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We will be glad to see you among the authors of “Arctic and North”!

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SOCIAL AND ECONOMIC DEVELOPMENT

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Scenarios for the development of the Arctic region (2020–2035) *

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Abstract. The importance of selecting the development of the Arctic seems to be relevant since rapid and irreversible changes are taking place there. Climate change and globalization are their prominent examples. A complex of factors has both positive and negative impacts on the use of natural resources and the positioning of states located not only within the Arctic but also outside it. The questions arise: what is the significance of these changes for geography, politics, and the management system? How should the comprehension of these processes be built? The relevance of the topic is enhanced by the fact that Russia has the most significant Arctic sector among the states with access to the Arctic Ocean. Therefore, our country has a leading role in working out strategies for the development of the Arctic. The comprehensive approach (considering the economic and political-geographical positions) is central in the article to analyze the directions of development of the Arctic territories. The method reveals the possibilities of sustainable development, which will provide Russia with strategic benefits within the Arctic and globally. The article discusses scenarios for the development of the Arctic, including the Arctic zone of the Russian Federation, in the long-term perspective (until 2035). Substantiation of the long-term prospects for the development of the Arctic, despite Russian and foreign research, seems to be unrealistic due to lack of knowledge about the nature and consequences of climatic changes currently observed in this region and affecting global environmental management. The authors concluded that the priority directions of the Arctic development should be the ones based on positive and innovative trends.
Keywords: *the Arctic, development strategies, climate change, geopolitics, socio-ecological systems, innovation*.

Introduction

Currently, in the Arctic, we observe transformations, the full understanding of which is not formed. They are influenced by two interrelated factors: climate change and globalization, followed by technological, geopolitical, institutional, and institutional reforms. The meaning of the

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latter lies in the directions and choice of instruments for state policy in the Arctic region [1, Schach M., Madlener R., p. 440].

The Arctic is one of the regions of the world considered the most vulnerable (along with the island states, Africa and the African and Asian rivers deltas) by the experts of the UN Intergovernmental Panel on Climate Change as [2, p. 197]. The Arctic is the center of numerous and not sufficiently studied processes and feedbacks operating in the climate system with the participation of air masses, sea ice, specific stratification Arctic Ocean, cryosphere and terrestrial biota. In the 20th-21st centuries, temperature trends in the Arctic have changed repeatedly, and imperfections of instrumental weather observations did not allow to conclude the directions of climate change for a long time. The increase in air temperature in recent decades, other than natural causes, can be attributed to anthropogenic activities that take place outside the Arctic (Figure 1).

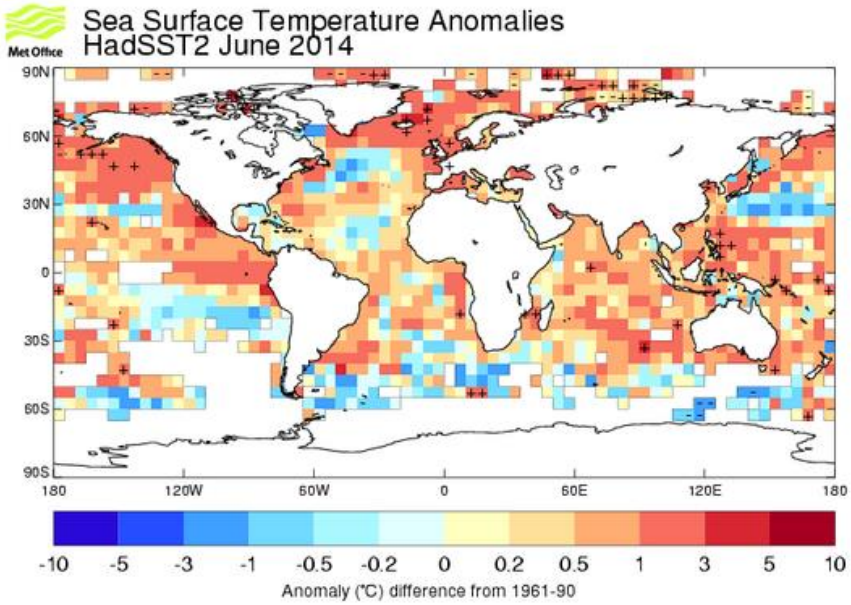

Figure 1. Temperature anomalies on the sea surface, June 2014.

The Arctic Council's report "Assessment of Climate Change in the Arctic" (ACIA, 2005)[1]provides an analysis of observed and expected climate transformations, reveals the impact of these processes on ecosystems, population (incl. indigenous peoples) and environmental management in countries with Arctic areas and territories to the south. Similar assessments are in the reports of the Arctic Council working groups published in 2010–2014. The Arctic Monitoring and Assessment Programme confirmed the data of Roshydromet [2]. All documents emphasize that the increase in air temperature entails the most significant in the last 40 years reduction in the area of sea and land (on the islands of the Arctic ocean) ice, which has an impact on global environmental management [3, Tsaturov Yu.S., Klepikov A.V., p. 69]. The melting of ice, confirmed by the North American Aerospace Agency (NASA) (Fig. 2), contributes to the expansion of exploration and extraction

[1] Arctic Climate Issues 2011: Changes in Arctic Snow, Water, Ice, and Permafrost. Arctic Monitoring and Assessment Programme (AMAP). Gaustadalléen 21, N — 0349 Oslo. Norway. 112 p.

[2] The second assessment report of Roshydromet on climate change and its consequences in the Russian Federation: technical resume /Federal Service for Hydrometeorology and Environmental Monitoring (Roshydromet); [ed. Group V.V. Yasyukevich et al.]. Moscow: [Rosgidromet], 2014. 93 p. [In Russian]

of minerals, determines the change of cargo transportation in the Arctic Ocean, affects the livelihoods of indigenous communities and causes systemic shifts in natural resources management.

The consequences of climate change concern challenging to calculate in the ultra-long term (50–100 years) risks of management of the northern territories [4, Leksin V.N., Porfiryev B.N., pp. 645], put forward the issues related to the organizing scientific research based the network observations of weather and climate in Russia and abroad: precipitation in the Far North, permafrost behavior on land and in the Arctic Ocean [5, Roberts C.D., Senan R., Molteni F., et al., pp. 3685–3690; 6, Bring A., Shiklomanov A., Lammers R., pp. 78–80; 7, Kaverin D.A., Melnichuk E.V., Shiklomanov N.I. et al., p. 50], interaction models of the "atmosphere-ocean" system for 50–100 years (Climate Forecast System, version 2, CFSv2) [8, Liu Y.Y., Wang W.Q., Kumar A., p. 1460]. Modeling of climate change is carried out at the Institute of Computational Mathematics of the Russian Academy of Sciences, where the models INMCM3.0, INMCM4 (Institute of Numerical Mathematics Climate Model, versions 3.0 and 4) and others [9, Dymnikov V.P., Lykosov V.N., Volodin E.M., p. 231] are developed.

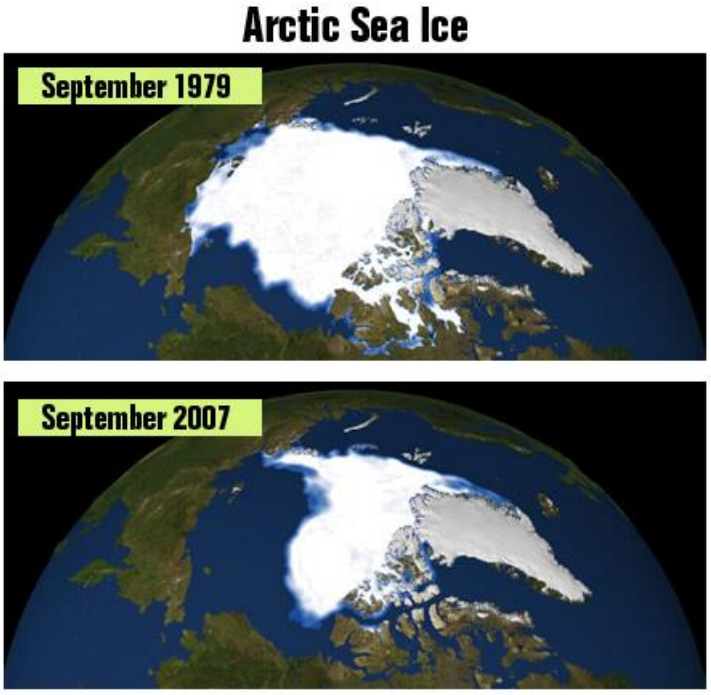

Figure 2. Changes in the Arctic sea ice area in September 1979 and September 2007, according to NASA.

Some questions arose: how significant are the changes in the Arctic? How should they be understood by geography, ecology, politics, and governance? Should we prepare for the "war for resources" — the concept used by some authors of popular scientific articles on the Arctic issues to frighten their audience? Is there a possibility of mutually beneficial cooperation to solve problems or even challenges in the Arctic region? What will contribute to making the Arctic an example for those seeking a constructive approach to natural and social and environmental change in other regions? Answers to the questions raised will allow us to come closer to understanding the ways of sustainable socio-economic development of the Arctic zone, where the priority will be human

well-being, economic progress, and environmental safety based on advanced research with international participation [10, Dodin D.A., pp. 16–17].

At the beginning of the 21st century, several foreign countries and their corporations worked out strategies for the development of the Arctic areas. Strategies adopted in Denmark[3], Canada[4], Iceland[5], Norway[6], USA [11], Finland[7], Sweden[8], China[9], India[10]. Countries that have developed strategies differ in size, location, historical development, and state structure (federal and unitary ones). In the Arctic areas of foreign countries specific economic systems have formed: American, Canadian, European (island and continental), and Russian. Strategies differ, but still, share several features. The continued decades of interest in the Arctic is dictated by the increasing activity of Russia in the Arctic (especially after the 2007 expedition to the North Pole). It is due to the growing demand for raw materials and fuel and. At the same time, we see the depletion of mineral resources in the old mining sites, caused by the desire to control intercontinental transport routes — Northern sea route (NSR) and Northwest Passage (NWP), to develop tourism in the North and the Arctic, to preserve indigenous peoples, to form scientific consortia and to study.

European countries that have developed Arctic strategies proceed from the fact that the problems of vast and non-standard natural and socio-economic conditions of the Arctic are impossible to solve without involving the most significant countries — world leaders. They are the leading emitters of greenhouse gases (China and India), as well as the countries importing hydrocarbons, considered technological leaders of the world economy (Japan and the Republic of Korea). Regional strategies focused on solving the issues of the Arctic development without involvement of non-Arctic states have no chance of success [12, Govorova N.V., Zhuravel V.P., p. 98; 13, Chistobaev A.I., Kondratov N.A., p. 85].

Factors influencing the choice of scenarios

The search for answers to the challenges of Arctic development is complicated by a high degree of uncertainty occurring in this region, due to the lack of our knowledge about their nature and consequences. Russian and foreign Arctic strategies have a time limit — the year 2020. In this regard, it is advisable to analyze several ready-made scenarios describing the directions of the Arctic development and its natural resources from interdisciplinary positions: geography, Economics, Ecology, Geopolitics [14, Young O.R., p. 22].

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[3] Denmark, Greenland and the Faroe Islands: Kingdom of Denmark Strategy for the Arctic 2011—2020. 58 p.
[4] Canada's Northern Strategy. Our North, Our Heritage, Our Future / Government of Canada, Ottawa, 2009. 8 p.
[5] Studneva E. Russia and Iceland: Arctic attraction. URL: http://russiancouncil.ru/inner/ (Accessed: 08 September 2018).
[6] Northern regions. Prospects and decisions / Ministry of Foreign Affairs of Norway. 2011, 48 p.
[7] Finland's Strategy for the Arctic Region / Prime Minister Offices. 2010. 98 p.
[8] Sweden's Strategy for the Arctic region /Government Offices of Sweden. Ministry for Foreign Affairs. Department for Eastern Europe and Central Asia. Arctic Secretariat, Stockholm, Sweden. 2011. 52p.
[9] Karlusov V. Arctic vector of globalization of China. URL: http://russiancouncil.ru/inner/ (Accessed: 08 September 2018).
[10] Lunev S. India has rushed into the Arctic. URL: http://russiancouncil.ru/inner/ (Accessed: 08 September 2018).

The authors proposed options for the development of the Arctic in the long-term perspective. They based them on the scientific foundation presented in scientific articles and the Arctic strategies, considering the willingness to create the specific Arctic oriented management and to develop international relations [15, Zagorsky A., p. 45; 16, Kharevsky A.A., p. 98].

Several factors influence the content of the Arctic development scenarios.

1. **Physical and geographical features of the region:** extreme climatic conditions and climate change dynamics.

A long period with negative air temperatures, short vegetation period, specific photoperiodicity, the spread of perennial rocks increases the cost of development industry and infrastructure, cause increased energy costs, and impose special requirements for municipal systems of settlements. Almost 70% of the Russian Arctic is constantly under the ice. It necessitates the development of special measures to ensure safety in the extraction of minerals, the functioning of infrastructure, and support of defense capability of the state in the northern (Arctic) direction [17, Barsegov Yu.G., Korzun V.A., Mogilevkin I.M., p. 18].

Natural extremality is enhanced by the peripheral location of the Russian Arctic, dispersal and low degree of study of raw materials and fuel deposits on land and in the waters of the Arctic Ocean, the remoteness of industrial centers from coastal supply bases and national and foreign markets, the insufficient development of transport, energy and communications.

In the Russian Arctic, the natural challenges of resource development are evident in the eastern sector. It is proved by the absence of significant investment projects there for several years. Eastern regions, islands, and archipelagos in the west of the Russian Arctic are characterized by dependence of the economic activity on the supply of fuel, food, and essential goods from other territories, the need to create a stock of goods there, considering the limited transport accessibility, i.e., a short navigation period.

Geographical location, natural conditions and economic development of the Arctic (historically formed raw material and almost mono-resource nature of the local economy) make local nature vulnerable. Low biodiversity and the speed of biological processes determine the weak resilience of the Far North ecosystems and their high susceptibility to the pollutants from the outside of the Arctic.

This issue attracts international attention and forms the basis of the activities of the Arctic Council. Efforts to overcome natural extremes, incl. the development of transport, substitutes for traditional energy carriers, and the development of information and communication technologies can be undertaken to base an innovative scenario for the Arctic development. Insufficient efforts in these areas will be the hallmark of the inertial scenario.

Many factors influencing climatic processes, a small period of weather observations, physical and geographical positions of the Arctic considering the water area of the Arctic Ocean allows long-term forecasts of climate change. We can talk about the trends emerged in the past 40 years: an increase in air temperature, a decrease in the ice area, and a decrease in the power of perenni-

al rocks. International scientific research to fill the vacuum of knowledge about the nature of high latitudes and the use of indigenous knowledge are found in the Arctic strategies of many states. It is relevant for Russia. After the collapse of the USSR, the country lost leadership in Arctic research, especially in climate issues [3, Tsaturov Yu.S., Klepikov A.V., p. 71].

2. **The world economy and the demand for hydrocarbon resources.** On the one hand, the growing need of different countries (esp. Asian) for fuel, and the desire of corporations to increase the profitability of its transportation (e.g., when using NSR) make the Arctic attractive for supporters of developments from the geopolitical standpoint. The desire to control the hydrocarbon production in the Arctic and fuel delivery dictated the development of the US Arctic strategy [11]. On the other hand, raw material orientation creates dependence on world energy prices. We will add that a part of the unique deposits of Alaska and Western Siberia has passed the peak of production, and another part of the reserves belongs to the category of potential, i.e., their role may grow up later.

3. **Technology status and its possession by a limited number of countries**. In the medium term, this factor will not allow to organize and develop cost-effective and environmentally safe production of oil and natural gas in the Arctic. The high cost of production and processing, technological unpreparedness of sites, low quality of seismic exploration (in Russia), need to adjust geological models and ecological restrictions have become major for BP, Shell, and Gazprom when deciding to suspend mining near Greenland, Alaska, and the Kara Sea. It should be remembered that some of the promising oil and gas fields are in disputed areas.

4. **The state of international relations and the role of Russia.** The system of international relations is currently experiencing a crisis that manifests itself with varying degrees of severity in different parts of the world and involves many countries and regions. The well-being of the population living in the Arctic depends on the degree of negotiability of the leading Arctic countries, esp. the USA and Russia, the reliance of governments on the norms of international law, “freedom” from considering factors indirectly related to the Arctic (e.g., exclusion from the bilateral relations between Russia and Canada, Russia and the USA, the “Ukrainian issue”, etc.), completeness of use the capacity of organizations of intergovernmental dialogue. Against the background of the progress achieved in relations between Russia and foreign countries in preparation for the Arctic resource use, North European countries, Canada and the United States imposed restrictions on cooperation with Russia, thereby calling into question mutual obligations to ensure security in the Far North and the Arctic.

Scenarios of the Arctic development

Formulating scenarios of the Arctic development, it is advisable to refer to the article by Young O.R. “Future of the Arctic: the role of ideas” [14], where the prospects of the Arctic development were considered in an uncertain period from two positions: geopolitical and socio — environmental systems.

Young O. R. wrote that most authors of popular scientific books described the changes considering the Arctic from a geopolitical perspective. It was suggested that we were witnessing a new phase of the “big game” for resources, another round of the Arctic “gold rush”, which would entail an increased clash of interests of different countries, but primarily the USA and Russia [18, Borgerson S., p. 21; 19, Howard R., p. 57].

The roots of the “power division of the Arctic” ideas contribute to the media, forming the public consciousness, which introduces visual images of such changes, e.g., the reduction of area and capacity of sea ice, and attempts to declare ownership of previously unowned territories.

An important sign of the geopolitical scenario, according to Young O. R., is the expected escalation of territorial claims in the Arctic. Examples include Denmark and Canada, negotiating the affiliation of Hans Islands between Greenland and Baffin Land, i.e., a few uninhabited ice-like rocks about 1.5 km^2; Great Britain, Denmark and Iceland are arguing about 570 m^2 of uninhabited Rocall rock located in the Norwegian Sea north of the Shetland Islands[11]; Greenland is discussing the idea of separation from continental Denmark. Russia, Canada, the USA, Denmark and Norway continue to study the Arctic Ocean floor, collect information on the outer limits of the continental shelf, prepare applications to the UN specialized Commission about the belonging of Lomonosov and Mendeleev ridges to land structures (Fig. 3).

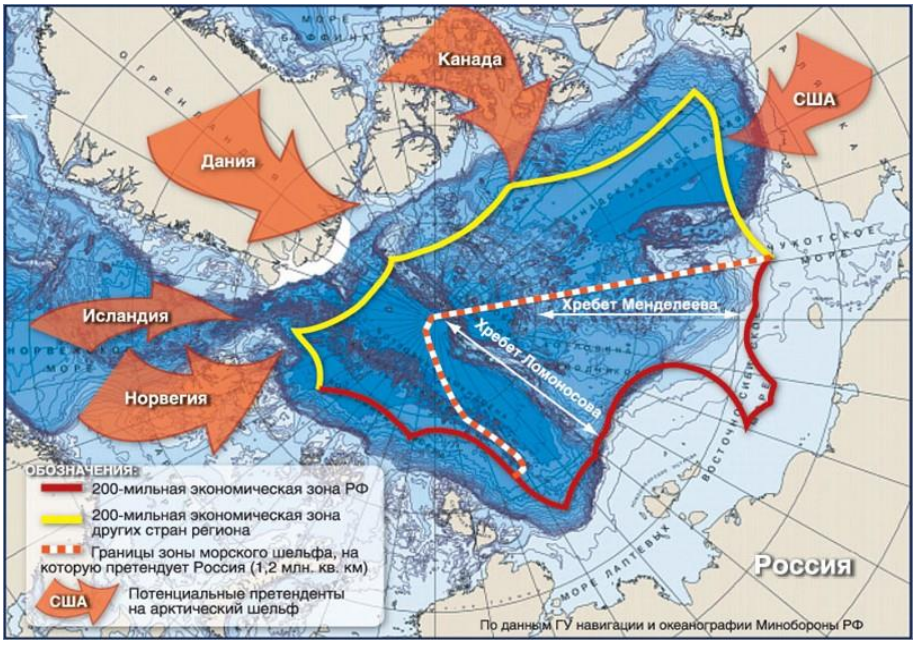

Figure 3. Applicants for the waters in the Arctic Ocean.

A peculiar situation persists around Svalbard. In 1920, in Paris, 40 States signed a treaty under which Norway was granted sovereignty over the archipelago but with the right of access for all interested states. The Soviet Union carried out scientific research on Svalbard (now there is a Russian scientific center there). In several villages, the extraction of hard coal for the needs of NSR was organized. Ensuring the Russian presence on the archipelago is one of Russia's political priori-

[11] The UK's Arctic claims may push similar actions in France. The French islands of Saint Pierre and Miquelon located near the North Atlantic coast of Canada and the UK's areas (Orkney and Shetland islands) make these two countries owners of a significant North Atlantic water area bordering the Arctic.

ties in the Arctic[12]. In 1976, Norway has established a conservation zone around the archipelago, detaining fishing vessels in the exclusive economic zone (EEZ) of the archipelago, which is contrary to the Treaty 1920.

Considering the future of the Arctic from the standpoint of the world power division, some authors predict a catastrophe that will lead to "... brutal bloody clashes between the great powers, desperately fighting each other for the right to possess the declining world reserves of natural resources" [19, Howard R., p. 10]. Indeed, the reasons for territorial claims stem from the presence (or foreseeable availability) of mineral and fish resources in the Arctic and Atlantic Oceans, the passage of strategic maritime communication routes.

In the developed Arctic strategies, esp. the US one, a special place is occupied by a block of military-strategic issues reflected from the positions of NATO. Military preparations of foreign countries in a strategically important region of the Earth are considered a destabilizing factor in the international situation. The US has not ratified the UN Convention on the Law of the Sea. It has declared the interests in the Arctic through the strengthening of military groups, readiness to act unilaterally outside the national Arctic zones. In the Arctic strategies of foreign countries, we see the need to organize exercises of fleets and land mobile parts, modernization of transport infrastructure, airfields on land and water area of the Arctic Ocean. In Northern Europe, the possibility of creating a "mini-NATO" based on the military infrastructure located behind the Arctic Circle in Norway is being explored.

It should be noted an important, if not the main, feature of the geopolitical approach to understanding the processes in the Arctic region: the categorical thinking of supporters of this scenario and their desire to draw attention to their works is to a small extent true. The Russian position is that in the Arctic, the situation is positive, stable and predictable, and it has no need to connect new military-political structures to the solution of development issues [20, Vasiliev A.V., p. 20]. However, in response to the challenges and in the interest of defending sovereignty, the AZRF is strengthening the state border, placing the forces of the Ministry of Defense and the Ministry of Civil Defense, Emergency Situations and Disaster Management. The Northern Fleet has established a Joint Strategic Command. The Arctic Ocean coast is developing a system of emergency and rescue centers. Relevant tasks: ensuring national security in the Russian Arctic, improving the effectiveness of interaction between military and special services with border departments of neighboring states, protecting bioresources, assistance to ships in distress, and disaster management.

Analysis of Arctic strategies of Russia and foreign countries shows that all countries approach the Arctic from the standpoint of the development of international cooperation. The recent shift from the confrontational rhetoric of the Cold War to the growing of convergence has

[12] Osnovy gosudarstvennoj politiki Rossijskoj Federacii v Arktike na period do 2020 goda i dal'nejshuyu perspektivu [Fundamentals of the State Policy of the Russian Federation in the Arctic for the period up to 2020 and further perspective]. URL: http://www.rg.ru/2009/03/30/ (Accessed: 10 August 2018). [In Russian]

broadened the range of technological and educational interaction between the Arctic states. A typical example is their participation in the development of Arctic Council agreements on cooperation in aviation and maritime search and rescue in the Arctic (Nuuk, 2011) and on preparedness and rescue when responding to marine oil pollution in the Arctic (Kiruna, 2013). Within the framework of the International Maritime Organization (IMO), in accordance with the Convention for the Safety of Life at Sea (SOLAS) and the Convention for the Prevention of Pollution from Ships (MARPOL), the Polar Code (Polar Code) was developed, i.e., rules of navigation for the countries using the Arctic Ocean. Despite the sanctions imposed against Russia, in the Arctic, enterprises with foreign participation are operating. It is, e.g., the Yamal-LNG project, which involves more than 40 countries and aimed at extracting unique hydrocarbons, while simultaneously developing industry and infrastructure in the Yamal-Nenets Autonomous District. Vietnam is producing hydrocarbons in the Nenets Autonomous District. China is interested in the Belkomur project aimed at connecting the Arkhangelsk Oblast and the Perm Krai and to continue it until Asia.

States interested in the sustainable development of the Arctic and the use of its resources recognize the leading role of the Arctic Council, Council of the Barents Euro-Arctic Region," Northern Dimension" of the European Union, and the University of the Arctic as platforms for policy development regarding resources, transport and logistics, protection of nature, support of indigenous peoples, science and education, esp. in weather (e.g., polar cyclones) and climate issues. In those few areas of the Arctic where disputes over territory and water ownership take place, the parties either make efforts to settle the relationship through negotiations, as it may be seen in the UN Convention on the Law of the Sea, establishing jurisdiction over parts of the continental shelf (beyond the 200-mile EEZ, but not more than 350 nautical miles). The Russian-Norwegian Treaty on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean (2010) is another example of the alternative "soft power" option expressed in non- military instruments. According to the Agreement, the delimitation of the Russian-Norwegian border in the Barents Sea has been carried out. It means the demarcation of the disputed area of 175 thousand km2 or about 12% of the sea area formed by the western border of the Arctic sector of Russia (Russian version) and the median line (Norwegian version), drawn at an equal distance from the archipelagos of Svalbard, Novaya Zemlya and Franz Josef Land. The sovereignty over maritime areas in the western Arctic sector is relevant for Russia from the perspective of exercising the right of free access to the Atlantic, the development of fisheries, the maintenance of commercial, civil and naval communications, the development of mineral fuel, the solution of applied and fundamental scientific issues.

Why, despite the obvious examples of active interstate dialogue in the Arctic, the ideas of geopolitical confrontation are viable and dominate political forums? The answer may be that such interpretations are easily picked up by the media and quickly rooted in the public consciousness formed by the Second World War, division of the world, and military confrontation between the USSR and the US. An equally important reason for the confrontational "pictures" may be the con-

tinued fragmented view of the Arctic, the weak elaboration of the alternative paradigm, which would demonstrate a more logical and scientifically sound interpretation of changes in the Arctic at the beginning of the 21st century.

Turning to the second direction of development of the Arctic, Young O.R. writes: “The changes that occur today in the Arctic are systemic, non-linear, rapid and irreversible” [14, p. 24]. On Earth, anthropogenic ecosystems play an important role. There, natural biogeophysical processes are superimposed on socio-economic transformations of the environment. In some regions, this leads to complex dynamic systems in which traditional methods and methods of management do not work. An approach to the future of the Arctic, i.e. an alternative to the geopolitical one, which could contribute to the development of new options for managing the region, could be a scenario based on social and ecological systems understood as interconnected social and environmental factors of development [14, Young O.R., p. 32].

Nowhere on Earth is the anthropogenic factor manifested as vividly but in the Arctic: climate change and globalization are anthropogenic and mutually influence each other. Climate warming, according to the Arctic Council and Roshydromet, is mainly due to human activity. Moreover, outside the Arctic, in countries those emit greenhouse gases, warming leads to the expansion of economic activity. Such states shift to previously inaccessible areas, e.g., the Arctic. However, in a socio-ecological system, the anthropogenic factor has a comparable, and sometimes more significant effect than the natural one. Therefore, attempts to understand what is happening in the Arctic should focus primarily on human activity, and the development of change management measures should consider their impact on nature and human activities in the future. Success in the development of the Arctic can be achieved by modernizing the management system. It means turning it into a set of problem-oriented blocks (a part of a multidimensional geographical location, geopolitical status, natural resource potential, socio-economic development, transport and logistics, socio-cultural, and environmental potentials), which could function separately, but, at the same time, be interconnected to solve various tasks and adapt to changes in the Arctic. Effective, safe and conflict-free interaction of the subjects of socio-economic development in the territories of the Arctic zone can be achieved within the framework of the Arctic partnerships at the international, regional, and local levels. Their content is well known [21, A. Pilyasov, p. 15]. Foreign experience in the development of the Far North demonstrates the benefits of partnerships between the federal and regional authorities, between the governments of the Arctic and corporations, between civil and military structures, between government and indigenous peoples, between government, corporations and indigenous peoples, between universities (scientific centers) and industrial enterprises (corporations). It can be stated that the potential of such interaction in the Russian Arctic is not fully used. The Arctic development scenarios based on socio-ecological systems, starting from the idea of responsible management, bring to the fore the agencies and organizations responsible for the control of the environment and managing land and marine bioresources. A task is to ensure the safety of the population, to use the indigenous knowledge for the

development of environmental management in the Arctic. The relationship between social and ecological systems in the Arctic is manifested in the analysis of Arctic strategies. Abroad, they lay down the principles of rational nature management and reliable consolidation of the polar countries. These ideas are shared in the Russian Arctic strategy.

The foreign strategies are not focused on the conservation of the natural environment of the Arctic. It was typical, e.g., 25–30 years ago. Now, their focus is on non-exhaustive environmental management with international participation, the development of alternative energy, the use of advanced standards for the development of natural resources, environmental management, safe and consistent with the international law use of energy resources with a gradual transition to the development of deposits located in more severe conditions [21, Pilyasov A.N., p. 15]. In the institutional sphere, unique structures are being created that will monitor profound changes in the Arctic and perform an early warning function, improving the safety of enterprises and the population living in the Arctic. Marine (aqua-territorial) clusters will be based at universities and research centers in the Arctic. The priority is a gradual transition to the development of offshore fields while observing high environmental standards to use it later when moving to considerable depths.

In the Development Strategy of the Arctic zone of the Russian Federation and National Security for the period up to 2020, approved by the President of Russia V.V. in 2013, two scenarios of socio-economic development of the Russian Arctic are preset.[13] They considered the scenario conditions for the functioning of the Russian economy and the socio-economic development forecast parameters worked out by the Ministry of Economic Development, as well as scenarios generated by the Arctic Council, e.g., the Scenario Narratives Report “The Future of the Arctic Marine Navigation in Mid-Century”, etc.

The innovation scenario will be, on the one hand, consistent with the competitive advantages of the Russian Arctic, the use of its natural resource potential, and, on the other hand, a manifestation of the new quality of economic growth, the use of advanced technologies in various sectors of the economy, development of the information and communication. This scenario implies the renewal of the institutional environment, the formation of specific Arctic governments, the advanced development of the service economy, the modernization of the industrial and energy infrastructure, the creation of deep processing facilities aimed at obtaining high value-added products, the introduction of technological and organizational innovations, the development of universities, which produce globally competitive knowledge. These aims will be equally effective in both civil and defense-industrial segments of the economy.

The innovation scenario is based on optimistic assessments of the development of critical sectors of the Arctic economy. It is associated with the start of megaprojects (Shtokman and Bovanenkovskoye fields, Pomorskoye and Dolginsky fields, the Varandey-Sea and Medynskoe-Sea

[13] Strategiya razvitiya Arkticheskoj zony Rossijskoj Federacii i obespechenie nacional'noj bezopasnosti na period do 2020 goda [The Development Strategy of the Arctic Zone of the Russian Federation and National Security for the period up to 2020]. URL: http://правительство.рф/docs/22846/ (Accessed: 08 September 2018). [In Russian]

sections, the development of pipeline transportation, an increase in freight traffic along the NSR) in the Russian Arctic, cooperation between the Russian Arctic territories to use each other's development potential. The inter-subject investment projects "Ural Industrial — Ural Polar" and "Belkomur" will begin.

The innovative scenario proceeds from the cooperation of the circumpolar countries in the development of the Arctic shelf and therefore at a much faster rate than in the inertial scenario. Pilyasov A.N. calls such a phenomenon "the Arctic Mediterranean," considers the Arctic region "... just as the Mediterranean was ... a center of international cooperation during antiquity" [21, p. 13]. Russia will continue to work on the delimitation of maritime spaces and ensuring the mutually beneficial presence of Russia on Spitsbergen, which meets Russia's policy in the Arctic until 2020 and for the future.[14]

The inertial scenario reflects the prolongation of current trends in critical sectors of the Arctic economy. It is based on conservative estimates of the growth of key indicators. It is assumed that the growth rates of the gross regional product of the Arctic territories, the real income of the population, the growth of labor productivity will be lower than the average for Russia. Structural shifts and the growth of private investment will occur slowly. The resource orientation of the Russian Arctic in the system of the geographical division of labor will remain. The conjuncture of world prices for natural resources will be favorable but unstable. The outflow of the population will continue, and the quality of life will decline. Due to the delay, megaprojects have little effect on the economical parameters of the territories' development. There will be a drop in the volume of cargo transportation along the NSR, fishing, and the research fleet will remain in crisis. Contrasts between the dynamic western and depressive eastern sectors of the Arctic will intensify. Concerning international cooperation in the Arctic, the inertial scenario reflects the conflict of interests of the circumpolar countries and the intensification of the struggle between them for natural resources, incl. an increase in pressure on the Russian Federation in Spitsbergen[15].

Using the author's approach to the development of scenarios for the development of the Arctic until 2035, the prospects for its future are optimistic, pessimistic, and intermediate. The object of the study — socio-economic and political factors, since the development of the Arctic is possible with the participation of the Arctica and non-Arctic states in the sustainable use of the natural resource and its transport capabilities.

Signs of an optimistic scenario for the development of the Arctic:

- progressive (despite cyclical) development of the global economy; the demand for natural resources of the Arctic and transport routes of the Arctic Ocean (primarily the NSR, although it remains low compared to the Suez Canal). All this and international partici-

[14] Osnovy gosudarstvennoj politiki Rossijskoj Federacii v Arktike na period do 2020 goda i dal'nejshuyu perspektivu [Fundamentals of the State Policy of the Russian Federation in the Arctic for the period up to 2020 and further pespective]. URL: http://www.rg.ru/2009/03/30/ (Accessed: 10 August 2018). [In Russian]

[15] Strategiya razvitiya Arkticheskoj zony Rossijskoj Federacii i obespechenie nacional'noj bezopasnosti na period do 2020 goda [The Development Strategy of the Arctic Zone of the Russian Federation and National Security for the period up to 2020]. URL: http://правительство.рф/docs/22846/ (Accessed: 08 September 2018). [In Russian]

pation help to continue the geological exploration of hydrocarbons in new areas of the Arctic;

- rallying the international community around the values of the Arctic region (territorial integrity, respect for the norms of international law, sustainable socioeconomic growth, the well-being of the population, high quality of the environment, production of new knowledge and joint scientific research — these postulates are in every Arctic strategy of Europe and North America);
- development of "public diplomacy" — cooperation between municipalities in the Barents Euro-Arctic Region and the transfer of knowledge and experience;
- increasing the role of the Arctic Council, which takes binding decisions for other countries, invites new states interested in the use of resources and sustainable development of the Arctic region to its work;
- the United States ratify the United Nations Convention on the Law of the Sea and, as a result, prepare an application for an increase in the EEZ; growing activities of American corporations in the Arctic;
- the mutual understanding between the Russian Federation and the principal countries of the region — the United States, Canada, and Norway — in subsoil use and transport routes; it will reduce the political and military tension in the area;
- Russia's initiatives to find new partners for the environmentally safe and economically profitable development of natural resources in the Arctic among non-Arctic states, primarily Asian and Latin American ones through public-private partnerships.

