

Human Security in the Arctic

Alexander A. Sergunin, Valery N. Konyshev, and Maria L. Lagutina

Contents

Introduction	2
Theoretical Approaches to Human Security in the Arctic	3
Human Security: Threats and Challenges	
A Brief Review of the Arctic States' Strategies in the High North	22
Conclusions	23
References	24

Abstract

In the Arctic region, a central challenge is that inhabitants are exposed to multiple nontraditional and nonmilitary threats resulting from environmental, economic, and societal changes, which can be understood as threats to human security broken down to its seven components: economic security, food security, health security, environmental security, personal security, community security, and political security. The authors argue that a comprehensive approach to human security overlaps with the concept of societal security and must, therefore, consider threats to collective identity and the essential conditions necessary for the maintenance and preservation of a distinct society.

Keywords

Human security · Societal security · Arctic · Sustainable development · Resilience

This research was done in the framework of the Russian Foundation for Basic Research -Foundation "Maison des Sciences de L'homme" (France) joint project no. 20-514-22001.

A. A. Sergunin (🖾) · V. N. Konyshev · M. L. Lagutina International Relations, St. Petersburg State University, Saint Petersburg, Russia e-mail: asergunin@spbu.ru; m.lagutina@spbu.ru

Introduction

Traditionally, the emergence of the "human security" concept is associated with the UN activities in the mid-1990s; in fact, the idea itself was not new then, with many researchers pointing to the fact that it appeared back in the 1940s (Inglehart & Norris, 2012). However, the term of "human security" was first proposed in 1994 in the "Human Development Report" of the United Nations Human Development Program (UNDP), where the phenomenon was defined as "safety from such chronic threats as hunger, disease and repression" and "protection from sudden and hurtful disruptions in the patterns of daily life-whether in homes, in jobs or in communities" (UNDP, 1994, p. 23). Besides that, the main components of "human security" were identified in the text of the Report, including: economic security, food security, health security, environmental security, personal security, community security, and political security.

Among the threats were the consequences of climate change and environmental pollution, its degradation and depletion of resources, problems of food security and health, socioeconomic development, various forms of violence, conflicts, suicide, and drug use as a form of individual violence against oneself, problems preserving cultural heritage and traditional ways of life, etc. A feature of this group of problems is that their solution requires the attention of not only individual governments, but the entirety of society, including local residents and local communities.

At the same time, within the framework of the concept of "human security," there has been an obvious shift in emphasis from the security of the state to security of individuals and their communities, which became a reflection of a number of world political transformations after the end of World War II. It should be also noted that the "human security" concept in the UN interpretation is interconnected with the concepts of sustainable development and human rights.

However, the UN's definition has a rather broad and abstract character, so therefore serves only as a kind of general framework; in practice, instead, there is a fairly wide variety of approaches to the definition of "human security," both at the level of international organizations and states (Konyshev, 2014, pp. 44–45). It is because of the very broad interpretation of the term, as well as because of its "Western" origin (Gjørv et al., 2009, p. 6), that many researchers assess the concept of "human security" very critically (Chandler, 2008; Paris, 2001).

As far as the Arctic is concerned, it has always been imagined as a territory fraught with danger to humans: harsh climatic conditions, polar nights, remoteness from developed territories and their inaccessibility, dietary habits, predatory animals, etc. From the very beginning, the population of the northern territories was engaged in adaptation to these harsh living conditions. Despite the active role of states in the development of the Arctic territories, individuals and communities have always played a leading role in the Arctic, possessing a unique experience of survival in difficult climate conditions.

Currently, Arctic residents face diverse challenges at various levels. These challenges result considerably more from environmental, economic, and societal changes than from military threats and are attributed to the human rather than

national/state security sphere. In light of this, examining the Arctic region illustrates the importance of utilizing a more comprehensive understanding of security. State sovereignty is not widely contested in the High North, and there are few regional threats to the survival of Arctic states, if any; instead, common challenges such as climate change, or shared interests such as in developing the region's abundant natural resources, have led to extensive international cooperation among the Arctic states.

It should be noted that in the Arctic, the human security concept is intertwined with the societal security one. According to the definition provided by the Copenhagen School of Security Studies, societal security refers to the "sustainability, within acceptable conditions for evolution, of traditional patters of language, culture and religious and national identity and custom" of a society (Buzan et al., 1998, p. 8). In other words, it is about "the ability of a society to persist in its essential character under changing conditions and possible or actual threats" (Wæver et al., 1993, p. 23).

Human security is linked to numerous issues that influence societal security. In fact, a society cannot be secured if individuals and communities forming them are not secured or safe. If human security refers to the security of individuals and their communities, the concept of societal security refers to how societies at large are capable of preserving and reproducing their essential characteristics in the face of variable phenomena that threaten the essence of such societies.

In the Arctic, human and societal security overlap and interlink with each other, and human security "can support the promotion of societal security and the development and implementation of policies that address the wants and fears of Arctic peoples" (Hossain et al., 2017, p. 64). Human security is an excellent analytical tool to identify and address the multiple vulnerabilities that the inhabitants of the Arctic face, and that threaten not only their security at an individual level, but also security at large in a societal context. It should be noted that addressing threats to human and societal security eventually enhances the security at the national level – the security of the states themselves.

Taking into account the ongoing shift from the hard (military) and state-centric to soft (nonmilitary) and human/societal security problematique in the Arctic, it is important to examine (1) how different theoretical schools apply the human security concept to the situation in the High North; (2) which human security threats and challenges can be identified in the region; and (3) whether the human security concept is embedded in national strategies of the eight Arctic countries or not.

Theoretical Approaches to Human Security in the Arctic

There are four major International Relations (IR) paradigms: political realism/neorealism, liberalism/neoliberalism, globalism, and postpositivism. Each paradigm has its own interpretation of the human security concept.

The neorealist school considers human security to be secondary compared to national security, which, in their opinion, is crucial for the wellbeing of both the nation as a whole and an individual. The neorealists believe that focusing security

policy on individual problems can lead society away from solving fundamental problems and undermine the entire national security system. This school tends to interpret human security as a component or lowest level of national security (individual, societal, national), equating human security to individual security (Konyshev, 2014; Tsygankov, 2010). Furthermore, individual security is seen as personal safety. Personal safety is viewed by the neorealists as protection of people from physical violence, whether from the state or external states, from violent individuals and substate actors, or from domestic abuse. For many people, the greatest source of insecurity is crime, particularly violent crime. This understanding of human security is reflected, for example, in Russia's national security doctrines, including the most recent one (Putin, 2021).

Another IR school, *neoliberalism*, shares the UN interpretation of the human security concept. This approach is based on the assumption that human security is indebted to the human rights tradition (the ideas of natural law and natural rights). This approach uses the individual as the main reference and argues that a wide range of issues (e.g., civil rights, cultural identity, access to education and healthcare) are fundamental to human dignity. The liberals argue that the goal of human security should be to build upon and strengthen the existing global human rights legal framework (Hossain & Petrétei, 2016; Hossain et al., 2018). In the case of the Arctic, they focus on indigenous peoples' rights. The neoliberals welcome Arctic nations' efforts to solve indigenous peoples' problems and protect their traditional economies and cultures. At the same time, the neoliberals heavily criticize those Arctic governments which are unable to implement their indigenous peoples' policies effectively (Rohr, 2014).

The *globalist school* challenges the "narrow" understanding of human security as individual security suggested by both the neorealist and the neoliberal legalist approach (Heininen, 2016). The globalists tend to interpret human security as an analogy to the sustainable development concept (Dodin, 2005; Selin & Vasiliev, 2010). They argue that economic growth is insufficient to expand people's choice or capabilities, and areas such as health, education, technology, the environment, and employment should not be neglected. On the other hand, the lack of human security has adverse consequences to economic growth and, therefore, development. The globalists underline that imbalanced development that involves horizontal inequalities is an important source of conflict. Therefore, vicious cycles can readily emerge where a lack of development leads to conflict and then to further lack of development (Graham & Poku, 2000; Larsen & Fondahl, 2015). Likewise, virtuous cycles are possible, with high levels of security leading to development, which further promotes security in return.

The most radical globalist version believes that the Arctic (particularly, its natural resources and sea routes) is a common heritage/asset for humanity that should be interacted with together with other countries and in a very careful way. Moreover, these sorts of globalists point out that an international legal regime similar to the Antarctic Treaty should be established and a comprehensive agreement should be concluded on the Arctic to make it a "region of peace and cooperation" (Dodin, 2005, p. 23; Sivakov, 2009; Watson, 2009). Similar to the Antarctic legal system, a

proposed new Arctic regime should prohibit any economic and military activities in the region. Only subsistence economies of indigenous peoples of the North and research activities should be allowed in the High North. Some globalists suggest establishing a UN-based governance regime in the Arctic which should replace the existing national sovereignty-oriented model (Kharlampieva & Lagutina, 2011).

