IASC Working Group: Social and Human Working Group

Country: Sweden

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What are your country's current Arctic research priorities (relevant to your Working Group)? How do these overlap or deviate from the ICARP-3 research priorities? https://icarp.iasc.info/images/articles/downloads/ICARPIII_Final_Report.pdf

Sweden is in the process of updating its national Arctic strategy document, Sweden's Strategy for the Arctic Region (2011), which was established when Sweden entered the chairmanship of the Arctic Council. The new strategy should be in place by the end of the year 2020. The government is also working towards a new national research political proposition that should be finalized in the autumn of 2020.

The overall concern in the previous, 2011 published, Arctic strategy document is climate & environment, economic development and the human dimension. Within the last priority a number of themes relating to the scope of SHWG are found, and we can conclude that they are also operationalized in research activities. Among the relevant priorities are mining, forestry, tourism, reindeer herding, culture, indigenous issues, different aspects of health and cultures. Perhaps with the exception of education and cultures these themes overlap with ICARP III priorities. Notably, Sweden has been an active part of the social science chapter of ICARP II (chapter 11) and of ICARP III, as well as being lead on the EU PolarNet White Paper 4 (the humanities and social science part): The Road to the Desired States of Social-ecological Systems in the Polar Regions.

In the Report of the 2_{nd} Arctic Science Ministerial: Co-Operation in Arctic Science – Challenges and Joint Actions (Nov 2018) it is stated that Swedish polar research primarily focuses on the Arctic Ocean and the surrounding coastal areas. This underlines the somewhat marginalized position of humanities, social sciences and medicine that at the same count more than 300 Arctic researchers within these fields only at the Arctic Research Centre at Umeå University.

The report further informs that there are two funding agencies, Swedish Research Council and The Swedish Research Council Formas that are the primary funders of polar research. Swedish Polar Research Secretariat (SPRS) manages Abisko Scientific Research Station and RI Oden.

In 2019 SPRS initiated a pilot project "Access Abisko" a new thematic programme aimed at providing enhanced opportunities for researchers to interact within and between disciplines, at Abisko Scientific Research Station. SPRS is currently also developing a new research planning process that aims to enable cross-disciplinary fertilization and multi-disciplinary research associated with the cruise planning of IB Oden.Research topics are generally determined through the evaluation of proposals from university researchers. There are on-going polar research initiatives at most universities and colleges.

What are major ongoing and upcoming projects within your Working Group's fields? How do these address the ICARP-3 science priorities?

Swedish researchers in social sciences and humanities have been successful in regional and international calls focused on the Arctic regions.

Four principle investigators in Swedish Universities were awarded funding within the 2019 Belmont Forum call "Resilience in a Rapidly Changing Arctic" for collaborative international projects of 3-4 years:

- Juan Carlos Rocha (Stockholm Resilience Centre) Marine Arctic Resilience, Adaptations and Transformations (MARAT)
- Rene Van der Wal (Swedish University of Agricultural Sciences) Understanding Resilience and Long-Term Ecosystem change in the High Arctic: Narratives-Based Analyses from Svalbard
- Marcus Carson (Stockholm Environmental Institute) Arctic Wetlands Ecosystems Resilience through Restoration and Stewardship (AWERRS)
- David Gustafsson (Swedish Meteorological and Hydrological Institute) Hydrology,
 Permafrost and reliance in Eastern Russian Arctic and Subarctic

The aim of the Belmont forum program is to bring together researchers and other expertise across the globe to develop proposals from integrated teams of scientists and stakeholders to address key areas of arctic resilience understanding and action.

Since 2016 Sweden has had two Nordic centres of excellence in Responsible Development of the Arctic: Opportunities and Challenges - Pathways to Action:

- REXSAC Resource Extraction and Sustainable Arctic Communities (KTH) is a research project
 that focuses on extractive resource industries in the Arctic as cultural, social, economic, and
 ecological phenomena from analysis of why resource extraction commences, to what
 consequences it has for communities in the Arctic and beyond, and what opportunities exist
 for transitioning toward post-extractive futures.
- CLINF Climate-change Effects on the Epidemiology of Infectious Diseases and the Impacts on Northern Societies (Umeå) explores climate impacts on the health of both humans and animals in the Arctic with focus on health statistics, economic impacts, and study of gender and traditional knowledge as integrated factors.

The joint Nordic initiative aims to generate new insight into the challenges and new opportunities confronting the Arctic region.

Swedish researchers have also been successful in European Research Council calls. Ongoing projects that have an Arctic element include:

- Greening the Poles: Science, the Environment, and the Creation of the Modern Arctic and Antarctic (KTH – PI: Peder Roberts)
- The Rise of Global Environmental Governance: A History of the Contemporary Human-Earth Relationship (KTH PI: Sverker Sörlin)
- Picturing indigenous communities in the Arctic (Umeå University Eavan O'Dochartaigh)

Starting in 2019 The Swedish Research Council Formas allocates € 1,8 Million over a four year period on the multidisciplinary research program Climate Change and the Double Amplification of Arctic Tourism: Challenges and Potential Solutions for Tourism and Sustainable Development in an Arctic Context. The program is spearheaded by the Department of Geography, Ume University. The content of the program is described as follows