An illustration of the pessimistic scenario will be, in contrast to the previous one, the deterioration of bilateral and multilateral relations between states in the Arctic. Signs of such a scenario:

- the tense nature of interstate cooperation due to territorial disputes (incl. the "Spitzbergen issue"); the willingness of countries to protect their interests outside the national Arctic areas; promotion of the idea of free borders in the Arctic; seeking a UN ban on exploration and extraction of minerals in the Arctic; defending the right to free navigation in the Arctic Ocean;
- the growth of the military presence; involvement of the foreign Arctic states via NATO. Militarization does not meet the interests of Russia in the Arctic region;
- The Arctic Council like a discussion club; its role in solving the problems of the Arctic is declining;
- cyclical moderate growth of the world economy replaced by stagnation; the demand for the Arctic oil and natural gas decreases against the development of shale energy; production at developed fields in the Arctic is falling; geological exploration rates are declining; transportation along the NSR remains uncompetitive; North-West passage is increasingly free of ice during the period of navigation;
- against international isolation, Russia is searching for new partners in the development of hydrocarbon deposits among Asian companies; anxiety of environmental organizations associated with the exacerbation of the ecological situation in the Arctic due to poor readiness of fields for development; the activity of ecological organizations near mining sites and transportation routes for natural resources is interpreted as environmental terrorism.

In the case of the moderate scenario, the development of the Arctic will balance between optimistic and pessimistic scenarios. Territorial disagreements and the desire to control shipping routes will remain, but these processes will not be sharp with the expressed desire of states to

find a solution based on international law. The state of bilateral relations with the participation of the Russian Federation and Western states remains tense. Sanctions pressure from European and North American states will continue; Asian countries will be key partners in the Arctic projects. Assuming that, the risk of losing control of shipping routes in the Indian Ocean and representation in the scientific community in Svalbard, will make India promoting its interests in the Arctic carefully with a steady interest in the region. The development of the world economy stimulates economic activity in the Arctic, which contributes to maintaining attention to the region from international environmental organizations. North American oil and gas companies, combining the technology and financial resources, will actively pursue their interests in the exploration and extraction of mineral resources on land and the shelf of the Arctic Ocean.

For the moderate scenario, implicit and random factors should be considered. By implicit factors, we understand the unpredictable aspects of development, i.e., they depend on events that do not directly affect the Arctic. E.g., the successes of the oil shale revolution and, in the long-term perspective, of hydrogen energy, albeit for a short time, can change the attitude towards the Arctic resources, which will have different directions for the development of the region. Signs of negative consequences include conserving Arctic projects for the development of natural resources and their export to foreign markets, a decline in the standard of living of the local population and, as a result, the desertion of the Arctic spaces. The positive significance lies in the conservation of resources for future generations, the reduction of anthropogenic pressure on ecosystems, and the preservation of a favorable environment. Neither positive nor negative aspects can currently be accepted unambiguously due to the lack of our knowledge of such processes.

Among the random factors that can influence the choice of scenarios are the natural disasters, technological accidents, acute and protracted financial crises, an arms race, information wars, terrorist attacks, the discovery of new deposits, unexpected technological innovations, increasing market volatility, or an increase in the rate of climate change.

Conclusion

At the beginning of the 21st century, the attention of governments and the scientific community in many countries of the world is in the Arctic region. It is due to the unique and not adequately studied natural resources, socio-economic, transport and logistics, environmental, tourist, and socio-cultural potential. All these points cause global geopolitical (incl. military-strategic) significance [17, Barsegov Yu.G., Korzun V., Mogilevkin I., p. 17]. In the Arctic, one can find successful examples of international dialogue, as well as disagreements. The peculiarities of the geographical position of the Arctic, the ongoing changes in this region, caused by climate change and against the struggle of various countries for resources and communications, are the ground for the Arctic development scenarios. Both basic geopolitical and socio-ecological scenarios call for the development of a global approach to the management of the Arctic. They make choosing the priorities: resolving territorial and legal disputes, responding (possibly aggressive) actions of states when try-

ing to limit their sovereignty in the Arctic, or focusing on international cooperation, building trust between the Arctic states, ensuring the ecological well-being of the region, applying the principles of a precautionary approach and preserving biodiversity, or combining these two paradigms. The solution should consider the results of scientific research and the involvement of highly qualified specialists in the extreme Arctic conditions.

The prospects for the sustainable development of the Arctic and subarctic territories form the positioning of states and their corporations. The region's competitive advantages determine the aims and directions of their activities. A practical solution of the territorial and environmental problems of the Arctic can be provided using experience (but without mechanical transfer) and knowledge accumulated in the main sectors of the northern economy in different countries. The controversial issues arising from this should be resolved using the principles of international law. The priority should be the sustainable development of the Arctic: the preservation of its environment, the use of natural resources without threats to the future generations. Such a socially and ecologically responsible approach, implemented through an innovative scenario and a scenario of socio-ecological systems, seems to us more realistic than the theses on "war for resources", "crisis of management", "re-division of the world", underlying geopolitical scenario.

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Conditions and opportunities to realize the agricultural potential of the North *

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Abstract. The article shows the role of the agricultural sector of the North in providing the population with fresh food products, preserving the traditional way of life of the indigenous ethnic groups, sustainable development of the northern territories, and ensuring the country's food security. The organization of agriculture in the north and Arctic territories of Scandinavia, Canada and Alaska and the possibility of its use in the Russian North, considering its own rich historical experience, is discussed in the article. The generalization of agricultural practices in northern countries allows us to recommend the Scandinavian development of agriculture and, above all, the experience of Finland for the European North of Russia. Canadian model of agricultural development is of little use for the Russian North since it was designed for sparsely populated territories. The study revealed the possibilities and limitations of the development of agriculture in the North. The critical points for the socio-economic development in the agrarian sector are the availability of natural and labor resources, the possibility of organizing organic (ecological) production within the traditional industries, the industrial nature of the economy that directs significant financial resources for the industrial modernization and the integrated development of rural areas. The study also revealed the possibilities and limitations of the agricultural development of the North. The constraints of agricultural development and food self-sufficiency are explicit. They are related to extreme natural conditions, low availability of biological resources, the poor technical support of the agrarian sector, low-qualified employees and hard living conditions of peasants, unfavorable external environment, inefficient state support, unavailability of loans, and unsustainable sales of agricultural products. The changes in the agriculture of the northern territories after the All-Russian Agricultural Censuses 2006 and 2016 revealed. The results of the study serve the ground for substantiating conceptual approaches to the development of agricultural production and increasing the level of food self-sufficiency of the local population.
Keywords: *agriculture, foreign northern countries, opportunities and constraints on the agricultural development, All-Russian Agricultural Census, forms of economic management, resource potential, infrastructure, innovative technologies, the North.*

Introduction

The territories of the Far North and similar areas occupy almost 70% of the Russian Federation. It consists of 24 subjects: Republics of Karelia, Komi, Sakha (Yakutia) and Tyva; Kamchatsky Krai; Arkhangelsk, Magadan, Murmansk and Sakhalin Oblast; Nenets, Khanty-Mansiisky, Chukotka and the Yamal — Nenets Autonomous Okrug are in the North. The northern territories are of importance in the socio-economic development of the country. Significant reserves of oil, gas, coal, chromium, manganese, gold and diamonds, vermiculite, nickel, copper and other rare metals are concentrated here. The share of the northern areas in the catch of fish and seafood is more than 50%. In the northern territories, about 2/3 of the world number of domestic reindeers is concentrated.

Agriculture and fisheries of the North developed together with the territory. Its specialization

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is influenced by nature, location, historical and socio-economic factors in the production of low-transport and perishable products, as well as traditional industrial products.

At the beginning of the 20th century, the possibility of northern agriculture was proved by the founder of agricultural science in the European North of Russia A.V. Zhuravsky. In 1911, the order of the Department of Agriculture of Russia established the Pechora agricultural experimental station in Ust-Tsilma. Its founder and first director was A.V. Zhuravsky. He convincingly proved that "it was not the climate that kept Pechora's agricultural development, but conditions that had nothing to do with the climate. And not far, hopefully, is the time, when the circumpolar abundance of light will be used for the welfare of Russia..." [1, Zhuravsky A.V., p. 64]. The possibility of "northernering" agriculture was also considered by N.I. Vavilov, D.N. Pryanishnikov and others.

In 1950-1980s, biologists of the Komi branch of the Academy of Sciences of the USSR [2, Archheva I.B., Panyukov V.A., Andrianov V.A.; 3, Khantimer I.S.]. Agricultural producers of the polar Vorkuta got 2 thousand ha of crops of perennial herbs. Their green mass amounted to more than 100 tons per 1 ha [4, Kotelina N.S., Archheva I.B., Ivanov V.A.]. The method of "tinning" tundra was applied in Yakutia.

Agricultural products in the North (except for traditional industries) are more expensive, unable to compete with similar products imported from abroad and from southern Russia. At first glance, it is necessary to minimize agricultural production. However, it is illegal to approach the development of local agricultural products from the standpoint of: "Everything that makes a profit is good, but everything that does not make it should be disposed of." Assumptions of uncompetitive and limits of northern agriculture will result in enormous public expenditure on indigenous employment by non-agricultural activities. The elimination of the northern village is not only a painful and costly process, but it also weakens national security.

The aim of the article is to identify factors and conditions that contribute to the development of the northern agriculture of the Russian Federation.

To achieve this goal, the following research objectives are defined: to reveal the role of agriculture in providing the population with fresh food and fulfilling its social function: to summarize the experience of foreign northern countries and the possibility of its use in the North of Russia; to identify conditions and opportunities for the development of the agricultural sector; following the results All-Russian agricultural census 2006 and 2016, to consider changes in the agricultural sector.

Social and economic importance of agriculture

The share of the Northern population in the Russian Federation is 6.8%; the area of farmland — 2.5%, the number of cattle — 4.5%. In the northern and Arctic territories, there are 1906 thousand domestic deer.

The share in the total production of agricultural products the Far North of Russia and similar areas in 2016 was 3.4% for potatoes, 1.9% — vegetables, 2.3% — milk, 1.3% — meat. Due to

the reduction of production, the share of the North and the Arctic in the total production of agricultural products of the country decreases (Fig. 1).

Agriculture and fisheries in the North and the Arctic are related to the way of life of indigenous peoples. In the pre-reform period, almost 2/3 of small indigenous peoples were engaged in agriculture and industry [5, Seleznev A.I., p. 32]. Overall, in the Nenets Autonomous Okrug, more than 60% of indigenous peoples were employed in traditional industries, while in some rural municipalities of the Okrug, their share ranged from 79% to 92% [6, Severniy Ekonomicheskiy Raion..., p. 106].

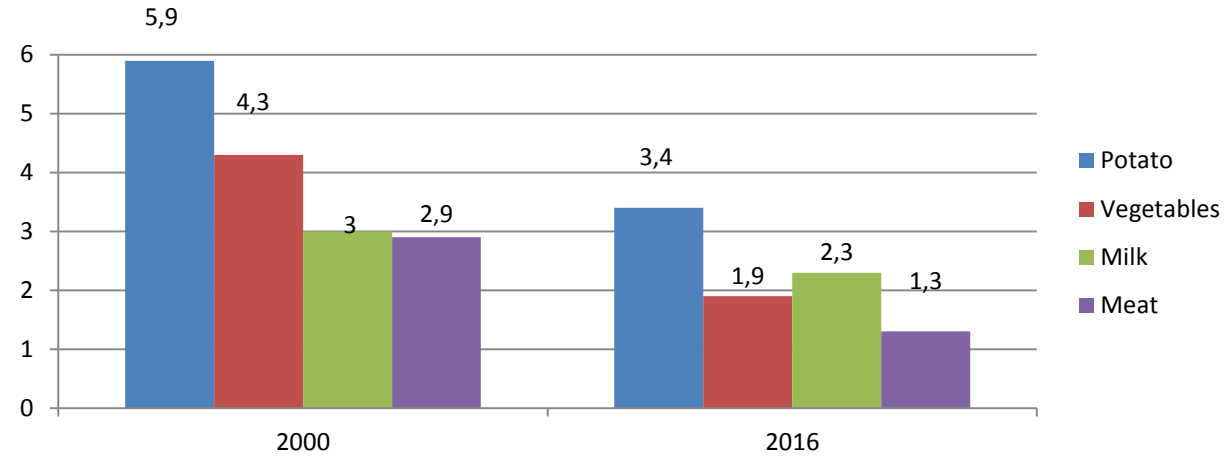

Figure 1. Share of production of basic agricultural products of the North in total production products of Russia, %.[1]

The special importance of agriculture is since this sector and forestry is the basis of rural development. It is the sustainable development of agriculture and fisheries as a socio-ecological-economic system that is appropriate to consider in relation to the interests of indigenous peoples.

Agriculture in the North not only provides the population with fresh biological and nutritious food but also stimulates the development of the food industry, stabilizes employment, prevents the monopolization of local food markets by individual suppliers, restrains the prices of food imported from outside the region, serves as a traditional way of life of the rural population, contributes to the preservation of spirituality, culture, traditions, morals, improvement of the demographic situation, the system of resettlement of people, preservation of the environment and natural landscape. Agriculture is both a branch of irreplaceable material goods and a sphere of human life. The elimination of agricultural production means a change of residence or even a way of life.

Agriculture, due to its specificity and features of market relations, is moving towards the social sphere and can be developed only with state support. The social role of entrepreneurship focused on counteracting social insecurity in areas with adverse conditions is discussed by A.N. Pilyasov and N.Yu. Zamyatin [7].

Especially important for the development of northern agriculture is the budget. Without

[1] Reference: 1. Ekonomicheskie i social'nye pokazateli rajonov Krajnego Severa i priravnennyh k nim mestnostej v 2000-2016 gg. [Economic and social indicators of districts of the Far North and equated areas in 2000-2016]. Rosstat. Moscow, 2017 URL: http:/www.gks.ru/bgdyreg/bl6_22/vain.htm. [In Russian] 2. Regiony Rossii. Social'no-ekonomicheskie pokazateli [Regions of Russia. Socio-economic indicators]. 2001, 2017: /Rosstat. [In Russian]

state support, agricultural enterprises and farms will be forced to reduce the production of environmentally friendly and perishable products. The state would then need disproportionately higher costs for the employment of indigenous ethnic groups than maintaining the agricultural sector of the North.

The need to develop agricultural production in the North is also due to the solution of the food sovereignty issue of the country. Until recently, the degree of medical nutrition standards at the expense of own production revealed that Russia belonged to countries not able to provide own food security. In 2016, due to its own production, the real consumption of potatoes (126%), poultry (101), pork (127) and eggs (102%) exceeded the rational consumption standards. The figure for beef is only 55%, milk — 58%, vegetables and melons — 75%.[2]

The agricultural experience of Nordic countries

Let us turn to the experience of agriculture in the northern and Arctic territories of Scandinavia, Canada, and Alaska, which can be useful for the Arctic zone of the Russian Federation. For our country it is necessary, first, to consider the agricultural models of Northern Europe [8, Lotte Hedeager, Kristian Kristiansen, Erland Porsmose; 10, Jonas Smitt; 11, Kauppala P.; 12, Soumen maatalouden historia]. A distinctive feature of agriculture in northern European countries is the diversification of agricultural production, based on a combination of crop and animal husbandry, which ensured the sustainability of agriculture. There, agrifood systems formed the principle of parity importance of agricultural production and rural society. According to it, any agricultural production can be considered effective only if it has a positive impact on the development of rural areas [13, Polbitin S.N., p. 132]. It is the principle of a combination of agricultural production, the northern rural way, and the development of rural areas can be the basis of methods and forms of agriculture in the Russian North.

According to Pekka Kauppal, in the European North and the Komi Republic the most acceptable way of development of agriculture is Finland's one. Unlike Canada, where agricultural production never functioned in the zone of coniferous forests, Finland's agriculture is in this zone, and in the tundra regions [14, Kauppala P.].

Finland is the northernmost of all Scandinavia countries, in terms of population distribution on the territory it is like the Russian North, closer to our country, has more than a century of experience stay in the Russian Empire (1809–1917). In Finland, agriculture and forestry are connected, farmers are legally provided with the use of forests, from the sale of wood they receive considerable income, which is used for modernization of agriculture. Integration of agriculture and forestry is especially relevant for the northern taiga of Russia due to additional income and increase of

[2] Source: 1. Rossijskij statisticheskij ezhegodnik. [Russian Statistical Yearbook]. 2017. Rostat. M., 2017. [In Russian] 2. Rekomendacii po racional'nym normam potrebleniya pishchevyh produktov, otvechayushchih sovremennym trebovaniyam zdorovogo pitaniya [Recommendations on rational norms of food consumption that meet modern requirements of healthy eating]: approved by the order of the Ministry of Health of the Russian Federation, August 19, 2016, No. 614. [In Russian]

employment of peasants.

Finnish farmers are successfully using the advantages of the northern economy to produce ecological food. Finland declared agriculture an ecological industry producing only environmental products according to European Union (EU) standards. Its production made the Central Fund of the EU allocate increased subsidies [15, Poskus B.I., p. 198].

Our country in the zone of the North has much more opportunities to increase the production of environmentally friendly products and to work out technologies of organic farming than the Scandinavian countries. Production of environmentally friendly products in the vast northern territories is becoming the main competitive advantage. Here one can expect to receive additional income from the sale of environmental products. In the future, as the domestic market is full of domestic food, Russia and its vast northern territories may well become a major exporter of ecological food.

The use of the Scandinavian way of development for Russia can serve a good example also because in Scandinavia has a small concentration of property and income in the same hands. Too much income concentration among a small part of the population is a constraint on the development of the domestic market being a result of the low purchasing power of the population.

In the northern regions of Canada, which remain sparsely populated, a point of view on the commercial unsuitability of agriculture has a long tradition. Simplification and acceleration of logistics links, the cost of food production in the southern regions and transportation to consumers in the northern territories is cheaper than production [13, Polbitin S.N., p. 135]. In Canada, agricultural farms are not created under unfavorable conditions. Profit from production in the southern regions (with delivery) is higher than food production in the northern territories. The Canadian model of agricultural development is hardly applicable to the Russian North, as it is designed for sparsely populated areas, and these regions are inhabited much more densely. If one takes this model as a basis, it could possibly lead to a huge reduction in the population of these territories in Russia [14, Kauppala P., p. 250].

Currently, 10 million people live in the North of Russia (in 2000, the population was 11.1 million). The population of the Arctic is more than 2.5 million people, which exceeds half of the total population of the Arctic [16, Sinitsa A.L.]. In the regions of the Far North and related areas, the share of urban population is 79%, in the Arctic — 88%. Towns in the Arctic and northern territories of Russia are: Murmansk, Arkhangelsk, Vorkuta, Norilsk, Yakutsk, Magadan, etc.

At the same time, the Canadian experience of managing sustainable development of the northern territories is very valuable for the North of Russia. Canada is implementing a set of measures for sustainable economic development, environmental protection and welfare of the population, as it is in the federal sustainable development strategy (FSDS) 2016–2019[3]. The strate-

[3] Planning for a sustainable future. Federal sustainable development strategy for Canada 2016-2019. Consultation draft. URL: http://www.fsdssfdd.cf/downloads/3130%20%%20Federal%20SUSTAINABLE%20Development%20Stategy%202016-2019.pdf (Accessed: 21 June 2019).

gy focuses on innovation in agriculture, fisheries, aquaculture, and indigenous peoples.

In our opinion, an interesting model for the North is the Arctic microeconomics developed for the villages of Alaska by American scientists, based on a clear delineation of three sectors — traditional, state, market, awareness of their specificity and close connection with each other [17, Pilyasov A.N., p. 126].

Summarizing, we should note that due to the peculiarities of domestic northern agriculture, underdevelopment of transport infrastructure, multi-structure of the agrarian economy, historically developed peasant mentality expressed in collective labor, it is impossible to fully replicate the agricultural development models of the Nordic countries. In the development of agricultural production and food supply of the population of northern, subarctic and Arctic territories of Russia should rely on rich historical experience. Nordic experience is of interest when it is related to the case of Scandinavian countries and, above all, Finland. The model of the food supply of the population of sparsely populated northern territories of Canada, based on the full supply of food from the southern regions, is not suitable for the North and the Arctic zone of Russia.

Opportunities and constraints of agricultural development

The location and the length of the territory of the Russian North in latitudinal direction determine, on the one hand, considerable severity, and on the other, significant differences in the bioclimatic and economic conditions for agricultural production. A large part of the territory is located beyond the Arctic Circle, within the permafrost, captures tundra and forest-tundra, while the central and southern parts are in the northern and middle taiga zone. Natural conditions and, above all, climate, soil quality, vegetation period constrain the effective development of agricultural production. Particularly unfavorable are conditions for agriculture in the far North, where tundra soils are dominated and thermal resources are extremely limited.

Among favorable conditions and competitive opportunities for agriculture of the North, we should note the following. The composition of farmland is dominated by natural hayfields and pastures. To improve the food supply of the population, there are significant fish resources and the potential for increasing the collection and processing of wild crops.

Nearly 24 hours of natural light in the sub-Arctic and enough moisture during the vegetation period ensure rapid growth and the ability of plants to accumulate a large stock of organic substances in a short time. A long daylight day helps herbs grow here with increased intensity. It takes 70—80 growing days to accumulate such amount of green mass, which is formed in within 180 days in the southern regions. Average daily growth of herbs in early spring in favorable days is from 3 to 9 cm [18, Gagiev G.I., p. 24].

Regions of the North have good opportunities to produce feed yeast, mineral and vitamin feeding for livestock and poultry. Extremely favorable conditions are created for the vegetable growing of protected soil on an industrial basis using the thermal waste of gas compressor stations. The heat of such stations can also be used for artificial drying and briquetting of herbs.

The North has promising opportunities to produce organic (ecological) products. In addition to organic agricultural products, in extensive ecological areas, it is possible to collect mushrooms, berries, birch juice, wild honey, and medicinal herbs. Production of environmental products is a strategic goal of agricultural development.

Products of traditional industries (reindeer husbandry, fishing, hunting, wild mushroom and berry picking) are competitive not only in the region but also in the national and international markets. In addition to reindeer meat and products of its processing, pantas, endocrine-enzyme materials, and deer blood are in great demand abroad, especially in Asian countries.

A precondition for technical, technological and socio-economic development of the agrarian sphere is the industrial nature of the economy, allowing to direct significant financial resources for modernization of the industry and integrated development of rural areas.

Favorable factors and conditions of the development of the agrarian sphere are presented in Fig. 2.

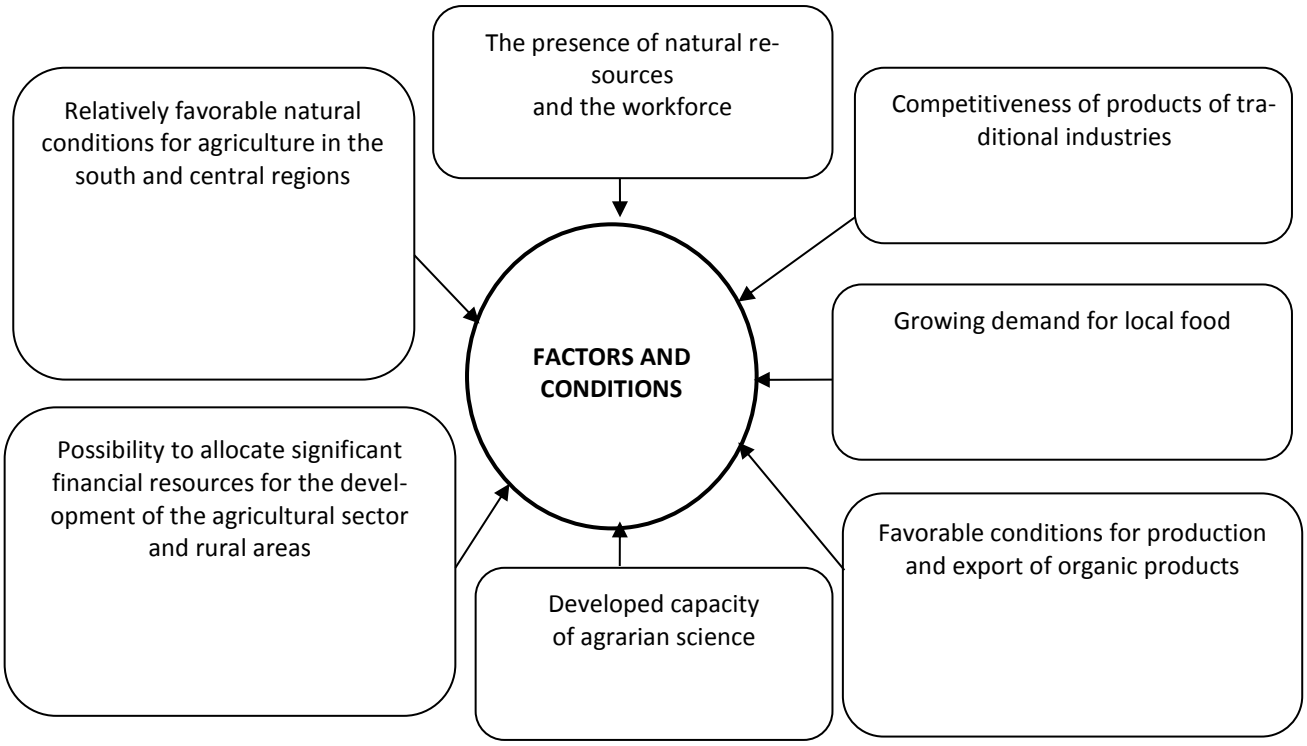

Figure 2. Factors and conditions contributing to the development of agriculture in the North[4].

The main barriers to the technical, technological and socio-economic development of agriculture in the northern and Arctic areas are related to the low availability of biological resources, the poor material and technical base of the agrarian sector, the shortage and low professional level and quality of life of peasants, the unfavorable environment, inefficient mechanisms of state support, inaccessibility of preferential credit, unsustainable sale of agricultural products (Fig. 3).

[4] Developed by the author.

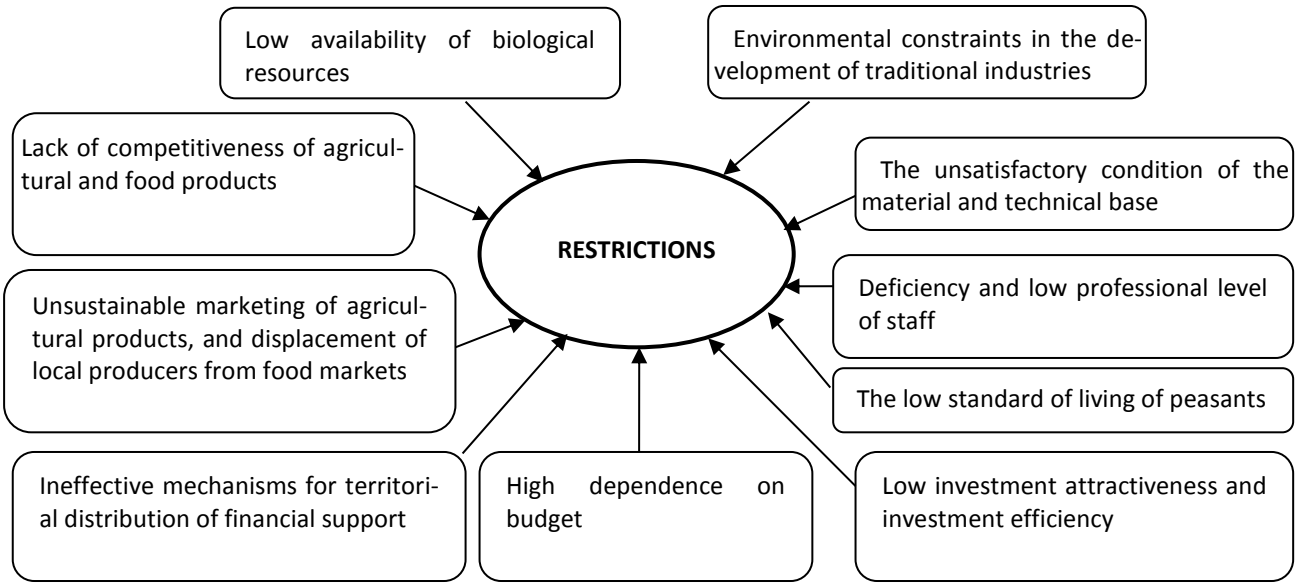

Figure 3. Limitations of the development of agriculture in the North[5].

Due to the peculiarities of agriculture in the North and the Arctic, the theory of liberalism is futile. Also, it is impossible to use the forms of agriculture typical to the southern regions of our country. An example of ignoring farming in extreme natural conditions — maize crops in the early 1960s. In 1962, in the state farms of the Komi Republic, this heat-loving crops occupied 2.9 thousand ha of arable land, i.e., 31% of the total area of silage crops and 14% of all crops of forage crops. The yield of green corn was only 44 kg/ha, and the cost of 1c — 3.70 rub.; these indicators for perennial herbs — 71 kg/ha and 1.11 rub. respectively. The development of agriculture in the northern and Arctic territories should be based on centuries-old agricultural traditions, considering extreme natural conditions and agrarian features.

Changes in the agrarian sphere according to the results of agricultural censuses 2006 and 2016

The history of agricultural censuses in Russia began in the early 20th century. The first census was carried out during the World War I (1916), the second — in 1920.[6]

[5] Developed by the author.

[6] Selskohozyajstvennye perepisi v Rossii/Rosstat. M.: IIN «Statistika Rossii» [IIN "Statistics of Russia"], 2007. 304 p. [In Russian]; Itogi Vserossijskoj sel'skohozyajstvennoj perepisi 2006 goda [Results of the All-Russian agricultural census 2006]: In 9 vol. — Vol. 1: Osnovnye itogi Vserossijskoj sel'skohozyajstvennoj perepisi 2006 goda [The main results of the All-Russian agricultural census of 2006]: Book 1: Osnovnye itogi Vserossijskoj sel'skohozyajstvennoj perepisi po Rossijskoj Federacii [Main results of the All-Russian agricultural census of the Russian Federation]. Federal service of state statistics. M.: IIC «Statistika Rossii» [IIN "Statistics of Russia"], 2008. 430 p. [In Russian]; Itogi Vserossijskoj sel'skohozyajstvennoj perepisi 2006 goda [Results of the All-Russian agricultural census 2006]: In 9 Vol. VOL. 1. Osnovnye itogi Vserossijskoj sel'skohozyajstvennoj perepisi 2006 goda [The main results of the All-Russian agricultural census of 2006]: Book 2.: Osnovnye itogi Vserossijskoj sel'skohozyajstvennoj perepisi po Rossijskoj Federacii [Main results of the All-Russian agricultural census of the Russian Federation]. Federal service of state statistics. M.: IIN «Statistika Rossii» [IIN "Statistics of Russia"], 2008. 687p. [In Russian]; Itogi Vserossijskoj sel'skohozyajstvennoj perepisi 2006 goda [Results of the All-Russian agricultural census 2006]: In 9 vol. — Vol. 7.: Sel'skoe hozyajstvo rajonov Krajnego Severa

In accordance with the legislation of the Russian Federation [7]and the Program of the World Agricultural Census of FAO, from July 1 to August 15, 2016, was held all-Russian agricultural Census; in remote and hard-to-reach areas — from September 15 to November 15, 2016. The census showed what labor and land resources were available in the industry, how they were used, and it also provided data on livestock, equipment, production infrastructure and innovative technologies used by agricultural producers[8].

Agricultural forms of management. According to the census 2016, in the North, there were 1,757 agricultural organizations, 6,192 peasant farms, 1,419 individual entrepreneurs, 782,4 thousand personal subsidiary and other individual households. In a 10-year perspective, we observe a reduction of agricultural organizations by 36%, farms- by 24%. The most significantly decreased numbers are for large and medium-sized organizations in the North-West and Siberian Federal Districts (3 times), peasant farms in the North-West (2.1 times) and Far Eastern (1.5 times) districts. An increase in the number of individual entrepreneurs by 18%, private subsidiary and other individual farms by 0.5% was also observed.

The analysis of organizations showed that the share of large and medium-sized agricultural enterprises decreased from 36% in 2006 to 22% in 2016. The share of small enterprises increased from 38 to 48%, subsidiary agricultural enterprises of non-agricultural organizations — from 26% to 29%.

In 2016 agricultural activity was carried out by 79% of organizations, 72% of peasant farms and 70% of personal subsidiary and other individual farms of citizens. In comparison with 2006, the share of agricultural organizations and farms engaged in agricultural production increased. The share of households decreased from 88% in 2006 to 70% in 2016 (Figure 4).

Human resources. According to the census, on July 1, 2016, in the total number of employed in agricultural production of the North, the share of workers of agricultural organizations was 64%, incl. large and medium-sized enterprises — 44%, peasant farms and individual entrepreneurs — 36%. Large and medium-sized agricultural organizations in the Chukotsky AO employ 100% of the workforce, in the Murmansk Oblast and the Yamal-Nenets AO — 71%, in the Kamchatsky Krai — 70%. In the Khanty-Mansiysk Autonomous Okrug — Yugra, the share of peasant farms and individual entrepreneurs is 73% of all the employees, in the Republic of Tyva — 65%, in the Republic of Sakha (Yakutia) — 54%.