This globalist subschool tends to ignore the fact that, for many Arctic countries, this region is of growing economic importance and a home for many industrial centers. For example, the Arctic Zone of the Russian Federation (AZRF) produces more than 10% of the entire Russian GDP and 20% of its export – even if only about 1.6% of the country's population lives there (Ministry of Foreign Affairs of the Russian Federation, 2021; Arctic-info.ru, 2016).

Alaska, America's only Arctic state, is the second largest producer of gold (after Nevada) and provides 8% of the national silver output. The Red Dog mine in northern Alaska boasts the world's largest zinc reserves, producing 5% of the global output and 79% of the total US output. That mine also produces lead -3% of the global total and 33% of American lead. Alaska is also America's second largest oil producer, at 20% of the total extracted volume (Ekonomika shtata Alyaska, 2021).

In this situation, the globalists' proposals to stop economic activities in the Arctic seem simply naïve and utopian.

The postpositivist school does not suggest a unified approach to human security. For example, postmodernism, the most radical subschool of postpositivism, heavily criticized "positivist" security concepts but did not develop any security concept of its own (Kapustin, 1996).

Social constructivism, another postpositivist subschool, prefers to interpret human security through the identity concept. According to this subschool, human security, which is socially constructed, can be ensured only if actors' identities are formed in a nonconfrontational way (Vasilieva & Chensin, 2011). Otherwise, multiple identities clash with one another and do not favor a desirable level of human security.

The constructivists are satisfied with the paradigmatic change of the Arctic countries' discourse: Instead of perceiving the North as something remote and hostile that should be "conquered," now the Arctic nations treat the High North as a natural and integral part of their countries that should be taken care of (Dregalo & Ulyanovsky, 2011; Nazukina, 2013). The North has developed a more positive and attractive image, and now it is associated with the ideas of growth, prosperity, and innovation. Moreover, now many northern countries tend to perceive the Arctic as a region of peace and stability, where different identities can be reconciled and harmonized. At the same time, the constructivists continue to monitor some negative processes and factors that continue to generate nationalistic sentiments within Arctic societies and elites and impede international cooperation in the Arctic region (Medvedev, 2013; Morgunova, 2014).

The so-called postcolonial subschool views the Arctic territories as former "internal" colonies of northern countries that were exploited for many decades in a predatory manner (Kukulin, 2013; Etkind, 2014; Huggan & Jensen, 2016; Silis, 2014). The situation now is slowly changing for the better, but there is still a long

way to go to make the Arctic a "normal" territory where human security standards are observed. Along with the radical globalists, the postcolonialists believe that the best way to ensure human security in the region is to deindustrialize it and make it a sort of a natural reserve where the indigenous peoples' rights and proper living standards are secured (Medvedev, 2013).

Human Security: Threats and Challenges

Before designing an effective human security strategy, the Arctic countries should have a clear understanding of the nature of threats and challenges in this sphere. These threats and challenges can be considered according to the seven main parameters of human security.

Economic security. The 1994 UNDP report defines economic security as an "assured basic income," either from one's own labor activities or from a social, public safety net (UNDP, 1994, p. 25). In other words, the assurance that individuals will be able to find a remunerated job that will allow them to earn a decent income. In this case, it is essential to differentiate between the human-centric and state-centric economic security. While the latter focuses on the economy as it affects the state (e.g., in macroeconomic terms), the former is an element of human security and focuses on the steady income of individuals. Human economic security, being a part of the nontraditional or rights-based approach to security, focuses on individuals and communities rather than on the state or macroeconomic data (Martin, 2018, p. 27).

In the case of the Arctic, it is also important that local communities could benefit from the exploitation of the region's national resources, partaking in decision-making on the potential use of ancestral lands or areas used for traditional economic activities such as reindeer husbandry or fishing.

The situation in the Arctic region, however, is far from ideal. For example, the unemployment rate among Russia's indigenous people has been estimated at between 30% and 60%, which is three to four times higher than that of other residents of the Arctic Zone of the Russian Federation (AZRF) (Rohr, 2014, p. 34).

About half of American Indian and Alaska Native (AIAN) people – the official term for the North American indigenous population – live in urbanized areas and are mostly integrated into the modern economy characteristic of high-income nations. About half of AIAN people, however, remain in isolated small communities in rural areas of Alaska that are not connected by road to larger population centers. Economic opportunities in this region are limited. Most of the available jobs are in public administration or in scattered resource extraction enclaves staffed with shift workers. Few AIAN residents possess the skills for these jobs, and many continue to practice mixed cash and subsistence fishing and hunting livelihoods. Persistent economic and social disadvantages for rural AIAN people are manifest across a broad range of economic and social indicators. Barely half of working-age adults are employed, per capita income was only 52% of the national average, and the cost of living is much higher (Berman, 2019, p. 162).

Official poverty rates for all Alaska Natives, based on income as recorded by the Census Bureau, are about 2.5 times the poverty rate for non-Native Alaskans, and twice the rate for the Alaska population as a whole. The Native/non-Native disparity has persisted as poverty rates drifted upward after 2000. Reported poverty rates for Indigenous Alaskans living in rural areas are even higher: 25% in 2011–2015, up from 20.5% in 2000 (Berman, 2018, pp. 106, 165–166).

Although Canada is one of the wealthiest nations in the world, socioeconomic disproportions between the indigenous and nonindigenous peoples still exist. For example, figures from December 2019 to February 2020 show the indigenous unemployment rate at 10%, while it was just 5.5% for nonindigenous people. The COVID-19 pandemic hit indigenous peoples stronger than nonindigenous ones. Indigenous unemployment shot up to 16.6%, while nonindigenous sat at 11.7% in May 2020 (Benning, 2020).

Occupational structure is an important aspect of the indigenous peoples' economic security in the Arctic. The more flexible indigenous peoples are in choosing their professions, the more opportunities they have for getting high-paying jobs. Conversely, the lack of flexibility in the choice of profession can affect the level of employment in the region and wages of indigenous peoples.

For example, in Russia, there is a trend common for many indigenous communities across the AZRF in terms of occupational preferences: Many young indigenous men, unlike women, appear to have been socialized into a path dependency and consequently have difficulties accepting alternative paths and changes. They tend to narrow their choices (sometimes on their own, sometimes as a part of a family decision) in favor of "traditional male professions" (mechanics, snowmobile drivers, etc.) (Rozanova, 2019, p. 66) that are complimentary to indigenous ideas of traditional "masculine" professions and help them with reindeer herding and hunting (Ventsel, 2018). According to some accounts, about 41.2% of the total population of the Nenets Autonomous Area (NAA) – predominantly men – work in the traditional economy (reindeer husbandry, hunting, gathering, and fishing/fish farming) on a permanent basis. As of 2018, this traditional branch employed about 1000 people (predominantly Nenets men), mostly in reindeer husbandry (Rozanova & Mikheev, 2020).

Among the main reasons for the indigenous men's decision to remain in traditional Nenets professions are: (1) protection against unemployment (a lack of good education aggravated by a lack of jobs in remote villages of this Arctic region pushes them to engage in reindeer husbandry); (2) the possibility of preserving the ethnocultural identity of the Nenets as indigenous people of the north (reindeer husbandry remains the only branch of the traditional economy capable of ensuring cultural reproduction); and (3) governmental support for traditional economic occupations in the NAA (indigenous peoples pursuing the traditional way of life and obtaining traditional occupations are protected by state and eligible for getting social guarantees and monetary payments).

Similar trends can be found among the Canadian aboriginal people. Among those who have taken some training to develop job skills, 81.9% were employed and 8.0% were unemployed, while among those who have not taken any training to improve

their job skills, only 60.6% were employed and 14.4% were unemployed (Statistics Canada, 2021).

Food security is another important element of human security. According to the UNDP definition, food security implies the constant "physical and economic access to basic food" (UNDP, 1994, p. 27): more specifically, this means both the availability of food as well as the possibility to acquire it. In the Arctic context, the food security concept acquires a deeper meaning because access to food supplies in such an isolated and remote area is not simple and represents a real challenge. Distances to market centers are long, distribution networks are not as developed as in other regions, and food imports have become essential to ensuring the availability and variety of products.

For example, in the Russian Arctic, many remote coastal communities have a stable connection to the "mainland" only via maritime transport on the seasonal basis. The so-called "northern supply" – which includes foodstuff, other consumer goods, fuel, and construction materials – takes place every summer season and lasts about 4 months. The rest of the year, these remote settlements are almost cut off the central part of the country.

It should be also noted that the Arctic indigenous peoples have already experienced negative consequences related to the import of foods that have replaced traditional staples. In this case, food security intersects with health security. Climate change also threatens food security in the Arctic because seasonal patterns are altered, animal cycles are changed, fish migrate, and the conditions for the growing of plants are modified. Last but not least, microplastic pollution has become a global problem. Microplastics are now found in Arctic fish and animals that have become unsafe to eat.

Health security is defined by the UNDP (1994, pp. 27–28) as the availability and access to adequate health systems, together with the elimination of threats to the health of individuals.

