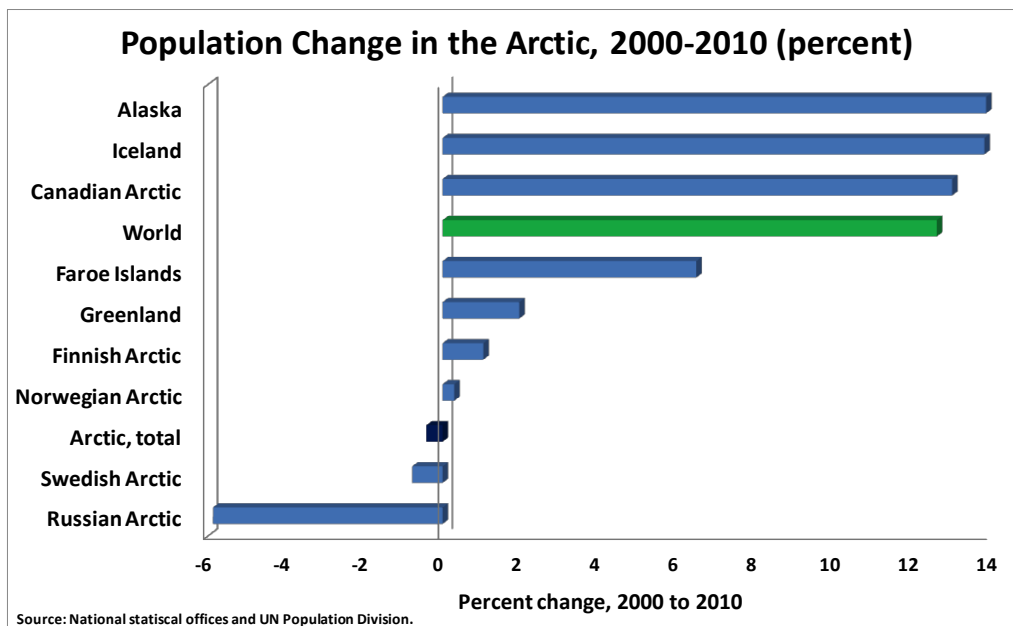


AHDR-II FACT SHEET: POPULATION AND MIGRATION

Population Change in the Arctic in the 21st Century: The population of the Arctic remained about the same in 2010 as in 2000, through a combination of growing and declining Arctic regions balancing each other out.



Among Arctic regions, Alaska’s population increased at a faster rate than the U.S. average. The regions of the Canadian Arctic also increased at a faster rate than Canada as a whole. Population growth in Iceland was 14 percent, similar to the North American Arctic. In all Arctic regions of Fennoscandia, population growth in the northern or Arctic regions was considerably less than the countries as a whole. The population of the Russian Arctic declined by 6%, much less than the decline during the 1990s, but twice that of the Russian Federation rate. Growth in the oil and gas producing regions (Nenets & Yamal-Nenets Okrugs) was outweighed by decline in all other Arctic regions of Russia.

The main factor driving trends in population change in the Arctic is migration. The major trend in most Arctic regions is migration losses to the southern regions of their respective countries and migration gains from abroad. Nearly all of the Arctic regions are experiencing considerable international migration of people seeking work in resource extraction and the service sectors. These migration flows are having a considerable impact on the social composition of the Arctic regions.

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AHDR-II FACT SHEET: CULTURES & IDENTITIES

"Northern culture" (indigenous and non-indigenous) is more and more becoming a strategic asset for communities. This is reflected in tourism, the music industry, heritage projects, and many other developments.

It is necessary to stress the enormous differences that exist within the North regarding "culture and identity". If there are meaningful generalizations to be made, they need to be on the regional level. There seem to be at least three such broad regions: the Russian North, the North American North (Alaska and Canada), and northern Fennoscandia (including Greenland, Iceland, and the Faroe Islands).

Even so, local idiosyncrasies remain significant.



Nuuk, Greenland, Sept 2012

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AHDR-II FACT SHEET: ECONOMIC SYSTEMS

In 2009 Arctic GDP was \$US 179.925 billion. Arctic GDP was 0.9% of the GDP of Arctic nations (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, US).

Change in the Arctic economy 2000-2009: Measured by real GDP the Arctic economy grew over 31% between 2000 and 2009, faster than the rate of growth for the Arctic nations (2.1%). GDP grew much faster than population in the Arctic, which meant real per capita GDP grew 30%, more than twice the rate of per capita GDP growth for the Arctic nations as a whole and approximately 10% more than growth of per capita GDP for the world economy.

The World Economy and the Demand for Resources: Arctic nations are currently optimistic about the prospects for Arctic resource development. Various resource development projects are proposed for Greenland, Nunavut, Russian and Alaskan arctic seas.