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i priravnennyh k nim mestnostej [Agriculture of the Far North and related areas]. Federal Service of State Statistics. M.: IIC «Statistika Rossii» [IIN “Statistics of Russia”], 2008. 392 p. [In Russian]

[7] Postanovlenie Pravitel'stva Rossijskoj Federacii «Ob organizacii Vserossijskoj sel'skohozyajstvennoj perepisi 2016 goda» [Resolution of the Government of the Russian Federation “On organization of the All-Russian agricultural census of 2016”] April 10, 2013 No 316. [In Russian]; Federal'nyj zakon «O Vserossijskoj sel'skohozyajstvennoj perepisi» [Federal Law “On the All-Russian Agricultural Census”] July 21, 2005, No 108. M., 2005. [In Russian]

[8] Itogi Vserossijskoj sel'skohozyajstvennoj perepisi 2016 goda [Results of the All-Russian agricultural census 2016]: In 8 vol. — Vol. 1.: Osnovnye itogi Vserossijskoj sel'skohozyajstvennoj perepisi 2016 goda po sub"ektam Rossijskoj Federacii [The main results of the All-Russian agricultural census of 2016 on subjects of the Russian Federation].Federal service of state statistics. M.: IIC «Statistika Rossii» [IIC “Statistics of Russia”], 2018. 711 p. [In Russian]

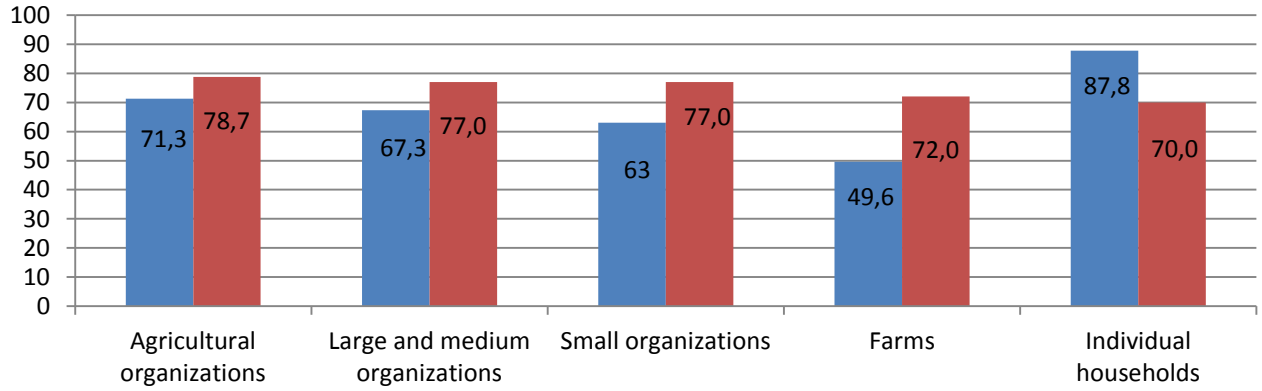

Figure 4. The share of agricultural organizations of the North that carried out activities in 2006 and 2016, in % of the total number of the corresponding category.

Over the decade, the number of workers in large and medium-sized organizations decreased by 2.7 times, farms and individual entrepreneurs — by 1.5 times, and in small enterprises increased by 17%.

According to the census, in 10 years, on average, the number of employees decreased by 9% per one large and medium organization, and by 19% per one farm and individual economy. The average of small enterprises increased by 57%.

In 2016, the share of households with 1 person engaged in agricultural work was 28.9%, with 2 people — 50%, with 3-4 people — 24.1%, over 4 people — 3%. Thus, single-person and two-person households predominate in the number of employed persons (79%).

The results of the census showed that in agricultural organizations the share of male leaders is 75%, female — 25%. Men under 29 years — 2.5%, 29 — 49 years — 48.2%, 50 years and over — 49.3%, female leader leaders — 3.4%, 32.2% and 64.4%, respectively. The total number of managers, nearly 2/3 are women of retirement age.

The census showed that the share of managers with higher education in large and medium-sized agricultural enterprises is 62.7% (in Russia — 87%), with professional education — 24.8%, in small enterprises — 65.4% and 22.2% respectively. Especially low level of higher professional education is among leaders of farms and individual entrepreneurs (24.9%). 34.6% of them do not have higher or secondary education (Table 1).

Table 1

Level of education of farm managers of the North, July 1, 2016, % of the total number of managers

Education	Large and medium-sized organizations	Small business	Farmers and individual entrepreneurs
Higher	62.7	65.4	24.9
Including agricultural	33.1	36.6	9.3
Secondary professional	24.8	22.2	40.5
Including agricultural	10.6	13.0	11.4
Do not have higher or secondary professional education	12.6	12.4	34.6

Land resources. The total land area of the region is 182.6 million ha, the share of reindeer pastures accounts for more than half (57%). Almost 2/3 of reindeer pastures are in Yamal-Nenets

AO, Chukotsky AO and the Republic of Sakha (Yakutia). Only a small part of the land is used for agricultural purposes — 1.2% and the share of arable land is only 0.2%. Low development of the North is due to unfavorable natural conditions for agriculture, huge forest, and small population.

In the farmland area, natural hayfields and pastures are dominating. Thus, 5.3 ha of meadows were accounted for per ha of arable land in the North. The areas and structure of the land fund are in Table 2.

The results of the census showed that agricultural organizations did not use 11% of farmland, incl. large and medium-sized organizations — 6%, peasant farms — 10%, personal subsidiary, and other individual households — 5%.

Table 2

The land area by categories of farms of the North, July 1, 2016, thsd ha

Land resources	Farms of all categories	Including			
		Agricultural organizations	large and medium	Farmers	Households
Total land area	182,593.5	143,651.0	142,394.4	2 235,8	720.1
Agricultural land	2 170,1	1 181,8	739.7	330.9	636.2
Including Arable land	322.6	224.4	113.0	60.7	33.8
Hayfields	601.6	222.8	100.7	115.1	252.4
Pastures	1 110,5	689.5	509.6	146.5	3.0
Of the total area of agricultural land is actually used	1 934,6	1 053,6	692.3	299.1	605.6
Dried land	45.2	53.3	37.4	2.3	-
With the actual drainage system	37.8	37.2	27.0	0.6	-

Compared to the previous census (2006), in all categories of farms, there was a decrease in the total land area by 18%, incl. agricultural land by 27%, a reduction in the area of agricultural land occurred at the expense of agrarian enterprises. The growth of farmland in peasant farms amounted to 51%.

Analysis of the distribution of the area of farmland among agricultural forms of management showed that in 2016 the share of agricultural organizations was 54%, peasant farms and individual entrepreneurs — 17%, households — 29%. In 2006, these figures were 67%; 9%; 24% respectively. According to the census, July 1, 2016, in Russia, the share of agricultural organizations in the farmland area was 63%, farms and individual entrepreneurs — 28%, households — 9%.

For 10 years, crops in farms of all categories decreased by 19%, incl. agricultural enterprises — 27%. In 2016, the main part of the acreage was in agricultural enterprises — 67%, incl. 53% in large and medium-sized organizations; the share of peasant farms accounted for 19%, individual farms of the population — 12%.

The totals sown area in farms of all categories were dominated by forage crops (75.9%), the share of grain and leguminous crops accounted for 8.5%, potatoes — 13.0%, vegetables — 2.6%.

The census data provided information on protected soil areas. In 2016, the share of agricultural organizations accounted for 44.2%, peasant farms and individual entrepreneurs — 55.8% of

the total area of greenhouses and greenhouses. In agricultural enterprises, the totals of protected soil were dominated by winter greenhouses (54%), on farms and in individual entrepreneurs — spring greenhouses (76%).

The main areas of protected soil in agricultural enterprises were concentrated in the Sakhalin region (36%), Komi (18), the Republic of Sakha (13) and the Arkhangelsk Oblast (9%). 91% of greenhouses were in the far Eastern Federal district.

In comparison with the previous census (2006), the area of greenhouses in agricultural enterprises decreased by 2.1 times; in peasant farms and individual entrepreneurs increased by 3.6 times.

Livestock population. The change in the livestock population for 2006-2016 in various agricultural forms of management showed that there was a decrease in the number of cattle and pigs in agricultural enterprises and individual farms. Significantly decreased is the number of poultries in agricultural enterprises (1.5 times). The growth of the livestock was observed on farms.

In 2016, the share of agricultural organizations of the total number of the livestock accounted for: cattle — 27%, incl. 31% cows, pigs — 48%, poultry — 81%, deer — 58%, foxes and minks — 100%, blue foxes — 80%.

In households, the total number of animals was 51% of cattle, 47% of sheep and goats, 39% of horses, 40% of deer. Peasant farms concentrated 20% of the total number of cattle, pigs — 28%, sheep and goats — 23%, poultry — 5%, horses — 32%, deer — 1%.

Over the decade, the domestic deer increased in all categories of households: in agricultural enterprises — by 12%, in peasant farms — by 4 times, in households — by 5%. Reindeer breeding is the industry most suited to the nature of the North and the Arctic, the labor skills of the indigenous population and has high efficiency. Due to the lack of costs for forage and construction of premises, the production of venison is highly profitable: the cost of its quintner on farms is more than 2 times lower compared to the production of beef. In addition to strengthening the food security of the region's population, pante and enzymatic endocrine materials are in great demand in the domestic and international markets.

The territories, which are entirely part of the North, account for 91% of the total reindeer population of the Far North and its equivalent areas. Among northern and Arctic territories, the first place is taken by the Yamal-Nenets Autonomous Okrug (47% of the total number of reindeer in the country), the second — the Nenets Autonomous Okrug (11%), the third — the Chukotka Autonomous Okrug (10%), the fourth — the Republic of Sakha (Yakutia) (9%), the sixth place — the Komi Republic (6%) (Fig. 5). The share of the Ural Federal district accounted for 49% of the total deer in the country, the far Eastern district — 23%, the North-Western Federal district — 20%.

The rapid growth of the reindeer population in Yamal caused the degradation of the vegetation cover of the tundra. According to environmentalists, to bring it into line with the available norms of ecological load, on the peninsula, they will have to reduce the deer by three times[9].

[9] Tundra protiv kommercii [Tundra vs Commerce]. Ros. gazeta. Ekonomika URFO. No 7069 (201). 2016. 9 July.

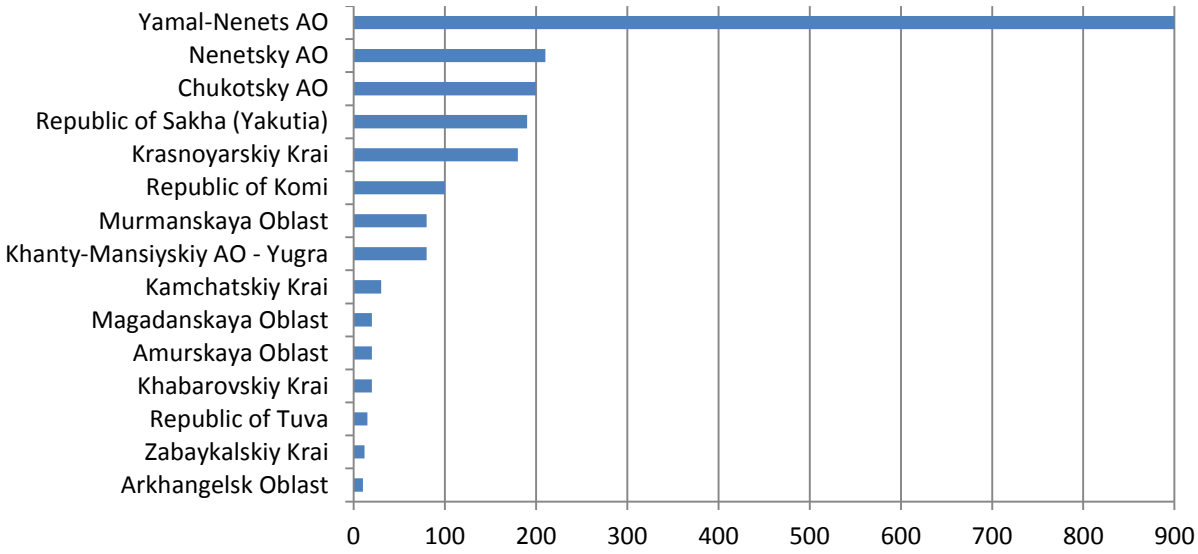

Figure 5. Deer in the North and the Arctic territories, all categories of farms, July 1, 2016, thsd.[10]

Technical facilities and infrastructure. The agricultural census allowed to obtain information on the availability of agricultural machinery, equipment, and infrastructure by categories of agricultural producers. For 10 years, on average, per agricultural organization, there was a reduction of tractors, cars, and some types of agricultural machinery. Increased availability of hay machines, equipment for feeding cattle, milking, cleaning, and cooling of milk. Farmers and individual entrepreneurs have improved the equipment of some types of machinery and equipment. In personal subsidiary and other farms, the availability of tractors, motor blocks — cultivators and cars increased.

Over the decade, agricultural producers have improved the structure of tractors. If in 2006, in agricultural enterprises, the share of tractors under 4 years was 5.6%, aged 4–8 years — 12.7%, aged 9 years and more — 81.7%, in 2016, it was 13.2%, 23.5%, and 63.3% respectively. The age structure of the tractors has also improved among farmers and individual entrepreneurs (Table 3).

Table 3

The age structure of tractors o agricultural organizations (farms) of the North July 1, 2006, and in 2016, %

Age of machinery	Agricultural organizations		Farms and individual entrepreneurs	
	2006	2016	2006	2016
Under 4 years	5.6	13.2	7.9	22.4
4-8 years	12.7	23.5	18.1	29.8
9 years and more	81.7	63.3	74.0	47.8

The results of the census showed that the lowest provision of infrastructure remains among peasant farms and individual entrepreneurs. Especially poor infrastructure is in the Siberian Federal District. Only 9.5% of agricultural enterprises have intra-farm roads with a hard surface, connection to heat supply networks — 1.1%, and water supply — 1.7%. No agricultural enterprise or private subsidiary is connected to gas supply networks (Table 4).

[10] Note: In the Irkutsk Oblast, the Sakhalin Oblast and the Republic of Buryatia, the livestock is less than 1 thsd goals.

Table 4

Infrastructure facilities of agricultural organizations and farms of the North, July 1, 2016, % of the total number of business entities

Federal District	Agricultural organizations.	Farmers and individual entrepreneurs	Personal subsidiary
Road communication with the district center or with a trunk network			
North-West	61.7	51.7	62.0
Ural	40.8	41.6	44.4
Siberian	84.4	68.3	85.5
Far Eastern	33.6	46.7	51.3
On-farm roads with hard surface			
North-West	31.8	-	-
Ural	35.3	-	-
Siberian	9.5	-	-
Far Eastern	14.9	-	-
Connecting to power supply networks			
North-West	72.3	53.2	66.9
Ural	63.9	46.8	91.7
Siberian	44.7	21.9	86.7
Far Eastern	48.6	46.3	72.4
Connecting to heat supply networks			
North-West	72.1	1.9	3.8
Ural	42.2	12.6	5.7
Siberian	1.1	0.3	2.7
Far Eastern	12.5	5.2	13.5
Connecting to water supply networks			
North-West	31.2	9.9	8.3
Ural	39.5	16.4	40.1
Siberian	1.7	0.4	4.9
Far Eastern	18.3	4.6	10.4
Connecting to gas supply networks			
North-West	4.6	1.2	2.2
Ural	10.1	6.5	16.4
Siberian	-	0.1	-
Far Eastern	5.6	5.2	14.3
Internet access			
North-West	56.1	16.3	15.1
Ural	36.3	26.2	37.8
Siberian	34.1	10.9	20.1
Far Eastern	27.8	11.5	16.7

The use of innovative technologies in agriculture. The results of the 2016 census allowed to get information on the application of innovative technologies in agricultural organizations, farms and individual entrepreneurs (Table 5).

The data shows an extremely small share of agricultural producers who applied innovations. Drip irrigation system was used in only 0.4% of agricultural organizations and 1.3% of farms and individual entrepreneurs; biological methods of plant protection against pests and diseases — 1.8 and 1.2% respectively; the system of individual feeding for the livestock — 3.6% and 4.2%: the method of cellular content of poultry — 0.5% and 1.9%; treatment plants on farms were available in 2.2% of agricultural enterprises and 1.4% peasant farms and individual entrepreneurs; the system of water disposal and treatment of industrial effluents — 4.2% and 3.2%. In the Republic of

Buryatia, the share of agricultural organizations using solar panels was 27%, farms and individual entrepreneurs — 63%.

Table 5

The share of agricultural organizations and farms of the North that applied innovative technologies July 1, 2016, % of the total number of business entities.

Types of innovations	Agricultural organizations.	Farmers and individual entrepreneurs
Drip Irrigation System	0.4	1.3
Biological methods of plant protection against pests and diseases	1.8	1.2
Individual Livestock Feeding System	3.6	4.2
The method of non-cellular poultry content	0.5	1.9
Treatment facilities on livestock farms	2.2	1.4
Wastewater disposal and treatment system	4.2	3.4
Renewable sources of energy supply:	6.7	9.0
bioenergy plants	-	0.0
wind power plants	0.1	0.1
solar panels	6.6	8.8

The main factors constraining the use of innovative technologies are insufficient level and mechanisms of financial support for agricultural producers, inaccessibility of preferential credit resources. In 2015, less than half (46%) of farms received budget support. Only 12% of agricultural enterprises and 8% of farms had access to loans.

Acceleration of modernization on an innovative basis in the North relates to the strengthening of the role of the state. It is proposed to increase subsidies not only from the region but also from the federal budget for the speedy transfer of the agricultural economy to a new technical and technological basis. For the federal budget it is advisable to provide more support to increase the number of cattle and deer, the volume of production of beef, venison and milk; to compensate part of the cost purchased modern machinery and high-performance equipment, mineral fertilizers, fuel, spare parts, mixed fodder, as well as tariffs in the amount of 50% for transportation by rail and water transport of material and technical resources; subsidize interest rates on loans; provide subsidies for rural poverty eradication and reimbursement of district rates; and Northern increments to a salary.

Conclusion

The study of agriculture, its experience in Scandinavian countries, Canada and Alaska, changes in the agricultural sphere of Northern Russia allows drawing the following conclusions and recommendations.

1. The objective preconditions for the development of agriculture and fisheries in the North revealed are conditioned by the provision of the population with fresh and full-fledged foodstuffs, and social function of the agrarian sphere. Due to extreme natural conditions and market relations in agriculture, the industry can develop only with state support. Without financial support, agricul-

tural enterprises and peasant farms will be forced to reduce the production of biologically complete products. The state will then need to disproportionately more expenditure to employ indigenous peoples than to support the agricultural sector.

2. On the basis of the study of the agricultural experience of Nordic countries, it is possible to conclude that the best way of development is the example of Scandinavia and, first of all, Finland, focused on the combination of crop and animal husbandry and the positive impact of agricultural production on rural society. Due to the significant population density, undeveloped transport in the Russian North, it is impossible to use the Canadian model based on the delivery of food from the southern territories to the sparsely populated northern areas of the country.

3. The author reveals the conditions and possibilities of development of agriculture in extreme conditions. Natural conditions, especially in the Arctic, constrain the development of agricultural production. Favorable conditions and competitive opportunities for agriculture are: long daylight during the growing season, the proper water supply of plants; large amounts of fodder land, incl. floodplain meadows, and labor resources: good opportunities for organic production in ecologically clean areas; industrial nature of the economy, allowing to allocate significant financial resources for modernization and integrated rural development; the existence of a significant potential of agrarian science. Products of traditional industries are competitive not only at regional but also national and international food markets.

4. Data of census held 2006 and 2016 revealed structural changes in agriculture, trends in the development of the industry, the role of each category of agricultural producers in the food resource formation. Extensive information will give an opportunity to agro-economic science to develop reasonable proposals for improving the state agrarian policy and contribute to dynamic development of rural areas. The results of the census are of great importance for the development of the State program for the development of the agro-food sector in the medium term. The information presented will also be used for educational purpose.

5. The results of the census showed that over a decade the number of agricultural organizations and farms decreased as well as the number of employed in agricultural production. In farms of all categories, there was a decrease in the total land area and farmland, the number of cattle, pigs, poultry and fur-bearing animals. In agricultural organizations, there was a reduction in the equipment of tractors, cars and agricultural machines. The census showed a very significant proportion of organizations and farms that did not produce agricultural products. The received information testifies to the insufficient level of innovation activity of agricultural producers with significant scientific potential in the North and the Arctic.

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Development of regional business cooperation: the experience of Northern Norway and how it can be applied to Russia*

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Abstract. The northern regions of Norway and Russia have similar issues: new mega-projects for the development of oil and gas fields and infrastructure are not only an opportunity but also a challenge for the development of regional small and medium-size enterprises. To connect to projects, regional enterprises need to increase their competencies and find opportunities for cooperation with each other. The article presents the results of a study of the formation of a regional business alliance in Northern Norway. Further, it offers an analysis of the possibility of applying the North Norwegian experience to Russia. It is concluded that, although from a theoretical point of view, this is difficult, the prerequisites for the successful application of the studied experience exist in the Arkhangelsk Oblast and the Murmansk Oblast. Two business associations are successfully operating there. They were built considering the Norwegian experience, but with the active participation of local industry and authorities, as well as accounting regional specifics, values, and traditions. It is a powerful foundation for the further development of business cooperation. The article contains several recommendations for such forms of collaboration. It is proposed to pay attention to the following: qualification of the coordinator, public-private financing scheme, openness and integration of the project, primary importance of technological cooperation idea and secondary significance of the legal form to be chosen.

Keywords: *Business cooperation, regional businesses, High North, Norway, Russia.*

Introduction

Northern regions of Norway and Russia have similar problems: new offshore oil and gas projects and coastal infrastructure are not only an opportunity but also a threat to medium and small enterprises. To join these projects, regional supplier enterprises need to develop their competencies and identify opportunities for group interaction. Otherwise, they are not competitive with larger or technologically advanced enterprises from other territories, incl. foreign enterprises. Thus, there is a problem of the local participation for the Northern enterprises. At the same time, the disclosure of potential and the development of the local industry is one of the necessary aspects of improving the social and economic security of territories and states. The experience of southern Norway revealed a balanced policy aimed at the interaction of interests of the state, national oil and gas companies, and local industry could bring amazing results. In the area, in 1970-1990, a cluster of suppliers with worldwide demanded competences appeared.

Currently, the problem of local participation in Northern Norway is being solved in the context of the State Policy for the Development of the North[1]: schemes of the interaction be-

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[1] General information about the Norwegian North Development Policy is available on the website of the Norwegian Ministry of Foreign Affairs: https://www.regjeringen.no/en/topics/foreign-affairs/high-north/id1154/ (Accessed: 11 June 2019).

tween authorities, oil companies, their contractors, representatives of small and medium-sized businesses have been built. One of the platforms for joint development is the Petro Arctic Association used by oil and gas companies and their contractors to promote the involvement of local industry in the development of deposits in the Barents region. State programs to support cooperation of small and medium-sized businesses are also being implemented, and a network of supporting organizations — business incubators have been developed. One of the latest joint initiatives of the national oil and gas company Statoil and the Innovation Fund Norway is the program to develop business alliances among regional companies — potential suppliers for the oil and gas industry. This is the third phase of the LUNN (Northern Norway Supplier Development) project started in 2008.

The article presents the results of scientific research of a local business alliance in one of the provinces of Northern Norway in 2010–2015. In addition to strong political and methodological support, the relationship culture of the Norwegian business environment played an important role in this process. The article considers the main stages and characteristics of the process, and also gives a critical assessment of the possibility of application of the "North-Norwegian model" of cooperation to the Northern Regions of the Russian Federation. Some recommendations on the application of the model in the Arkhangelsk Oblast and the Murmansk Oblast are formulated.

The context of the study — the project "Nordnet"

The studied business alliance was a result of the cooperation project "Nordnet" (pseudonym)[2] with the support of Innovation Norway in the framework of "Network Business Interaction" program (Bedriftsnettverk). Project participants are local small and medium-sized enterprises interested in oil and gas service projects related to maintenance and modification of mining facilities, intelligence, and transport infrastructure. Even before the start of the project, these companies had experience of cooperation on the local market but had never worked together (and most of them had no chance to do it individually) in oil and gas projects with special complexity, high-quality requirements, duration and scale of work. The "Nordnet" project started in 2010 by several people — leaders of local companies. By the beginning of 2015, the number of participants was about 29 companies specializing in electrical installation, automation, installation and repair of steel structures, ship repair, waste treatment, logistics, isolation, vulcanization, etc. The purpose of this cooperation was to form an operational group of companies capable of offering [3]a wide range of services to the customer. The emphasis was on improving the competencies of companies (certification) and personnel (training programs), internal harmonization of methods of commercialization of cooperation, and building relationships with major players (potential customers, financial, expert organizations, oil and gas companies, and authorities). Phases of the cooperation project "Nordnet" from idea to the market are in Table 1.

[2] The alias, a fictitious project name, is used to protect personal data in accordance with the requirements of the Norwegian Research Council.

[3] Nordnet's potential customers are the contractors of oil and gas companies or drilling platform owners.

Table 1

Phases of the cooperation project "NORDNET"

Phase	**2010: Discussion of the project idea and development of a feasibility study**	**2011–2012: Pilot project** Market analysis, assessment of the level and lack of competences of participating companies, and building relationships with key players	**2013–2015: Main project** Collaboration to improve competencies, marketing, and search for ways of commercialization of cooperation	**Autumn 2015: Entering the market** Participation in the tender for service and technical works at the LNG plant "Melköya" (Hammerfest)
Participating Companies	2 to 7	approx. 14	20 to 29	29
Organizing collaboration	Informal interaction of the initiative group members	The Board of Directors included the initiative group members; A project coordinator was appointed; Informal membership of participating companies	The Association was registered; Formal membership of participating companies; Elected Board of Directors	The Association was preserved; several of its members became co-investors in the newly formed project company. Acquisition of an executive company was planned

Research methodology

The object of research was the organization or the process of *formation* of a regional business alliance (on the example of "Nordnet") in 2010–2015. According to some scholars [1, Ahrne G. and Brunsson N., p. 2], the following definition of *organization* is used: a social order established by the decisions taken and consisting of one or more elements, such as membership, hierarchy, rules, monitoring, and sanctions. This definition removes the dualistic contradiction that arises under the traditional understanding of the organization i.e., a separate formal legal system existing in a certain environment (market, region, segment industry, etc.), and thus separated from the environment by imaginary boundaries. Thus, the paper assumes that the formed business alliance was a continuation of the already existing social world order (environment), but as a result of its formation acquired special qualities, allowing this world order to diversify.

A longitudinal case study was used as a research strategy. Robert K. Yin defines case analysis as "empirical research aimed at the deep study of the modern phenomenon (case) in the context of the real world" [2, p. 16]. According to R.K. Yin, the boundaries of the phenomenon and the real world where it exists can be blurred. At the same time, empirical data are collected from several sources at the same time. In this paper qualitative methods of data collection from several sources were used (Table 2). The observations and data collection continued three and a half years (2012–2015).

Table 2

Methods and sources of data collection

Methods	Sources
Interview	"Nordnet" project manager, Board members, ordinary members Oil and gas industry experts, surrounding organizations (42 interviews with 26 respondents)
Observations	Meetings of "Nordnet" members (8 meetings) Official group email (about 100 messages) for "Nordnet" members
Text analysis	Power-point presentations, applications, and reports submitted to the Innovation Foundation, "Nordnet" Charter, member meetings abstracts," Nordnet" website, and Facebook pages

The application of several synchronous data collection methods allowed for a multifaceted analysis of the organizational process being studied. The following were studied: mechanisms of process management from the position of management (manager and board of directors), actions of process participants (directors of companies included in the project and other associated organizations), and the formation of new organized structures. At the same time, the multiplicity of methods and sources allows increasing the reliability of the research, as the same topics are studied from different perspective.

Characteristics of the organizational process

THIS section presents the forming the alliance, which, on the one hand, were of key importance, and on the other hand, were quite atypical for Russian business.

"Egg in the nest"

The business alliance formed through the "Nordnet" can be compared to "an egg" placed in a favorable environment — "a nest", carefully entrenched from the interlocking ties of different stakeholders: the project is integrated into the already existing network of inter-organizational relations (Fig. 1), existing in the context of the National Strategy for the Development of the North. In this case, the main "participants" of the network were the Norwegian National Oil and Gas Company Statoil (in Fig. 1 — "Company TEK"), Innovation Norway Foundation (in Fig. 1 — "Innovation Fund" "), the Regional Business Incubator Enterprise (in Figure 1 — "Business Incubator"), as well as transnational enterprises — contractors (in Figure 1 — "Contractor"), which by then have already opened their offices in Northern Norway.

The Innovation Foundation and Statoil were co-founders of the training program under the above-mentioned LUNN project. Northeast companies, incl. "Nordnet" members, were actively involved in the program. Statoil is an industrial co-founder of Business Incubator, who coordinated the training program at LUNN and took over the project management in "Nordnet". Contractors were involved in the LUNN program as co-hosts of seminars (e.g., based on contractual interaction in service projects). The Innovation Fund financed project management and co-financed opera-

tions in “Nordnet”. A part of the operational activities was financed from the funds of the participating companies.

The role of contractors deserves special attention. In accordance with the Norwegian State Policy for the Development of the North, the national “TEK Company” gives preference to those contractors that attract local suppliers. At the same time, “Company TEK” provides contractors with information about local suppliers. Competing, contractors draw attention to North Norwegian suppliers, support cooperation projects between them and receive information on development plans from participants projects.

The engagement of a contractor

In the case of “Nordnet”, the contractors actively participated in technical consultations and informed about their plans and projects in Northern Norway. One of them was involved in a joint project to improve technological competencies. By 2015, an agreement was reached (fixed by the agreement of understanding) on joint participation in the tender for carrying out service and technical works at the LNG plant “Melkoya” (see Table 1). Under such a contract, in case of a win, the contractor undertakes to cooperate with the suppliers representing “Nordnet” (subject to the availability of all necessary certificates and qualifications). The possibility of participation of the contractor in the project company established by “Nordnet” in 2015 is also being considered (see Table 1) as a project management service provider. One more case in a successful alliance in Northern Norway.

Qualified mediator

The success of network projects involving many different participants depends largely on management. The existence of a common goal requires collective decision — making and organizational arrangements. Also, there are always individual goals and perceptions that may conflict with the collective objectives set for the project. At the same time, the project manager cannot use mechanisms based on power and direct control. Instead, the project manager should be able to negotiate with all project participants, build relationships between them, find and promote compromise solutions. Thus, the manager acts as an intermediary. In the "Nordnet" project, this task was entrusted to a person with the following qualities: wide *outlook* acquired through the experience of technological and economic activity outside the region; *neutrality*, i.e., the lack of commercial interest in the activities of individual project participants and *locality*, i.e., local knowledge, authority and sincere desire to contribute to the development of the region. This person was born, grew up and studied in Northern Norway. After many years of work in the oil and gas industry (the supplier company side) in southern Norway and in other countries (USA, Kazakhstan, and Russia), this person returned to hometown and joined the development of regional industry (through project activities in the "Business Incubator"). In the development of the "Nordnet" project, he was very useful for the extensive network of contacts, the ability to see the situation from different sides (regional and global aspects, as a customer and contractor, etc.), and the ability to build relationships. All the qualities mentioned above: outlook, neutrality, and locality formed the ground for comprehensive trust used by the mediator manager of the "Nordnet" project.

Evolution

It could be seen in table 1, forming a business alliance through the "Nordnet" project took a lot of time, i.e., 5 years. According to the participants, the project "took more time than it was expected". Nevertheless, the study proved that such speed of the project was necessary for its balanced development. The project was not developed in a forced way, but in an evolutionary way, considering the existing limitations. It turned out that most of the participants (company executives) had acute time shortages, i.e., most of their attention was focused on managing the operations of their companies. At the same time, at the very beginning of the project, it was difficult to establish a common language and to agree on methods of joint work. The project manager and some participants noted the importance of "talking to each other many times over time". Equality and diversity of partners were important for the development of the project, but it was also a limitation since its impossibility to force the project and to develop it in order. Therefore, the emphasis was placed on raising awareness among participants (e.g., oil and gas industry certificates and qualifications, complexities of contractual regimes). The task of the manager was to motivate participants to work together. And for this purpose, it was necessary to show them the advantages of cooperation and the disadvantages of isolation, to provide an atmosphere of mutual trust and understanding of the situation.

Another sign of the evolution of the process was its openness. All companies that believed that the project could be useful for them could participate. Even though about 29 companies participated in the project at the end of the project, it went through much more. Those who left the project (and some of them were the companies that started it and were a part of the initiative group 2010–2011) decided to do it themselves. They also had the opportunity to return later. Thus, the project proceeded relatively peacefully.

Another important sign of evolution was some uncertainty (or rather its acceptance) regarding the legal formalization of relations between the participants. These issues had been discussed continuously but had not been the main ones. The issues of building technological links, increasing competencies, building relationships with potential customers were put in the forefront. At the same time, given many participants, it would be difficult to organize themselves, i.e., to reach an agreement that would suit everyone. In spring and autumn 2015 the financial support of the Innovation Fund was close to an end; participants were invited to act as co-investors in the project and executive companies. At the same time, the management of the project (the board and the manager) understood that not all participants would become investors. Those who prefer more free participation, it is possible to remain a member of the regional association (see Table 1). "Nordnet" was organized like that before reaching the level of commercialization. In any case, the "Nordnet" project was not originally created "for someone" but was open to everyone who was willing to contribute to its development.

The North Norwegian Model in Russia: difficult but possible?

Everything discussed above will be called the "North Norwegian model". The model has the following features: "egg in the nest", engagement of the contractor, and qualified coordinator (with the following qualities: outlook, neutrality, locality) and evolution of the process (with signs of slowness, unenforceability, openness, uncertainty). Since we identified the key features of the "North-Norwegian model", let us analytically consider the possibility of its application in the northern regions of the Russian Federation.

Considering the scientific research of the Russian business environment by Western scientists of the past 20 years [3, Puffer S., McCarthy D.], it is possible to assume that the application of such a model in Russia is difficult. One of the main characteristics given by Paffer and McCarthy for Russia is a strong imbalance between informal (interpersonal) and formal (regulated by law, inter-organizational) relationship mechanisms. Similar conclusions were made by Rose [4] and Ledeneva [5]. On the one hand, it is argued that relationships (incl. economic ones) are most often built at the interpersonal level. On the other hand, there is an institutional vacuum, i.e., underdeveloped formal mechanisms for regulating relations between economic counterparties or different organizations. This is the reason for weak inter-organizational relations. Thus, the condition of the North Norwegian model "egg in the nest" seems difficult to practice. The low efficiency of inter-organizational cooperation in Russia was also repeatedly noted by representatives of Norwegian

business, who had personal experience in working with projects in Russia. Also, the excessive use of interpersonal relationships leads to the fact that the built inter-organizational schemes do not have time to institutionalize and are easily destroyed with a (frequent) change of political or market conjuncture (e.g., when appointing new people). Thus, the condition for the evolutionary introduction of the North Norwegian model is also difficult to fulfill. Indeed, with frequent changes in the environment, slow and unforced processes of establishing business linkages may simply fail to complete.

Another feature of Russia (as well as the countries of the former Soviet Union) is the low level of minimum trust between economic counterparties. According to the analysis of economists from the Institute of Development Studies of Sussex University [6, Humphrey J. and Schmitz H.], this leads to the impossibility of building long-term interdependent relations between different organizations. Namely, such relations are the key to the development of high-tech supply chains and industrial clusters. Thus, it is believed that Russian managers tend to use "old" proven links to solve new problems. While new problems (e.g., the development of regional industrial competitiveness is one such problems) call for new linkages. The latter seems unlikely because of a lack of confidence in the "strangers". All this can lead to the construction of "closed" organizational structures or limited attraction of external resources. This means that the conditions of openness and acceptance of uncertainty in the North Norwegian model are also difficult to achieve.

The considered difficulties have a theoretical basis[4]. On the one hand, this foundation is built using scientific approaches developed in a "Western" context other than Russia. This means that the application of these approaches automatically contrasts the Russian and Western realities. Indeed, scientific research of the Russian business environment carried out by Western scientists, regarded Russia as a country with a "transition economy" — catching up or seeking to comply with the economic, social and political models of Western Europe and the US. Thus, Russia has initially seen as a country where something "not enough" or something else is being done "not as it should". At the same time, the unique features of Russia were rarely considered. Perhaps the limitations of this approach were the result of the fact that a few years ago there was a decline in the research activity of the Russian business environment by Western scientists, i.e., they tried to understand Russia deeply but did not work, and no desire to learn from Russia appeared[5].