Unfortunately, the Arctic region is replete with health security problems. For example, the fertility rates in nearly all Arctic countries and regions have been declining over the past few decades, and most have fertility rates at or below the replacement level. Arctic regions with high shares of indigenous populations tend to have higher fertility rates, including Nunavut (Canada), Greenland, and Russia's Nenets and Chukotka autonomous areas. The Arctic regions of Norway, Lappi, and several regions of Russia have extremely low fertility rates. Part of the "demographic crisis" during the 1990s in Russia, including in the north, was a steep decline in childbearing, when the fertility rate declined from 1.89 in 1990 to 1.16 in 1999 before increasing to 1.79 in 2016 (Coates & Holroyd, 2020, pp. 48–49).

The indigenous peoples of Russia have extremely high adult mortality rates. Just over one-third of indigenous men (37.8%) and less than two-thirds of indigenous women (62.2%) in Russia reach the age of 60 (Rohr, 2014, p. 32). At the national level, the figures are 54% for men and 83% for women. This has led Russian demographers to describe the state of the indigenous peoples as a demographic crisis.

Besides, 36% of AZRF indigenous people die prematurely from nonnatural causes, which is more than double the national average of 15%. Infectious diseases, such as tuberculosis, a typical indicator of extreme poverty, cause 60 deaths per 100,000, which is almost three times the national average of 23 per 100,000. Furthermore, maternal deaths and child mortality are significantly above the national average.

Alcoholism is a major factor in the indigenous peoples' acute health crisis (including women). The Russian Federation Council's Committee on Northern and Indigenous Affairs has established that, over the course of the 2000s, alcoholism has increased 20-fold, mostly due to increased alcohol consumption among women and children. This increase is, among other things, attributed to an uncontrolled flow of alcohol into the regions inhabited by indigenous peoples (Rohr, 2014, pp. 32–33).

The AZRF population demonstrates a higher suicide rate than average in the entire country. Between 1998 and 2002, the incidence of suicide among northern indigenous peoples came to over 100 per 100,000 – more than double the national average of 38 per 100,000. In the Koryak district in northern Kamchatka, this figure has been established as 133.6 per 100,000.

As some studies based on the Nenets Autonomous Area data show, there were higher suicide rates in the indigenous Nenets population compared with the non-indigenous population. Suicides among Nenets and nonindigenous populations in the NAA are associated with different sociodemographic characteristics. The strongest positive associations with the suicidal risk in the Nenets population were observed for particular characteristics: 20–29-year-old, male, urban residence, a high education level for both sexes, and being divorced or a widower for males or being married for females. These characteristics may have connections to a lack of a "sense of indigenous belonging," lack of cultural identity, and problems of resilience.

In the nonindigenous population, higher risks of suicide were observed for males, rural residence, having secondary school education, being an employer or employee, and being single. The highest suicides rates in this group were seen in males aged 20–29 years, and females aged 30–39 and 70 years and above.

As the result of the above negative processes, life expectancy at birth in Nordic countries is higher by 13.6 years for males and 7.6 years for females than in the Russian Arctic regions (Coates & Holroyd, 2020, p. 48). In the Russian northern regions, life expectancy at birth is 65 years for males and 76 for females, although it has a tendency to increase at a higher rate than in the Nordic countries.

The indigenous population in the Nordic countries shares many health security problems with its Russian counterparts. Greenland has the highest suicide rate in the world per capita, with a yearly rate around 80 deaths per 100,000 over the last decade (The Arctic Council Sustainable Development Working Group, 2021, p. 205).

In Sweden, Finland, and Norway, the statistics are not divided by ethnicity, but studies have indicated that suicide rates are significantly higher in Arctic regions, with the highest rates in reindeer-herding Sámi populations (Jacobsson et al., 2020). Although the health status of Sámi is generally similar to that of nonindigenous residents, suicides are an exception; suicide rates among Sámi men are significantly

higher than among non-Sámi, especially in Northern Finland (Pollock et al., 2018; Young et al., 2015).

According to some accounts, half of Sámi adults in Sweden suffer from anxiety and depression. One in three young indigenous reindeer herders has seriously contemplated or attempted suicide – more than double the rate among their Swedish peers. Other studies have found rates of suicidal ideation to be nearly four times higher among Sámi than among other Swedes (Schreiber, 2016). For many Sámi, suicide offers an escape on their terms from the inexorable force of climate change, which is eroding the traditional way of life in the Arctic.

In Iceland, which has no indigenous population, the suicide rate in 2018 was 9.7 deaths per 100,000 (Organization for Economic Cooperation and Development, 2019), and in the Faroe Islands, also with no indigenous population, the rate was 4.8 deaths per 100,000 (The Arctic Council Sustainable Development Working Group, 2021, p. 205).

In 2019, the suicide rate in Alaska was 28.7 per 100,000, with indications of especially high rates in the northern and southwestern part of the state (Farr et al., 2019, p. 42), where the indigenous populations range from 50% to 75% of the whole population (Wang & Roto, 2019).

Mortality rates for Alaska Natives statewide are 40% higher than the state and national averages, driven by injury death rates three to four times the national average. Suicide rates for rural Alaska Native young males are particularly high (Berman, 2018, p. 162).

In Canada, Inuit regions suffer from a much higher rate of suicide than the rest of the country. While the national average is 11.3 suicides per 100,000 inhabitants, Inuvialuit is 60.4, Nunavik is 113.5, Nunavut is 116.7, and Nunatsiavut is a shocking 275.3 suicides per 100,000 inhabitants (Dobes, 2019). Specialists identified the key reasons behind suicidal behavior among the Inuit as depression and substance use (alcohol and cannabis). They traced these pathologies to the colonization era. During those times, indigenous peoples were forced to leave their lands, abandon their traditional way of life, and stay in permanent settlements. The Inuit had to send their children to infamous residential schools, where they were subjected to harsh treatment in a foreign environment, with the ultimate goal of assimilating them into the mainstream society and annihilating their Inuit identity.

Health security challenges in the Arctic can be grouped into four main categories: development of an adequate health care infrastructure; prevention policies; external environmental factors; and securing sufficient resources for coping with health security problems.

The creation of a good health system (clinics staffed with high level professionals and equipped with modern medical equipment) might be a difficult task for many Arctic regions. Establishing health centers might be limited to bigger towns and cities. People might be forced to travel long distances to visit a clinic or a hospital. A main challenge is thus to increase the means to provide proper health services. Such health care systems need to include the development of health care infrastructure, adequate funding for these institutions, or the provision of services such as transportation.

Prevention schemes are a second main challenge. Prevention activities reduce the need for medical care and help to increase the wellbeing and health of individuals and their communities. Some basic prevention activities can include measures to overcome low nutrition, or sport and other community and group-based activities. Prevention policies should also address existing social problems such as alcoholism, drug addiction, sedentary lifestyles, and gender inequality. In addition, access to telemedicine or e-health services can vastly contribute to prevention as well as early detection while saving costly travels.

As for external environmental factors, pollution represents the main threat to health security in the Arctic. Many pollutants from all over the world are present in Arctic lands and waters. The elements such as persistent organic pollutants or other contaminants are issues of particular relevance when it comes to health security in the High North. Curbing and reducing pollution may have direct positive effects on human health in the region.

Finally, securing sufficient funding and adequate resources for establishing proper health systems in the Arctic is another major challenge. Due to the low population density of the region, the vast distances, and the harsh environment, investments to tackle health issues are, in per capita terms, higher than in other areas. But as mentioned above, modern electronic services can help reduce the funding needed to provide good and adequate health services to the inhabitants of the Arctic, and in particular to those living in more remote areas.

Environmental security. According to the 1994 UNDP report, environmental security is a "healthy physical environment" (UNDP, 1994, p. 28). The healthiness of the environment can be threatened by economic, industrial, and military activities, pollution, degradation of ecosystems, or climate change. These threats can be local or the result of transborder and global activities. Generally, the Arctic environment is still pristine, particularly if compared to many other regions in the world. However, it is not free from stressors such as climate change, increased human activity, and long-range transportation of pollution.

The ecological situation in each Arctic region is very different from each other. On the one hand, for example, in the Canadian Arctic, there is practically no industrial activity, and the transport infrastructure is poorly developed, so the state of the environment is quite satisfactory; on the other, in the western part of the Russian Arctic, where large centers of extractive and heavy industries are located, the environmental situation is unfavorable.

Continued neglect of ecological aspects of the AZRF industrial activities resulted in heavy pollution of many Russian Arctic urban areas. Russian environmentalists pointed out 27 impact zones in the AZRF, which are polluted to the extent that serious threats both to local ecosystems and population's health emerged there (Fig. 1). The most problematic impact zones include the Norilsk industrial conurbation (more than 30% of total pollutants), the West Siberian region where oil and gas production is concentrated (30%), the Murmansk Region (10%), and the Arkhangelsk Region (5%) (Dushkova & Evseev, 2011; Sokolov, 2013). According to some experts, around 15% of the Russian Arctic is heavily polluted (Kochemasov et al., 2009).