Tourism has been regarded as an opportunity to create employment, not least in northern sparsely populated areas. Globalization and climate change have entailed

greater media exposure and public awareness for the Arctic region, resulting in quickly increasing tourism demand. Sometimes this growth is explained as a form of 'last chance tourism' enabling tourists to see the melting Arctic. However even future flight taxes are expected to increase demand for the European Arctic. This 'Arctification' of tourism poses a number of opportunities and challenges for local communities. To better understand these, a political-ecology perspective is applied. In this context tourism is seen as an external force disturbing prevalent human-environment relation. In four work packages it is addressed; how the Arctification of tourism in northern Sweden has evolved; how communities have benefitted in terms of improved innovation capacity; how land use conflicts and over-tourism are being managed; and how Sami people handle the touristic commodification of their heritage. These issues are addressed empirically by combining public statistics, analysis of marketing material, interviews and ethnographic field studies in Väster- and Norrbotten. This is also achieved by pooling resources with universities in Norway and Finland. An important aspect is to work together with tourism organizations and other community actors to contribute to a sustainable development of the region.

The multi-disciplinary project New Governance for Sustainable Development in the European Arctic was finalized with a book launch at the EU Arctic Forum in Umeå 3 October.

Swedish researchers have also been active in EU-PolarNet. An ERC funded consortium that aims to develop and deliver a strategic framework and mechanisms to prioritise science, optimise the use of polar infrastructure, and broker new partnerships that will lead to the co-design of polar research projects that deliver tangible benefits for society.

In general, Sweden has a wide disciplinary range of expertise in Arctic Research including security, governance, geography, health, tourism, sociology, history, archaeology, heritage, anthropology, postcolonial and indigenous studies, law, linguistics, religion, arts and design, economics, political science, policy, and gender studies.

Examples of topics of ongoing research projects at Umeå University with funding from research councils include: Adaptation to the changing global climate, Mining, Tourism, Education, Security studies (including human, food, infrastructural, geopolitical etc.), E-health, Weather related health, Climate change and infant mortality, Digital coaching and living conditions, Micro-urbanisation and mobility, Cities in the north, Marine transports systems, Indigenous health, Environmental archaeology, Resilience and voluntary work, Sustainable development in the Arctic, Social construction of the polar regions in media, policies, international negotiations etc. and their impact in decision-making, Health and healthcare, and International law incl. law of the sea, indigenous rights, search and rescue and the conservation and sustainable use of marine biological diversity.

All of these projects are in harmony with the ICARP-3 priorities under the third section Understanding the Vulnerability and Resilience of Arctic Environments and Societies and Supporting Sustainable Development.

Is there any new / novel research in your country, relevant to your Working Group, being undertaken that broadens / deviates from ICARP-3 priorities? What & why?

ICARP III priorities are linked to new Swedish research initiatives: Climate change effects on health, Arctic demography, bibliometrics (observing system of systems in ICARP III), data and metadata initiatives, rural medicine, science platforms, traditional and local knowledge, stakeholder collaboration, citizen science, sustainable cities, tourism, and urbanization. Not necessarily because the researchers are well informed about ICARP III.

What are emerging Arctic research issues in within your Working Group's fields? How do these relate to the ICARP-3 research priorities?

What's more and more highlighted are the need for more in-depth research about multiple pressures on land-use and societies and the complexity this brings. This is in line with the priority in the ICARP: Assessing the diverse impacts of climate change and human activities on Arctic biodiversity and its consequences for ecosystem goods and services and societal impacts.

On-gong implementation of the SDGs/Agenda 2030 will require research efforts and research-practitioner collaborations on how to localize the global goals in northern regions, including finding processes that ensure local and regional engagement.

There is a growing need to address how the necessary transition away from use and production of fossil fuels will affect northern regions, including the impacts of non-fossil energy production on land use (e.g. expansion of mining and wind power). In addition to the earlier emphasis on multiple pressures (and land-use conflicts), it will thus be important to take account of the additional challenges that are likely to accompany transformative changes of society, including issues related to trust and transparency in making decisions about future directions and priorities.

What are current gaps in research and/or data within your Working Group's fields? How do these relate to the ICARP-3 research priorities?

No major research gaps. Ethnic (Indigenous) data excluded from official registers.

What are areas emerging issues concerning international science cooperation (e.g., successes, obstacles, best practice)?

Sweden has a leading role in IASSA and UArctic, and are actively engaged as social science & humanities delegates in Interact, Barents Euro Arctic Council, and Chinese-Nordic Arctic Research Conference. Organized ICASS IX in 2017 with more than 1,000 participants. Leading part in the Nordic cooperation Arctic Five. Governmental funding is an obstacle and the fact that Sweden still does not have a national policy or national ethics/guidelines for research engaging with indigenous issues/communities is another (neither has financial compensation been solved.

Mitigation of climate change makes it increasingly necessary to limit international air travel. This will increase the need for platforms that can facilitate international collaboration without extensive travelling. In addition to the use of various technical platforms for virtual meetings, IASC could play a role in in supporting innovative social solutions for new ways of getting together and to do so in ways that also address other challenges (need for good circumpolar coverage, more local engagement without putting undue burden on local capacity, etc.)