At the same time, the presented theoretical arguments cannot be disregarded if the question of the application of Western models and technologies of cooperation in Russia is raised. In the case of direct surface copying of Western models in Russia, they will not work effectively for the reasons mentioned above: an unevenness of trust, an imbalance between formal and informal

[4] This article lacks the theoretical analysis of the possibilities for fulfilling such conditions of the North Norwegian model in Russia as "involvement of the contractor" and "qualified intermediary". It may be briefly mentioned that, according to empirical observations and personal experience of the author, these conditions are also difficult to achieve. First, big companies do not have to cooperate with small ones. Secondly, there is a personnel problem.

[5] This statement is hypothetical. It is based on personal observations and experience of the author. No research has been carried out to confirm this hypothesis.

governance mechanisms, and rejection of uncertainty. Thus, it is necessary to consider the specifics of Russia and its regions, to look for a creative approach to applying the experience gained abroad, and to do so with caution.

According to the author, the ground for successful application of the North Norwegian Model exists in the Murmansk Oblast and the Arkhangelsk Oblast. The fact is that local industrial associations ("Sozvezdie" in Arkhangelsk, "Murmanshelf" in Murmansk) have been successfully functioning since 2006[6]. These associations were established with the support of the Norwegian company Statoil in the framework of a cooperation agreement with the governments of the Murmansk Oblast and the Arkhangelsk Oblast. Statoil used the Petro Arctic Association established in Northern Norway as a prototype. It was mentioned in the introduction. Statoil's methods of development of suppliers in Northern Norway are described in the article [7, Andvik T.C.]. Methods and motives of the company in the North-West of the Russian Federation are briefly presented in the article [8, Mineev A.].

Although the initial methodological and financial support came from Norway. Russian associations were organized considering local specificities, values, and traditions. A great contribution to the development of the associations was made by representatives of the local authorities and business. Perhaps this was the key to the viability and further development of associations in Russia. The positive experience of Russian participation in this project in the Murmansk Oblast was presented in the study [9, Mineev A., Bourmistrov A.]. Today, both associations exist independently, without foreign support. Each of them has about 200 members, incl. Russian and foreign, regional and foreign, and large and small companies. Associations consider the interests and promote interaction between local companies, authorities and large businesses. Thus, these associations can play the role of a feeding environment for innovative business alliances in various sectors of the Russian industry. Also, a positive role should be played by the specificity of the northern territories, i.e., the culture of mutual benefit and transparency within society (due to the compactness of cities), contributing to a high level of mutual awareness and trust among people.

Recommendations for the cooperation project

Considering the experience of Northern Norway, the formation of business alliances in the North-West of Russia (the Murmansk Oblast and the Arkhangelsk Oblast) is recommended to be implemented in the form of cooperation projects. As a result of such a project, a group of interested companies should come to a joint technology-economic and commercial scheme of interaction, allowing to carry out high-quality service or production projects for the maintenance of the fuel and energy sector, infrastructure or related industries. Some of the critical points to be addressed are outlined below.

[6] Sozvezdie. URL: www.sozvezdye.org (Accessed: 21 June 2019), Murmanshelf. URL: www.murmanshelf.ru (Accessed: 21 June 2019).

1. ***A "qualified" coordinator*** should play a key role in the implementation of the cooperative project. In this case, qualification includes the above characteristics: wide outlook and business contacts obtained outside the region; neutrality, i.e. independence from the interests of individual project participants; locality, i.e., knowledge of local specificity, authority and wholeheartedly wish to contribute to the development of the region. It is important that the project will be a significant part of the core work of the coordinator (about 50% of the working time). At the same time, it is important for the coordinator to be involved in other related projects. The coordinator will be able to influence the formation of mutually beneficial relations between different organizations by participating.
2. ***Public-private financing scheme*** is necessary for the balanced project. On the one hand, governmental support can be a stimulant for the participation of regional small and medium-sized businesses. On the other hand, the feasible financial contribution from the enterprises will guarantee their involvement and active participation in the project. E.g., the coordinator position and a part of the operational activities of the project can be financed through a federal or local program or innovation fund, and another part of operating activities — at the expense of membership fees. The experience of Innovation Norway may be used: Participants should provide a report on the number of hours spent on the project to access the fund. Every working hour of an individual participant "defrosts" the corresponding amount from the fund. The amount is then transferred to the overall budget of the project.
3. ***Openness and integration*** *are* important aspects of the project organization. On the one hand, the project should be open to all interested companies who believe they can benefit from it. At the same time, conditions should be created to increase their motivation and to bring something positive to the development of the project. On the other hand, the project should be integrated into the relationship between authorities, potential customers (primarily contractors), research and education institutions. The openness and integration of the project will largely depend on the activities of the coordinator. Therefore, it is important to organize effective communication: the exchange of knowledge and information should be transparent and involve direct interaction between the member enterprises and between contractors and other organizations.
4. ***A clear technological idea*** is important to sustain the course of commercialization of the project. All participating enterprises should understand their role in a common product or service. In other words, everyone must concretely imagine who to work with, whether it is increasing the volume of production through the cooperation of similar enterprises or expanding the range of services through the cooperation of technologically related enterprises. It is also necessary to monitor the demand for the joint technological solution in the market, to maintain contact with prospective customers. Examples of technological ideas for cooperation: electromechanics and automation units, energy efficiency, waste disposal,

thermal power engineering, ship repair, etc. The choice will depend on an analysis of existing and required technologies in the area.

5. The question of choosing ***the legal form*** of interaction is important but should be considered as a matter of secondary importance. It should be discussed gradually, but with no hurry with its formalization. As the experience of the business alliance in Northern Norway shows, the participating companies and their executives must gradually "mature" to solve this issue (undergo a joint training process), that is, to establish a mutual understanding, improve the skills of the companies and employees, to understand the requirements of customers, opportunities and ambitions of each other.

Conclusion

The article presents the results of the study of the local business alliance formation in Northern Norway, and the analysis of the possible application of the North Norwegian experience in Russia. It is argued that from a theoretical point of view it seemed difficult due to such reasons as an imbalance between informal and formal mechanisms of relations and low level of minimum trust between economic counterparties. However, the ground for the successful application of the studied experience exists in the Murmansk Oblast and the Arkhangelsk Oblast. Two regional business associations have been established and successfully operate in these regions. These associations were based on Norwegian experience, but with the active participation of local industry and authorities, considering local specificities, values, and traditions. In this regard, some recommendations for the cooperation project in the North-West of Russia are formulated. It is proposed to consider the following: qualification of the coordinator, public-private financing scheme, openness and integration of the project, primacy of technological and secondary legal idea of building cooperation.

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Prospects of cooperation between Russia and North-East Asian countries in the Arctic region*

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Abstract. Significant increase in global attention to the Arctic, as well as the intensive development of technologies for its study, makes the cooperation between various countries increasingly important. The article discusses the history and current interaction in the Arctic region between Russia (and its predecessor, the USSR) with North-East Asia (NEA) — China, Japan, and the Republic of Korea. The author noted the increasing scientific and practical interest of the NEA countries to study the Arctic, analyzed it and main aspirations of these countries to cooperate with Russia. Also, the author reviewed the most significant internal laws and regulations governing their activities in the Arctic. It was concluded that the high prospects for cooperation between the countries of Northeast Asia and Russia occur. Main directions of possible interaction in the region are presented in the article along with the highlighted unique position of the Russian Far East as one of the critical links.

Keywords: *the Arctic region, North-East Asia (NEA), the Northern Sea Route (NSR), the Arctic zone of the Russian Federation (AZRF), Initiative "One Belt — One Road," the Far East of the Russian Federation, Territory of Advanced Socio-Economic Development (TASED).*

Introduction

In the 21st century the Arctic region is a subject of increasing attention and study for the international community. According to different estimates, the Arctic has significant world reserves of natural resources, which can become basic for the world economy. Along with resources, international attention attracts the transport and logistics of the Arctic. Transport routes of the northern seas reduce the distance, time and cost of transportation between Asia, Europe, and North America compared to traditional routes through Suez and Panama canals.

Despite growing economic attractiveness, the Arctic is still poorly integrated into the international economy. It creates opportunities for all (not just circumpolar) countries to participate in the Arctic research and development of the Arctic economic system. In recent years, China, Japan, and the Republic of Korea have shown severe concern and commitment to the Arctic. These states received observer status in the Arctic Council and published their Arctic policy (the Republic of Korea in 2013, Japan in 2013 and China in 2018).

First, the interests of these countries are focused on the use of Arctic economic potential. Mineral resources (esp. hydrocarbons) and transport routes are significant for energy-intensive

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and export-oriented economies of North-East Asia. Russia, in turn, has specific jurisdiction over the NSR (Northern Sea Route) and can provide navigation in polar waters. Taken together, this serves as a severe basis for essential and even inevitable cooperation between Russia and the countries of North-East Asia in the Arctic.

Review of studies on the subject

The idea of cooperation between China, Japan and the Republic of Korea on the one hand and Russia (or other Nordic countries) on the other is relatively new. So far, comprehensive studies in this area have not been carried out enough. T. Troyakova is one of the few scholars who studied the main possible ways of such cooperation [1, Troyakova T., pp. 7–15]. At the same time, some experts argue that the participation of non-Arctic states, especially China, in the development and management of the Arctic is unreasonable and unsafe [2, Gudev P., pp. 71–78]. However, today, most researchers share the view that non-Arctic countries are involved in various activities in the Arctic, and their role in the development and management of the region is growing [3, Podoplekin A., pp. 40–45]. That is why it is so essential to study these processes of cooperation and to identify specific mechanisms for interaction between circumpolar and non-Arctic states between Russia and the countries of North-East Asia.

Within the framework of this article, the Arctic policy of the countries, mentioned above, is revealed. The main interests of Japan in the Arctic were covered by M. Akiyama, D. Tulupov [4, pp. 250–255], A. Tonami [5, pp. 47–71], F. Okhnishi [6, pp. 171–182]. Also, strategy and activity of the Republic of Korea in the Arctic is widely studied [5, pp. 73–92], [7, Jin D., Seo W., Lee S., pp. 84–96], [8, Benett M.].

The growth of activity of China in the Arctic, along with the study of the problems of the so-called “Arctic society”, increasing attention is paid to the Arctic policy of this country [5, Tonami A., pp. 19–45], [9, Xu G., pp. 52–62], [10, Nong H.], which is one of the most active participants in the region among the non-Arctic states. The release of the “White Paper” on the Arctic policy of China in January 2018 gives the basis for new research in this field.

As for the Russian strategy of the Arctic, there are several main documents to regulate various activities of Russia: “Fundamentals of state policy of the Russian Federation in the Arctic for the period up to 2020 and Further Perspective”, “Strategy of Development of the Arctic zone of the Russian Federation and Ensuring of National Security for the period up to 2020” and “State Program for Socio-Economic Development of the Arctic Zone of the Russian Federation”. These documents have been studied by many authors. P. Zhuravlyov analyzed the “Strategy of Development of the Arctic zone of the Russian Federation and Ensuring National Security for the period up to 2020” from the point of view of its main problems and proposed measures for its improvement [11, pp. 154–156]. Employees of the Northern (Arctic) Federal University A. Podplekin and K. Bestuzheva stressed the advantages of the “Strategy of Development of the Arctic zone of the Russian Federation and Ensuring national security for the period up to 2020” and outlined its main

prospects [12, pp. 35–46]. The first steps and promising directions of the “Fundamentals of the State Policy of the Russian Federation in the Arctic for the period up to 2020 and Further Perspective” were considered by E. Labetskaya [13, pp. 59–71], [14, pp. 106–114].

When studying the possibilities and prospects of cooperation between Russia and the countries of North-East Asia it is necessary to consider regional aspects linking the Russian Arctic, China, Japan and the Republic of Korea. The authors consider the Far East of Russia one of these links. The Institute of Economic Research of North-East Asia paid great attention to the problem of the economic integration of the Far East of Russia into the economic system of the Asia-Pacific region [15, Kurokawa Y, pp. 46–48]. Russia's view of regional cooperation between the Far East, China, Japan and the Republic of Korea, and problems and specific projects within the framework of such cooperation, is best demonstrated by the scientists of the Institute of Economic Studies of the Far East Branch of the Russian Academy of Sciences — P. Minakir, O. Prokapalo and A. Goryunov [16, pp. 6–16], [17, pp. 486–492]. In this article, the authors tried to develop the ideas of their colleagues and put them in the context of the Arctic cooperation to demonstrate that the Far East of Russia can act a link between the countries of North-East Asia and the Arctic zone of Russia.

History of cooperation between the USSR and the North-East Asian countries in the Arctic

Joint projects between Russia and the North-East Asian countries in the Arctic zone of Russia are not new. The agreements between the USSR and Japan on the wood supply for Japan were signed in 1968, 1974 and 1981. In exchange, Japan supplied the USSR machinery and equipment necessary for the wood exploitation in the Far East. Part of the wood was delivered from Yakutia to Japan via the NSR. They also used the transportation along the Lena River to the seaports of the NSR by the method of “wood rafting”. During the summer navigation, transportation was carried out by barges to the eastern ports of the USSR and further to Japan.

In accordance with the Agreement 1974, the USSR supplied coking coal to Japan in exchange for equipment, machinery, materials and other goods used in the development of coal basins in Yakutia. Part of coal was also supplied by means of rivers and the NSR. In addition, in 1974 Japanese companies “Tokyo Gas” and “Mitsubishi Corporation” initiated an agreement on the supply of natural gas from Yakutia to Japan. According to the agreement, the exploration of natural gas fields in Yakutia was carried out jointly by the USSR, the USA, and Japan. Japan also supplied the USSR with pipes, incl. “large diameter pipes”, equipment for liquefaction of gas and other equipment for exploration and development of gas fields. However, in 1980, the implementation of the agreement was stopped due to the beginning of the USSR's military campaign in Afghanistan.

Since the late 1980s, Japan showed increasing interest in joint scientific research of the Arctic with the USSR, especially in connection with the use of the NSR. Japanese scientists, together with their colleagues from Norway and the USSR participated in the international program for

studying the Northern Sea Route and comprehensive study of the route and the possibilities of its use by global shipping companies.

However, there was no systematic approach to these projects. The Arctic was not considered a special economic region. That is why these initial projects cannot be examples of full cooperation between countries. However, today, the foundation for the development of such cooperation has already been formed.

Fundamentals of cooperation between Russia and the North-East Asian countries in the Arctic

It is reasonable to compare the arctic policy of these countries, to emphasize shared interests and to define the relationship between them to determine the directions of cooperation between Russia and the countries of North-East Asia in the Arctic.

The main priorities of North-East Asian countries in the Arctic have been disclosed in the relevant regulatory documents: China's Arctic Policy White Paper; Japan's Arctic Policy; and Japan's Ocean Policy Plan; the Republic of Korea's Arctic Policy Master Plan. These documents contain a clear view of the approaches of the three countries to the development of the Arctic.

Table 1

Russia and the countries of North-East Asia: basic approaches to Arctic policy[1]

Country	**Key documents related to Arctic policy**	**Interests in the Arctic and Priorities of Arctic Policy**
China	Arctic Policy of China (2018)	• Expanding exploration and understanding of the Arctic. • Protecting the Arctic environment and combating climate change. • Use of Arctic resources in a legitimate and rational manner. • Active participation in international governance and cooperation in the Arctic. • Promoting peace and stability in the Arctic.
Japan	Ocean Policy Plan (2013); Arctic Policy of Japan (2015)	• Full advantage of Japan's scientific and technological benefits from a global perspective. • Study of the Arctic environment and ecosystem. • Ensuring the rule of law and promoting international cooperation in a peaceful and orderly manner. Respect for the rights of indigenous peoples and the traditional economic and social foundations of their life. • Study of the security in the Arctic. Economic and social compatibility with climate change and the environment. Study of the use of maritime transport routes and exploration of natural resources in the Arctic.
Republic of Korea	Arctic Policy Master Plan (2013)	• Creation of an Arctic partnership within the international community to solve current problems of the region. • Expanding research activities for better understanding the Arctic. • Sustainable development of economic activity in the Arctic.

[1] Source: developed by the authors.

Russia	"Fundamentals of the state policy of the Russian Federation in the Arctic for the period up to 2020 and further perspective" (2008); "Strategy of development of the Arctic zone of the Russian Federation and ensuring national security for the period up to 2020" (2013)	• Socio-economic development of circumpolar areas through the development of natural resources and commercial use of the NSR. • Conservation of the Arctic ecosystem. Preservation of peace and stability in the region. • Ensuring state sovereignty on the continental shelf under the jurisdiction of Russia and along the NSR.

Many of the priorities are common to the three North-East Asian states. In particular, the key force of the Arctic policy of the Asian countries and Russia is the economy.

The development of commercial navigation in polar waters along with the exploitation of minerals is also of importance for North-East Asian states. Promotion and support of technological solutions, know-how, and high-tech equipment in the Arctic is another priority for North-East Asian states. Finally, the last priority on the list, but not least, is recognition of the opportunity to participate in the management of the Arctic. The comparison of these interests with the priorities of Russia helps to identify the promising areas of possible cooperation in the region.

Mineral resource development in the Arctic

From the resource perspective, North-East Asian countries are interested in gaining access to mineral deposits in the Arctic, incl. oil and gas, non-carbon minerals and the maritime biological resources. The Arctic zone of Russia is rich with various types of resources (Table 2) [18, Istomin A., Pavlov K., Selin V., pp. 158–172].

Table 2

Mineral resources of the Russian Arctic[2]

Type	Territory	Resources
Energy resources	Chukotskiy Autonomous Okrug, Krasnoyarsk Territory, Nenets Autonomous Okrug	Coal, uranium, oil shale, and methane hydrates
Hydrocarbons	Yamalo-Nenetskiy Autonomous Okrug and Nenetskiy Autonomous Okrug	Oil, gas, condensate, and mineral resins
Ferrous metals	Chukotskiy Autonomous Okrug, Republic of Sakha (Yakutia), and Murmansk Oblast	Iron, manganese, titanium, chrome, mercury, lead, zinc, and lead
Rare earth metals	Chukotskiy Autonomous Okrug, Republic of Sakha (Yakutia), and Murmansk Oblast	Beryllium, vanadium, lanthanoids, lithium, niobium, and tantalum
Non-ferrous metals	Chukotskiy Autonomous Okrug, Republic of Sakha (Yakutia), Murmansk Oblast and Krasnoyarskiy Krai	Aluminum, bismuth, tungsten, copper, molybdenum, nickel, cobalt, and tin
Precious metals	Chukotskiy Autonomous Okrug, Republic of Sakha (Yakutia), Murmansk Oblast and Krasnoyarskiy Krai	Gold, silver, and platinum
Mining and chemical raw materials	Krasnoyarskiy Krai	Phosphate ore, mineral salt, graphite, gloss, barite, and abrasive
Crystals	Republic of Sakha (Yakutia) and Murmansk Oblast	Unprocessed diamonds and gems

[2] Source: developed by the authors.

However, due to the limitations of industrial, financial, technological, and economic potential, Russia cannot effectively manage large resource projects on its own. At the same time, after the introduction of economic sanctions against Russia, the problem has worsened. In this context, cooperation between Russia and North-East Asian states has significant technical, production, and financial base.

Due to the conditions presented by the President of the Russian Federation V. Putin in the so-called “May decrees”, the goal to achieve by 2024 is the annual NSR's cargo turnover of 80 million tons. The Government of the Russian Federation (i.e., the coordinator of economic activities in the Russian Arctic) began work on large projects that would contribute to the development of the region and will attract private investors, incl. foreign ones.

At the same time, the Russian leaders have repeatedly stated that our country is open for any mutually beneficial cooperation with foreign business in the Arctic.

One of the most successful examples of international cooperation in the Russian Arctic is the Yamal-LNG project, an integrated project for the production, liquefaction, and supply of natural gas with a capacity of about 16.5 million tons per year at the Uzhno-Tambeyskoye field. The first production line started in Q4 2017, the second and third production line started in July and November 2018, respectively. Shareholders of the OJSC "Yamal LNG" are Novatek (50.1%), Total (20%), CNPC (20%), and the Silk Road Fund (9.9%). Although the project reached its full capacity only in November 2018. More than 10 million tons of LNG have been shipped to foreign consumers.

The next significant project should be "Arctic LNG 2" of Novatek on the Gydanskiy Peninsula, i.e., the construction of three liquefaction lines of 6.6 million tons each. The cost is about 20–21 billion US dollars. It is planned to launch the first phase of “Arctic LNG-2” in 2022—2023. At the same time, the Novatek management announced the signing of binding agreements on the terms of entry into the “Arctic LNG-2” project with Chinese CNODC (100% “daughter” of CNPC) and CNOOC. Both agreements mean a 10% stake in the project.

Other projects, incl. the coal sector, are also being prepared. E.g., on the Taimyr of the Krasnoyarsk Krai — the development of oil and coal fields (expected turnover of up to 20 million tons by 2024), Payakhskaya group of oil fields in Krasnoyarsk (“Neftegazholding” company), as well as a hard coal project on the Taimyr (“VostokUgol” company).

Besides, according to Vice-Premier Yu. Trutnev and Minister of Natural Resources and Ecology of Russia D. Kobylkin, in 2019, it could be possible to open the Arctic shelf for private companies. It will also significantly increase investment attractiveness of the region for foreign business.

Oil, gas, and coal are not the only areas of cooperation in the region. In the Arctic, strategic deposits of solid minerals are found. In addition to the resources listed in Table 1, the deposits of manganese and polymetallic ore in Novaya Zemlya archipelago, rough diamonds in Laptev and White Seas and tin on Novosibirsk Islands are still underestimated. Tomsk deposit is one of the

most attractive deposits of rare metals, incl. niobium. World annual demand for it exceeds 3 billion carats, and the main consumers of niobium and other rare metals are high-tech industries of China, the Republic of Korea and Japan.

Summing up it is reasonable to consider the development of mineral resources as one of the promising areas of cooperation between Russia and the North-East Asian states in the Arctic. Despite skeptical statements about the inexpediency of extraction in the Far North in the current economic situation, the Arctic remains the main reservoir of mineral resources for future generations and a key element for ensuring energy and resource security for several states.

Joint use of the Northern Sea Route

The development of commercial navigation along the NSR is another area of cooperation in the Arctic. Despite all the advantages over traditional southern transit routes, it is mainly used for mineral development projects. At the same time, the NSR is the only way to deliver resources from Arctic Russia to the countries of North-East Asia. To make the route safer and more efficient, it is necessary to establish appropriate infrastructure, incl. port facilities and navigation services and rescue centers. All this opens a wide field for cooperation between Russia, China, Japan and the Republic of Korea.

Russia is working on all these due to the Federal Program "Development of the Russian Transport System until 2020", "Strategy of development of the Russian Maritime Transport System until 2030" and other regulatory documents. According to these directives, EMERCOM of Russia plans to establish ten rescue centers in the Arctic.

The construction and modernization of Russian ports are actively underway (Fig. 1).

Figure 1. Construction and modernization of seaports in the Russian Arctic[3].

Several companies from North-East Asia have already taken part in the construction of offshore facilities in the Russian Arctic. E.g., the Japanese "Mitsui O.S.K. Lines" and the Chinese "Chi-

[3] Source: developed by the authors.

na COSCO Shipping" participate in the development and operation of the Sabetta seaport, while the Korean company "Hyundai Merchant Marine Co." together with the Chinese "Poly Group" are considering the participation in the reconstruction of the Arkhangelsk deep seaport and development of the Murmansk transport system. In addition to the profits from specific joint investment projects, these countries may expect to receive some privileges from the NSR shipping.

Improvement of the NSR infrastructure should increase the capacity of the route. Due to NSR's advantages compared to the Suez and Panama Canals, it can be used as an alternative way for trans-Eurasian transportation. At the same time, the interest of Asian countries in transit is clear.

According to the Administration of the Northern Sea Route, in 2018, 12 Chinese vessels applied for passage (eight of them belonged to COSCO Shipping), in 2017 — 9 (5 — COSCO), in 2016 — 5 (3 — COSCO), in 2015 — 3. In 2018, Japan had 2 applications and only one in 2016 and 2017. Korean shipping company Hyundai Merchant plans to test transit of container vessels with a capacity of 2500-3500 TEU (unit equivalent to twenty feet) along the NSR in 2020.

To reduce shipping costs along the NSR, China, Japan and the Republic of Korea can begin deliveries with cargo caravans in cooperation with Russia. The idea is to combine several ships from different countries into one caravan instead of single shipping. It will reduce the costs of provision and insurance for icebreakers and make navigation safer. Russia could reduce taxes on the NSR passage for international caravans. Cargo caravans may be formed depending on demand at one of the North-East Asian seaports. In 2015, Japanese Prime Minister Shinzo Abe announced the creation of a hub port (Tomakomai (Hokkaido Island) is considered the most appropriate by Japanese scientists) to promote commercial transportation via the NSR[4].

The NSR can also be considered one of the transit routes within the Chinese "The Belt and Road Initiative" (BRI) and become the "Ice Silk Road", which provides for the connection of the Arctic transport routes with the BRI and Central Asia. Such a connection can be provided by the inland Russian waterways, e.g., the Ob-Irtysh system. Passing on these rivers, special mixed navigation vessels (river and sea) can make routes from the NSR ports to Central Asia. An alternative solution is transshipment from sea vessels to river vessels. In 2016, this route has already been tested by the Korean logistics company SLK Kukbo and the shipping company Pan Ocean, which organized the delivery of large-tonnage objects from Ulsan (Republic of Korea) and Shanghai (China) to Pavlodar (Kazakhstan). Later, the representatives of the companies assessed the route as very promising.

Certainly, routes using Russian rivers are cost-effective only for large cargoes that cannot be delivered by other means. However, the development of infrastructure, incl. hydraulic structures and terminals for transshipment of sea and river cargo, they can be used as a link between

[4] Kitagawa H., Otsuka N. A New Hub-Port Concept for Tomakomai in Anticipation of the Era of Arctic Shipping. Conference paper: 24th International Ocean and Polar Engineering Conference, June 15-20, 2014, Busan, Korea. Retrieved July 05, 2018. URL: https://www.onepetro.org/conference-paper/ISOPE-I-14-079/ (Accessed: 20 March 2016).

the Chinese initiative "The Silk Road Economic Belt" (SREB) and the NSR (Fig. 2). In the long term, Russian rivers will also allow supplying hydrocarbons from Arctic deposits to the energy deficit areas of Central Asia.

Figure 2. Water routes connecting the SREB and the NSR[5].

Another problem that needs to be addressed to ensure sustainable navigation along the NSR is the construction and maintenance of icebreakers. Countries with extensive shipbuilding experience, e.g., China and the Republic of Korea, could make a great contribution to this process. Moreover, the Korean corporation Daewoo Shipbuilding & Marine Engineering is building ten Russian LNG ice-class vessels for "Sovcomflot". Hyundai Heavy Industries and Samsung Heavy Industries also intend to receive orders from Russia. The vessels will be used for the Yamal — LNG project.

Considering this, the joint development of the NSR provides a good field for cooperation. To structure it, the countries of North-East Asia and Russia should sign an agreement to ensure the participation of China, Japan and the Republic of Korea in the development of the NSR in exchange for some preferences. Ideally, the countries should create two large container terminals (in Murmansk and Chukotskiy Autonomous Okrug) and provide continuous maintenance of icebreakers transport corridor between them, together with qualified safe services and the provision of meteorological, navigation and rescue services (search and rescue operations).

In this situation, Russian jurisdiction over the NSR is in the interests of Asian states. First, it means that the route belongs to one party responsible for its maintenance and operation. Secondly, the internationalization of the NSR will lead to attempts of the United States to establish control over the route, incl. the military one. Even today, the US is trying to introduce NATO into the region, although there are no real military threats there. At the same time, the existing status of the route provides free navigation in the polar waters, requiring notification of the Russian side, and the independence of the NSR as a transit route.

[5] Source: developed by the authors.

Development of the Russian Arctic

At first glance, the countries of North-East Asia should not be interested in the socio-economic development of the Russian Arctic directly. However, effective use of the economic potential of the Arctic, incl. mineral exploration and navigation, is impossible without ensuring sustainable socio-economic development and the creation of a spatial framework, transport, engineering infrastructure, and communication lines. A sustainable economic system of the Arctic is crucial for the successful development of Arctic resources.

In addition, cooperation in the sustainable development of the Arctic, incl. social and environmental projects, will help countries to strengthen their positive public image and affirm the validity of its activities in the region, rather than simply making economic gains in the long term. This will demonstrate the serious long-term intentions of Russia and North-East Asian states as responsible players in the Arctic before the international community.

Russia is taking certain steps in this direction. In April 2014, the "State Program for Socio-Economic Development of the Arctic Zone of the Russian Federation until 2020" was approved (in 2017, it was extended to 2025). It aimed at accelerating the socio-economic development of the country through the development of Arctic resources, based on the principles of resource efficiency and environmental protection. Among the main objectives of the Program are key investment projects in the Russian Arctic; development of transport, energy and IT infrastructure, security and control environmental systems in the region, and the establishment of a regulatory, institutional, technological and scientific basis for the development of the Russian circumpolar territories and the improvement of governance.

In accordance with the new edition of the state program, it introduces the concept of "support zones" of development in the Arctic: Kola support zone; Arkhangelsk support zone; Nenets support zone; Vorkuta support zone; Yamal-Nenets support zone; Taimyro-Turukhan support zone; North-Yakut support zone and Chukotskaya support zone. Summarizing the list of goals and tasks of support zones of development, it is possible to conclude that they should become catalysts of comprehensive economic development of the region and to provide its social component aimed at improving the quality of life of the population.

At the same time, Russia expects to attract part of the funds for the comprehensive development of the Russian Arctic from foreign sources, incl. North-East Asia. In turn, the Russian government and regional authorities offer administrative and tax preferences for investors. It was discussed at the international forum "Arctic — the territory of dialogue" (St. Petersburg, April 2019).

The interregional large railway projects expected to benefit the socio-economic development of the North of Russia and improve the development of mineral deposits of the NSR for investors from North-East Asia are: North Latitudinal Railway (NLR) (first stage: Salekhard — Nadym — Urengoy; second: Igarka — Dudinka — Norilsk; third: Railway to Yakutia); BelKomur (White Sea — Komi Republic — Ural; Arkhangelsk — Syktyvkar — Gaini — Solikamsk); Barents Komur (Barents Sea — Komi Republic — Ural) (Fig. 3).

Figure 3. Prospects of railway construction in the Russian Arctic[6].

All large infrastructure projects are included in the State Program for Socio-Economic Development of the Arctic Zone of the Russian Federation.

Public-private partnership is one of the best ways to implement such initiatives. Such a partnership in the Arctic can use technological platforms.

The technological platform is a forum with many participants from different spheres (state, science, business), the purpose of which is to define development priorities, develop research and development program, and the establishment and coordination of horizontal links between project participants. Their use is provided by the Strategy of development of the Arctic zone of the Russian Federation and ensuring national security for the period up to 2020. Technology platform for Arctic mineral exploration (14 universities, 27 research centers, 18 project organizations, 17 mining enterprises, and 5 foreign companies) has been acting since 2011. It helps to ensure representation of business interests in the development of the project, modes of administration, the introduction of new technologies in exploration, an increase of social investor responsibility, increased cooperation among various stakeholders, and the publicity and transparency of financial flows and project results.

There are also regional investment projects. Thus, the administrations of the circumpolar regions of Russia have already offered partners from North-East Asia several investment initiatives and developed business plans. The Chukotskiy Autonomous Okrug proposed the establishment of reindeer herding farms and processing enterprises, as well as projects on traditional hunting of

[6] Source: developed by the authors

indigenous peoples; the Republic of Sakha (Yakutia) — breeding of polar animals and production of leather and fur products based on traditional crafts; the Krasnoyarsk Krai and the Arkhangelsk Oblast — tourist and recreational centers and skiing resorts. In total, the administrative districts of the Far North of Russia offer more than 40 socially oriented investment projects.

Cooperation in the field of science, research and technology

The growth of economic activity in the Arctic requires new environmentally friendly technologies adapted to harsh climatic conditions. Until recently, no significant demand for "Arctic innovation" revealed in the business environment, government, and other stakeholders. However, today the situation has changed significantly in connection with the offshore projects on exploration and development of hydrocarbons, the growth of cargo traffic via the Arctic sea routes and the need to develop infrastructure to support all these activities. At the same time, the international community has realized the need to protect the environment and ensure comfortable living in the Arctic.

Many elements of production, energy, transport, utilities, and other technical systems have emerged in the region. Such systems were developed in climatic conditions other than the northern ones, and then partially adapted to the Arctic. In this regard, their effectiveness in the Arctic is relatively low.

Further development of the Arctic will need the following innovations: new building technologies, food production technologies, health care, transport technologies, energy technologies, innovations in robotics and new technologies for oil and gas exploration (sub-glacial, offshore technology, shore — to — sea horizontal drilling, etc.). Also, most countries lack effective offshore development technologies. That is why economic competition in the region will be a technological one.

Russia has a long tradition and great potential in Arctic research. The main institutes involved in the study of the Arctic are the Northern (Arctic) Federal University (Arkhangelsk) and the Research Institute of the Arctic and Antarctic (St. Petersburg). Russian universities organize new promising scientific institutions for Arctic research: The Arctic scientific community at the Tyumen State University of Oil and Gas; Research Center of the Shanghai Cooperation Organization and Asia-Pacific region at the Khabarovsk State University of Economics and Law; Far Eastern Arctic Engineering Center at the Far Eastern Federal University; Department of the University of the Arctic at Far Eastern State University of Railway Transport, etc.

Russia has achieved good results in geophysical research in the Far North. On the continental shelf of the Arctic Ocean, Russian scientists are studying natural geological hazards that can lead to catastrophic consequences during exploration work oil and gas. A new complex of geophysical information system for emergencies is being developed.

In 2013, a base was developed to monitor the temperature of the seabed in the Arctic Ocean. The system of online monitoring for underwater pipelines is under development. The

technology for assessing the impact of climate change on the nature and population of the Arctic has been developed. Research is also being done in oil spill prevention, climate change, environmental conservation and carbon, and methane reduction.

For scientific purposes in Russia, several modern polar stations and more than 30 research vessels operate, incl. the latest scientific expedition vessel "Academician Treshnikov". Four modern research vessels of the ice-class category "Ark-7" are being built.

However, problems remain in marine, sub-glacial, and horizontal drilling technologies. Russia has no drilling facilities to produce hydrocarbons (drilling vessels, drilling platforms, etc.).

So, Russia and the countries of North-East Asia can complement each other in terms of scientific cooperation in the Arctic. Russia can bring its experience, fundamental knowledge, and significant scientific research into joint work. China, Japan, and the Republic of Korea can provide their enormous technical and industrial capabilities for research projects in energy, robotics, oil and gas exploration, transport, etc.