Optimism about the future of the arctic economy is based on 3 observations: 1) The Arctic is a storehouse of natural resources, holding almost 22% of the world's undiscovered conventional oil and gas; 2) The potential for accessing resources has increased with the current rapid rise in commodity prices. Increasing demand from emerging nations is driving prices increases of commodities, most of which have risen sharply since 2001. The likelihood of sharp reversals, especially in oil prices, is low; 3) Global warming in the Arctic will likely allow ice free travel in arctic seas and lower the cost of access to and development of the Arctic's resources, while access by sea will lower cost delivery of supplies and of shipment of the resources to markets.

4 reasons to curb our enthusiasm: 1) Global warming in the Arctic will not always benefit development. Climate change may increase resource development costs on land; 2) The recent dramatic increase in commodity prices is not likely persist, long term. Historically, high prices for any resource have encouraged exploration as well as innovations to find substitutes. Volatility in resource prices and arctic warming will increase the risks, thus decreasing the potential for investment; 3) The north will remain a high-cost region of production, as resources are far from markets and lie in a sparsely settled land and a harsh environment. Providing infrastructure, workers, and supplies imposes large costs on development. Reasons for high cost development include harsh winters requiring special designs; poor soil condition requiring additional site preparations; potentially damaging ice pack in arctic seas; long supply lines requiring large inventories of parts; limited transport access; higher wages and salaries to recruit personnel. Of these only the transport cost will be positively affected by warming; 4) Access to Arctic resources may be delayed or eliminated by government policy even when development would be profitable. Environmental concerns and conflicts with other users of the land may increase the cost of development through delays or remove resources from consideration.

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AHDR-II FACT SHEET: LEGAL SYSTEMS

The amount of Arctic-specific legal regulation continues to grow: While a limited amount of domestic and international law is specific to the Arctic, the adoption of the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic at the 2011 Nuuk AC Ministerial Meeting heralds a change. The Agreement establishes the AC as a forum for negotiating Arctic-specific international treaties. The process is underway to adopt a legally binding instrument for oil spill preparedness and response. Other international developments that confirm this trend towards developing Arctic specific (or polar) norms include the IMO process to adopt a legally binding Code to make Arctic navigation safer and environmentally more sustainable. We observe some evidence of similar trends in Arctic-specific domestic laws of Arctic states (e.g. Finnmark Estate Act, new navigational norms adopted by Russia for NSR, and by Canada (NORDREG) for Arctic waters). While Arctic-specific legal solutions are still the exception, a creative interaction between Arctic-specific norms (including soft norms developed by the AC) and global and regional norms continues.

The international law of indigenous peoples continues to develop at a fast pace: International indigenous law has consolidated and developed since AHDR-I. Most important was the adoption of the UN Declaration on the Rights of Indigenous Peoples in 2007, which all Arctic states except Russia have now endorsed. An important regional development has been the efforts of the Nordic states and the Saami peoples to develop a Nordic Saami Convention, a draft of which was released in 2005. Yet, except in the cases of Norway and Denmark\Greenland, these developments have not had a significant impact on the domestic legislation of the Arctic states. Also, even though the Arctic states have accorded Arctic indigenous peoples a unique standing in the AC as Permanent Participants, this status has not helped indigenous peoples to convince their governments to incorporate and implement international law guaranteed indigenous rights.

Trend: The Arctic littoral states are delineating their continental shelves in a cooperative manner and on the basis of applicable laws, specifically the Law of the Sea Convention (LOSC): Notwithstanding media reports that suggest a race to grab Arctic marine space and geological resources, the Arctic coastal states have been proceeding strictly in accordance with international law in taking steps to delineate the outer limits of their continental shelves. Submissions must be supported by significant hydrological, geological and geophysical research and in many cases Arctic states have initiated and implemented cooperative research and survey endeavours in order to collect the necessary information. Arctic states have also made progress in delimiting their continental shelves and exclusive economic zones between states. A crucial development since AHDR I was the conclusion of the delimitation agreement (2010) between Russia and Norway in the Barents Sea, which also reinforces existing cooperative arrangements to shared fish stocks in the Barents Sea.

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**AHDR-II FACT SHEET:
RESOURCE GOVERNANCE**

Resource governance refers to the collective efforts of society to define and achieve societal goals related to human–environment interactions, serving as a navigating device for addressing societal challenges. It is the process by which self-organized citizen groups, NGOs, government agencies, businesses, local communities and partnerships of individuals and organizations interact as part of a stewardship process, which *may or may not involve government*. Resource governance is critical in maintaining social and natural assets important to sustaining ecosystem services and building the resilience of northern in anticipation of anticipated change and possible surprise. It is especially important in times of rapid social and ecological change.

