

Communicating Polar Agendas

Societal engagements with the Arctic and Antarctic

Large-scale processes of change in the Polar Regions comprise not only environmental dynamics, but also economic, social, cultural, political and legal ones. In that respect, the Arctic and Antarctic offer distinct but sometimes complementary perspectives.



Over many centuries, humans in the Arctic have shown the ability to adapt to rapid environmental and social change, which requires a high degree of flexibility in resource use and livelihoods. Not only have they learned to respond to change, but also to induce it, and to modify their environment. The Arctic has become a homeland for indigenous, settler, and mixed communities, who are united by their close interaction with the natural environment

and their wish to foster local culture and social integrity. Various Arctic communities exist under divergent economic and legal conditions, but all these communities share a demand to participate in the design of strategies for safeguarding the region's future.

By contrast, human presence in the Antarctic is comparatively recent and governed by the Antarctic Treaty System, an international regime dedicating the Antarctic continent and surrounding seas south of 60° southern latitude to peace, science, collaboration and, more recently, environmental protection.

Both Polar Regions experience some similar developments, in particular unprecedented levels of human activities, including research, tourism and new forms of resource extraction, such as the expansion of mineral and fuel extraction into the Arctic Ocean or the krill fishery in the Southern Ocean. Environmental, economic and social changes now occur at greater speed and scales than ever before, and in increasingly interconnected ways, so residents and stakeholders in circumpolar regions need applied and detailed knowledge on a range of key issues. These issues need much more research to inform judicious decision-making.



KEY ISSUES

The most crucial societal challenges that should be made priorities in European and trans-national research initiatives are:

1. Identifying institutions and mechanisms needed to resolve competing approaches to management of renewable and non-renewable resources in the Arctic and Antarctic.
2. Achieving an alignment of legal national and international obligations on property rights and rights to resources in the Polar Regions (particularly in the Arctic) with local practices of sharing, moving, and flexible resource-use arrangements.
3. Assessing how technological innovations, new infrastructures, and intensifying overland and maritime transportation can benefit both external users and local residents in the Arctic. Ensuring that such innovations do not result in new social and environmental threats, but instead help reduce risks.

4. Strengthening legal, political and logistical cooperation in the Antarctic and the Arctic, and identifying strategies that facilitate human, societal, and environmental security.
5. Maintaining and improving health and well-being of permanent and temporal human dwellers in regions that are undergoing rapid environmental change (such as global warming, long-distance transport of pollutants, and shifts in the distribution of biological species). Identifying improvements in the provision of health services, telecommunication, and access to information that benefit these regions.
6. Investigating how the growing attraction of the Antarctic and Arctic as tourist destinations can contribute to cultural creativity, local identity, and economic sustainability, without adversely impacting on polar ecosystems.
7. Identifying the sources of adaptive and transformative capacity for shaping resilient communities in the Arctic.
8. Developing means by which different domains of knowledge (traditional skills and formal higher education), which are often differentiated along axes of gender and age, can be combined to endorse local communities' ability to devise strategies for their futures.



DESIGNING, IMPLEMENTING AND COMMUNICATING POLAR SCIENCE

It is essential to identify and discuss:

1. The histories and methodologies of different scientific disciplines in the Polar Regions, the calibration of various methodologies, and social science approaches to modelling and forecasting;
2. The ways in which scientific exploration of the Polar Regions has been recorded and communicated;
3. The production and circulation of images and representations by the media that have highly symbolic meanings for the Polar Regions and which shape the global public perception of these regions;
4. The integration achieved so far of different fields of scientific expertise, the coordination of various research activities in both the Arctic and Antarctic, and mechanisms for improving compatibility of socio-economic (including demographic) data – all of which are structural preconditions for achieving greater levels of polar research integration;
5. The extensive experience that social scientists bring from working with indigenous and local communities in Polar and Sub-Polar Regions, and how this can inform multidisciplinary and collaborative research, as the demand by local communities for inclusion in such research grows.



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Saffron cod fishing along the Bering Sea coast, Chukotka Autonomous Okrug, Russian Federation; Arthur Apalyu | Ny-Ålesund International Research Village, BAS
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