Today, several joint research institutes and projects have already been established in Russia and North-East Asia:

- Institute of Peripheral Seas and Arctic Research (Far Eastern Federal University and Shanghai University of Transport) (2014));
- Scientific and educational project "Ice School" (Far Eastern Federal University in cooperation with Chinese scientists) (2015));
- Joint Chinese and Russian Arctic Research Expeditions (2016, 2017);
- Joint Arctic Journal (Far Eastern Federal University, St. Petersburg State University, Shanghai Ocean University, and Shanghai Transport University) (2015);
- Russian-Korean Center for Maritime Transport and the Arctic (Maritime State University (Vladivostok) and Maritime University of (the Republic of Korea) (2015));
- GAME-Siberia Climate Research Project (North-Eastern Federal University in cooperation with Hokkaido University, Japan) (2016).

Individual projects should be systematized into a single common plan for the establishment of comprehensive scientific cooperation. It will give a significant impetus to research activities in the Arctic. The business environment, government, and society should be involved in developing such a plan to increase the practical relevance of research in the Arctic.

The Far East of Russia as an Arctic link for the North-East Asian states

Interregional cooperation is very important for the development of cooperation in the Arctic. Any agreement concluded at the highest level will not work without economic, investment, research and humanitarian exchange between the regions involved. Interregional cooperation between Russia and North-East Asia in the Arctic, of course, includes cooperation with the regions of the Russian Far East.

The Russian leadership is actively working to create the most comfortable conditions for doing business in the Far Eastern Federal District. Thus, in 2013, Russia created a new Ministry for the Development of the Far East (since January 2019 — Ministry for the Development of the Far East and the Arctic). Several laws were adopted to help business, namely the "Law on Territories

of Advanced Socio-Economic Development" and the "Law on Free Port of Vladivostok", which applies to most of the Far East ports.

The new legislation provides for several preferences for business and investments: tax incentives (exemption or reduction of taxes on profits, property, and land), simplification of customs and visa procedures, and reduction of administrative barriers. Examples of cooperation projects include the Chukotskiy Autonomous Okrug and the Republic of Sakha (Yakutia) ("Kangalassi" Industrial Park) and the Beringovskaya Zone of Advanced Social and Economic Development (TOR "Beringovskiy")). The administrations of the two territories have already proposed a list of investment projects, incl. development of minerals (rare earth metals in Yakutia), processing of reindeer husbandry products, traditional hunting, tourism and recreation, breeding of polar animals, etc.

The Far East of Russia can become a kind of a springboard for the development of the Arctic. Given the fact that Asian states are the most promising consumers of oil and gas resources of the Arctic, significant expansion of export flow with a high probability of creation of ports-hubs will be in the Far East. In addition, the region can be a transshipment base for the delivery of the NSR products from North-East Asia to Europe (both Arctic seaports and ports of Kamchatka, Primorsky and Khabarovsk Krai). Also, the Far East is a promising region for auxiliary production based on existing enterprises of Khabarovsk and Komsomolsk-na-Amure.

Conclusion

Currently, no country can independently achieve the ambitious goal of sustainable development of the Arctic. Only multilateral cooperation could become an effective mechanism for creating Arctic economic system. The countries of North-East Asia and Russia have one of the best starting positions for establishing such cooperation. They do not have serious geopolitical differences, are neighbors and share common interests in the region. In addition, economic ("Russia's turn to the East", stable trade relations between Russia and North-East Asia) and political (instability near the Suez and on the Middle East, "trade war" between China and the US) reasons for a new model of sustainable development of the Arctic exist in the format of cooperation between Russia, China, Japan and the Republic of Korea.

North-East Asia and Russia have different advantages in terms of the development of the Arctic and can complement each other. Russia has extensive experience in economic activities in the Arctic, traditions of scientific research and importance in the region. The Russian Arctic has become a key hydrocarbon province and transport route in the circumpolar region. Unlike Russia, China, Japan and the Republic of Korea have the significant technological, industrial and financial potential for large projects, accelerating the development of the Arctic and promoting the establishment of an economic system in the Far North. Therefore, achieving their economic benefits, North-East Asian states can help Russia to achieve the goals proclaimed by the "Strategy of development of the Arctic zone of the Russian Federation and ensuring National Security for the period

up to 2020" and "State Program of Socio-Economic Development of the Arctic Zone of the Russian Federation".

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System problems and directions of municipal development of the Russian Arctic*

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Abstract. The subject of the study is the municipalities of the Arctic, their specifics of functioning and development in comparison with the southern regions of the Arctic states. The purpose of the work was to identify problem areas of regional development that affects the socio-economic situation of the Arctic municipalities, prospects, and directions of their development. The theoretical and methodological basis consisted of the works of Russian and foreign scientists on regulating and stimulating the socio-economic development of the territories and municipalities of the Arctic. The study grounds on an integrated approach to the functioning and development of municipalities in the specific conditions of the Arctic, as well as general and specific factors for the growth in the Russian Arctic, considering international research. An analysis of the leading indicators of the socio-economic situation of the Arctic territories showed several common problems for the development of municipalities. The main forces of state regulation should be aimed at solving the issues of human development, social and transport infrastructure and require the approval and state support of the Arctic territories. Government policies to minimize negative processes and factors for the municipalities of the Russian Arctic should base on international experience. Authorities and management can use the results of the study for the development of fiscal, tax, investment policy, programs, and plans for the socio-economic development of the Arctic territories.
Keywords: *the Arctic zone, municipalities, socio-economic development, investment activity*.

Introduction

The social and economic development of municipalities, i.e., the primary management link attracted increased attention from all Arctic states and in all spheres of activity — political, economic, social, and environmental. Various scientists have developed a significant methodological base that contributes to assessing socio-economic development of individual territories [1, Skufina T., Baranov S., Samarina V.; 2, Voronina E.P., p. 60–69], investment climate, attractiveness for the population and business [3, Saak A., Kolchina O., p. 53–54], the level and quality of life of the population [4, Vylegzhanina A.O., pp. 78–88; 5, Korczak E.A.], infrastructure development both at the level of municipalities [6, Bukhval'd E.M., Voroshilov N.V., pp. 54–69], and at the level of regions.

The study of the Arctic as a special object of legislative regulation and management, as well as the specific conditions of functioning of this macro-region, are in the scientific writings of A. Pilyasov [7, Pilyasov A.N., Kuleshov V.V., Seliverstov V.E., pp. 10–22], A. Chistobayev [8, Chistobayev A.I., Malinin P.Yu., pp. 122–128]; M. Blunden [9, Blunden M., p. 127], etc.

However, the social and economic development of municipalities is mostly considered in isolation from its territorial affiliation. So, in the present study, the analysis of factors and issues related

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to the functioning of towns is discussed within the specific conditions of Arctic territories to identify cardinal directions of their further development.

All countries, a part of which is in the Arctic, i.e., Russia, Canada, Denmark (Greenland), Norway, USA (Alaska), Sweden, Finland, and Iceland face several common problems of municipalities. These are difficult climatic conditions and increasing costs; inaccessibility and remoteness of towns from economic centers; mono-profile nature of the economy; increased level of population migration; high energy intensity and cost of electricity; lower level of social services and unfavorable ecological situation [10, Mikhailov K.L., pp. 442–446; 11, Greaves W., pp. 660–671; 12, Litovskiy V.]. These factors are the main reasons for low attractiveness of municipalities for investors, labor, economic activity, and entrepreneurship.

Formation and development of municipalities of Russia [13, Emelyanova E.E., pp. 79–83; 14, Emelyanova E.E., pp. 103–117], and prevailing trends of the international policy of the Arctic states in relation to negative processes typical for the Arctic region allow to establish common and particular ground for socio-economic development of municipalities that provide direct impact on authorities. It is human development; economic diversification and fiscal policy of the state.

The Arctic Zone of the Russian Federation (AZRF) includes all municipalities of the Murmansk Oblast, Nenets, Chukotka and Yamalo-Nenets Autonomous Okrugs — the entities of the Russian Federation, which are a part of the Arctic zone, as well as some municipalities of the Arkhangelsk Oblast, the Komi Republic, Karelia, the Republic of Sakha (Yakutia), and the Krasnoyarsk Krai — the subjects of the Russian Federation, partially included in the Arctic Zone of the Russian Federation[1].

The issue of human resources is relevant for almost all municipalities of the ASRF and foreign countries. Indicator of the territory, directly characterizing development and its prospects, is population density [4, Vylegzhanina A.O., pp. 78–88]. The population density in the Russian Arctic is the lowest in the country and ranges from 0.1 people /km^2 in the Chukotskiy OA to 5.2 in the Murmansk Oblast, with an average of 8.6 in the country. For the past 15 years, the largest “emptiness” occurred in the Nenets Autonomous Okrug, where the population density decreased by 33%, the Komi Republic, the Murmansk Oblast (-25%) and the Arkhangelsk Oblast (-17%). At the same time, the average population density in the country increased by 2.3%, and it indicates a redistribution of the population within the country. The population of the Arctic territories of Russia (Fig. 1) decreased by 151 thousand people or 10.9% for the past 15 years, and over the past year — by 6.5 thousand people.[2]

[1] Ukaz Prezidenta RF ot 2 maya 2014 g. №296 “O suhoputnyh territoriyah Arkticheskoj zony Rossijskoj Federacii” [Decree of the President of the Russian Federation, May 2, 2014 No 296 “On land territories of the Arctic zone of the Russian Federation”]. Sobranie zakonodatel'stva Rossijskoj Federacii, 2014. No 18. Art. 2136. [In Russian]; Ukaz Prezidenta RF ot 27 iyunya 2017 g. №287 “O vnesenii izmenenij v Ukaz Prezidenta RF ot 2 maya 2014 g. №296 “O suhoputnyh territoriyah Arkticheskoj zony Rossijskoj Federacii” [Decree of the President of the Russian Federation of 27 June 2017 №287 “On Amendments to the Decree of the President of the Russian Federation dated May 2, 2014 №296 “On Land Territories of the Arctic Zone of the Russian Federation”] [In Russian].

[2] Ocenka chislennosti postoyannogo naseleniya suhoputnyh territorij Arkticheskoj zony Rossijskoj Federacii [Estimation of the permanent population of land areas of the Arctic zone of the Russian Federation] Demograficheskij ezhegodnik Rossii. 2017. Statistics. Rosstat. M., 2017. [In Russian]

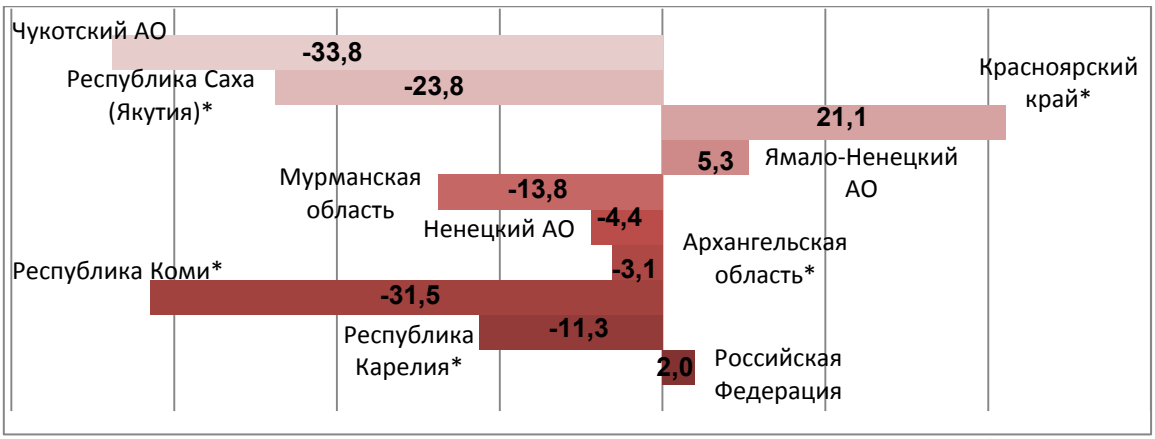

Figure 1. Population change in the municipalities of the ASRF 2002—2017, %[3].

In addition to the difficult demographic situation in the Arctic, the issue of gender and age composition revealed. Previously, there was a lower proportion of the population of older working-age compared to the national average, especially in territories fully classified as AZRF (9.9% vs. 20.5% of the country's average)[4]. It is due to existing resettlement programs, and a higher proportion of the working population (when people moved to the North because of the so-called “long ruble”). The outflow of people of working age has increased, and the picture is smoother compared to the national indicators.

This may indicate, on the one hand, that people do not want to move to other territories of the country after a certain age, and, on the other hand, that the older population does not have such opportunities. In any case, these categories of citizens should enjoy a suitable social infrastructure and the necessary level for qualitative provision of social services per citizen (availability of doctors, access to health care, etc.).

At the same time, over the past decades in the areas of Russia, fully or partially referred to the Arctic zone, the decrease in the share of the working population in Arctic towns amounted to an average of 13%: 67.2% in 2005 and 58.2% in 2017[5]and almost equal to the national level. The situation is aggravated by the increased rate of migration (Table 1). Among the territories of the Russian Federation, most areas of the Arctic occupy the first places in the level of outflow of population. Only the Krasnoyarsk Krai has minimal positive dynamics.

[3] Demograficheskij ezhegodnik Rossii [Demographic yearbook of Russia]. 2002: Statistics/Goskomstat of Russia. M., 2002. 397 p. [In Russian]; Demograficheskij ezhegodnik Rossii [Demographic Yearbook of Russia]. 2017: Statistics/Goskomstat of Russia M., 2017. [In Russian]; Baza dannyh pokazatelej municipal'nyh obrazovanij [Database of indicators of municipalities]. Federal'naya sluzhba gosudarstvennoj statistiki. URL: http://www.gks.ru/free_doc/new_site/bd_munst/munst.htm (Accessed: 23 July 2018). [In Russian]

[4] Regiony Rossii [Territories of Russia]. Socialno-ekonomicheskie pokazateli [Socio-economic indicators]. 2018: Statistics/Rosstat. M., 2018. 1162 p. [In Russian]

[5] Ibid.

Table 1

The migration growth rate of the territories, fully or partially attributed to the ASRF (per 10 000 people) [6]

Territories of the ASRF	2002	2012	2017
Russian Federation	5	21	14
All territory is a part of the ASRF			
Murmansk Oblast	-84	-101	-46
Nenets Autonomous Okrug	111	12	-53
Yamalo-Nenets Autonomous Okrug	16	-21	-45
Chukotskiy Autonomous Okrug	-205	-66	-132
A part of the territory included in the AZRF			
Republic of Karelia	25	-15	-31
Komi Republic	-59	-122	-112
Arkhangelsk Oblast	-33	-88	-70
Krasnoyarskiy Krai	-16	13	3
Republic of Sakha (Yakutia)	-59	-87	-48

The main reasons for the migration from the Russian Arctic municipalities are related to:

- the discrepancy of the comfort of living and compensatory costs to the population of Arctic cities. At present, the income of the population living in extreme climatic conditions is almost the same in most territories of central Russia, and the cost of social support is much higher than the all-Russian one. Reducing the difference in income between the Arctic and non-Arctic territories causes the outflow of population. The greatest outflow occurs when the difference with non-Arctic subjects of the Russian Federation is especially not obvious (e.g., the Murmansk Oblast) [15, Larchenko, pp. 69—75];
- low level of socially relevant health and education services. In remote small Arctic settlements, the level and availability of social services are much lower due to the distance and the small number of settlements. From the perspective of the current reforms of health and education (especially higher education), a significant reduction and consolidation of social security facilities are observed together with the possibility of receiving it in administrative centers of territories of the Russian Federation;
- depletion of natural resources and changing market conditions, leading to the economic and social decline of towns due to their mono — profile economy and focus on the resource extraction.

In the forecast period, the population outflow from areas with unfavorable working and living conditions will increase due to changes in pension legislation and the increase in retirement periods. The life expectancy in the North and the Arctic is lower than the national average, and in some territories — the lowest (Chukotka Autonomous Okrug — 66.1 years)[7]. In combination with the above factors, the population outflow to the better areas of the country may increase significantly. Even though, in the Arctic, the mortality rate in working-age decreases at a similar rate, as in the country, this figure exceeds the national one by 15–20%[8].

[6] Ibid.

[7] Demograficheskiy prognoz do 2035 goda [Demographic forecast until 2035]. Federal State Statistics Service. Official website. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/demography/ # (Accessed: 04 December 2018). [In Russian]

[8] Regiony Rossii [Territories of Russia]. Social'no-ekonomicheskie pokazateli [Socio-economic indicators]. 2018: Statistics/Rosstat. M., 2018. 1162 p. [In Russian]

The human capital issue is recognized one of the most important in the development of the Arctic in all Arctic countries and directly affects the economic, investment, infrastructure and social development of towns [16, Petrov A.N., pp. 203–220; 17, Markin V.V., pp. 75–88]. Therefore, the efforts of the state should first and foremost be directed at its solution. Considering the international management experience of the Arctic towns, in Russia, it is necessary to create a comfortable living environment using the most practical knowledge of such countries as Norway and Canada. Their Arctic policy is aimed at creating a favorable environment for the local population, which allowed to improve living standards significantly and not only reduce migration outflow but also successfully attract labor resources from other regions due to state investments in the social sphere[9][10].

In the Russian Arctic, investment expenditures in the social sphere (education, health, culture, and sports) (Table 2) of the four territories of the Arctic — the Murmansk Oblast and the Arkhangelsk Oblast, the Komi Republic and Karelia — is not compensated due to rising costs, and even below the average values for the country by 1.5 times or more.

Table 2

Investments in fixed assets in the leading sectors of the economy and in the social sphere in 2017 in the AZRF territories, thous. rub/person. [11]

AZRF territories	Total investments	Mining	Production	Social sphere
Russian Federation	***108.7***	**19.9**	**13.7**	***4.2***
All territory is a part of the ASRF				
Nenets Autonomous Okrug	3232.6	2247.8	0.2	16.7
Murmansk Oblast	146.5	30.2	15.1	3.0
Yamalo-Nenets Autonomous Okrug	2014.3	1554.3	100.4	8.8
Chukotskiy Autonomous Okrug	237.3	121.7	0.2	9.8
A part of the territory is included in the AZRF				
Republic of Karelia	66.7	8.0	18.8	2.6
Komi Republic	152.9	83.9	7.9	2.5
Arkhangelsk Oblast	92.7	1.5	18.4	2.7
Krasnoyarskiy Krai	147.6	44.6	28.1	7.8
Republic of Sakha (Yakutia)	399.3	168.2	5.5	8.6

Increased social costs in the Nenets Autonomous Okrug, the Chukotskiy Autonomous Okrug and the Yamalo-Nenets Autonomous Okrug and the Republic of Sakha (Yakutia) are connected, firstly, with the harshest living conditions and a considerable length of territories, which leads to the need for additional costs for the maintenance of fixed assets of buildings and structures. Secondly, it has to do with the social responsibility programs in this area. Large corporations are involved in the local community in terms of public-private and municipal-private partnership

[9] Fedoseev L. The comfortable urban environment in the Arctic opens doors for innovations — experts. URL: http://tass.com/economy/983475 (Accessed: 03 May 2019). [In Russian]

[10] Simmins G. Urban and Regional Planning. 2015. URL: https://www.thecanadianencyclopedia.ca/en/article/urban-and-regional-planning (Accessed: 03 May 2019).

[11] Calculated by the author. Source: Regiony Rossii [Territories of Russia]. Social'no-ekonomicheskie pokazateli [Socio-economic indicators]. 2018: Statistics/Rosstat. M., 2018. 1162 p. [In Russian]

using investments in the development of the social sphere by analogy with foreign companies operating in the territories of indigenous peoples [18, Tysiachniouk M.S., pp. 29–34].

Oil-producing territories can invest in the development of individual industries and towns. E.g., the Murmansk Oblast, the Arkhangelsk Oblast, and the Republic of Karelia almost always need the participation of the state in expensive and large investment projects because the level of investment flows in these entities is significantly different from the other Arctic territories (Table 3). The volume of investments is comparable to the all-Russian level (and in parts of the territories and below), which is insufficient due to the increasing costs factors for the construction and operation of infrastructure and increased depreciation of fixed assets in extreme conditions of the Far North.

Table 3

Distribution of investments in fixed assets in the territories of the Russian Federation by forms of ownership in 2017, thous. rub. /person[12]

AZRF territories	Total	Russian			Foreign	Joint
		State	Municipal	Private		
Russian Federation	***108.7***	***12.8***	***2.1***	***54.9***	***7.0***	***9.4***
All territory is a part of the ASRF						
Nenets Autonomous Okrug	3232.6	68.8	5.9	2116.2	25.8	216.5
Murmansk Oblast	146.5	64.2	2.2	62.8	1.1	3.9
Yamalo-Nenets Autonomous Okrug	2014.3	22.4	5.3	510.2	14.1	932.6
Chukotskiy Autonomous Okrug	237.3	46.3	4.6	46.6	28.0	47.2
A part of the territory included in the AZRF						
Republic of Karelia	66.7	9.1	1.3	42.0	2.9	3.3
Komi Republic	152.9	5.1	2.0	119.1	2.7	10.2
Arkhangelsk Oblast	92.7	19.9	1.4	42.9	5.3	6.2
Krasnoyarskiy Krai	147.6	11.7	1.5	55.1	17.5	23.6
Republic of Sakha (Yakutia)	399.3	14.4	9.6	238.1	6.7	48.3

Investment participation of the state is most noticeable only in those areas with joint corporate or foreign projects. A significant part of them goes to the development of extractive industries. The social and infrastructure necessary for human capital and small business development is not adequately funded to address these problems. These are Nenets, Yamalo-Nenets, and Chukotskiy Autonomous Okrug. In other territories of the Arctic, the level of participation of the state and municipality is higher in the territories fully assigned to the ASRF. Most likely, this is due to the need to compensate for the rising costs of both the federal and local levels and the municipal authorities.

As for the structure of investments, the pace and volume of housing construction in the Arctic are almost everywhere the lowest in the country. So, the level of investment there is extremely low. Equal volumes of financing with the average Russian values are only in the Nenets Autonomous Okrug, the Krasnoyarsk Krai and the Republic of Sakha (Yakutia). But this is mainly

[12] Calculated by the author. Source: Regiony Rossii [Territories of Russia]. Social'no-ekonomicheskie pokazateli [Socio-economic indicators]. 2018: Statistics/Rosstat. M., 2018. 1162 p. [In Russian]

due to the priority state programs to settle out of dilapidated and emergency housing. Its proportion in these territories is the largest in the country. Investments in infrastructure and transport projects are mainly in the oil and gas and Far Eastern territories, and in the Western Arctic (Murmansk, Arkhangelsk, Republic of Karelia and Komi) are much lower. At the same time, in the territories fully included in the Arctic zone, investments in non-residential buildings, constructions modernization, equipping of lands are much higher as well as investments in the fixed assets of equipment and vehicles.

Infrastructure, incl. social one and transport is a determining factor both for human and economic development, leading to the progress of entrepreneurship and creating a favorable investment climate. Despite the obvious importance of the ASRF for Russia, the socio-economic situation there remains quite difficult [19, Kartamysheva N.S., pp. 333–337]. Infrastructure and transport accessibility in foreign countries is the main way to increase investment flows. It allows wide use of Arctic territories for tourism, attracting a significant number of tourists and the development of small business associated with near-tourist services [20, Veijola S., pp. 63–81].

Compared with other Arctic countries, the tourism opportunities of the AZRF are not fully used due to transport and logistics underdevelopment and the lack of necessary tourist infrastructure. E.g., in Norway, the flow of tourists to the Svalbard archipelago is about 60 thous people a year, while in the national park “Russian Arctic”, incl. the territory of Franz Josef Land, — it is 1,225 people[13]. It has an impact on the development of small businesses in Arctic towns and great importance for mono-profile municipalities, allows to diversify the economy and makes it possible to create new jobs.

Active economic diversification through the creation of territories of advanced socio-economic development (TASED) in towns with the mono-profile structure of the economy and other municipalities have been implemented by the Government of the Russian Federation since 2014.[14] Support and preferences are provided for the residents of the TASED. Currently, there are about 100 preferential territories in Russia. 10 of them are on the territory partly included in the Arctic zone of the Russian Federation. 2 TASED are on the territory fully included in the AZRF — “Kirovsk” and “Chukotka”[15]. Now, in TASEDs, the indicators of additional jobs and investments are small. It indicates the insufficient effectiveness of the stimulation investment activity since the creation of the TASEDs does not guarantee the economic revival and inflow of investments. In ad-

[13] Skoriy R.P. Perspektivy razvitiya Arkticheskogo turizma [Prospects for the development of Arctic tourism]. URL: https://rusunion.com/perspektivy-razvitija-arkticheskogo-turizma/ (Accessed: 28 July 2018). [In Russian]

[14] Federal'nyj zakon ot 29.12.2014 № 473-*FZ* “O territoriyah operezhayushchego social'no-ekonomicheskogo razvitiya v Rossijskoj Federacii”. [Federal Law of 29.12.2014 № 473-FZ “On territories of advanced socio-economic development in the Russian Federation”]. [In Russian]

[15] Reestr rezidentov territorij operezhayushchego social'no-ekonomicheskogo razvitiya, sozdannyh na territorii mono-profil'nyh municipal'nyh obrazovanij. [Register of residents of territories of advanced social and economic development created in mono-profile municipalities]. Ministry of Economic Development of the Russian Federation. Official website. URL: http://economy.gov.ru/minec/activity/sections/econReg/ monitoringmonocity/2016160505 (Accessed: 06 March 2019). [In Russian]

dition, the legislation establishes some restrictive measures for TASED's residents (creation of at least 20 jobs, newly registered separate units, the necessary amount of investments, etc.). The restrictions are tough enough for small and medium-sized business[16].

Due to transport infrastructure and favorable business conditions provided by the state, the increasing costs of extreme climatic conditions do not have a significant impact on foreign small business development in the Arctic. In the Russian Arctic, challenging weather conditions limit the development of small businesses. It is accompanied by poor transport accessibility, high energy consumption, long distances, high compensation costs and benefits for workers in the Far North (travel costs compensations every two years, so-called district coefficients and allowances). Budgetary institutions and large enterprises operating in the Arctic do not consider the compensation issue so acute, but for small business, it is a question of "survival"[17]. Therefore, the focus moved to small and medium-sized businesses in the Arctic. Transport accessibility of the Arctic territories should be a priority of federal and local authorities.

At the governmental level and in international forums, the promotion of small entrepreneurship has gained increased attention by creating an enabling environment for business through the federal and local programs to support entrepreneurship, "tax holidays", exemption from inspections, etc. In addition, in recent years, the Government has subsidized small agricultural enterprises and farms due to counter — sanctions policy for food products. These measures led to the growth of small enterprises, especially in the agricultural sector, e.g., in the Far East of the country. However, the figure shows (Fig. 2) that in the Arctic, both the number of small enterprises and the growth rate of small businesses significantly lag behind the average Russian indicators, especially in the subjects of the Russian Federation, fully recognized the Arctic zone, and in some of them (Chukotskiy and Nenets Autonomous Okrug), they remain at the low level.

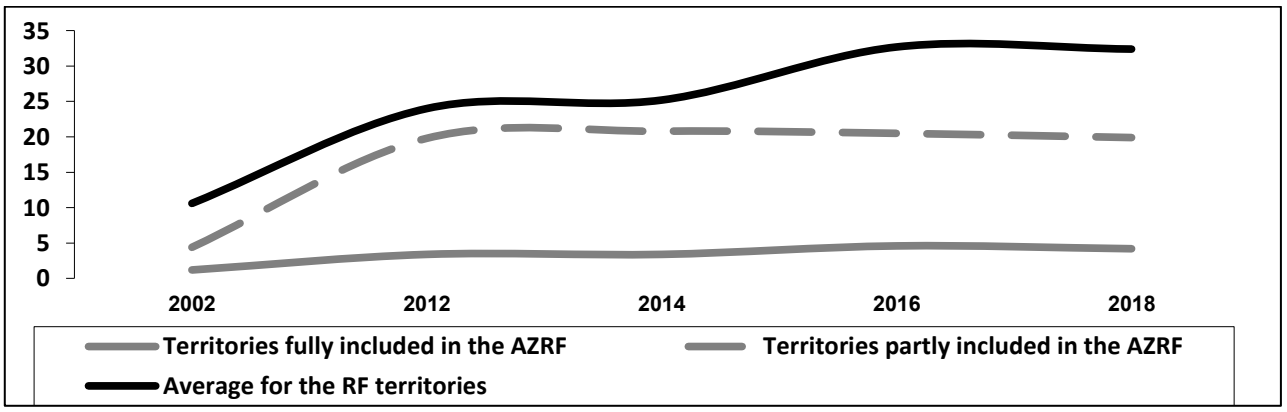

Figure 2. The number of small and medium enterprises in the regions of AZRF, thous [18]

[16] The territory of advanced socio-economic development "Kirovsk". URL: http://invest.welcomekirovsk.ru/ (Accessed: 14 March 2019).

[17] Pilyasov A.N. Arkticheskoe predprinimatel'stvo:nechto isklyuchitel'noe. [Arctic entrepreneurship: something exceptional]. Go Arctic. URL: https://goarctic.ru/work/arkticheskoe-predprinimatelstvo-nechto-isklyuchitelnoe/ (Accessed: 29 July 2018). [In Russian]

[18] Maloe predprinimatel'stvo v Rossii. 2003. [Small business in Russia. 2003] Statistics/Goskomstat of Russia. M., 2003. 109 p. [In Russian]; Maloe i srednee predprinimatel'stvo v Rossii. 2013. [Small and medium entrepreneurship in Russia. 2013]. Statistics/Rosstat. M., 2013. 124 p. [In Russian]; Edinyj reestr sub"ektov malogo i srednego predprini-

Meanwhile, small enterprises and their investments play an important role for municipalities. In territories with developed entrepreneurship (e.g., the Republic of Tatarstan and Nizhny Novgorod), investments of small enterprises amount to 15-18 billion rubles per year. In 2016, the average for the country was 9.4 billion rubles.[19] In Arctic towns, small business is a minor component in investment activity, because, firstly, it is poorly developed, secondly, in most municipalities of the ASRF, significant investors are large mining companies, and, thirdly, the need to compensate for the increased costs of activities reduces the volume of free financial resources.

A competent fiscal policy is necessary for the development of entrepreneurship in the Arctic zone and all territories in addition to state support. In all the Arctic states, almost all municipalities belonging to the Arctic zone get subsidies. However, the volume of subsidies per person varies significantly from country to country (Figure 3). The most significant amount of inter-budgetary transfers falls on the Arctic territories of Canada and Iceland (25 and 10 thous. USD per person, respectively). In Russia, this figure is the lowest, i.e., about 350 USD per person. At the same time, a significant amount of transfers falls on Chukotka and Yamalo-Nenets Autonomous Okrug. In other territories, it is less — about 90 USD per person.

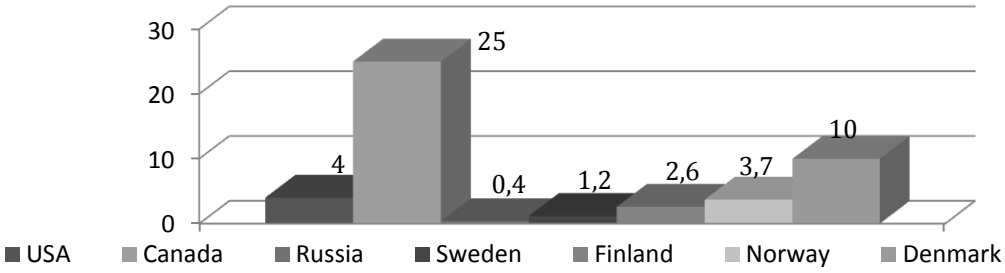

Figure 3. The size of inter-budgetary transfers per person in the Arctic territories in 2016, thous USD/person[20]

The higher level of transfers per capita in Chukotskiy Autonomous Okrug and Yamalo-Nenets Autonomous Okrug in comparison with other territories is explained by the harshest living conditions and the lowest density population in quite large areas. It leads to the necessity of significant expenses for maintaining stable functioning of housing, energy, transport, and “northern delivery.” E.g., in Chukotskiy AO, it is due to the inflated costs of air delivery of fuel, building materials, machinery, and food. The absence of railways and a unified system of road communication

matel'stva. [Unified Register of Small and Medium Enterprises]. Federal Tax Service. URL: https://rmsp.nalog.ru/statistics.html (Accessed: 30 April 2019). [In Russian]

[19] Maloe i srednee predprinimatel'stvo v Rossii. 2017. [Small and medium entrepreneurship in Russia. 2017]. Statistics/Rosstat. M., 2017. 78 p. [In Russian]

[20] Calculated by the author. Source: Demograficheskij ezhegodnik Rossii. 2017. [Demographic Yearbook of Russia. 2017]: Statistics/Goskomstat of Russia M., 2017[In Russian]; Mezhbyudzhetnye transferty sub"ektam RF. [Inter-budgetary transfers to subjects of the Russian Federation]. Federal Treasury. URL: http://datamarts.roskazna.ru/razdely/rashody/mezhbudgetnye-transferty/mezhbudgetnye-transferty-subjektam-rf/?paramPeriod=2016 (Accessed: 01 August 2018). [In Russian]; Verbinenko E.A., Badylevich R.V. Finansovoe regulirovanie razvitiya Arkticheskih territorij v zarubezhnyh stranah. [Financial regulation of Arctic territories development in foreign countries]. Fundamental'nye issledovaniya, 2017. No 4-1. pp. 126-132. URL: http://fundamental-research.ru/ru/article/view?id=41447 (Accessed: 09 July 2018). [In Russian]

makes aircrafts the only year-round transport [21, Kopin R.V., pp. 3–7]. Also, subsidies for energy tariffs and socially significant food products are relevant [22, Kalinova A.A., pp. 23–29].

The Arctic territories of Russia received only 5% of all inter-budgetary transfers in 2012-2014. At the same time, there has been a clear downward trend in recent years. Thus, in 2017, the volume of transfers to the territories that are entirely part of the Arctic zone decreased to 0.7%, which clearly does not correspond to the level of financing in foreign countries and runs counter to the overall strategic goals and trends in the development of the Arctic territories.

Previous studies of the budgetary provision of the AZRF municipalities indicated a high degree of subsidization and decrease in tax revenues [23, Skufiina T.P., p. 214], which leads to limiting the capacity of municipal authorities to influence their social and economic development and reducing the investment activity of town administrations. The taxation system in Russia, centralization of power and accumulation of funds at the federal level put the Arctic territories and municipalities in a rigid dependence on decisions of higher authorities. Weak income sources of the municipal budget do not allow to solve problematic issues of the Arctic territories independently.

Conclusion

The results of the study, i.e., defining the problems and directions for the development of the Russian Arctic, make it is possible to say that the socio-economic development of Arctic municipalities with precise specifics of functioning, typical both for Russia and for most foreign Arctic towns, depends on the state solution of development issues, human potential, social and transport infrastructure, small businesses and exceptional support to the Arctic.