Fig. 1 The AZRF impact zones. (Source: compiled by the authors)

To address the numerous environmental problems in the AZRF, in 2011, the Russian Government launched a program worth ₱2.3 billion to clean the area, including the Franz Joseph Land and Novaya Zemlya Archipelagos. By the end of 2016, some 42,000 t of waste had been removed from these archipelagos, and 349 hectares of insular land had been cleaned. In 2015, another AZRF cleaning program was launched – this time with a ₱21-billion funding envelope. By the end of the following year, the cleaning of Wrangel Island – including the removal by the Russian military of 36,477 barrels and 264 t of scrap metal – was nearly complete (Neftegas.ru, 2016).

Nuclear safety in the High North is also a matter that encourages Russia and other Arctic states to cooperate. Notably, more than 200 decommissioned nuclear reactors from submarines and icebreakers from the Soviet period are stored on the Kola Peninsula – a Soviet "legacy" that is especially problematic for neighboring countries such as Norway, Finland, and Sweden. It should be noted that the US-Russian Cooperative Threat Reduction Program (Nunn-Lugar) of 1991–2012 (Nikitin & Woolf, 2015) and the Multilateral Nuclear Environmental Program in the Russian Federation (Government of the Russian Federation, 2003) played a significant role in nuclear waste treatment.

The Russian Government program on nuclear and radiological safety for 2008–2015 succeeded in dismantling 195 retired nuclear submarines (97% of the total quantum), removing 98.8% of radioisotope thermoelectric generators from service, and dismantling 86% of these generators. Centralized long-term storage facilities for spent nuclear fuel were constructed. Moreover, 53 hazardous nuclear facilities were decommissioned, 270 hectares of contaminated land was remediated, and open water storage of radioactive waste was ended (Rosatom, 2017).

The Russian northern regions and urban centers now try to prevent and reduce pollution in the AZRF rather than to focus on the elimination of accumulated ecological damage (Tianming et al., 2021). They believe that reduction of air pollution will help to mitigate climate change and suggest a number of specific measures to reduce dangerous emissions. These policies are viewed as more adequate and efficient than eliminating the environmental damage mostly created by the Soviet economic and defense activities in the north. On the other hand, this is a good example how climate change adaptation and mitigation strategies can complement and reinforce each other.

Russia has supported and vigorously participated in developing all the UN-related environmental initiatives, ranging from the Intergovernmental Panel on Climate Change's recent reports (2014, 2021) to the International Maritime Organization's Polar Code (2014–2015) and the Paris Agreement on climate change (2015). Moscow has also actively participated in the Arctic Council working and expert groups involved in environmental research and assessment.

It is not only Russia that has environmental problems in the Arctic. For example, in Northern Norway, there are similar problems in Kirkenes, where mining, processing, and ship repair enterprises are located. In Northern Sweden, the concern of the "greens" and the Sámi people is caused by the activities of an iron ore mine and a processing plant in Kiruna. In Alaska, the sources of environmental problems are oil and gas pipelines, the mentioned Red Dog mine, and military activities.

Personal security refers to the absence of sudden and unpredictable physical violence (UNDP, 1994, p. 30). Such physical violence could be either caused by states, loose or organized groups of individuals; or be targeted at specific groups (such as women or children). Threats to personal security might arise from outside the community, from specific individuals in one community, or from the community as a whole. It can arise from circumstantial factors (being in the wrong place at the wrong time), or be rooted in the pillars of a society (such as domestic violence). In the first case, randomness is the main element to be considered. In the second, vulnerability of individuals or collectivities within the community are far more relevant factors (Peterbauer & Martin, 2018).

As the Arctic region opens up to the world, new threats to personal security might emerge. Those could include organized crime or trafficking in drugs and people.

For example, the Russian "fish, crab, and caviar mafias" not only aim to expand their commercial activities and sideline their foreign rivals, but also to establish control over the regional governments and federal agencies in the Russian Far North and East.

The Arctic states are concerned about smuggling, not only from outside the region (a threat that remains hypothetical for the time being), but also between the Arctic nations themselves, which is already a reality. For example, in 2012, a narwhal smuggling ring was disclosed by the Canadian and US law enforcement agencies. Between 2000 and 2010, an American family purchased the tusks legally in northern Canada and then used the Internet to find buyers in the United States. This family is estimated to have sold between \$400,000 and \$1 million worth of tusks to as many as 150 buyers (McGwin, 2015). It should be noted that narwhals are protected under various national and international treaties. The Convention in International Trade in Endangered Species of Wild Fauna and Flora bans their hunting in Canada and Greenland by anyone other than the Inuit. Canadian tusks may be sold domestically or shipped abroad to countries where their sale is legal. Imports of tusks to the United States are banned under the federal Marine Mammal Protection Act.

Illegal migration is one more security challenge for the Arctic states. Over the last decade, Canada registered several cases of illegal migration. For example, Romanian citizens traveled from Greenland to Canada's Ellesmere Island by motor boat before trying to fly to Toronto. Several Turkish sailors have illegally left their ship in the Canadian port of Churchill in attempt to travel by train to Winnipeg (Gudev, 2014).

The case of Arab refugees traveling to the Nordic countries via the polar routes is a much more serious security threat. Since the beginning of 2015, at least 29,000 people, mostly from Syria, have used various routes to seek asylum in Norway. The number of asylum seekers arriving plummeted by 95% in 2016 (Osborne, 2016). The refugees being bussed to Russia had taken the so-called "Arctic Route" through Russia, crossing the Norwegian border by bicycle as Russia does not allow anyone to cross by foot. In November 2015, Oslo announced it would deport people who had arrived from a safe country. The Norwegian government considers Russia safe, but has not given the refugees opportunity to appeal the decision. The Norwegian authorities have started sending the first of approximately 5500 mainly Syrian refugees, who have been housed in a transit camp in the north of the country, back to the Russian border they crossed in 2015 (Norway sends 2016). Critics of the government have said the attempts to return refugees to Russia put them at risk and contravene European human rights. Although Norway is not an EU member, it is in the border-free Schengen zone. In addition to deportation, in 2016 Norway started to build a steel fence at its border with Russia to prevent a further influx of refugees.

As far as Finland is concerned, approximately 32,500 refugees, mostly natives of Iraq, came to the country in 2015 (TASS, 2016). Most of them arrived through the Swedish-Finnish border in the north of the country, but many others chose other routes, such as traveling by ferry from Germany and across the border with Russia in northern Lapland. The Russian-Finish border has become one of the main routes that refugees use to get to Finland. The influx of refugees from Russia to Finland increased after Norway tightened security measures on its borders and made the procedure of asylum application more difficult in late 2015, prompting migrants to seek alternative paths to enter the EU's borderless Schengen area and to get asylum

there. In January 2016, Finland registered 500 asylum seekers arrivals from Russia against 700 border crossings throughout 2015 (Sputnik, 2016b).

In March 2016, Russia and Finland agreed to introduce temporary restrictions at two checkpoints on their border, Salla and Raja-Jooseppi, for citizens of third countries. Similar to Norway, the asylum seekers were sent back to Russia, where they have valid residence permits. The Finnish Ministry of Interior said that the measures have aimed to curb undocumented migration and related threats and enhance the effectiveness of measures taken by both Helsinki and Moscow to combat illegal migration.

Some Arctic nations (especially Russia) are seriously concerned about the threat of nuclear terrorism. Moscow is afraid that not only the industrial infrastructure or oil platforms, but also nuclear power plants and nuclear waste storages, could be potential targets for terrorists. There are two nuclear plants – Kola and Bilibin – in the AZRF. Recently, a floating nuclear power plant was stationed in the port of Pevek. Most notably, more than 200 decommissioned nuclear reactors from submarines and icebreakers from the Soviet period are stored on the Kola Peninsula from the Soviet period. In 2016, Russia launched a large-scale program for removing nuclear waste from the former Soviet submarine base in Andreev Bay in the Murmansk region. A total of 22,000 containers of spent fuel from nuclear submarines and icebreakers were stored in three storage tanks. There were also approximately 18,000 m³ of solid waste and 3400 m³ of liquid radioactive waste, which, according to Norwegian sources, are collectively as radioactive as 5000 Hiroshima bombs (Sputnik, 2016a). These nuclear facilities must be reliably protected to prevent potential terrorist attacks.

Although today crime is not a major concern in the Arctic, existing cooperation networks and expertise should be strengthened as to avoid potential new threats. Unfortunately, personal security is hardly covered in the national policies and strategies and mostly left for municipalities and local communities themselves.

Community security. According to the 1994 UNDP report, individuals often "derive security from their membership in a group – a family, a community, an organization, a racial or ethnic group that can provide a cultural identity and a reassuring set of values" (UNDP, 1994, p. 31). Ensuring community security means that the language, culture, or – more generally – integrity of those groups is preserved. In other words, this means that the community endures and persists beyond its current individuals. At the same time, it means that vulnerable subgroups within such communities are also recognized and valued by the community; that is, that the community at large is not a source of threats to individuals.