Indigenous efforts to specify property rights have transformed institutional arrangements in many Arctic regions, creating new structures at/across various scales. While significant changes in the rights and role of Indigenous peoples have occurred in North America (e.g., land claims) and parts of Fennoscandia (e.g. Sami Parliament), governance in Russia leaves Indigenous people with limited decision-making authority (e.g. Nenets, Yamal oil and gas fields).

Processes of globalization and increasing **international attention of climate change** are transforming the way governance occurs in the Arctic. Faster and more extensive networks of communication make for greater awareness and engagement at all levels. The images of the North as distant and remote region are ideas of the past.

Colonialist perspectives of southerners persist (e.g., notions of “wilderness”), even where rights and new governance structures have been implemented,. While new arrangements for governance have been imperfect in their performance, they nonetheless critically link science and policy, and achieve a level of balance between local and non-local interests.

Climate change represents a relatively new and significant challenge to arctic resource governance, and requires rethinking conventional processes of decision-making, from older models of governance (command and control decision-making) to adaptive governance models (reflexive processes of deciding). Such shifts require moving to demanding processes that enable social learning with assumptions of uncertainty and ambiguity in information, active and passive experimentation, and innovation. These idealized notions of adaptive resource governance are difficult, if not impossible, to achieve where contested rights and differing cultural priorities for land use and development dominate transactions.

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AHDR-II FACT SHEET: EDUCATION & HUMAN CAPITAL

There is an increasing role of Human Capital (and demand for HC) for economic well-being, fate control and human development in general. Human capital is critical for economic development and socio-economic transformation in the Arctic, as it often becomes the engine of economic reinvention and revitalization of a region. Although by a standard definition human capital in the Arctic is underdeveloped, this representation no longer reflects the variability and diversity of arctic regions, some of which demonstrate substantial levels of creativity that is based on non-codified informal knowledge.

Education gaps persist: 1) between the Arctic and southern regions; 2) between urban/industrial arctic territories and the rest of the Arctic; and 3) between Indigenous and non-Indigenous population in the Arctic.

Drop-out rates persist, especially among Indigenous students: Of major concern in the Arctic is the drop-out rate from both high school and post-secondary institutions. Alaska's dropout rate is 2X the national average. Dropout rates among 20-24-year-olds in the Canadian Territories are persistently higher than those of the provinces (15.5% in Yukon, 30.1 in NWT in 2007-2010).

Mobility of HC in the Arctic is high: 'Brain drain,' 'brain turnover' (intensive in- and out-migration of human capital) and 'brain waves' (surges and dips of human capital associated with the boom-and-bust economic cycles) characterize the Arctic.

Gains in post-secondary education are observed in the last decade in many Arctic regions. In the NWT in 2009, 47.6% of those over 15 years old had certificate, diploma or degree beyond high school, up from 46.5% of in 1999. In the same period those with university degree jumped from 14.0% to 19.3%. In 2009 there were 3.3 times more Aboriginal people with university education than in 1999. Aboriginal population still had a dramatic university education gap compared to non-Indigenous residents (4.9% vs. 32.3%), but the gap is closing.

Feminization of human capital: Marked changes in gender patterns of education took place during the last 10–15 years. *Women dominate the realm of education in most of the Arctic.* Northern Scandinavia, Russia and Alaska have the most feminized human capital. Parts of Canada show a continued dominance of males in post-secondary education attainment, due to both women's departure to pursue educational opportunities and influx of educated male labor force to the resource sector.

Improving relationship of formal schools and local and indigenous knowledge: Incorporation of local and Indigenous knowledge into educational and economic systems of the Arctic is a cornerstone of Arctic prosperity in the future. Limited role of LIK in formal education and lack of LIK's utilization to enhance human capital capacity of Arctic regions curtail competitiveness and well-being of northern communities and societies.

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**AHDR-II FACT SHEET:
HUMAN HEALTH & WELL-BEING**

Arctic Residents do not have equal health and possibilities for the good life. Disparities exist among indigenous and non-indigenous people.

At the moment there are key health indicators to be followed, as well as the long-term surveillance programs on infectious diseases and levels of contaminants across the circumpolar arctic.

The effects of climate change and globalization on human health and well-being are already seen in the increased number of water, food and vector borne diseases. There is a need for development of surveillance and early warning systems and health registers.

Dietary transition and declining traditional foods increase obesity, diabetes and cardiovascular diseases.

Over the past ten years there has been an improvement in information on health and well-being. A critical focus is now on health promotion projects and collaboration in research and education in the Arctic.

The most challenging task to improving the possibilities for the good life are the joint efforts for preventing domestic violence, accidents and suicides among people living in the North.

There is also an increased focus on the importance of

- social determinants of health in Arctic,
- alcohol and smoking,
- redressing social inequalities
- health care reform
- new types of partnership between researchers and local communities, and
- finding ways to adapt to change

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