To deal with the identified demographic threats, to attract human capital and to reduce migration outflow from the Russian Arctic, it is necessary to develop a set of measures aimed at the quality urban environment, developed transport, and social infrastructure, incl. its modernization; ensuring accessibility and improving the quality of health care; the development of education and vocational training; new jobs and employment (especially in monoprofile settlements), as well as the growth of incomes of the Arctic population and the amendment of pension legislation to maintain previously existing retirement benefits.

The development of social and production infrastructure is possible only with the participation of public investments and large business due to high capital intensity in the Arctic conditions and rising costs. By analogy with foreign countries, specific social responsibility for the development of territories means a public-private and municipal-private partnership, which will give impetus to a network of business structures.

The slow entrepreneurship development and the lag in the volume of investment participation of small businesses in the economy of Arctic cities in comparison with the average Russian level are due to the underdeveloped logistics and infrastructure and additional expenses caused by payments and guarantees established by the Russian legislation for the residents of Far North. Therefore, the development of small and medium-sized business in the municipalities of the Rus-

sian Arctic requires additional support from the state through the improvement of labor legislation and various preferences for the Arctic employees in terms of compensation of travel costs to the place of vacation, district allowances and coefficients for small business.

Also, in Russian tax and budget legislation, it is necessary to reconsider the issues of financial security and autonomy of municipal authorities by means of changes in inter-budgetary regulation and fiscal policy. It is necessary to develop, change and amend the tax legislation by increasing the share of local taxes, which will strengthen the financial and economic base of the local budgets, especially in the Arctic areas with their high cost of living, fixed assets, production and social infrastructure that confirm the need to expand the list of local budget revenues.

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NORTHERN AND ARCTIC SOCIETIES

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"This family has been found and is now located in Obdorsk region…" (reflections on the list of Samoyeds of Berezovsky district in 1832) *

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Abstract. The article details the list of "Samoyeds", compiled in 1832 by Tobolsk missionary Hieromonk Makarii. The generic names and surnames indicated there show that they belonged to the European, Ural and Siberian tundra Nenets, and it was not by chance that they were on the same list. It was a small group from the "Vojkar Samoyeds", a separate territorial group of the Nenets ethnos, wandering in the 17th–19th centuries on both sides of the Subpolar Urals. On the basis of information from the "List", generalization of materials from archival documents and works of researchers and travelers of the 18th – 19th centuries, it was possible to put forward several reasonable assumptions and clarifications about the origin of some Nenets families and patronyms, places of their settlement and marital relations. In addition, for the first time, it was possible to find information about the compiler of the "List", its life and activities long before the missionary trip to the north of the Berezovsky department.
Keywords: *hieromonk Makarii, Nenets, mission, christening, Voykarsky Samoyeds, clans, patronymy, origin.*

Introduction

For many decades, the State Archive of Tobolsk attracted scientists with its precious materials on the history and ethnography of Siberia. They contributed to hundreds of scientific and popular scientific articles and books, and dozens of candidate and doctoral dissertations. However, archival funds keep a significant number of documents still unused by experts. The information hidden there is often the missing fragments in the mosaic of historical processes occurred in Western Siberia.

One of such documents — "The List of Samoyeds of Berezovsky District Baptized in the Mission of 1826 in the former Arkhangelsk Province" (1832) was found by us in the "Act on secondment of the Mission of the Kaluga eparchy of Borovskiy for a first-rate of Hieromonk Makariy from Pafnutiev monastery to the Berezovskoe Department for preaching the word of God to the foreigners who are nomadic there." From the title of the document, it follows that they were baptized by the mission of Archimandrite Venjamin, who worked in the north of the Arkhangelsk province in 1826–30. Makariy's "List of Samoeds", as well as the writing of his "Report" for the Metropolitan of Tobolsk, was caused by the inability to find "*at what church their baptism was recorded in metric books, and in what Christian societies they were listed*"[1].

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[1] State budgetary institution of the Tyumen Oblast the State Archive of Tobolsk (SBITO SAT). F. I156. Op. 11. D. 189. L. 74-74ob, 75-76. [In Russian]

The “List of Samoeds”, we placed at the end of the article, was first published by V.Ya. Templing among the other documents. However, when preparing it for publication, mistakes in several names and surnames were made, and the record about one woman was missing [1, pp. 50–51].

Reviewing the “List”, we had to refer to several archival documents and works of scientists and travelers of the 18th — 20th centuries, directly or indirectly affecting the ancestral organization of the Nenets people. The material made it possible to put forward reasonable assumptions and clarifications on the origin of some Nenets clans and patronimies, places of their settlement, and family relations. An important conclusion of the study is that the “Samoeds” of European, Urals, and Siberian families were not accidentally in the same list. It was a small group from among the “voykarskaya samoyadi”, a separate territorial group of the Nenets people, which migrated in the 17th — 19th centuries on both sides of the circumpolar Urals. They belonged to Kunovatskaya and Lyapinskaya volost of the Berezovsky district, and paid yasak “willingly” in Pustozersk, in Obdorsk or in Voykarsky town.

Mentions of clans of the “voykar samoyadi” are in the works of V. Islavin [2, pp. 132–135], A. Reguli [3, pp. 164–165], Archimandrite Veniamin [4, p. 97], A. Shrenk [5, pp. 560–562], G.D. Verbov [6, pp. 52–57], L.V. Homich [7, pp. 102–111]. In the works of these researchers, the information on a family on the local territory is found but it has no analysis of their origin. Archival documents concerning the Voikar Nenets are considered by A.I. Andreev [8, pp. 84–103] and E.I. Kolychev [9, pp. 76–88], Sokolov Z.P. [10, pp. 33–36] and Martynov E.P. [11, pp. 88–93] wrote about the Kunovat and Lyapin Nenets and their marriages with Khanti and Mansi. The generalization and analysis of information about Nenets are in the works of Dolgikh B.O. [12, pp. 33—47], Minenko N.A. [13, pp. 136–137], and Vasilyev V.I. [14, pp. 12–20; 15, pp. 118–130; 16, pp. 86–98]. Among recent works, we should mention the article by E. Rutkai-Miklian [17], who has some common points with the present article.

Researchers of the second half of the 20th century used various materials about the “voykar samoyad” and interpreted them differently. As a result, they did not agree on the history of this ethnic group. In our article, we tried to clarify some controversial points. In addition, we managed to find information about the author of the “List of Samoyeds” — Hieromonk Makariy, his life and activities long before the missionary trip to the north of the Beryozovsky Department.

“A humble novice — Hieromonk Makariy”

Mikhail Ostalsky, the name of Makariy, was originally from Malorossia. He was a teacher of Volyn Seminary and was briefly mentioned in the “Summary review of the activities of Orthodox missionaries among northern non-Russian peoples of Siberia in the 18th – 19th centuries” (1869)[2]. Information from the book of a local historian N.I. Theodorovich “Volynskaya Spiritual Seminary” shows that Mikhail was born in 1783 in the village of Labun (Zaslavsky district) in the family of a

[2] Federal State Institution of the Russian State Historical Archive (FSI RSHA). F. 797. Op. 96. D. 45. L. 3ob. [In Russian]

priest Anthoniy Ostalsky. Mikhail had a brother Iakov, born in 1786. They studied at the Volynskaya Seminary at the theological department. Mikhail was accepted there in 1800, and Iakov — in 1799. After graduating in 1811, Iakov was appointed a priest in the village of Zbityn (Dubensky district), and Mikhail entered the male convent of Ioann the Merciful in the village of Zagajtsi (Kremenets district) “with hope to receive monasticism”. Then Mikhail's career developed rapidly. In 1812 he took a monastic shaving. On the 29th of June that year, he became a hirodiakon, on the 30th of June he got the post of a hieromonk, and on the 9th of September — governor of the Zagaetsky Monastery. After eight months, on the 12th May 1813, hieromonk Makariy was appointed deputy of the first-class male Preobrazhenskiy Monastery in Ostrog and a present in the Volynskaya consistory. In 1814, he became a teacher of the Russian school at the Volynskaya Seminary. In October 1818, Makariy founded, and in February 1819 opened, a parish spiritual school in the village Zagaitsi and remained its caretaker until 1823 [18, pp. 48, 50—51, 189, 276, 847—848, 916].

Then traces of hieromonk Makaiy are lost. It is interesting, in the book by N.I. Theodorovich, no information about his relocation to any other monastery. Such information about many other priests and monks is found. Nevertheless, it is possible to assert certainty that in the 1820s, Makariy was at the first class Pafnutiev Monastery of the Kaluga diocese (rebuilt and renovated in 1822 after the fire of 1812). Any information about his service in this monastery has not yet been found. However, in 1831 Makariy moved to Tobolsk to prepare for missionary activities in the Ob North[3].

In Tobolsk, hieromonk Makariy appeared under the surname Bogolepov[4]. No contradiction observed here. Surnames like this are artificial, “priests'”. They began to spread in Russia since the end of the 17th century among students of seminaries and clergy. It is interesting, artificial surnames were typical for the Great Russian clergy. The Malorossiya and Belarusian priests in seminaries kept their hereditary surnames [19, pp. 169—170]. Accordingly, Makariy, who passed from the Malorossiya diocese to the Great Russian one, changed the surname according to the local custom.

What was the motivation for Makariy to express his desire to become a missionary? Is it the invitation of Archbishop of Tobolsk and Siberia Evgeniy? Perhaps, he was inspired by the success of the baptism of Samoyeds by the mission of Archimandrite Benjamin, and he decided to try his hand in this field. However, there could be other reasons. In the record of Makariy, presented to the Tobolsk diocesan administration, it was said: “*that he was a touch on a secret matter.*” Although “*the designated secret case of St. Synod and he was found completely innocent*”, perhaps, he needed to leave Borovsky Monastery for a while[5].

[3] GBUTO GAT. F. I156. Op. 11. D. 189. L. 18. [In Russian]
[4] Ibid. L. 1.
[5] Ibid. L. 5.

The trip of Makariy to Obdorsk (now — Salekhard) was preceded by almost a year of coordination with the diocesan authorities. During this time, three metropolitans were replaced in Tobolsk — Eugene, Paul, and Afanasiy. By spring 1832, the composition of the mission was approved. A graduate of the Tobolsk Theological Seminary Luka Vologodsky and a novice of the Tobolsk Znamensky Monastery Nikita Solovyov, who came to Tobolsk together with Makariy from the Kaluga, were his companions[6].

The mission arrived in Obdorsk on June 20, 1832 and stayed there until February 1833. The strong reluctance of residents to accept the Christian faith let the missionaries to baptize only 17 Ostyak and Samoyed people in eight months [20, pp. 21–22; 21, pp. 15–16]. In April of the same year, hieromonk Makariy in his "report" to Archbishop Afanasiy proved his own powerlessness to baptize the Obdorsk infidels. According to him, they "*lead a vagrant life and are far away from Christian dwellings, in Obdorsk they are only once a year for the yasak*", "*besides their language is very insufficient for explanations of the truths of the Christian religion*", "*hope of their conversion to it, I do not foresee*".[7]

The inheritance of hieromonk Makariy, i.e., his "reports" to the Metropolitan of Tobolsk, is small and understandable for a narrow circle of specialists who are engaged in historical and ethnographic research of the culture of the peoples in Western Siberia. It is unlikely that Makariy thought about "how his word would respond" and what exactly can be of interest for ethnographers in the future among documents he wrote.

"... the clans of Tuskda"

In Obdorsk, hieromonk Makariy, who received an excellent education, was a teacher at the Russian school at the Volynskaya Seminary, and therefore was good in Russian but completely unprepared to the perception of indigenous names and nicknames. The first thing you pay attention to when reading the "List" is the distorted names of some Nenets families. In "report", Makariy wrote that he was notified by Obdorsky separate assessor Ilya Ivanov Reshchikov about these Samoyeds[8]. So, Makariy used information from this document when drawing up his list, in which, perhaps, not everything was correctly written.

The first in the "List" is Tabak Aletov, clan Tuskda, other Samoyeds — Leokoysky, Valeysky, Tysyy, Juweysky, Khatacheysky, Yangasov, Karachyskago, Seradyty, and Serudety families. The families listed above existed in the 19th century, and some of them are still existing today. A part of them are primary patronyms, others — separated ones. To understand who they are, we should look at their origin.

Tusida clan (in Makariy writtings — Tuskda): according to the scientific classification, it belongs to the Kharyuchi Fatria, and, according to the Nenets traditional division, to the Khasovo tenz. The name in translation from Nenets means "without fire", "orphan". According to relatively

[6] Ibid. L. 36-38ob.
[7] Ibid. L. 122-122ob.
[8] Ibid. L. 74.

recently introduced data, the name Tusid is found in the documents of the Obdorsk Peter and Paul Church on the baptism of Samoyed for 1853 and 1880, and the name Tuzid — in documents for 1876 and 1886 [22, pp. 171, 230, 231, 239, 257]. Later, in the official documents of the First All-Russian Population Census 1897, it was noted that among Samoeds of Obdorskaya parish, migrating on the Kamennaya (Priuralsko-Yamal) side [23, p. 37; 16, p. 170]. In the list by A.A. Dunin-Gorkavich, in 1915, it was noted that the clan Tusida under the leadership of elder Nadi migrated in "winter between Poluy and Nadym, in the summer on Yamal near the river Tambey and further north" [24, p. 44]. Near the river Tambey, nomads of Nadi Tusida are also marked on the map of B.M. Zhitkov [25]. Approximately there is the patrimony of Yarkuloni Tusida on the scheme of V.P. Yevladov [26]. Similar information about the location of nomadic genus Tusida is in the works of G.I. Arteeva, I.F. Nogo and M.M. Brodneva [12, pp. 92–94].

A detailed description of the settlement of the Tusida family in the late 1920s is found in the "List of settlements of the Ural region". 19 families of this clan were there that time. The main places of their migration in summer were in the northern part of the Yamal Peninsula. In winter, many moved to the south, closer to the Gostorg trading stations; some passed the Ob Bay in the meridional direction [27, pp. 185, 189, 191, 195, 201].

The **Lähe** family (in Makariy writtings — Leokoisky) is one of the three main clans of the European tundra Nenets (like Tysyy and Vyutsi). The name is untranslatable. The first time Lahe (Lehei) was mentioned is in the "Charter of Grand Duke Basil III to Samoyeds on their acceptance into citizenship" in 1525. There, together with the Karachi family, it is called "the Ugric Samoyeds, who live along the Ob River" [28, pp. 10–11].

It is known that in 11th — 13th centuries, the chronicle Ugra land was to the West of the Ural Mountains. [29, pp. 150–151; 30, p. 2005]. Distinct groups of Mansi and Khanty lived there. In our opinion, the expansion of the Ugra land to the lower Ob began in the 14th century. This is indirectly confirmed by information from the Novgorod fourth chronicle of 1364, where it was written: " *Novgorod boyars' children and young people arrived from Ugra where they were fighting along the Ob river to the sea, the other half of the army was fighting to the up the river Ob*" [31, p. 64–65; 32, pp.219–220]. It was the 14th century, when a part of the Ugric population was displaced from the European part of the country to the Ural by Komi and Russians migrating to the north [10, p. 18]. All this gives a reason to believe that the Lahe family and Karachi have long traveled along the northern tundra on both sides of the Ural Mountains.

In the 16th — 18th centuries, the Lahe family was noted in the yasak documents of the European North as a part of two departments — Pustozersky and Izhemsky. The first collected yasak from the Tundra Kanin, Timan and Bolshezemelsky Nenets, and the second — from the Nenets who migrated in forests. That time, the parts of the genus Lahe and Valy lived in the Kanin tundra [16, p. 13], and the Bolshezemelsky Lahe continued to migrate, the way they did in the previous centuries, in the Northern Urals. In the town books on Novgorod Velikiy, in 1704, it is written that the Lahe and Tysyn lived "around Kamen (Urals — *Yu.K.*), on the edge of the sea, on clean steppes,

and not in the woods". At the same time, they were noted in Obdorsk yasak books as "Pustozerskiye Lahe and Tysyn" [9, p. 77].

Lahe, like all large families, began to gradually divide into big-families related collective-patronymies. When this division appeared? It is impossible to say with accuracy. But since the 18th century, in the yasak books, the Kanin Nenets began to be written not by descent, but by surnames with Russian formants *-ov, -ev, -in*, and sometimes with Russian names [33, pp. 30–37]. This was due to the gradual Christianization of Nenets in the western tundra, which took several centuries. Among Bolshezemelskie Lahe the same process was different. Christian missionaries reached these territories only in the first quarter of the 19th century and found dissociated patronymies in Nenets — Xiadai-Lahe, Wenokan-Lahe, Vylka-Lahe, and Pyreka-Lahe. The main family of the Lahe clan continued to exist in parallel with them [2, p. 134; 4, p. 97].

Tyosy clan, as well as Lahe, probably existed in the 16th century and, as mentioned above, migrated in the Northern Urals. The name of the clan comes from the Nenets word "yasya" — "a small bird living in talnik". In various documents and scientific works, these families are constantly mentioned together, incl. in the erroneous spelling of Tussa-Ilogai or Tysya-Ilogei [34, p. 4; 35, p. 222]. Since 1703, in the books of yasak collectors of the Pustozersky department, except for the Tysyya (Tysynia), the patronymies of Yavtysyn and Nogatsyn appear. After a century, researchers noted the appearance of three more divisions — Laptander-Tysiya, Paganse-Tysiya and Siussed-Tysiya [2, pp. 132–133; 4, p. 97].

In the 18th century, a small part of Tysyya clan migrated in the Kaninsky tundra, where they began to gradually separate families with Russian surnames, as in the case of Lahe family [16, p. 84].

The clan **Nyvai** (in Makariy's writtings — Juweisky) refers to the Liapin Nenets, which along with the Kunovatsky, constituted the main group of the voykarskiy "samoeds", who lived in the Berezovsky district of the Tobolsk province [12, p. 34]. The first notes are three entries in the materials of the 4th revision census of unbaptized "Samoyadtsov" of the Obdorskaya parish 1783. There, the Nenets of the family called Murtyuki of the Kamennaya storona had wives from the family of Nyvay[9] [16, p. 97]. This clan was recorded as Gõjvai in 1837 by A. Shrenk [5, p. 562]. The tribe Gniwai was described, among other things, in a letter to academician P.I. Köppenu in 1847 by a Hungarian scientist A. Reguli [3, p. 165]. In the metric books of Kolvinskaya Church of Mezensky (later Pechorsky) county of the Arkhangelsk province, in 1870s — 90s, liapin samoyeds Yive and Jowei are found. In Ust-Kozhvin parish of the Pechora County of the Arkhangelsk province, in 1897, a "samoed" from the Jovitsky family was recorded [16, p. 97; 36, pp. 68–69].

An extinct tribe Nyevai, who once lived in the lower reaches of the river Pur and the cape with a sacred place belonging to him, was mentioned in writings of 1911 by T. Lehtisalo [37, p. 52, 54]. Recognizing the data of the Finnish scientist, G.D. Verbov wrote that the Ngivai family "lives on the eastern slope of the Northern Urals", and "before it spread far to the east" and "at the

[9] GBUTO GAT. F. I154. Op. 8. D. 43. L. 169, 170ob. [In Russian]

mouth of the river Pura to this time one of the capes is called Ngyvay-Salya" [6, p. 54]. In these works, it is all about the Cape Iwai-Sala, located 16 km from the mouth of the channel Maly Pur. In the book "Overview of the basin of the river Taz" by I.N. Shukhov, in the description of wintering and crafts of Russians in the Tazovskaya gulf, there is information about the "wintering of the famous Siberian firm of Plotnikov", located "on a high Cape Gyivay-Sade", regardless of any family or clan [38, p. 41]. In one of the works of B.N. Gorodkov, the cape was called Ivay-Sala [39, p. 53].

The name Nyevai is most likely from Nenets "neva" — head or "newei" — the brain. In this regard, it seems interesting to think about B.O. Long's assumption that the Nyevai clan is "a group of Siberian forest Nenets from the Pyak family, namely from its division Ngaevahei" (Nenets word "nevahy" — forward, head; leader, leader) [12, p. 39]. However, the Ngaevahei family, as well as other units of the Pyak family (Saepa, Panhei), is not mentioned in the lists of forest Nenets neither in the archival documents of the 17th — 18th centuries nor in the works of researchers and travelers 18th — 19th centuries. It can be said that the question of the nomadic movement in the lower reaches of Pur remains open.

Hatanzi clan (in Makariy's writing — Hatacheyskiy) together with Vanyuta and Valley belongs to the forest European families. Among them, it was the largest in terms of the amount of people. If we translate the name from the Nenets, it means "spider of a light color with long legs". In the 17th century, representatives of this family paid yasak in all the three departments — Pustozerskiy, Izhemskiy and Ust-Tsilemskiy, and since the 17th century — only in the last two. The main places of the summer migration of Hetanzi was Pechora and its right flows to the south of the northern forest border. For the winter they went to the areas near the rivers Tsilma, Pizhma, and Izhma. Some families migrated through the Urals and brought yasak to Obdorsky and Voikarsky towns [40, p. 72; 12, pp. 34–35; 16, pp. 76–78, 86, 204].

The process of decomposition of the Hetanzi family to patronymic began, apparently, at the end of the 18th century. Evidence of this is the documents preserved in the Tobolsk archive. E.g., in 1789—1790, Tobolsk governor board considered the case of a Samoyed man from "Mezen district, Izhemskiy clan of Khatanzeyskiy samoyad" Alka Dyldin and his family transfer to Kunovatsky parish of the Berezovsky district [13, p. 137].

In the 19th — 20th centuries, the introduction of surnames among Samoyed people was directly related to Christianization. In one of the metric books of the Kolvina Church for 1867, Malgin Osip Talkov is recorded "samoyadin" of Izhemsky department of Khatanzeysky family. But in the book of the village Bolshaya Pyssa of Yarensky district of Vologda province at the beginning of the 20th century was found a peasant of the Kolvinsky parish Alexey Nikolaev Katanzin. The materials of confessions from the Colvinskaya Church for 1916 show that there were 59 surnames in the Khetanzi family that time [16, pp. 142, 149, 150].

In the 18th — 19th centuries, active business and marriage contacts between Nenets people and Komi-Izhemtsi in the European North of Russia led to the formation of a special group of Kolvinsk Nenets, who spoke the language of Komi-Izhemtsi, but maintained the Nenets self-

identification. Hiring as shepherds to Komi-Izhemtsi, the Colvintsy moved for the Urals. Some of them settled in the villages there [41, pp. 30, 45; 42, p. 121]. Samoeds of Kolvinskaya parish with the names Khatanzey, Khatanzeev, Khatanziev are found in confessional notes of the Muzhevskaya Mikhailo-Arkhangelskaya Church at the end of 19th — the beginning of 20th centuries[10].

The record of the **Yangás** family in the "List" of Hieromonk Makariy is one of the few that could be accurately correlated with the record in another source, namely, the materials of the Archimandrite Benjamin's mission that baptized Nenets of the Arkhangelsk province in 1825—1830 [16, pp. 203—204]. After A. Shrenk, Soviet ethnographers began to interpret the name of this family incorrectly [6, p. 44; 12, pp. 37, 40, 41, 62, 82; 7, p. 111; 16, pp. 148, 150, 170, 171, 203]. Shrenk A. wrote: "... with Samoeds from the Gyvai and **Yagaggasova** (**river people**) clans, migrating on the right bank of the river Ob, closer to the sea". Here we read about another family — "**Padraggasovo** (**forest samoyeds**) migrate near the northern Urals and the lower Ob" [5, pp. 562–564]. It becomes obvious that this author drew a simple analogy between the two clans and how their names are pronounced. Pedaranhasovo and Yanhasovo are correctly spelled. When pronouncing in both cases, a nasal sound is heard, indicated on the letter by a combination of letters *ng* or the letter *'n*. The name Padaranyhasovo can be translated as "forest people", but perhaps it means "Nenets from the river Padarata (Baydarata)". Yanhasovo is easily translated from the Nenets language and means "Nenets living separately" [43, pp. 502–503, 844].

Our conclusions about the correctness of writing "Yanhasovo" are confirmed even by materials that were studied by Soviet ethnographers. E.g., V.I. Vasiliev analyzed the data of metric books from the Muzhevskaya and Grado-Berezovsky churches for the 1870–1880s. Leads the entry "Young Hazov", but immediately in brackets writes "Yahan-Khasova" [16, p. 150], considering the correct translation of Shrenk "river people". Interesting, in confessional notes of the Muzhevskaya church in 1898 and 1911, the names of Yangosov and Yankhozov appear[11].

If the note in the list of Makariy is correct, then the Yangasov family is a division of the European forest family **Vali** (in Makariy notes-Valeyskiy). The name probably comes from the Nenets word "vale" — "nimble, agile". At the turn of the 17th — 18th century, Vali family was registered as yasak payers in Pustozersk and Izhemskiy departments. In comparison with the Hetanzi, this family was small and migrated in the Kaninskaya tundra, in the forest on the right flows of Pechora, as well as on the eastern slopes of the Urals together with voykarskikh samoeds [12, pp. 17, 34, 44].

As in the case of the Lahe family, the Vali migrated in the Kanin tundra became divided into patronymics in the 18th century. Representatives of Izhemskiy Vali family were recorded as the Woley in the yasak books of the 17th century, and since the 18th century, the name was written in the Russian way — Valeyevi, Valeyskiye. Patronimia with Russified surnames began to stand out

[10] GBUTO GAT. F. I700. Op. 1. D. 20. L. 13; Ibid. D. 37. L. 20ob.-21. [In Russian]
[11] Ibid. D. 26. L. 31b; Ibid. D. 37. L. 20ob.-21.

among Izhemsky Vali only in the early 20th century. [16, pp. 77, 78, 80, 148]. Yangasov clan, apparently, is an exception.

In the 19th century, Izhemskiy Vali joined the Colvinskiy Nenets. Together with Hetanzi and representatives of other families, they periodically went to the Urals. In the materials of the Muzheva Church, they mentioned samoeds of Kolvinskaya parish Valleevi and Valleja[12] [16, p. 150].

Háryuci clan (in Makariy's notes — Karachei) was one of the largest for centuries along with Vanuito, exogamous division of the Nenets people. The name of the clan means "cranes" (Nenets word "haryo" — a crane). For the first time, Nenets Karachi were mentioned in the "Complainted Diploma" of Vasily III in 1525. It was mentioned above in connection with the family of Lahe.

In the 16th — 17th centuries, "Karachian Samoyed" moved to the east of the Urals, making periodic referrals to the west, to the Bolshezemelskaya tundra, where they got stable marriage ties with the Lahe family. Since the 17th century, they jointly began to attack the yasak collectors, ruined Pustozersk, Obdorsk, and Mangazeya [28, pp. 10–11, 29–32, 56]. The divisions of the Haryuchi family are marked in the yasak documents of the 17th century. In the second half of the 18th century, with the increase of deer in Kharyuchi family, the division into patronymies intensified and continued the entire 19th century [40, p. 75; 16, pp. 84–86, 108; 16, pp. 86–87, 92, 164–172; 44, pp. 103–104, 151].

One of the divisions of Haryuchi is **Serotetto** clan (in Makariy's notes — Seradyta or Serudeta). The legend about the origin of this name is still kept in the Nenets culture: "There lived three brothers. They had a lot of deer. Once they got a fight. The elder took away almost all the deer and became Ngokoteta ("multi-deer"). The middle took the white deer (Sarotata), and the younger had nothing left, he went on foot (Yadnya)" [7, p. 110].

We managed to identify the first mention of the Yadnya's (Yadne) ancestor, i.e., Yaur/Yavor in the materials of the 4th revision census of 1783 in Obdorskaya parish. We compared the information about it with the information from the legend about the origin of this family, recorded by us in Antipayutinskaya tundra from the informant N.N. Yadne [44, pp. 43–45]. Other patronymies, incl. Okoetto and Saroteto, also began to stand out from the Haryuchi family, precisely from the second half of the 18th century. It was a consequence of the development of large herding in the Nenets. However, in the yasak documents at the turn of the 18th — 19th centuries, small families continued to be recorded within the maternal family.

The first mention of the Sarotetto family is found in one of the metric books of Benjamin's mission in 1825. The wife of the Kanin samoed Grigory Yeltsov is named Agafia Tobokov Syrtyt [16, p. 158]. Saradat clan is mentioned in the work of A. Shrenk [5, p. 562]. Then it disappears for a long time from documents and descriptions and appears among the other names in the 1970s and 1980s. In the 19th century, in documents of Obdorskaya Peter and Paul Church on the baptism of "Samoeds" [22, pp. 220, 221, 224, 228, 230, 234, 240, 242]. In the metric books of the Mu-

[12] Ibid. D. 20. L. 13.

zhevskaya Church for 1870s-80s, in records on baptism, we found “samoedin” Hattet Sartetttnoy vatagi and “samoedka” Pirepti-Tokoliva-Serdatat from the lands possessed by the elder Yamruina [16, p. 169]. The last record indicates Yamra Madarin, the foreman of the 6th vataga of the Haryuchi family, noted in the materials of the 9th and 10th revisions in 1850 and 1858 respectively [16, p. 165]. Judging by the records in the revisions of the 18th — 19th century, the name Yamru was one of the ancestral names of Haryuchi and passed by inheritance to the grandson or great-grandson, even when the family began to divide.

“Yamru Aletov, a family of Karracheiskogo Seraditi, at baptism is called Ioann”. In the “List” of Makariy, in the materials of the 7th revision census of 1816, he is recorded as “Emru or Yalku Yunsin Emruyev”[13]. His wife, two sons, three daughters, his daughter-in-law and grandson are recorded as well. Makariy wrote: “was he married or not — it isn't shown”[14].

In the same 7th revision census, it was succeeded to find Sabarey Litkov, from the Serudeta family, who was recorded as Habka Hupadin or Suborin Litov. His family members were a wife, a son and two daughters[15].

At the turn of the 19th — 20th centuries, the main pasture for summer nomads of the Sarotetto family was the northeastern Yamal Peninsula. In winter they crossed the Ob Bay and moved a parallel direction between Poluy and Nadym rivers [45, p. 106; 24, p. 44]. Separate families of this clan migrated to Bolshezemelskaya tundra and reached Pechora. They probably went there looking for brides. In the metric books of the Pustozersky parish of 1890–1900s, clans of “obdorsky samoeds” are repeatedly mentioned. One of them is the family of Seredyata [16, pp. 169, 203].

How to call you?

The next thing you look at in Macariy's “List” is the names, as well as some patronymic and surnames. The baptismal Orthodox names are clear and understandable, but most Nenets ones are hardly translatable.

Number one is Tobak Aletov. Perhaps the nickname of this Nenets man was “tobak” — “stocking of deerskin” because "tobak" in the Nenets language is called — “sayr”.

Further on the list goes “Yauta Atsypin Petin, the family of Valeyskago”. Here we will dwell on the patronym/surname of Atsypin. Undoubtedly, this is a distorted record often mentioned in various documents concerning the European North, i.e., the Nenets surname Apitsyn [16, pp. 84, 136, 147]. The name of Samoyed Apitsa is first found in the "Zhalovannaya nesudimaya gramota Kaninskim i Tiunskim samoedam (“Non-Judging Act for Kanin and Tiunsk Samoyed”) 1545 of Tsar Ivan the Terrible, confirming their ownership for hunting and fishing lands [46, p. 182–184]. His direct descendants — Tiunskie (Timanskie) “samoyeds” “Erofeiko and Menshichko Apitsyna” reported about the same to Tsar Mikhail Fedorovich in 1631 [47, pp. 280–281].

[13] GBUTO GAT. F. I154. Op. 8. D. 404. L. 647ob. [In Russian]
[14] GBUTO GAT. F. I156. Op. 11. D. 189. L. 75b. [In Russian]
[15] GBUTO GAT. F. I154. Op. 8. D. 404. L. 657ob.-658. [In Russian]

According to B.O. Dolgikh, Apitsyni is patronymic for the Vera clan, which, in turn, is a division of the European family of Vanyuta migrating in the Timansky tundra [12, p. 13]. There is no more precise information on the Vera family. As for Apitsyn, they constantly appear as payers of yasak in the revision censuses of 18th — 19th centuries as "samoyeds of the Timanskiy coast" [16, pp. 84, 136]. At the same time, Apitsyn from the "List" by Makariy belongs to the family Vali (Valeyskiy), i.e. its part attributed to the Izhemskiy department. To confirm this fact, it is possible to give data informants V.I. Vasiliev, who claimed that Apitsyns are "different and not all of them belong to the Vera family" [16, p. 220].

This is followed by "Vek Soskin Vyrtsabin, the family of Juweiskago" and his married daughter "Terelya Vekkina Vyrtsabina". It is in the variant of *Vyrtsabin* this surname is written only in the materials of Veniamin's mission and in the "List" of Makariy. In the censuses of the 18th — 19th centuries, it was written by *Vertsepov*. Representatives with this surname had one of the patronymies of the Ngywai family (Juweiskiy).

The ancestor of Vyrtsabinys/Vertsepovs for V.I. Vasiliev is a Liapinskiy "samoed" Vyrsamey. If this is true, then the "sameyds" Toya, Sinya and Tongali Vertsepovi, recorded in the materials of the 4th revision census 1783, are his sons[16] [16, p. 97]. The daughter of Vyrsamey, 50 years old, noted, in the same census, was married to her coeval Sozej Huypalev from the family of Vanyuta Kamennoi storoni. In the explanation written before the listing of the Sozej family, reveals the Huypaliv family, i.e., 23 people, was moved "*by order of the former Tobolsk provincial Chancellery of Pustozersk department... for payment to the treasury of the yasaka in 782*."[17]

Makariy recorded a wife of the Vek Vyrtsabin, i.e., "Valei Kalinina Lotpina, clan Khatacheyskiy". In this case, we treat the description in the name of the clan *as Khatanzei*, i.e. *Khatanzi*. Representatives of this family repeatedly appear among the marriage partners of the Liapinskie "samoedi" in 18th — 19th and early 20th centuries [18] [16, pp. 203–204].

Husband Terel Vyrtsabina "Vysyk Eulin Seylamin, the clan of Yangasov Valeysky, was named Matphei at baptism". Perhaps his ancestors paid yasak for some time in Kunovatskaya parish. Let's try to justify this hypothesis, pushing away from Seylamin's name.

In one of the legends recorded by V.I. Vasiliev, it is told about three brothers who came to pay tax to Lyapin. "The brothers were called by nicknames: Varsabiy — the forefather of all Varsapovs; Saloma (?) — his descendants live beyond the Urals and Pinals — the ancestor of all Pinaleevs. Since then Pinals and Varsapovs are considered relatives, and marriages between them (previously) were forbidden" [16, p. 97].

The first thing to pay attention to — Saloma in this story was left aside from the "brothers". The second is the reaction of the interviewer, V.I. Vasiliev put after the name of Seilom a question mark. This is not surprising because the descendants of Seiloma (Seilomina) do not seem to be

[16] GBUTO GAT. F. I154. Op. 8. D. 43. L. 22ob.-23. [In Russian]
[17] Ibid. L. 148-148b.
[18] Ibid. L. 22ob.-27ob.

found either in the revision censuses or in the metric books of churches. However, in the 1783 audit of Kunovatskaya parish revealed only one interesting record — "*Yasak samoyeds moved from Obdorskaya parish after the census* (1763 —*Yu.K.*) *to Kunovatskaya parish, where they pay yasak to the treasury*". The following are the three brothers with their families: Tyara, Lyaku and Nyaka Seya Pomini. Two brothers have wives, both taken from "samoeds" to the clan of Vanyuta of the Kaminnoi storoni[19].