Within the Arctic context, it is widely assumed that threats to security can affect the more vulnerable communities such as indigenous peoples, women, children, and old generation. They are particularly vulnerable to the effects of rapid modernization, industrialization, socioeconomic structural changes as well as environmental threats such as climate change.

It should be noted that ensuring the continuation of Arctic indigenous communities requires that the different cultural and community-based culture is protected, so it can be handed over to the next generation. The formal protection of indigenous

languages, culture, traditional economies and way of life, particularly after centuries of neglect if not open repression, is already formally included in all Arctic nations' policy and strategy documents. The Arctic states also work on establishing knowledge centers where traditional knowledge can be gathered and transmitted following both traditional and modern, scientific ways. Such institutions contribute to the enhancement and transmission of traditional culture and language, and thus reduce community insecurity.

In Finland, Norway, Sweden, and Russia, Sámi people created some representative institutions to protect their ethnic identity, culture, and rights. For example, Sámi parliaments were established in Finland (1973), Norway (1989), Sweden (1993), and Russia (2008). In Russia, however, both the Murmansk regional government and some local Sámi organizations have challenged the legitimacy of the Kola Peninsula Sámi Assembly (the official name of the Sámi parliament), and it was dismissed in 2018. Instead, the Russian Sámi preferred to organize regular Sámi conventions to discuss common problems and address them to the local and regional governments.

Except for the indigenous peoples, an often-neglected community security problem is gender empowerment and the promotion of gender equality measures, both at the economic as well as the community and political levels. Women are roughly 50% of the Arctic population, and a gender perspective needs to be taken into consideration when addressing human security challenges ranging from men's violence against women, sexual harassment and abuse, guest hetaerism, girls' early marriages, and women's access to health care, education, and well-paid jobs.

For example, according to some accounts, in the Canadian Arctic, indigenous women are 12 times more likely to go missing or be murdered than their non-indigenous counterparts (Ágústsson, 2021, p. 87). Additionally, in remote locations and situations, women tend to become more financially dependent on their spouses, and therefore more vulnerable. Job opportunities in the extractive economy see lower rates of female employment, reflecting significantly greater barriers to women working in the extractive sector, and further isolating of women who live in camps and extractive industry communities.

It should also be noted that, much like in the rest of the eight Arctic states, women in the Arctic (particularly indigenous women) are politically underrepresented and suffer from unequal social and economic structures. Even if there are no formal restrictions barring indigenous peoples from assuming public office, the reality on the ground is that they are factually underrepresented and that, in this case, it is insufficient not to actively violate the rights of indigenous peoples; the state is duty-bound to take special measures to fulfill this right. Even in predominantly indigenous villages, the local mayor and their aides are usually nonindigenous males. International experts believe that this is indicative of a reality of structural discrimination against which the state has to intervene actively.

According to the Gender Equality in the Arctic Report-3, except for the Chukotka Region in Russia and Nordic regions of Västerbotten, Norrbotten (Sweden), and Nordland (Norway), women remain less likely to participate in the political sphere than men across the Arctic regions (Fig. 2).

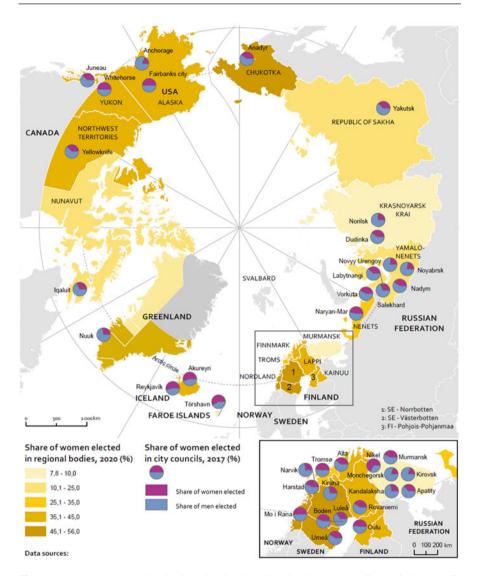


Fig. 2 Women's representation in elected regional, (sub)national elective bodies, and city councils (per cent). (Source: adapted from Ágústsson (2021)

With an average level of 26.3% of female representatives in the Arctic elective bodies, the gender gap varies significantly across Arctic countries and across the regions/subnational entities. Today, there is just one region with full gender parity achieved – the Chukotka Autonomous Area in Russia. A great difference in gender composition is observed in elective bodies not only across the entire Arctic but also across the country's regions, from the highest proportion of women's representation

18

(50% elected deputies of both genders in Chukotka) to the lowest one (7.8% of female legislators in Krasnoyarsk Province) (Fig. 3).

Iceland became a world leader in closing most gender gaps as a result of both women's NGO activism and the country's special programs aimed at improving gender equality in such critical areas as education, political participation, and women's participation in the labor force. However, as far as women's representation in the Icelandic parliament is concerned, the trend toward narrowing the gender gap in legislative institutions is not sustainable. The first setback took place in the first decade of the twenty-first century, when the proportion of men in two parliamentary elections of 2003 and 2007 increased despite female candidates' active participation: women won slightly over 30% of parliamentary seats. The 2017 elections demonstrated another decrease in the number of female legislators from 47.6% to 38% (see Fig. 4).

In Greenland, although the political norms are gradually changing toward more gender-equal representation in institutions of political power (Fig. 5), elements of patriarchal structures are still dominant in the public domain. The current political



Fig. 3 Share of male and female legislators in regional elective bodies in the Russian Arctic in 2020. (Source: adapted from Ágústsson (2021)

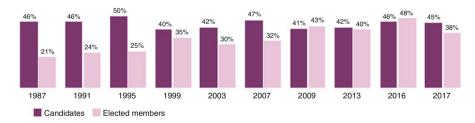


Fig. 4 Women as percentage of candidates and elected members in Icelandic parliamentary elections in 1987–2017. (Source: adapted from Ágústsson (2021)

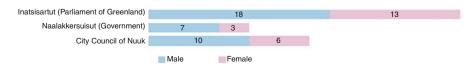


Fig. 5 Gender political representation in Greenland. (Source: adapted from Ágústsson (2021)

system does not fully guarantee equal access to all levels of power, across different sectors, or meaningful participation in political discussions to all genders.

Despite achieving approximate parity in numbers in the Greenlandic parliament, gender gaps still exist at political leadership positions. For example, the female President leads the parliament, but all the political parties' leaders are men, and male parliamentarians lead 8 out of 13 committees.

At the city level, where the political stakes are not that high, the general pattern shows greater gender equality across city councils in all Arctic countries than in regional legislative bodies. Although the top leadership positions of city mayors remain mainly male dominated in the Arctic region, in the United States and Canada, three out of six major cities – Juneau, Yellowknife, and Whitehorse – are led by female mayors.

With an average level of 37.8% of elected female seat holders in city councils, women's representation in most regions is higher than in regional legislative bodies (26.3%) (see Fig. 2). This is especially true in Russia, where women are typically much better represented in city governance. However, the share of elected female council members varies considerably not only from country to country and region to region, but also from city to city within administrative-political territories (Fig. 6). For instance, in the Murmansk Region of Russia, women occupy 20% of city council seats in Monchegorsk and 43% in Murmansk to 66% in Nikel. In Alaska, women hold 18% of city council seats in Anchorage, 38% in Juneau, and 50% in Fairbanks. The causes of cross-regional and intraregional disparities leading to existing imbalances are different in each case and can be explained by the local political peculiarities.

At the local level, despite different and, in some cases, opposite patterns observed in gender composition in local elective bodies, the gender gap in political empowerment is less profound throughout Arctic communities. In Iceland, for instance, there is a sustainable trend toward achieving full gender parity. In 2018, this has almost been achieved at the municipal level (Fig. 7). It should be noted that the number of elected women was proportionally higher in larger municipalities than in smaller ones.

Despite numerical parity, the presented numbers do not say everything about women's level of influence at the local government level. Studies have repeatedly shown a worrisome trend: Men are more likely to get re-elected than women, and the last local elections are no exception. About half of the male deputies were re-elected, compared to 32% of women.

A relatively new emerging phenomenon of reversed gender disparity related to male underrepresentation is also indicated in the North, especially in predominantly indigenous communities. For instance, in the Russian Arctic, the local political and civic empowerment of women is particularly visible in remote communities where women play a substantial role and have an overwhelming majority in local governance institutions.