In our opinion, Seya Pomines is Seilomins. Apparently, there was a very ordinary event for the 18th — 19th centuries — a mistake of one of the yasak scribes. Most likely, it happened when Tyara and his family moved from one department to another. Then the record began to move from one census to another census, almost unchanged. Interestingly, in the 6th revision of 1811, the surname of Tyara and his brothers is written together — Seyapinya. In the 7th revision of 1816, it is written — Tyara Sei Pomin, and in names of brothers the prefix, Sei is absent[20]. Let us suppose that the records in the census documents were not made according to the representative of the family, but simply checked with the records of the previous audit. Yasak, at the same time, was the gurt passed by the foreman of the clan or vatagi.

The further fate of the family Seyaminys / Seylomins is easy to trace. Though here it didn't work out without records of census scribes. E.g., in materials of the 9th revision 1851 among the unbaptized kunovatskiy "samoeds" of the Synsky township, the son of Tyara Sei Pomin — Sel Tyarin was noted. In the 10th census 1858, Selya's sons Sei, Yapta and Nyavi were recorded under the surname Toyarov. Yapta was also baptized under the name Nikon. In the materials of the Muzhevskaya Church 1886, Nikon Alekseev Teyra [21] is found among the Kunovatsky Nenets [16, pp. 172–173].

The family name Seyapomin / Seylomin / Seylamin in a pure form is not found anywhere else. But in the documents of Obdorsky church for 1876, the son Vysyk-Matthew Seylamin was mentioned. In one of them it is stated that by the decree of His Imperial Majesty, the Emperor of the All-Russian, the Holy Government Synod taught "*self-alone and foreman*" Stephan Matpheev Yangasov blessing, with issuing a printed certificate from the consistory for the transfer to Obdorskaya Peter and Paul Church "*13 and to Obdorskaya Mission 12 deer worth more than 100 rubles*" [22, p. 219]. Whether Stefan Yangasov was a rich reindeer herder or, using the rights of the foreman, he collected reindeer from members of his vatagi; it is not known for sure.

The last name, awarded our attention, belongs to the wife of Sabarey Litkov, a family of Karacheiskiy — Serudeta. Her name was "Natya Karacheeva Dvoinikova." Dvinikovi is one of the patronymies of the Tysyya family, who migrated in the Kaninskaya tundra. It is evidenced by the materials of the 5th revision census 1795 for the European North and the records of Benjamin's mission 1825. There is nothing unusual in the fact that the Kanin nenka Natya Dvinikova is the wife

[19] Ibid. L. 2ob.
[20] GBUTO GAT. F. I154. Op. 8. D. 289. L. 1098; Ibid. D. 404. L. 314ob.-315. [In Russian]
[21] GBUTO GAT. F. I154. Op. 8. D. 756. L. 224ob. [In Russian]; GBUTO GAT. F. I700. Op. 1. D. 10. L. 124. [In Russian]

of the "samoed" of the Stone (Priural-Yamal) side from the family of Sarotetto. The testimonies of priests and the metric books of Pustozersky and Kuyskiy parishes of the second half of the 19th century contain information about the Obdorsk "samoeds", incl. the family of Sarotetto, who reached Pechora and Timansky tundra [16, pp. 84, 138, 203]. Probably, similar migrations happened before.

Now let's pay attention to the Samoyed from the "List" of Makariy who, judging by their names, were baptized twice. The wife of Tabak Aletov is recorded as "**Anna** Hoytseva, Leokoiskago family; at baptism, is called **Maria**." Several other Nenets were re-baptized. E.g., the four children of Tabak and Anna: "Ophonka is called John at baptism; Vaska is called Fedor at baptism; Vanka is called Mihail at baptism; Marina is called Vassa at baptism. And here are children from other families: Anka is called Anna at baptism; Lufa (perhaps Lusha, Lukerya?) is called Marina at baptism. And, finally, Natya Karacheeva Dvoinikova, mentioned above, got the name of Anastasia at baptism.

As it follows from the title, all these Nenets were baptized by Benjamin's mission in 1826. The youngest of the re-baptized, Vanke-Mihail, was only 6 years old that year, and the oldest, Anne-Maria — 37 years old. It follows that they accepted the first baptism no later than 1820–21. And it happened, perhaps, in the Sosvinsk Chrystorozhdestvenskaya Church of the Gradoberyozovskiy Department, whose priests worked in Sosvinskaya and Lyapinskaya parishes. The exception is Natya Dvoinikova, who was baptized, most likely, in a parish near the Kaninskaya tundra.

"... in Kunovatskaya and in Lyapinskaya due to a small number, they are not called clans"

All Nenets, appeared in the "List" of Makariy, can be attributed to "voykarskaya samoyadya". In the scientific literature, this term denotes the Nenets who constantly or periodically brought yasak in Voykarsky town, standing on the river Laypin. The basis of this community, as mentioned above, were Nenets of Kunovatskaya and Lyapinskaya parishes. Occasionally, the delivery of yasak and the choice of brides made European and Obdorsky Nenets migrating there.

Concerning the clan composition of the "voykar samoyadi", researchers could not reach a consensus. E.g., B.O. Dolgikh reasonably assumed that "European forest Nenets of Pustozersky County and Voikar forest Nenets of Berezovsky County in the 17th century represented one ethnographic community of forest Samodians, divided by the places of yasak payment and administrative belonging" [12, pp. 33–34]. N.A. Minenko, relying on several archival documents, considers that "almost the majority of the lyapin and kunovatsky Nenets were formed by European immigrants" [13, p. 137]. An interesting record is available in one of the documents of 1782 — "*... in Kunovatskaya and in Lyapinskaya duy to a small number, they are not called a clan, also because of the above clans of the Kamennaya storona are separated*" [8, p. 94].

V.I. Vasiliev criticized his colleagues and expressed his version (a weak one, in our opinion). He believed that "most likely to consider the Liapinskiy and Kunovatskiy "samoeds" as a shard ethnic community that arose on the slopes of the Urals while the ancestors of the Nenets people

moved to the north of Siberia". At the same time, he relied on the work of A. Reguli and A. Shrenk and they do not represent full-fledged ethnographic research [16, p. 98].

Rather agreeing with the arguments of B.O. Dolgikh and N.A. Minenko, we can't accept V.I. Vasiliev's point of view. In our opinion, the "Povest Vremennih Let" directly indicates that in the 11th century Samodian ancestors of Nenets passed through the Ural Mountains and advanced to the eastern bank of Pechora [29, pp. 150–151]. Only insurmountable obstacles — sea or impassable mountains could stop their movement to the west.

Russian found the routes through the Urals the middle of the 14th century. [31, pp. 64–65]. By the beginning of the 19th century, the people from the Western and Eastern Urals knew at least nine land crossings and seven waterways through the Ural Mountains and used them when it was necessary, moving from one side to the other and back in different seasons years [3, pp. 171—175].

Documents of the 17th century show that at that time the path "through the Kamen" was not particularly difficult and was actively used by "walking people", smuggling fur from Siberia to Russia. In the letter of Tobolsk voivode, dated 1633, it is described how "forty thieves' people" crushed on the river Irtysh below the Samarovskaya Mountains (near the modern city of Khanty-Mansiysk) a detachment of the "writing head" of Peter Aigustov, who went to Obdorsk to collect the state tithe duty. A detachment of servicemen was sent from Berezov to the Sobskaya outpost for the capture of robbers and it could not find them. They traveled to the outpost above the land of Ostyatsk Knyaz Alachev (probably on the river Wojkar). Voivodes sent messengers to Kazan and to Sol Kamskaya with letters to the local boyars and voivodes "*about those runaway people and ordered on the Volga not to miss them and on Don*". Mangazay Streletsky hundred-man Alexey Shafranu managed to catch up and beat robbers. He went to Siberia with commercial industrial people along the river Usa (a tributary of Pechora) [48, pp. 121–122, 124–126].

Another document is of importance for our study, because, among other things, it shows one of the ways of forming a "voykar samiyad". It is "Letter to Beryozov to the voivode Peter Cherkassk about the trade of Russians with samoeds in Berezovsky County" 1607. It refers to the capture of traders from Pustozersk in Obdorsk, who did not carry travel certificates. On interrogation, in Berezov the pustozyortsy people told, "*that they went from Pustozero to kunnoi samiyodi because of the old debts*". They decided not to keep these dealers in Berezov, took the tenth duty from their fur and released them to Pustozersk [49, pp. 234–235].

Further in the letter, there is a detailed story about the problems created by the fur resellers to the collectors of the state yasak — "*... the pustozyortsi come to the Berezovsky district for all years, many people go via Pechora river in boats with great goods, and from Pechora to the Usa river to the Kamen, to the Rogovoi town, and there they spend fall; and as the road is possible, the pystozerski kamennyaya samoayd comes, their acquaintances and friends, and the Pustozorsky samopyad is hired by those trade people and carries their goods over the Kamen via the tundra, to the yasak and kunnaya samiyad, which comes with its yasak to Obdor and Kazym; and many of*

their goods they change over the Kamen, on the Usa river, in the Rogovoi town; and the trade people themselves go for their goods with the Kamenniy samoyad on reindeer and, not allowing the Kamenniy samoyad to go to the yasak collectors in Obdor, and to Kazym, and to Kunovat, they trade with them before yasak, and make them move over the Kamen, to the Usu river, in the Rogovoi ostrog; and many of samoyad deals with those puskozertsi and do not pay yasak, moving back in the tundra, and other samoeds go to the pustozertsi over the Kamen and trade on the Usa, in the Rogovoi town; and because of those pustozertsi, the tradesmen and their stealing for all the years, it is a shortfall of the yasak in the treasury, and the tenth duty is carried by many trade people" [49, pp. 235–236].

The formation of "voykarskaya samoyadya" contributed to the Russian "walking people" in a certain way. The 17th century (possibly earlier), they organized unauthorized trade with the Ural "samoeds". Having made friends with Nenets who migrated along the tributaries of Pechora, they trusted them their goods, which were carried through the Urals and exchanged for furs from Nenets who moved along the tributaries of Ob, Nadym and Pura. Some Russians went on deer with Pustozerskie Nenets and brought Voikar and Siberian forest Nenets with goods to the river Usa. It is safe to say that periodic trade contacts of European and Siberian Nenets led to the emergence of stable marriage relations between them. Some Nenets moved to a sedentary lifestyle in the villages of the European part, and some did the same but in the Siberia.

In the yasak books of the end of 17th — beginning of 18th centuries, a part of the Vokar Nenets, together with the Synevskaya and Lyapinskaya "samoeds", was a group of European Nenets: Tysyya, Lohei, Valey, Vanyuta, the group of Obdorskaya and Pustozyorskaya "samoedi", as well as some representatives of Siberian tundra Nenets: Lodokui, Ader, Karachei, and Siguney families [15, p. 34]. In the "List" of Makariy, we found the European Nenets: Valei, Tysyy, Lehe, and Hetanzi families, sub-Urals Ngyvai family and Siberian tundra Tusida and Sarotetto families. As you can see, the composition of the "voykar samoyadi" from the end of the 17th century and to the beginning of the 19th century remained quite mobile. Although its main backbone was formed.

Mobility in different periods of time was caused by different reasons. At the end of 17th — the first half of 18th century, local authorities tried to organize trade with "samoeds" and collecting yasak. Some Nenets, in turn, tried to avoid continuous control over them. Since the second half of the 18th century, tundra Nenets began to increase the number of deer and got the opportunity to make cross-country trips at long distances, incl. for the Urals. It became more complicated due to periodically emerging epidemics of smallpox. The last one was close in time to the "List" of Makariy. It occurred in Western Siberia in 1816 and partially affected the European North of Russia [16, pp. 140–141].

The further fate of the "voykarskaya samoyad" is closely intertwined with the peoples who lived in proximity. Marriage contacts, gradually expanded in the 19th century of the Kunovatsky Nenets with Khanty, Komi, and Russians, led to assimilation and loss of Nenets identity by many of them. One of the territorial groups of the Nenets people, i.e., the Kunovatsky Nenets, disappeared

in the first decades of the 20th century. [15, p. 129]. Lyapinskie Nenets forgot their native language, but kept self-consciousness, even in the second half of the 20th century distinguishing themselves from neighbors — Komi and Mansi [14, p. 20].

About clans and patronyms

The Nenets clans and patronymic surnames mentioned in the "List" of Makariy allow looking critically at the conclusions of some researchers about the formation of the clan system in Nenets communities. E.g., according to V.I. Vasiliev, "the vatagi's awareness of their social significance or, in other words, their registration in the public consciousness in small clans" falls on the 1870s—1890s [16, p. 158, 169]. In our opinion, the author refutes himself, incorrectly summarizing his own research. Indeed, according to the revision censuses of the 18th — 19th centuries, it is possible to imagine that the Nenetshad large undivided clans that time. Only in the second half of the 19th century, in the revisions, it is a division of clans into nameless vatags.

On the other hand, information from metric books and confessional notes, writings of travelers, officials and researchers of the first half of the 19th century, used by V.I. Vasiliev [16, pp. 37, 79, 84, 92, 97, 138, 141, 142, 147–155, 169–175, 184], speak of another. Patronimia (or small clans) in Nenets began to stand out from large families since the second half of the 18th century, with the development of large herd reindeer husbandry in the European North of Russia and in Western Siberia. In the western tundra patronymies of the baptized Nenets received the Russian surnames. Sub-Urals-Yamal and Nadymsko-Tazovskie unbaptized Nenets continued to be recorded in yasak documents on belonging to the main, maternal family. One example is mentioned above samoed from the "List" of Makariy, i.e., "Sabarey Litkov, the family of Karachyskago Serudeta". He was recorded in the 7th revision 1816 and does not stand out from the structure of the Karachi family of the Kamennaya storona. In addition, the "List" confirms that such clans as Tusida and Yangasov existed in the beginning of the 19th century.

Conclusion

In our study, we presented detail considerations on the "List of Samoyeds", by the Tobolsk missionary Hieromonk Makariy (Mikhail Ostalskiy-Bogolepov). Finally, it was established that the information reflected dates to 1826. The list contains the Nenets baptized by the mission of Archimandrite Benjamin 1825—1830 in the north of the Arkhangelsk province. Judging by surnames and names of clans, we conclude: some of them belonged to the Kunovatskiy and Liapinskiy Nenets, others — to the European tundra and forest Nenets, and the third — to the Obdorskiy tundra Nenets. Some Nenets were baptized twice. The first time was, probably, in Lyapinskaya parish of Berezovsky district of the Tobolsk province. The analysis of the ancestral and family composition of the Nenets from the "List" allows to attribute them to a separate territorial group of "voykar samoyadi". They paid yasak where it was convenient — in Pustozersk, Obdorsk or in Voykarsky town. Hieromonk Macarius was unable to find the families of these "samoed" (except for one) and to find out what parish they were in and to which church parish they were assigned. It was due to

the mobility of these families. Various circumstances made them periodically migrate from the east side of the Ural Mountains to the west and back.

Conclusions on the origin of Samoeds from Makariy's List contributed to important observations and clarifications concerning both the origin of individual clans, surnames and the Nenets family system. It was possible to confirm the division of large clans on patronymies began in the second half of the 18th century, but not a century later, as some researchers suggested.

The “List of Samoyed” by Hieromonk Makariy is an indicator of how important it is for researchers to pay attention to the seemingly insignificant documents. How important they might be for expanding the horizons of research and drawing up the fullest possible understanding of the subjects and objects studied.

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Table 1

The list of Samoyeds of the Berezovsky District baptized by the mission of 1826 in the former Arkhangelsk Province

Number		Who exactly?	Age	What district and what volost	Location and what Christian community they are in
Male	Female				
1.		Tobak Aletov, the clan of Tuskda, his age and given name at baptism are not in his note		Berezovsky county Obdorskoy parish	This family is found; and it is now in Obdorskoy parish, but it is not a part of Christian society; Since they were baptized, they are not familiar with Church of God and live as they were unbaptized
	1.	The wife Anna Khoitsev, a family of Leokokas; at baptism she is called Mary,	37		
		Age			
		Her children:			
2.		Ophonka was baptized as Ioann	12		
3.		Vaska was baptized as Fedor	8		
4.		Vanka was baptized as Mikhail	6		
	2.	Marina was baptized as Vassa	11		
5.		Yauta Atsypin Petin, the clan of Valeyskago; baptized as Alexander	26	Berezovsky county Unknown parish	Where are they now, it is not known; but local authorities make efforts to find them.
	3.	His wife, Negei Gymuyev, the clan of Tysy; at baptism she was called Vassa	23		
	4.	Their daughter Tuzhita; at baptism she was called Anna	1		
6.		[L. 75ob.] Vek Soskin Vyrtsabin, the clan of Iweiskago; at baptism he is called Abraham	60	All family members live in Berezovsky County Unknown Parish	Where are they now, it is not known; but local authorities make efforts to find them.
	5.	His wife Valya Kalinina Lotpina, a family of Khatacheiskago; at baptism she is named Fevronia	50		
		Their children:			
7.		Hasov or Andrew at baptism	15		

8. 9. 10. 	 6. 7. 8. 9.	Hazomboy; baptized as Ioann Soest; baptized as Petr Anka or Anna after she was baptized — age is unknown Loofah was baptized as Marina — age is unknown His son-in-law Vysyk Eulin Seylamin, the family of Yangasov Valeyskago; He is called Matphey at baptism His wife Terel Vekkina Vyrcabin, the clan of Iweiskago; baptized as Martha Their daughter Kirikta; at baptism she is Anna	5 1 25 20 1		
11.		Yamru Aletov, the family of Karacheisko Seradyty; baptized as Ioann. Has he family or not — it is unknown	55	Berezovsky county Obdorskoy parish	Location unknown
12.	 10.	[L. 76] Sabarey Litkov, the family of Karacheisk; at baptism he is called Nikita His wife, Natia Karacheeva Dvoinikova; at baptism she is called Anastasia	59 45	Berezovsky county Obdorskoy parish	Location unknown

Missionary Hieromonk Makariy

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Integration mechanisms for immigrants in Norway and Russia: a comparative analysis*

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Abstract. An essential component in the structure of the immigration policy of developed countries is the integration of migrants. The integration policy for migrants is aimed at solving the issues of adaptation, inculturation, labor mobility, naturalization, and political participation. Integration is a reciprocal process which involves the interaction of migrants and the host society. The integration policy goal is the formation of migrants' qualities and competencies that allow them to participate in the economic, social, political, and spiritual spheres of the recipient country. The failure of integration policies inevitably increases the conflict potential of the host society, leads to social exclusion, marginalization of migrants, and an increase in xenophobia. The article is devoted to the comparative analysis of the integration policy of the two Northern states — Norway and Russia. Norway has extensive experience in implementing the integration policy, occupies a leading position in the index of integration of migrants MIPEX. Russia has extensive experience in the incorporation of various ethnic groups into a national state, but the state has long ignored the solution of issues of integration and adaptation of migrants. The study aims to analyze national models and practices of integration and adaptation of migrants. The research methodology is linked to the methods of demography, sociology, political science, law, and statistics. For the comparative analysis of the immigration policies of Norway and Russia, a set of indicators reflecting the quality and status of the integration policy, MIPEX (labor market, family reunification, long-term stay, political participation, protection against discrimination, naturalization) was applied. It is concluded that the policy of integration in Russia should have different objects of regulation, be differentiated by goals and objectives.
Keywords: *immigration policy, integration of migrants, naturalization, Russia, Norway.*

Introduction

The integration of migrants is the backbone of immigration policy. In our view, only countries with workable mechanisms for naturalization and adaptation of migrants can benefit from migration and ensure migrant inclusion in the host society without violating the systemically important foundations of its identity. It should be noted that the integration involves the interaction of at least three parties: host society, migrants and the state. Each of the parties is internally dif-

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ferentiated, has both coinciding and dissimilar goals, which make integration risky and create issues. Migrants come from different countries (with a common historical background and without), they are temporary and permanent, labor, family reunification, returnees, and refugees. The state as the main actor of immigration policy includes the political level — national, regional, and in the case of the EU, supranational, and non-political — municipal. The host society consists of large and small social groups and institutions — educational, religious, economic, employers, diaspora, etc. As a conclusion: the integration policy is a multilevel process. It should have different objects of regulation, and, therefore, strategies, be differentiated in terms of goals and objectives. The failures of integration policies inevitably increase the conflictogenic potential of the host society, lead to social exclusion, the marginalization of migrants, the growth of xenophobia and the effects of divided communities.

The interest of researchers in the study of the mechanisms of integration and adaptation of migrants intensified in the early 21st century when most developed countries faced the failure of multiculturalism, which was recognized by the political establishment of Great Britain, Germany, and France. The challenges of losing national identity were accompanied by the difficulties of adapting and integrating migrants in developed countries. The failure to implement multicultural policies has been affected by changes in the ethnic pattern of migration flows, as well as by securitization of migration. Among the contemporary researchers on the integration of migrants is S. Vertovek, S. Castles [1], A. Favell [2], G. Freeman [3], A.V. Dmitriev [4], V.S. Malakhov [5], V.I. Mukomelya [6], I.S. Semenenko [7], M.A. Pitukhina [8], etc. Unlike the population, which links security and immigration issues, immigration policy researchers point to the determination of problems of social security and integration of migrants. According to M. Rosenblum, miscalculations and failures of the integration policy create threats to the security of the host society [9, p. 29].

Researchers note significant differences in naturalization policies between the states of the Old and New World. In the post-war era, the economies of developed countries actively used the labor force of migrants. Integration policies in the US and European countries had significant differences. The main difference between American and European immigration policies was in the sphere of naturalization [10]. In the US, every immigrant was a potential citizen. Hence the US strategy of assimilation arose. European countries favored labor migration mainly. They made naturalization procedures more difficult. Unfortunately, difficulties in obtaining citizenship for migrants from post-Soviet states with close cultural and historical roots, fully apply to Russia. Malakhov V.S. notes the gap in the strategies of the European and Russian legislation on citizenship: tendencies to the liberalization of the European strategies and restrictive Russian strategy [11, p. 14]. E.g., the Law “On Citizenship of the Russian Federation” (2002) abolished the institution of dual citizenship for individuals acquiring Russian citizenship. Moreover, the law does not have a jus soli norm (the citizenship right for migrants' kids upon reaching the age of 18).

One of the disturbing contemporary trends was the formation of an anti-immigration bloc in the government of developed countries. According to American scientists W. Cornelius, P. Mar-

tin, and D. Holyfield, opponents of immigration focus on access of illegal immigrants to social services with budget funding, incl. education and health care. In addition, counteraction to programs of socio-economic and cultural integration of migrants [12, p. 5].

Immigration policy and integration of migrants in Scandinavian countries (esp. Norway) is a subject of scientific interest for foreign researchers. So, the writings of G. Brockmann and A. Hagelund [13], as well as E. Uppsal, S. Sogner and K. Schelstadli [14] are devoted to the study of the historical development of postwar immigration policy in Norway, Sweden, and Denmark. The authors explore how welfare states with inclusive social security schemes and a developed sense of egalitarianism cope with immigration pressures and their growing diversity.

A considerable body of research focuses on the specific aspects of integration and social well-being of immigrants in Norway, which leads to the conclusion of how individual, collective and institutional resources have a direct impact on Norwegian migrants and the dynamics of their social integration [15, Fladmoe A., Steen-Johnsen K.; 16, Friberg J.H., Midtboen A.H.; 17, Hardoy I., Mastekaasa A., Schone P.].

The Norwegian experience of the settlement of inter-ethnic relations and migration policy arouses the interest of Russian scientists. The scientific development of the theme from a historical perspective was completed by E.S. Kotlova, as well as the analysis of the main models of the ethnic policy of Norway [18, p. 21]. Mechanisms of sociocultural adaptation and integration of migrants in Norway and Denmark are presented in the article by N.S. Chukalova. The study, carried out in a comparative context, allows identifying the country features of the policy of integration of immigrants [19, p. 33]. Continuing the practice of comparative research, the authors of this article aim to carry out a comparative analysis of the current integration policy of Norway and Russia on the based on comparable indicators adopted in the international community.

The methodological basis of the research was structural-functional, institutional, historical and systemic approaches. Methods of demography, sociology, political science, law and migration statistics were used. Comparative analysis of integration policies of Russia and Norway is carried out through the methodology of the MIPEX index as a set of indicators reflecting the quality and current situation of state immigration policy.

Integration policy in the structure of immigration policy

Current migration policy is designed to meet the challenges of filling the country's demographic and labor potential, creating conditions for the integration of migrants into Russian society, redistribution of labor resources. T. Hammar wrote about two components in the structure of immigration policy: immigration control policies (rules and procedures for selection and admission of foreign nationals and stateless persons), immigration reception policies (employment, housing, social benefits, opportunities to receive education) [20, p. 7]. The approach of T. Hammar allows dividing immigration policies by types and forms of political regulation. V.I. Mucomel considers

immigration, integration and naturalization policies as successive stages of admission, placement, and transformation of the migrant into a full member of the host society [21, p. 258].

Thus, the immigration policies of developed countries have two structural components. One includes measures to receive migrants — characteristics, rules, procedures, selection systems, and quotas. The second component is the policy of integration and socialization. It is the solution of problems related to the labor market, inculturation, family reunification, etc.

Integration is a recurring process that involves the interaction of migrants and the host society. Integration policy aims at developing the skills and competencies of migrants to participate in the economic, social, political and spiritual spheres of the host society. Adaptation is an integral part of the integration of migrants and a prerequisite for it. Adaptation refers to the process of the initial adaptation of migrants to the norms and practices of the host society. Inculcultation is part of the adaptation, i.e., assimilating the cultural patterns of the host society by immigrants. In contrast to integration, the adaptation is unidirectional and involves efforts of migrants themselves, particularly in learning the language of the new country and communicative taboos. The integration can result in full integration (assimilation) and partial integration, which is limited only to the adaptation of migrants to the new cultural environment, and migrants do not become part of the society of the host country.

Migration policies of modern countries dispose of various instruments aimed at the adaptation and integration of migrants. Among the tools of adaptation and integration of migrants, Kapitsyn V.M. calls pre-migration training programs in sending countries, networks, and associations of migrants, integration programs, incl. individual integration plans, integration tests, exams, indexes, oaths, municipal consultants and inter-cultural mediators [22, p. 164]. Experts note that due to the weakness of the state integration policy in Russia, the functions of adaptation and integration of migrants are assumed by institutions of civil society, human rights defenders' organizations, labor collectives, associations of migrants, and diaspora[1]. As a result, migration to Russia is largely illegal. First, it concerns temporary labor migration.

The conflict potential of host countries is an inevitable consequence of the social exclusion of migrants. Growing contradictions in the labor markets of developed countries, hidden restrictions for social mobility, pressure on the political establishment from the national electorate will strengthen the introduction of restrictions on the use of migrant labor. Conflicts determined by socio-economic factors will take the form of ethnic, racial and religious contradictions. The threat of deepening and widening conflicts between indigenous populations and migrants will objectively reinforce restrictive trends in immigration policies. Conflict potential is already being used to mobilize their supporters by right-wing parties, esp. in Scandinavia. If the average value of electoral support for right-wing radical parties in 2017 in Europe was 12.8%, for Scandinavian countries it was much

[1] Iontsev V.A., Ivakhniuk I.V. Models of integration of migrants in modern Russia CARIM-East RR 2013/12; Robert Schuman Centre for Advanced Studies, San Domenico di Fiesole (FI): European University Institute, 2013. URL: http://www.carim-east.eu/media/CARIM-East-RR-2013-12_RU.pdf (Accessed: 21 December 2018).

higher than the average European level — 16.3% [23, Shaparov A.E., Kalachnikova M.Yu., p. 74]. Right radical parties are consistently elected to the national parliaments of the Scandinavian countries, holding leading positions there: in Denmark, they got the 2nd place, in Norway and Sweden — the 3rd place among parliamentary parties. Immigration can increase conflict potential in host countries. The state is obliged to propose an adequate integration strategy integrated into a set of basic state policies in the social sphere: educational, national, regional, cultural, etc. The main objective of the integration component of the state immigration policy is to ensure social order, integrity, and security of the host society. The complexity of achieving the social goal predetermines the complex multi-level nature of immigration policy in modern conditions.

Examples of integration policies for migrants in Norway and Russia will be discussed below. A comparison tool we used is the Migration Integration Policy Index (MIPEX), developed by the Spanish non-governmental organization Centre for International Relations of Barcelona and European Migration Policy Study Group. Currently, this index is calculated in 28 EU countries, and in several non-EU states — Serbia, Norway, Switzerland, Canada, USA, Australia, Japan, and South Korea. The MIPEX project was intensive in 2004-2015. Over the years, the objects of research have significantly expanded, and the number of indicators has increased. The project is ongoing. The index analyzes the indicators of integration in eight social areas: access to the labor market (labor market mobility, access to vocational retraining, rights of employees); family reunification; education (equality of opportunity, inter-cultural education; political participation; long-term stay (access to status, conditions for obtaining it); access to citizenship; access to health services; protection against discrimination (mechanisms) protection against discrimination, equality policy). Common criteria for assessing integration policies allow for comparative analysis and identification of leaders and outsiders among countries in the certain areas of integration policy. The project is carried out for more than a decade, which allows analyzing the evolution of integration policies of the studied countries.

Table 1

Migration profile of Russia and Norway 2000—2017[2]

Country	Number of international migrants (thous. people)		Share of international migrants (% of the population)		Share of women among international migrants (%)		Average age of international migrants	
	2000	2017	2000	2017	2000	2017	2000	2017
Norway	292	799	6.5	15.1	50.5	47.8	34.9	36.3
Russia	11 900	11 652	8.1	8.1	49.7	50.9	44.5	44.5

Integration policy for migrants in Norway

Norway is one of the countries attractive to migrants and it has made significant progress in their integration. According to the MIPEX, the country had 69 out of 100 possible points in 2015

[2] International Migration Report 2017. URL: http://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2017_Highlights.pdf (Accessed: 20 December 2018).

and, along with Finland, ranked fourth in the world, followed by Sweden, Portugal, and New Zealand. The experience gained in this area, we believe, can be useful for Russia, where the policy of social and cultural adaptation of migrants is only put on the agenda.

Norway is a country with a rapidly growing migrant population. Only in the period 2000–2017 the proportion of migrants in the structure of the population increased almost twice: from 6.5% to 15.1% (Tab. 1). Currently, there live people from 220 countries, mainly from Europe (49%), Asia (32%) and Africa (9%). Work, education, and family reunion are the main causes of immigration. Thus, according to the statistics of Norway, for the period 1990-2016, 33% of immigrants used a work visa, 36% — family reunification and 10% — higher education [24, Sandnes T., p. 38]. Forced migrants constitute a significant group of arrivals. Only in 2015-2017 Norway received about 23.8 thous. refugees and humanitarian migrants. Half of them fell at the peak of the European migration crisis in 2016.[3]

Norway's immigration policy has come a long way and evolved. Officially, the policy of integration of migrants started with the adoption of the Integration Act 2003, but a number of Norwegian researchers claim that Norway initially adhered to the policy of integration of migrants, despite the fact that it was called the policy of multiculturalism [25, Alghasi S., Hylland Eriksen T., Ghorashi H., p. 12]. Indeed, the assimilation model of ethnic policy, which was implemented in Norway until the late 1970s, laid the foundation of modern integration policy. According to E.S. Kotlova, from the point of view of the Norwegian state, assimilation was perceived as a positive phenomenon. In the context of the establishment and strengthening of the nation-state, this policy has contributed to the growth of national identity based on Norwegian culture, which, after long years of life in the Unias with Denmark and Sweden had to “reinvent” [18, p. 21].

In White Paper on Migration 1980 and 1996 (i.e., drafts of official documents of government structures, informational and analytical reports and reports in specific areas are submitted to the Parliament of Norway for further procedures), the Government has made several proposals for the integration of migrants. In the White Paper 1980, studying the Norwegian language to involve migrants in the social and cultural life was underlined. The next White Paper 1996 set out the obligations of immigrants to participate in the labor market to achieve financial independence and equality, which led to the regulation of entry for all categories of migrants [13].

Issues of state regulation of migration and creation of a holistic system of integration and adaptation were updated at the beginning of the 21st century, i.e., in 2004, when Norway entered the European Economic Area and got a strong flow of labor migrants from Poland and the Baltic countries. The flows of refugees from the world's hot spots increased significantly: Yugoslavia, Bosnia and Herzegovina, African and Asian countries.

[3] The Norwegian Directorate of Immigration (UDI). Asylum Decisions by the Norwegian Directorate of Immigration (First Instance) by Citizenship and Outcome, January — December 2017. URL: https://www.udi.no/en/statistics-and-analysis/statistics/asylum-decisions-by-citizenship-and-outcome-2017/ (Accessed: 19 December 2018).

The current Norwegian integration policy is regulated by several legal acts. The main laws are the Immigration Act (2008), the Adaptation of Migrants Act (2003), the Education Act (2012) and the Citizenship Act (2005). The Immigration of Foreign Nationals to the Kingdom of Norway Act 2008 defines the legal status of an immigrant and guarantees him equal rights and obligations. It specifies the conditions and procedure for entry of migrant workers and refugees, obtaining a residence permit and Norwegian citizenship[4]. The Citizenship Act of 2005 establishes the principle of citizenship for immigrants and their children[5]. The Act lays down the basic conditions for obtaining citizenship. These include: compliance with temporary residence conditions, lack of criminal record and debt obligations, 7 years of permanent and legal residence in Norway, renunciation of previous citizenship. According to the amendments introduced in September 2008, applicants for citizenship are no longer required to attend 300 hours of Norwegian language courses if they provide a certificate of language proficiency. Children under the age of 18 become Norwegian citizens only after the naturalization of their parents if they have resided in the country for two years. For children from Scandinavian countries applying for Norwegian citizenship, this residency rule does not apply.

According to the Migration Integration Act 2003, the main objective of Norway's integration policy is to provide basic Norwegian language skills, to understand Norwegian society and to train to participate fully in the labor and social life of the country[6]. This Act was fundamental for the Government has developed an integration program. The program is primarily targeted at political refugees, persons granted residence permits for humanitarian reasons and their families. Immigrants are required to attend Norwegian language courses (250 hours) and social studies (50 hours). You can only take part in the training during the first 3 years of residence in Norway. Immigrants between the ages of 56 and 67 have the right but are not obliged, to attend this course. It is important that participation in the training program is equal to full employment. Such training programs are created for each participant individually, considering their educational and professional needs. There is a possibility to suspend participation in the program due to new circumstances, such as an offer of employment. It is not necessary for such persons to resume their participation in the educational program if they have documented their proficiency in the language. Migrant workers are not eligible to participate in the program free of charge, but they are required to pass it or to confirm their knowledge of Norwegian to obtain a residence permit or citi-

[4] Norway. The Immigration Act (2008) /No. 35 of 2008/Ministry of Employment and Inclusion/International Labour Organization. URL: http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=88330 (Accessed: 19 December 2018).