For example, in the Nenets Autonomous Area, the recent local elections of 2016–2018 brought women majorities into power in eight out of nine predominantly indigenous municipalities (Fig. 8), revealing a significant gender gap in favor of

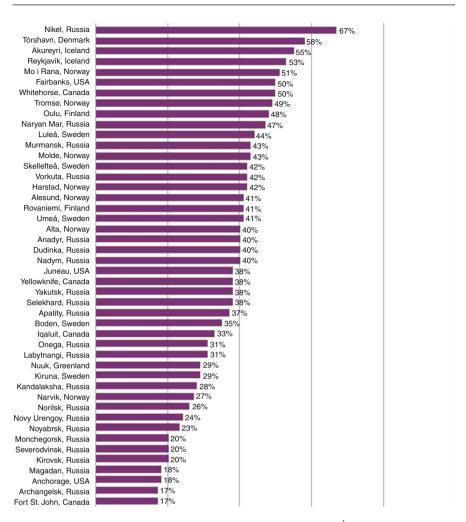


Fig. 6 Share of women elected to city councils. (Source: adapted from Ágústsson (2021)

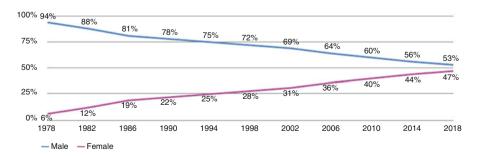


Fig. 7 Share of elected male and female deputies at municipal elections in Iceland in 1978–2018. (Source: adapted from Ágústsson (2021)

(Control 1 to (0017)				
Kaninskiy (2017)	20.0%	80.0%		
Karskiy (2018)	28.6% 71.4%			
Khorey-Verskiy (2017)	28.6%	71.4%		
Khoseda-Khardskiy (2018)	14.3%	85.7%		
Kolguev (2018)	16.7%	83.3%		
Malozemelskiy (2017)		71.4%	28.6%	
Primorsko-Kuyskiy (2017)	30.0% 70.0%			
Timansky (2018)	28.6%	71.4%		
Yusharskiy (2016)	28.6%	71.4%		
Male Deputies Female Deputies				

Fig. 8 Gender disparity in selected Nenets municipal councils (Russia): elected female and male deputies, by percentage (elections of 2016–2018). (Source: adapted from Ágústsson (2021)

female elected representatives. Overall, women got 48 seats (71%) and men only 20 (29%).

There are three major factors that significantly contribute to the political trend toward women's empowerment in these local AZRF settlements: (1) the Soviet doctrine of gender equality that was implemented in the Arctic as a form of women's liberation (partly through the depatriarchization of traditional family institutions); (2) the Soviet system of compulsory education for all children; and (3) women's personal goal-setting and career strategizing.

This phenomenon can be observed in many communities across the Arctic. For example, in Greenland, men's identities are strongly attached to defined notions and visual representations of hunting and fishing. Males are socialized into maintaining traditional work activities that no longer enable them to secure success in the current political system. Despite holding formal political leadership by having an overwhelming majority in municipal councils, men often feel disempowered (Ágústsson, 2021, p. 241).

However, generally, the problem of reaching a gender balance in the representative bodies of the Arctic regions, cities, and municipalities is still an important priority on the human security agenda of the Circumpolar North.

It should be noted that in the case of community security, human security is particularly closely intertwined with societal security, since it reflects problems that relate to specific communities, which, in fact, make up society.

Political security. The UNDP report (1994, p. 32) attributes political security to a society "that honors their basic human rights." As Martin (2018, p. 40) notes, within the Arctic context, enhancing political security for the wellbeing of the local populations might refer: to the enhancement of self-government and local governance structures to deal with phenomena at the local level; to ensuring that local and indigenous communities are part of the different decision-making processes regarding issues that affect them; or to ensuring that local communities have certain (direct or indirect) control over the revenues generated by the exploitation of the natural

resources located in the region. Some level of integration of indigenous, local, and nonstate actors has been partially achieved through regional governance fora and different arrangements at the national levels. Several Arctic states stress the need to strengthen and deepen current levels of self-government (for example, in the cases of Greenland and the Faroe Islands), and that the prospects of economic development are not to diminish but to increase the current self-governing structures. Further development of such political instruments is essential to achieve a lasting and far-reaching political security.

According to the Human Freedom Index 2020, at least seven out of the eight Arctic states could arguably present a good record of respect and promotion of basic human rights (in particular the Nordic countries, who are also deemed champions in this field). Nordic countries have the following freedom ranks: Denmark – 4, Sweden – 9, Finland – 11, Norway – 15, and Iceland – 20 (Vásquez & McMahon, 2020, p. 48). North American countries were ranked sixth (Canada) and seventeenth (US) (Vásquez & McMahon, 2020, p. 43). Russia is the only problematic country in the region, criticized for the lack of political freedoms, tolerance to political opposition, and free mass media. For these reasons, it has the lowest rank – 115 (Vásquez & McMahon, 2020, p. 38). However, in the case of Russia's Arctic zone, such criticism might be not entirely relevant because Moscow tries to actively involve its Arctic regions, cities, municipalities, and indigenous communities to strategic planning and decision-making.

It should be noted that promoting political cooperation and collaboration between the Arctic governments (at the state or regional levels) in order to address various transboundary challenges means promoting political – and thus human – security. In this context, all Arctic states promote the use of multilateral institutions such as the Arctic Council or Barents Euro-Arctic Council, as well as stronger partnerships among the Arctic states.

A Brief Review of the Arctic States' Strategies in the High North

Some Arctic countries – such as Canada, Norway, and Sweden – are among those countries that, since the 1990s, have actively promoted the human and societal security concepts in their foreign policies. Among these countries, Canada played a key role in including "human security issues on the circumpolar agenda" (Exner-Pirot, 2008), including on the agenda of the Arctic Council. However, has this concept been reflected in the national Arctic strategies?

It is known that today all the Arctic countries have published their Arctic strategies, some of which have already been republished taking into account new trends in the development of international cooperation in the Arctic. It is in the texts of the strategies of the Arctic countries that one can find the goals, objectives, and main priorities of the Arctic countries in the implementation of their Arctic policy. However, none of the strategies of the Arctic countries (with exception of Canada) explicitly mentions the human security concept. The 2019 Canadian Arctic and Northern Policy Framework notes: "Canada has an opportunity to bolster its international leadership to ensure that the evolving international order in the Arctic is

shaped in a manner that protects and promotes Canadian interests and values, such as human and environmental security, gender equality and meaningful engagement of Northerners, especially Indigenous peoples" (Government of Canada, 2019).

At the same time, some elements of this concept (in the UN definition) are simply noted in strategic documents: "The policies and strategies cover not only economic or geopolitical strategic topics, but also social, environmental and human aspects of sustainable development in the region" (Exner-Pirot, 2008). Based on the analysis of these documents (Danish Ministry of Foreign Affairs, 2011; Government of Canada, 2019; Government of Finland, 2013; Government of Norway, 2021; Government of Sweden, 2020; Parliament of Iceland, 2011; President of the United States of America, 2013; Putin, 2020), it can be stated that the priority of most Arctic countries is economic security (sustainable use of natural resources, economic development, business interests in the Arctic, etc.), environmental security (climate changes, balance between environmental protection and economic development, protection of the Arctic ecosystem and biodiversity, etc.), community security (tackle societal and community-based problems, gender equality, promotion women and youth empowerment, create jobs, foster innovation, etc.), and political security (increasing participation of local inhabitants in decision-making processes, promoting the wellbeing of indigenous people, etc.). The rest of the components of human security are found only in certain countries. For example, references to food security issues can only be found in Canada's and Russia's Arctic strategies, personal security only in Canada's and Finland's, and health security only in Canada's, Denmark's, Russia's, and Sweden's.

Obviously, attention is paid to various aspects of human security in national Arctic strategies to varying degrees, while in all cases, there is no comprehensive approach to human security. As Martin (2018, p. 26) notes, this is largely due to the fact that Arctic strategies are mainly focused on determining the national interests of countries in the Arctic, they have a truly state-centric character and "economic and environmental security, as elements of human security, can be better connected with the national priorities of the Arctic states." Thus, the strategic documents of the Arctic countries are mainly focused on the interests of the state, and the interests of the inhabitants of the Arctic take the second place. However, tracing the evolution of the Arctic strategies of the countries that republished them, it can be noted that the "human dimension" appears more and more in their content.

For example, in the 2013 Russian Arctic strategy (Putin, 2013), only threats and challenges related to economic, environmental, and health security were identified. In the Russian Arctic strategy designed up to 2035 (Putin, 2020), some new human security challenges are addressed – the food, demographic, personal, communal, societal, nuclear, and information ones.

Conclusions

Several conclusions emerge from the above analysis.

The "human security" concept was accepted by all IR paradigms in one way or another, although the neoliberal and globalist paradigms are most receptive to this

concept. These two paradigms have developed the most detailed human security agenda in the Arctic, although they have not been able to fully influence the Arctic states' policies in this area.

All eight Arctic countries have familiarized themselves with the human security concept. To some extent, this concept is embedded in their Arctic strategies, although only the Canadian one directly refers to the human security problematique. The Arctic states' strategies link human security issues with societal security and a sustainable development agenda.

At the same time, in the Arctic states' strategic documents, quite often economic, ecological, food, health, personal, communal, and political dimensions of human security are not properly harmonized with one another. Priority is given to economic and environmental aspects of human security strategies, while other dimensions are often ignored or given less attention.

The strategies analyzed in this chapter are still highly state-centered. This means that these documents focus first on the state, and then on the inhabitants of the Arctic. Despite the human security elements found in the above documents, the overall state-centric approach is still in place.

At the same time, the Arctic countries try to address the human security problematique as a part of their sustainable development strategies in the Arctic. They created proper legal and institutional settings for the development and implementation of such strategies. The Arctic states have made great strides in implementing some human security-related projects (mostly economic and environmental) over the last 10–15 years. There was a clear shift from survival or reactive strategies to capacity-building, proactive human security, or sustainable development strategies.

However, there is still a long way to go, in terms of both the development of adequate policies and their effective implementation. The main problem is how to solve the "words and deeds" problem, since many of the human security-oriented projects in the Arctic countries still remain on paper and have never been implemented.

To conclude, despite the above problems and shortcomings, the total "balance sheet" of the Arctic states' human security strategies and general dynamics in this sphere is rather positive. The Arctic countries are serious about solving numerous socioeconomic, environmental, and other human security-related problems and making their Arctic regions and cities better and more comfortable places to live in.

References

Ágústsson, H. O. (Ed.). (2021). Pan-Arctic report, gender equality in the Arctic, phase 3. The Arctic Council Sustainable Development Working Group. Retrieved from: https://www.dropbox.com/s/3qb1ofhcy3jqehp/Pan-Arctic_Report-GEA3-2021.pdf?dl=1

Arctic-Info.Ru. (2016). Regions of the Artic Zone of Russia, February 17. Retrieved from: http://www.arctic-info.ru/encyclopedia/countries-and-regions/regiony-arkticheskoy-zony-rf/(in Russian).

- Benning, K. (2020). Unemployed indigenous workers disproportionately suffering from COVID-19 economy compared to non-indigenous. *Global News*, 3 November. Retrieved from: https://globalnews.ca/news/7440640/unemployment-indigenous-coronavirus-economy/
- Berman, M. (2018). Resource rents, universal basic income, and poverty among Alaska's indigenous peoples. *World Development*, 106, 161–172. https://doi.org/10.1016/j.worlddev.2018. 01.014
- Buzan, B., de Wilde, J., & Wæver, O. (1998). Security: A new framework for analysis. Lynne Rienner Publishers.
- Chandler, D. (2008). Review essay: Human security: The dog that didn't bark. *Security Dialogue*, 39(4), 427–438.
- Coates, K., & Holroyd, C. (Eds.). (2020). The Palgrave handbook on Arctic policy and politics. Springer Nature.
- Danish Ministry of Foreign Affairs. (2011). Kingdom of Denmark strategy for the Arctic 2011–2020. Retrieved from: https://naalakkersuisut.gl/~/media/Nanoq/Images/Udenrigsdir ektoratet/100295 Arktis Rapport UK 210x270 Final Web.pdf
- Dobes, P. (2019). Suicide among young indigenous peoples in the Canadian Arctic. 27 June. Retrieved from: https://jsis.washington.edu/news/suicide-among-young-indigenous-peoples-in-the-canadian-arctic/
- Dodin, D. A. (2005). The Arctic's sustainable development (problems and prospects). Nauka. (in Russian).
- Dregalo, A. A., & Ulyanovsky, V. I. (2011). "Nordman": Prolegomena on socioeconomic typology of the northern man. *The Arctic and the North, 1*, 14–35. (in Russian).
- Dushkova, D., & Evseev, A. (2011). Analysis of technogenic impact on geosystems of the European Russian North. *The Arctic and the North*, 4, 1–34. (in Russian).
- Ekonomika shtata Alyaska. (2021). Pro Ssha. http://prousa.info/alaska economics
- Etkind, A. (2014). Domestic colonization. Russia's imperial experience. NLO. (in Russian).
- Exner-Pirot, H. (2008). Human security in the circumpolar North: What role for the Arctic Council? Retrieved from: https://www.rha.is/static/files/NRF/OpenAssemblies/Anchorage2008/a/5th_nrf anc 2008 exnerpirot human security circumpolar north.pdf
- Farr, C. J., Avila, R., Topol, R., & Raines, R. (2019). Alaska vital statistics 2019 annual report. State of Alaska, Division of Public Health.
- Gjørv, G. H., Bazely, D., Christensen, J., Tanentzap, A., & Bojko, E. (2009). Human security in the Arctic Yes, it is relevant! *Journal of Human Security*, 5(2), 1–10.
- Government of Canada. (2019). Arctic and Northern policy framework international chapter. Retrieved from: https://www.rcaanc-cirnac.gc.ca/eng/1562867415721/1562867459588
- Government of Finland. (2013). Finland's strategy for the Arctic Region. Government resolution on 23 August 2013. Retrieved from: https://vnk.fi/documents/10616/334509/Arktinen+strategia +2013+en.pdf/6b6fb723-40ec-4c17-b286-5b5910fbecf4
- Government of Norway. (2021). The Norwegian government's Arctic policy. People, opportunities and Norwegian interests in the Arctic. Retrieved from: https://www.regjeringen.no/en/dokumenter/arctic policy/id2830120/
- Government of Sweden. (2020). Sweden's strategy for the Arctic region. Retrieved from: https://www.government.se/informationmaterial/2020/11/swedens-strategy-for-the-arctic-region2020/#:~:text=Sweden's%20strategy%20for%20the%20Arctic%20region%20presents%20the%20Government's%20objectives,and%20the%20environment%3B%20polar%20research%3B
- Government of the Russian Federation. (2003). Framework agreement on a multilateral nuclear environmental program in the Russian Federation, 28 October. Retrieved from: http://www.pircenter.org/media/content/files/11/13613597850.pdf
- Graham, D., & Poku, N. (Eds.). (2000). Migration, globalization and human security. Routledge. Gudev, P. (2014). Russia and the USA in the Arctic: Common interests and tensions. Institute of World Economy and International Relations, Russian Academy of Sciences. Retrieved from: http://sites.miis.edu/russianinitiative/files/2014/03/ARCTIC.pdf. (in Russian).

Heininen, L. (2016). Security of the global Arctic in transformation – Potential for changes in problem definition. In L. Heininen (Ed.), *Future security of the global Arctic: State policy, economic security and climate.* Palgrave Macmillan.

- Hossain, K., & Petrétei, A. (Eds.). (2016). Understanding the many faces of human security: Perspectives of northern indigenous peoples. Brill Nijhoff.
- Hossain, K., Zojer, G., Greaves, W., Roncero, J. M. R., & Sheehan, M. (2017). Constructing Arctic security: An inter-disciplinary approach to understanding security in the Barents region. *Polar Record*, 53(1), 55–56.
- Hossain, K., Martín, J. M. R., & Petrétei, A. (Eds.). (2018). Human and societal security in the circumpolar Arctic. Local and indigenous communities. Brill.
- Huggan, G., & Jensen, L. (2016). Postcolonial perspectives in the European high north: Unscrambling the Arctic. Palgrave Macmillan.
- Inglehart, R. F., & Norris, P. (2012). The four horsemen of apocalypse: Understanding human security. *Scandinavian Political Studies*, *35*(1), 71–96.
- Jacobsson, L., Stoor, J. P. A., & Eriksson, A. (2020). Suicide among Reindeer Herding Sámi in Sweden, 1961–2017. *International Journal of Circumpolar Health*, 79(1). Retrieved from: https://doi.org/10.1080/22423982.2020.1754085
- Kapustin, B. (1996). National interest as a conservative utopia. *Liberal Thought*, 6, 13–28. (in Russian).
- Kharlampieva, N. K., & Lagutina, M. L. (2011). Transnational model of Arctic governance in the 21st century. *The Arctic and North*, *3*, 64–82. (in Russian).
- Kochemasov, Y. V., Morgunov, B. A., & Solomatin, V. I. (2009). Ecological and economic assessment of the prospects for the development of the Arctic. *ECOTECO*. Retrieved from: https://ecoteco.ru/id398/. (in Russian).
- Konyshev, V. N. (2014). Human security A new turn in understanding of security policy. *National Interests: Priorities and Security*, 40, 43–56. (in Russian).
- Kukulin, I. (2013). "Domestic colonization": Shaping post-colonial mentality in the Russian literature of the 1970–2000s. *Political Conceptology*, 2, 149–185. (in Russian).
- Larsen, J. N., & Fondahl, L. (2015). Arctic human development: Regional processes and global linkages. Nordisk Ministerrad.
- Martin, J. M. R. (2018). Policies and strategies for the Arctic: A review of the approaches to human security in the Arctic. In K. Hossain, J. M. R. Martín, & A. Petrétei (Eds.), *Human and societal* security in the circumpolar Arctic. Local and indigenous communities. Brill.
- McGwin, K. (2015). American sentenced in narwhal smuggling ring. The Arctic Journal. 12 January. Retrieved from: http://arcticjournal.com/climate/1248/american-sentenced-narwhal-smuggling-ring
- Medvedev, S. (2013). Reserved territory: The Arctic should be saved from corporations and states. *Forbes*, 3 October. Retrieved from: http://www.forbes.ru/mneniya-column/tsennosti/245761-zapovednaya-territoriya-arktiku-nuzhno-spasti-otkorporatsii-i-gosud. (in Russian).
- Ministry of Foreign Affairs of the Russian Federation. (2021). Interview with the Ambassador at large of the Russian MFA N.V. Korchunov, newspaper "Kommersant". 15 January. Retrieved from: https://www.mid.ru/arkticeskij-sovet/-/asset_publisher/0vP3hQoCPRg5/content/id/4525318. (in Russian).
- Morgunova, M. (2014). *Russia's Arctic "Saga"*. Moscow: The Russian International Affairs Council, 7 May. Retrieved from: http://russiancouncil.ru/library/?id_4=490 (in Russian).
- Nazukina, M. V. (2013). The Main trends of positioning the Russian Arctic's regions. *Labyrinthe*, 5, 59–68. (in Russian).
- Neftegas.ru. (2016). The Russian military removed 36,477 barrels and 264 tons of scrap metal from the Wrangel Island. Retrieved from: http://neftegaz.ru/news/view/154946-Usiliyamirossiyskih-voennyhs-ostrova-Vrangelya-bylo-vyvezeno-36-477-bochek-i-264-tmetalloloma. (in Russian).

Althingi.pdf

- Nikitin, M. B. D., & Woolf, A. F. (2015). The evolution of cooperative threat reduction: Issues for congress. Congressional Research Service. Retrieved from: https://fas.org/sgp/crs/nuke/ R43143.pdf
- Organization for Economic Cooperation and Development. (2019). Suicide rates. Retrieved from: https://data.oecd.org/healthstat/suicide-rates.htm
- Osborne, S. (2016). Norway to build border fence with Russia to keep out refugees. *Independent*, 25 August. Retrieved from: https://www.independent.co.uk/news/world/europe/norway-border-fence-russia-refugees-refugee-crisis-schengen-syria-war-a7208806.html
- Paris, R. (2001). Human security: Paradigm shift or hot air? *International Security*, 26(2), 87–102.
 Parliament of Iceland. (2011). A Parliamentary resolution on Iceland's Arctic policy. Approved by Althingi at the 139th legislative session 28 March 2011. Retrieved from: http://library.arcticportal.org/1889/1/A-Parliamentary-Resolution-on-ICE-Arctic-Policy-approved-by-
- Peterbauer, H., & Martin, J. M. R. (2018). Innocence challenged: Perceptions and constructions of human security in Scandinavian literature on the Arctic. In K. Hossain, J. M. R. Martín, & A. Petrétei (Eds.), Human and societal security in the circumpolar Arctic. Local and indigenous communities. Brill.
- Pollock, N. J., Naicker, K., Loro, A., Mulay, S., & Colman, I. (2018). Global incidence of suicide among indigenous peoples: A systematic review. *BMC Medicine*, 16, 145. Retrieved from: https://doi.org/10.1186/s12916-018-1115-6
- President of the United States of America. (2013). National Strategy for the Arctic Region. 10 May.

 Retrieved from: https://obamawhitehouse.archives.gov/sites/default/files/docs/nat_arctic_strategy.pdf
- Putin, V. (2013). The strategy for the development of the Arctic Zone of the Russian Federation and ensuring national security for the period up to 2020. 20 February. Retrieved from: http://п равительство.pd/docs/22846/. (in Russian).
- Putin, V. (2020). RF President's Decree no. 645, 26 October 2020 "On the strategy for the development of the Arctic Zone of the Russian Federation and ensuring national security up to 2035", http://static.kremlin.ru/media/events/files/ru/J8FhckYOPAQQfxN6Xlt6ti6XzpT VAvOv.pdf. (in Russian).
- Putin, V. (2021). Decree of the President of the Russian Federation no. 400, 2 July 2021 "On the national security strategy of the Russian Federation. Retrieved from: http://publication.pravo.gov.ru/File/GetFile/0001202107030001?type=pdf. (in Russian).
- Rohr, J. (2014). *IWGIA report 18: Indigenous peoples in the Russian Federation*. International Work Group for Indigenous Affairs. Retrieved from: http://www.iwgia.org/iwgia_files_publications files/0695 HumanRights report 18 Russia.pdf
- Rosatom. (2017). *Back-end*. Retrieved from: http://www.rosatom.ru/en/rosatom-group/backend/index.php?sphrase id=11699
- Rozanova, M. (2019). Indigenous urbanization in Russia's Arctic: The case of Nenets Autonomous Region. Sibirica, 18, 54–91.
- Rozanova, M., & Mikheev, V. (2020). Rethinking women's empowerment: Insights from the Russian Arctic. *Social Science*, 9(14). https://doi.org/10.3390/socsci9020014
- Schreiber, M. (2016). In a land of thundering reindeer, suicide stalks the indigenous Sami.
 9 December. Retrieved from: https://www.statnews.com/2016/12/09/suicide-sweden-samimental-health/
- Selin, V. S., & Vasiliev, V. V. (2010). Interaction of global, national and regional economic interests in the development of the north and Arctic. The Kola Science Center of the Russian Academy of Sciences. (in Russian).
- Silis, I. (2014). Russia the Colonizer. *Arctic Journal*, 1 October. Retrieved from: http://arcticjournal.com/opinion/1050/russia-coloniser
- Sivakov, D. O. (2009). The Russian Arctic: Means for legal protection. *Problemy Severa i Arktiki Rossiyskoy Federatsii*, 9. Retrieved from: http://archiv.council.gov.ru/files/journalsf/item/20090922142429.pdf. (in Russian).

Sokolov, Y. I. (2013). The Arctic: On the accumulated environmental damage problem. *The Arctic: Ecology and Economy, 2*, 18–27. (in Russian).

- Sputnik. (2016a). All clear! Russia to give its Arctic domains a clean bill of health. 10 June. Retrieved from: https://sputniknews.com/20160610/russia-norway-arctic-nuclear-waste-1041126139.html
- Sputnik. (2016b). Finland-Russia border restrictions to come into force on April 10. 8 April. Retrieved from: https://sputniknews.com/20160408/finland-russia-border-restrictions-1037708246.html
- Statistics Canada. (2021). Skills training and labor force status by aboriginal identity, age group and sex. 17 March. Retrieved from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4110005001
- TASS. (2016). Finland, Russia agree to cooperate to solve refugee problem. 27 January. https://tass.com/politics/852479
- The Arctic Council Sustainable Development Working Group. (2021). *Pan-Arctic Report-Gender Equality in the Arctic* 3. Retrieved from: https://www.dropbox.com/s/3qb1ofhcy3jqehp/Pan-Arctic Report-GEA3-2021.pdf?dl=1
- Tianming, G., Bobylev, N., Gadal, S., Lagutina, M., Sergunin, A., & Erokhin, V. (2021). Planning for sustainability: An emerging blue economy in Russia's coastal Arctic? *Sustainability.*, 13. Retrieved from: https://doi.org/10.3390/su13094957
- Tsygankov, P. A. (2010). Human security theory: Political implications and lessons for Russia. Moscow University Bulletin. Series no. 12. *Political Science*, 4, 78–83. (in Russian).
- UNDP. (1994). *Human development report 1994*. Oxford University Press. Retrieved from: http://hdr.undp.org/sites/default/files/reports/255/hdr 1994 en complete nostats.pdf
- Vasilieva, N. A., & Chensin, V. (2011). Modernization as a search for Russia's new identity: The Arctic model. *International Organizations' Bulletin*, 3, 20–26. (in Russian).
- Vásquez, I., & McMahon, F. (2020). The human freedom index 2020. A global measurement of personal, civil, and economic freedom. Cato Institute/Fraser Institute. Retrieved from: https://www.fraserinstitute.org/sites/default/files/human-freedom-index-2020.pdf
- Ventsel, A. (2018). Blurring masculinities in the Republic of Sakha, Russia. Polar Geography, 41, 198–216.
- Wæver, O., Barry, B., Kelstrup, M., & Lemaitre, P. (1993). Societal security, state security and internationalization. In O. Wæver (Ed.), *Identity, migration and the new security agenda in Europe*. Pinter.
- Wang, S., & Roto, J. (2019). *Indigenous population in the Arctic*. Nordregio. Retrieved from: https://nordregio.org/maps/indigenous-population-in-the-arctic/
- Watson, M. (2009). An Arctic treaty: A solution to the international dispute over the polar region. *Ocean & Coastal Law Journal*, 14(2), 307–334.
- Young, T. K., Revich, B., & Soininen, L. (2015). Suicide in circumpolar regions: An introduction and overview. *International Journal of Circumpolar Health*, 74(1), 1–8.