[5] Norge. Ikraftsettelse av lov (2005)/LOV-1965-06-18-4. Statsborgerskap og statsborgerforskriften. 2005. URL: https://lovdata.no/dokument/NL/lov/2005-06-10-51 (Accessed: 19 December 2018).

[6] Norway. The Act on an introduction program and Norwegian language training for newly arrived immigrants — the Introduction Act (2003) /Amended by the Act of 11 March 2005 No. 13 (in force) from 1 September 2005 pursuant to the Decree of 11 March 2005 No. 228, section number amended from section 22. Government.no. URL: https://www.regjeringen.no/en/topics/immigration/innsikt/Verkemiddel-i-integreringsarbeidet/introduksjonsprogram/id2343472/ (Accessed: 19 December 2018).

zenship. Persons who are in Norway under EU citizenship regulations are not entitled and are not obliged to receive free Norwegian language courses and social studies instruction.

The Education Act 2012 defines the procedure, forms and methods of work of educational institutions with migrant children who must learn Norwegian during 2-3 years of schooling[7]. The law provides for the training and retraining of teachers in multicultural education. Teachers participating in these training programs should have knowledge of two languages: Norwegian and the native language of the immigrant. The website of the National Centre for Multicultural Education, which operates at the University of Oslo, has created online resources for teachers and parents in the field of multicultural education. The Centre also launched a website that contains educational resources for schools and parents in Norwegian and 13 other languages spoken by immigrants. Each language has its own subpage, where a set of subjects and information is displayed in both Norwegian and the native language of the migrant[8].

The regulations have been drawn up by the Government of Norway in accordance with international agreements and treaties to which Norway is a party. First, it is the Schengen Agreement (2001), which regulates passport-free or selective control at the borders of the states within the Schengen area. The Dublin Convention (2001), which establishes the responsibility for considering applications to the country where the forced migrant was originally sent to seek asylum within the framework of the UN Geneva Convention 1951, as well as the Agreement on the European Economic Area (2004), which implies “four freedoms” — the free movement of goods, capital, services and people within the European Single Market[9].

At present, Norway's migration policy is implemented at several levels of government. The Norwegian Parliament Storting provides strategic guidance and regulatory framework for immigration policy. It also sets quotas for the reception of refugees, the amount of funding for municipalities that accept and resettle refugees. The responsibility for the implementation of the state immigration policy at the national level is divided among four ministries: The Ministry of Justice and Public Order, the Ministry of Education and Science, the Ministry of Labor and Social Affairs and the Ministry of Children, Youth and Family. The Ministry of Justice and Public Security, through the Department of Migration, is responsible for developing and coordinating legislation and policies for all categories of immigrants, asylum — seekers and refugees, as well as directing the Directorate of Immigration (UDI) and the Immigration Appeals Board (UNe).

The Directorate of Immigration (UDI) is the central agency for immigration management. Its tasks include review of applications for entry, stay and work in the country, asylum applications in Norway, management of refugee reception centers and liaison with local authorities on the in-

[7] Norge. Lov om grunnskolen og den vidaregåande opplæringa (2012) (opplæringslova)/LOV-1998-07-17-61. Departement Kunnskapsdepartementet. 2012. URL: https://lovdata.no/dokument/NL/lov/1998-07-17-61 (Accessed: 19 December 2018).

[8] National Centre for Multicultural Education (NAFO). URL: http://nafo.oslomet.no/ (Accessed: 19 December 2018).

[9] Agreement on the European Economic Area (1994) /Decision 94/1/EC, ECSC on the conclusion of the agreement on the European Economic Area. URL: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Aem0024 (Accessed: 19 December 2018).

tegration of immigrants, the granting of Norwegian citizenship, the implementation of programs for the deportation of migrants. Within the Directorate of Immigration, there are special departments, incl. a department for dealing with refugees, a department for other categories of migrants and their naturalization in the country. In carrying out its functions, the Directorate of Immigration works with: Norwegian missions abroad involved in the processing applications for entry visas and work and stay permits; the Employment Service for issuing permits to employment, the police responsible for border control and deportation and the issuance of temporary work permits, the municipalities in implementing the policy of integration of immigrants, the Council on Immigration appeals, whose function is to review the decisions of the Directorate of Immigration, and by immigrant social organizations.

The Ministry of Education and Science is the key body responsible for implementing policies for the integration and adaptation of migrants. The Directorate for Integration and Diversity (IMDi), under its responsibility, is responsible for the development and implementation of adaptive courses for immigrants, the teaching of the Norwegian language, the extension of knowledge about the country, its history, legislation, for the improvement of their professional competence, promotes dialogue and understanding between the indigenous people, citizens of the country and immigrants, and works on the prevention of discrimination. IMDi was established in 2006 through separation from the Directorate of Immigration to act as a center of competence and driving force for integration and diversity. The Directorate for Integration cooperates with municipalities, government agencies, immigrant organizations and groups, and the private sector. IMDi also has several financial instruments at its disposal, such as grants to municipalities and voluntary organizations working to promote diversity and integration. The Office has branches in Narvik, Trondheim, Bergen, Kristiansand, Jovica, and Oslo[10].

The Ministry of Labor and Social Affairs has overall responsibility for policies on migrant workers and promotes the integration of migrants into the economic life of the country. It also includes migrants covered by the Agreement on the European Economic Area (2004)[11]. In turn, the Department of Children, Youth and Family Affairs of the Ministry of Children and Equality is helping to regulate child migration issues, particularly the placement of children, who entered the country unaccompanied by adults[12].

Municipalities have an important role to play in the implementation of the integration policy. Migrants live, work and form cultural ties with the host community in municipalities. It is the municipalities that decide on the number of immigrants they can accept, their resettlement, the forms and methods of adaptation and integration, the education of migrant children in schools,

[10] Directorate for Integration and Diversity of Norway. Official website. URL: https://www.imdi.no/en/about-imdi/imdis-work (Accessed: 19 December 2018).
[11] Ministry of Labor and Social Affairs of Norway. Official website. URL: https://www.regjeringen.no/en/dep/asd/id165/ (Accessed: 19 December 2018).
[12] Ministry of Children and Equality of Norway. Official website. URL: https://www.regjeringen.no/en/dep/bld/id298/ (Accessed: 19 December 2018).

based on the from the existing capabilities. The main tasks of each municipality are: inclusion of immigrants, especially refugees, in adaptive programs (within 3 months of obtaining a residence permit), dissemination of information on Norwegian culture and economic devices (e.g., information on the tax system) and equal rights and opportunities with the residents of the municipality.

Municipalities, considering the specificities of immigrant groups and their country of origin, have the right to choose their own models for the implementation of policies for the integration of migrants within the framework of general provisions. They receive transfers through the national income distribution system. Funds are distributed among municipalities due to several factors. Among them: the number of migrants in the municipality, their ratio by type of migration, and the proportion of refugees. The county councilors being government representatives are responsible for guiding and overseeing the integration. Among the municipalities of Norway, the largest number of migrants is concentrated in Oslo, Swansea, Gamwik and Drammen, where their share among the population reaches 30% [24, p. 33]. It is a clear tendency for migrants to settle in economically developed cities, where employment opportunities are greater.

Norwegian immigration policy has included civil society institutions and nongovernmental organizations. Substantial information and legal support for the adaptation and integration of the most vulnerable groups of migrants is provided by the Norwegian Asylum Seekers Organization (SPLA), a nongovernmental organization “Juice Bous”, created by students of the Law Faculty of the University of Oslo, the Norwegian Red Cross Society [19, p. 33].

In general, the policy of integration of migrants in Norway is based on the integrated interaction of government bodies at different levels and social organizations, which is the guarantee of its effectiveness.

The increasing flow of displaced people, the integration and adaptation of which is carried out at the expense of the state, places a heavy burden on a budget of the country. According to a study by a Norwegian non-profit organization, the Human Rights Service (HRS) Foundation, the direct expenditure of the Ministry of Justice and Public Security in 2017 amounted to NOK 59.3 billion, 23.5 billion of them was used for immigration policy. Between 2006 and 2017, the Board of Immigration Appeals increased its expenditure 2.8 times: from NOK 117 million to NOK 328 million; the Directorate of Integration and Diversity — 3 times, from NOK 83 million to NOK 262 million. NOK 12.1 billion were spent on ensuring policy at the level of municipalities, NOK 9.3 billion of which were spent on care of minor migrants, NOK 1.7 billion on benefits, NOK 427 million were allocated to specialists health care services (incl. dental services usually paid by the client), NOK 236 million invested in the provision of free legal aid, NOK 193 million to overcome child poverty[13]. For comparison, expenditures of the Ministry of Agriculture and Food Calculation in 2017 amounted to NOK 167 million (0.005% of Norway's GDP), while the share of expenditure on inte-

[13] Innvandring, integrering og statens utgifter/Human rights service. URL: https://www.rights.no/2017/09/innvandring-integrering-og-statens-utgifter/ (Accessed: 19 December 2018).

gration policy is 0.6% of the country's GDP. Thus, the Kingdom spends considerable resources to achieve the effective integration of migrants, which indicates the importance of this direction of the state activities.

The effectiveness of Norway's public policy on the integration and adaptation of immigrants is highly appreciated based on the key MIPEX indicators, according to which Norway occupies one of the leading positions[14].

Employment and income levels are indicators of the social and economic integration of immigrants into the host community. According to Statistics Norway at the beginning of 2018, the unemployment rate among migrants was 6.1%, which is 0.8% lower than in 2014.[15] This is a high rate, but the unemployment rate among migrants is markedly higher than among the citizens on (1.8–1.9%)[16]. The migrant's employment depends on work experience and the availability of education. Generally, the highest unemployment rate is among refugees from African countries, who have lower levels of education and professional qualifications. Accordingly, they are mostly represented in professions that do not require education. Employment rates are markedly higher among migrants who had adaptation courses. Thus, 70% of male migrants were able to find employment within a year after the end of the program, among women this indicator is lower (50%, average 61%)[17].

The income level of immigrants shows a positive trend. Over the period 2003–2017, it grew by 1.3% but lags the national average. Thus, the average annual income of a resident of Norway in 2017 was NOK 367.4 thous., while a migrant from the EU/EEA, USA, Canada, Australia, and New Zealand — NOK 299.1 thous. Immigrants from Africa, Asia, Latin America, Europe (non-EEA), except for Australia and New Zealand, had an average income of NOK 249.7 thous[18]. Differences in income are due to many factors: level of education, professional qualifications, language knowledge, etc.

The political and legal aspect of integration can be determined by the number of persons who have acquired citizenship and their participation in elections. In 2008-2017, 136,7 thous. migrants received Norwegian citizenship, that is 17% of their total number. In 2017, 9,8 thous. out of 21,6 thous. migrants passed the naturalization process[19]. An important indicator of integration is political participation. Thus, 55% of immigrants who received Norwegian citizenship took part in the parliamentary elections in 2017. Traditionally, there is a high proportion of people from Eu-

[14] Migrant Integration Index. 2015. Norway. URL: http://www.mipex.eu/norway (Accessed: 19 December 2018).
[15] Registered unemployed among immigrants. Statistics Norway. URL: https://www.ssb.no/en/statbank/table/07115/tableViewLayout1/ (Accessed: 19 December 2018).
[16] Registered unemployed among non-immigrant population. Statistics Norway. URL: https://www.ssb.no/en/statbank/table/07115/tableViewLayout1/ (Accessed: 19 December 2018).
[17] Immigrant integration/Kompetanse Norge. URL: https://www.kompetansenorge.no/English/Immigrant-integration/ (Accessed: 19 December 2018).
[18] Stein L. Jorunn, F. Fattigdom og levekår i Norge Tilstand og utviklingstrekk — 2017/NAV Rapport No. 4-2017. 79 p. URL: http://fayllar.org/fattigdom-og-levekr-i-norge-tilstand-og-utviklingstrekk — 2017.html (Accessed: 25 December 2018).
[19] Overgang til norsk statsborgerskap /Statistisk sentralbyra, 2017.URL: https://www.ssb.no/befolkning/statistikker/statsborger (Accessed: 19 December 2018).

rope who participate in elections. However, the participation of ethnic Norwegians is 23% higher than that of immigrants. The participation of residents and migrants in municipal elections is significantly lower, accounting for 64% and 42%, respectively. The active civil position is more pronounced among migrant workers [26, Dokka A.G., pp. 147–148].

All immigrants in Norway are included in social and cultural adaptation and take courses in the Norwegian language and culture. Thus, according to the National Agency for Competence Policy (VOX), the number of successfully written Norwegian language proficiency tests increased by 9 times over the period 2006-2017. However, language proficiency tests are more successfully passed by those with an education. Thus, in 2017, 55.9% of migrants with secondary education and only 1.1% without education were successfully tested for language proficiency[20].

It should be noted that the equality of migrants and their protection against discrimination is not fully ensured in Norway. It was noted that this figure was one of the lowest in Norway (59%).

The integration process is a two-way street, and its effectiveness depends not only on the host state. An integral part of integration is the adaptation of migrants themselves to the new social environment, i.e., to what extent they are willing and able to accept and respect the norms, traditions, and rules of the receiving society while preserving their cultural and national identity. Representatives of individualist European cultures tend to adapt easily due to the identity of basic values and models of behavior. Serious difficulties in adaptation are experienced by carriers of opposite spiritual and moral traditions. It is relevant, first, for people from Asian and African countries, who consider collectivism and family clan relationships as key principles of interaction. There is a desire of migrants from these countries to segregate, to isolate themselves from the host society, to unite on ethnic and religious principles, which hamper the adaptation. The officially declared policy of equality of cultures creates conflicts such as protests against some of the host country's traditions under the pretext of insulting the religious feelings of immigrants (requirement of cancellation of Christmas trees, the permission of polygamy, etc.). The incentive to adapt refugees to the social and economic life is also offset by significant social benefits, which exceed the basic needs of migrants.

All these behaviors cannot but cause legitimate resentment on the part of the host society. According to polls, in 2018, more than 70% of Norwegians generally recognize that immigrants are useful for society in terms of their contribution to the development of the economy and cultural enrichment of the country. 57% of respondents generally disagree with the assertion that immigrants are a source of social uncertainty. Compared to 2009, this indicator increased by 5%, which indicates the growth of confidence in immigrants, but at the same time, the integration policy pursued by the state. Currently, 53% of the respondents supported the measures taken by the state

[20] Educational level, sex and test result for persons who have taken the Norwegian language test for adult immigrants 2014 — 2017/ Statistics Norway. URL: https://www.ssb.no/en/statbank/table/11318/(Accessed: 19 December 2018).

in relation to immigrants. Only 29% spoke in favor of making policies towards migrants more complex, whereas in 2009 this figure reached 49%[21].

In general, the Norwegian integration policy is comprehensive and highly effective. Although the number of indicators of the integration index decreased significantly in 2015 compared to 2007. Among them: long-term stay in the country and acquisition of citizenship by 4 points, participation in the political life of the country and the possibility of family reunification by 6 points. Compared to 2010, the employment rate of migrants of working age decreased by 6 points, to 56.5% and the risk of poverty increased by 49%[22]. This is due to several factors. Norway's immigration system failed to cope with the large influx of refugees in the context of the European migration crisis. In addition, entry rules have been tightened, especially for family reunification. Under the amendments to the Immigration Act, only spouses, and their young children were entitled to family reunification, not relatives, as they used to be. The minimum annual income for a family member who calls his relatives to Norway has been raised from NOK 250,000 to NOK 297,000. One of the most important innovations is setting the minimum age of 24 years from which a spouse could invite her partner to Norway. The requirement was formally introduced to prevent forced marriages. It is known that in several third world countries parents "conspire", connecting young groom and bride together against their will. However, the law was aimed at restricting the entry of foreigners into Norway. According to statistics, most mobile immigrants, incl. family immigrants are persons under the age of 24. The DNA test for spouses without children was established by law. This initiative was adopted after selective testing of Somali spouses, among whom this entry position prevails. The results showed that 40% of childless spouses were not married together but were close relatives. Following the release of DNA tests, 25% of requests for family reunification from Somali, Eritrean, Turkish and other nationalities were voluntarily withdrawn[23].

Integration policy in Russia

Russia has extensive experience in the incorporation of various ethnic groups into the nation-state. Most often, numerous peoples became part of a single country due to the territorial expansion of Russians. The term "colonization", in our view, reveals more accurately the essence of the incorporation of numerous ethnic groups, focusing on the purposeful nature of the impact on this process by the of the state in the Russian conditions. According to Russian researchers, the integration into the Russian state of the Finn-Ugric and Turkic peoples of the European North, the Volga area, the Urals and Siberia took place both through their cultural and linguistic assimilation through Orthodoxy and civil naturalization with the spread of all rights and obligations of the Russian subjects [27, p. 16]. The colonization received a new impetus and content during the Soviet

[21] Holdninger til innvandrere og innvandring. Statistics Norway. URL: https://www.ssb.no/befolkning/statistikker/innvhold (Accessed: 20 December 2018).
[22] Migrant Integration Index. Norway. URL: http://www.mipex.eu/norway (Accessed: 20 December 2018).
[23] Smirnov A. Postoronnim v"ezd vospreshchyon [Unaffiliated entry is forbidden]. *Novie izvestiya*. URL: https://newizv.ru/news/world/18-03-2014/198751-postoronnim-vezd-vospreshen (Accessed: 04 March 2018). [In Russian]

period, when workers, engineering, scientific and managerial qualifications were in demand for industrialization. The practice of attracting labor resources to the North, Siberia, the Far East, numerous suburbs has gained great development. The policy of colonization received an important administrative and organizational resource in the form of party and Komsomol bodies. The economic development of new territories took place and through violent migrations.

After the collapse of the USSR, for a long time, the integration of migrants was not a task of migration policy. Adaptation and integration have been carried out in civil society through resettlement and human rights organizations. Integration of migrants into Russian society was formulated relatively recently, in 2012, in the "Concept of the State Migration Policy of Russia for the period up to 2025", and then only as a task, rather than the objectives of migration policy. However, it would be wrong to assert that the state has been removed from solving the problems of incorporating migrants into Russian society. Back in February 1993, the laws of the Russian Federation "On refugees" and "On forced migrants" were adopted. They are aimed at regulating forced migration and had an avalanche character after the collapse of the USSR. An important tool for the integration could be the program of resettlement of compatriots, adopted in 2006.[24] When resettling, the participant of the state program and members of his family receive a guarantee and social support, in particular, the cost of moving to a permanent place of residence is paid, a one-time settlement allowance. At the introduction of the program, it was announced that about 300 thous. people will arrive in Russia during the first 3 years of the program (but, at the beginning of 2010, there arrived about 17 thous. people). In 2012, the resettlement program for compatriots was approved in a new edition and became permanent. Compatriots were free to choose the territory of the settlement, without focusing on vacancies of employers; in the territories of priority settlement, the payments increased by 2 times (from 120 thous. up to 240 thous. rubles). The number of territories participating in the program increased (at the end of 2017 — 60 territories of the Russian Federation). It is important that the new version of the program has eliminated the requirement of a place of work, which has expanded the range of potential participants. At the same time, the legislator left the requirement of permanent registration at the place of residence, which seriously complicates the process of naturalization. According to the head of the Ministry of Internal Affairs of Russia, given in November 2017, just over the past 10 years, almost 675 thous. compatriots returned to Russia.[25]

According to experts, migrant workers in Russia have minimum guarantees in the field of social protection: by ratifying the European Social Charter[26], Russia has made a minimum com-

[24] «O merah po okazaniyu sodejstviya dobrovol'nomu pereseleniyu v Rossijskuyu Federaciyu sootechestvennikov, prozhivayushchih za rubezhom» ("On measures to facilitate the voluntary resettlement of compatriots living abroad to the Russian Federation"). Decree of the President of the Russian Federation of June 22, 2006 №637 URL: https://xn--b1aew.xn--p1ai/document/8391252 (Accessed: 20 December 2018). [In Russian]

[25] TASS Information Summary. 13.11.2017. URL: https://tass.ru/obschestvo/4723756 (Accessed: 24 December 2018). [In Russian]

[26] Ratification of the European Social Charter (Revised) of 3 May 1996. Federal Law of the Russian Federation from 03.06.2009 № 101-FZ URL: http://base.garant.ru/12167396/ (Accessed: 24 December 2018). [In Russian]

mitment under this document: migrant workers are guaranteed only non — discriminatory tax treatment and the possibility of sending money to their homeland [28, p. 18]. Until 2012, insurance premiums were paid from payments in favor of foreign citizens and stateless persons only within the framework of compulsory insurance against industrial and occupational accidents or diseases. No other contributions should have been paid from such persons. In accordance with the amendments, since 2012, persons temporarily staying on the territory of Russia, who have entered into a labor force and were included as insured under compulsory pension insurance contract for an indefinite period, or fixed-term employment contract for a period of not less than 6 months. Since 2013, foreign citizens temporarily staying on the territory of Russia are considered to be insured persons under compulsory pension insurance provided that they have entered into an employment contract for an indefinite term, or fixed-term employment contract (fixed-term employment contracts) of at least 6 months, i.e. in total during a calendar year[27]. According to Doctor of Economics I.D. Ivakhnyuk, in Russia there is a simplified understanding of integration and attempts to assign responsibility for integration exclusively to migrants. Since 2015, Russia introduced a test on knowledge of the Russian language, history, and basic legislation of the Russian Federation for foreign citizens. This instrument of integration policy is mandatory for persons intending to obtain a residence permit or citizenship. At the same time, in the case of temporary migrant workers, the language test could provoke their departure into illegal employment, making integration difficult. This measure demonstrates a simplified, unilateral understanding of the essence of integration, shifts responsibility for it exclusively to migrants, underestimates the importance of social protection of migrants as conditions for their integration[28].

The CIS states enjoy a visa-free regime, and their citizens can work in the Russian Federation under a patent. An important stage for Russia's migration policy was the creation in 2014 of the Eurasian Economic Union (EAEU) that ensures freedom for movement of goods, services, capital and labor. Since 2015, when the Treaty on the establishment of the EAEU came into force, citizens of the participating countries (Belarus, Kazakhstan, Kyrgyzstan, and Armenia) received some employment privileges. Esp., labor migrants, i.e., citizens of the CIS member states buy a patent for work in the Russian Federation, they are equated in labor rights with citizens of the Russian Federation.

The possibilities of naturalization of migrants have become more difficult compared to the early 2000s. In 2009, changes were made to the “Law on Citizenship of the Russian Federation”. The Law abolished the possibility of obtaining Russian citizenship in a simplified procedure for foreigners and stateless persons and sharply decreased number of naturalized (from 394 thous. peo-

[27] «O vnesenii izmenenij v otdel'nye zakonodatel'nye akty Rossijskoj Federacii po voprosam obyazatel'nogo pensionnogo strahovaniya» (“On Amendments to Certain Legislative Acts of the Russian Federation on Mandatory Pension Insurance”) Federal Law No. 243-FZ of December 3, 2012. *Rossiyskaya Gazeta*. 07.12.2012 URL: https://rg.ru/2012/12/07/oms-dok.html (Accessed: 22 December 2018). [In Russian]

[28] Ivakhnyuk I.V. Predlozheniya k migracionnoj strategii Rossii do 2035 goda. (Proposals for the migration strategy of Russia until 2035). INF Report. 2017, September. P. 9 URL: http://russiancouncil.ru/activity/publications/predlozheniya-k-migratsionnoy-strategii-rossii-do-2035-goda/ (Accessed: 23 December 2018). [In Russian]

ple in 2009 to 111 thous. people in 2010) [29, Chudinovskikh O.C., p. 29]. The system of issuing temporary residence permits and residence permits remains complex and bureaucratic. Russian legislation is aimed at attracting and using temporary foreign workers with short terms of employment contracts (up to 1 year).

Experts note the extremely low quality of migration statistics in Russia. There is no information on the number of working foreign citizens, on the areas of their work, on their education and qualification level, on gender and age composition, on the terms of stay in Russia — both on federal, regional and local levels. The decision was taken in 2011 to change the criterion of attribution of foreign citizens arriving in Russia to permanent and long-term migrants from "12 months and more" to "9 months or more." As a result, the category of permanent migrants, which is commonly understood in demographic statistics as a source of change in the number of resident populations, has been expanded to include numerous temporary workers migrants, which completely distorted the pattern of permanent migration[29].

Comparative analysis of the integration policy of Norway and Russia

For our research, the fact of comparative evaluation of Russia's integration policy in 2010 is important, esp., the use of the international indicators of the MIPEX integration index[30]. As a tool, the researchers used the questionnaire 2007. (experts V.I. Mukomel, A.E. Shaparov, Yu.F. Florinskaya, O.V. Popova). The questionnaire included 6 indicators: access to the labor market, family reunification, long-term stay, political participation, citizenship and protection against discrimination. According to experts, in such areas of integration as access to the labor market, long-term stay, and citizenship, Russia almost did not differ from most European countries. On such indicators as political participation, protection against discrimination and family reunification, Russia has lagged most European countries. According to the results obtained, the assessment of Russia's integration policy at that time was 50% of compliance with the ideal European standards, and in the ranking of countries at that time Russia would occupy the 16th place, being in the middle of the list (the maximum rating in 2007 had Sweden — 88%, the minimum — Latvia with 30%) [30, Mukomel V.I., p. 420].

In 2017, MIPEX evaluation methods were again applied to Russia. The work was coordinated by the National Research University of the Higher School of Economics and the quality was checked by the central research group MPG MIPEX. The data for Russia is based on the situation as of January 1, 2015 and is compared with MIPEX data for 38 countries in the MIPEX web database. Data collection was carried out by the International Laboratory of Socio-Cultural Research at the

[29] Ibid. P. 54

[30] Prokhorova A. Politika integracii migrantov v Rossii: primer ocenki s ispol'zovaniem indeksa integracii MIPEX [The policy of integration of migrants in Russia: example of assessment with the use of the MIPEX integration index] Demoskop Weekly. 2011. № 479 — 480. URL: http://www.demoscope.ru/weekly/2011/0479/analit05.php (Accessed: 22 December 2018). [In Russian]

Higher School of Economics, head V. Ponizovsky (among experts V. Mukomel, V. Postavalin, O. Vorobyova)[31].

Table 2

Evaluation of the policy of integration of migrants in the EU, Norway and Russia according to the indicators of MIPEX[32]

Indicators	European Union 2015	Norway 2007	Norway 2015	Russia 2007	Russia 2015
Labor market mobility	57	90	90	50	40
Family reunion	61	69	63	-	42
Education	37	-	65	-	18
Political participation	40	88	82	25	9
Permanent residence	61	74	70	66	33
Access to nationality	47	52	52	57	40
Anti-discrimination	63	59	59	35	20
Health	42	-	67	-	18
Overall rating	51	72	69	50	28

Experts note that Russia in 2010-2017 seriously worsened the quality of integration policy on several key indicators: access to the labor market, citizenship and long-term residence, which was hardly offset by progress in other areas. Currently, according to the total number of points of key indicators assessing the quality of integration policy, Russia (28 points) was in one of the last places, losing Latvia (31 points) and ahead of only Turkey (25 points).

Today, Russia has no anti-discrimination legislation. Migrants face difficulties in protecting their rights. Access to justice is difficult for migrants. According to experts, as in 2007, and at the present time, Russia's integration strategy can be characterized as “differentiated separation”, based on a clear differentiation of rights and opportunities of temporary migrants and citizens of the country [31, Vykhovanets O.D., Prokhorova A.V. et al., p. 144]. While state integration policies often focus on the inculcation of migrants (language learning, adaptation to cultural norms, knowledge of history), opinion of researchers, the fundamental aspect of the integration of migrants is economical. The opposite is the discrimination of migrants in the labor market, its conditions, and remuneration, great difficulties in defending their rights through the justice system, stigmatization of migrant workers in the media and public views significantly offset the efforts of the state to adapt migrants to sociocultural socialization. As a conclusion, the economic

[31] Next MIPEX country: Russia. URL: http://www.mipex.eu/next-mipex-country-russia (Accessed: 22 December 2018).
[32] MIPEX-2015 http://www.mipex.eu/next-mipex-country-russia (Accessed 22 December 2018); Demoskop Weekly http://www.demoscope.ru/weekly/2011/0479/analit05.php (Accessed: 22 December 2018). [In Russian]

integration of migrants and the efforts of the state to protect against discrimination of migrants should become the basis of Russia's integration policy.

Conclusion

The total fertility rate in both countries under review (2017). Norway — 1.85 and Russia — 1.61[33]) predetermines their dependence on immigration as a factor of preserving simple reproduction of the population (to keep the population at one level the SKR should be not less than 2.15). Both countries are attractive to international migrants, whose share of the population will continue to increase. Whether migration becomes a factor in the development of the host society, or a source of conflict and security threats depends on the effectiveness of the integration policies of migrants, the main actor is a state.

The analysis showed that the model of integration of migrants in Norway is not ideal. It was difficult to obtain citizenship and enter the country because of family reunification. Immigrants are not fully protected against discrimination. The education and health of migrants needed to be improved. Quality indicators of integration policy worsened three points for the period 2007-2015. (Table 2).

In general, Norway has built a multilevel and comprehensive system of integration of migrants, while in Russia it is only in its formative stage. Norway's integration policy, characterized by flexibility and mobility, has been able to withstand the onslaught of the European migration crisis and maintain a leading position in the world. In Russia, according to the data of the Migration Integration Index — MIPEX for 2007–2015, the quality indicators of integration policy have worsened twice (Table 2). Moreover, the decrease of integration indicators migrants occurred in such important areas as access to the labor market, citizenship, protection against discrimination and long-term residence, and was not compensated for by progress in other directions

To improve the effectiveness of Russia's policy in the field of integration of migrants, it is necessary to conceptualize the immigration policy, its legal and organizational management support with the division of responsibilities and powers, and development of mechanisms for its implementation. The introduction of anti-discrimination measures at work and wages, ensuring access to health care, education, and legal services are among the pressing tasks of the state policy. Successful integration of migrants is a prerequisite for the growth of the Russian economy and the development of the main spheres of life of Russian society.

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REVIEWS AND REPORTS

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The Arctic in the Soviet cinema lens: "Two Oceans" by Vladimir Shneiderov*

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Abstract. The study aims at introducing unstudied materials, i.e., film documents of the Soviet period, related to the development of the Russian North, into the scientific circulation. So-called expedition films occupied a special place in the history of Soviet visual anthropology — films of educational content about the peoples and territories of the USSR. They reached its heyday at the turn of the 1920s — 1930s. One of the pioneers of Soviet visual anthropology is considered to be the filmmaker V.A. Shneiderov, the author of a series of films about the USSR territories ("The Great Flight", "The Pamirs (the bottom of death)", "At the height of 4500", etc.). In addition to solving creative issues, the production of such films was part of a state experiment on the construction of local images and the country. The Soviet authorities used the resources of the cinematographer as a media source and agitation. In this article, the author considers the example of the expedition film "Two Oceans", the classic of documentary films where V.A. Shneiderv pictured the history of the Northern Sea Route and the Soviet colonization of the Arctic. The context of the filmmaking, i.e., parallel processes in Soviet cultural politics and cinema, is discussed as well. The author conclusions contain thoughts about the research value of the Soviet expeditionary film as a complex historical source.
Keywords: the *Arctic, Soviet films, Vladimir Shneiderov.*

The development of the North-East route connecting Europe and Asia, since ancient times has been attractive for researchers and geopolitics, seafarers and traders from different countries. Water routes were the first bonds linking the world in the Middle Ages, and therefore competition for sea and river routes was a struggle for power. At the end of the XV century, Spain and Portugal controlled the "southern" sea routes in the East, around Africa. It actualized the search for "northern" passage among the elites of other maritime powers, and above all — England. In 1533, the trading company "Misteri" with the assistance of the London Guild of Merchants travelers launched the first expedition to the North under the command of H. Willoughby. But this debut campaign was not successful: two ships of the expedition reached the coast of East Murman, where they were forced to stop for wintering. All crew members, incl. Captain Willoughby, died of scurvy and frostbite. The third ship led by Captain R. Chancellor managed to reach the mouth of the Northern Dvina. He sent representatives to Moscow and even pass the offer on trade relations from the English King Edward VI to the Russian Tsar Ivan IV the Terrible. So, the result of this campaign was a patent for trade with Russia. But "Mister", which equipped the expedition of H. Willoughby, was renamed to the "Moscow Company" and continued the search for the North-East sea passage to expand the trade ties of England with Asian countries. In 1556, the company equipped another expedition to the North under the command of S. Borro. This expedition went

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further than the previous one: for the first time, it reached the shores of the Novaya Zemlya, tried to enter the Kara Sea, but was forced to return. On the way back, the expedition had wintered in Kholmogory on their way back. In 1580, "Moscow company" sent its ships to the North "to reach the countries and possessions of the powerful Chinese emperor" [1, Vise, p. 27]. This new expedition developed the successes of the previous ones and managed to pass into the Kara Sea, but was unable to overcome the heavy ice and had to return without cutting the "windows" from Europe.

So, the relay in searching the North-Eastern sea route passed to Holland. In 1584, the expedition of Captain O. Brunel, who set a goal to reach China, reached the Novaya Zemlya and was forced to return. Ten years later, in 1594, a new Dutch expedition was more successful: a detachment of four ships under the command of Captain W. Barents reached the Kara Sea. The expedition members decided that they had managed to find the desired sea route to the East Indies and reported upon their return to Holland. It served a strong argument for the immediate dispatch of the next expedition. It successfully passed to the Kara Sea, but could not move beyond the Yugorsky Strait because of heavy ice. And the third expedition of W. Barents failed: the expedition reached the Novaya Zemlya and landed on the shore for a forced wintering. So, the plans for a further trip to the North died as well as Captain Barents, whose name is now used to call the rebellious northern sea. A series of the above-mentioned unsuccessful English and Dutch expeditions forced to leave the idea of the North-Eastern passage discovery, dormant in the ambitions of the European elites up to the 19th century [1, Vise V.Yu., p. 39].

In 1878, the Swedish expedition under the command of the scientist A.E. Nordensköld was supported by the Russian merchant A. Sibiryakov. The expedition along the northern coast of Eurasia aimed to pass from the Atlantic to the Pacific Ocean. They left Sweden on the steamer "Vega" and A. E. Nordensköld successfully passed the Kara Sea, reached the mouth of Lens, for the first time, and went further — to the Pacific Ocean. But they could not reach the Bering Strait and had to stay for winter in the ice. Next summer, the expedition managed to reach the Pacific Ocean. So, two years of expedition and A. E. Nordensköld and his crew solved the problems of previous centuries: open sea routes to the estuaries of Siberian rivers — Lena, Ob, and Yenisei — and for the first time, the North-East sea passage from Europe to Asia itself was passed. At the same time, A. E. Nordensköld was skeptical about the exploitation of the seaways he had discovered: "Can the voyage of "Vega" be repeated every year? This question still has no answer without an unconditional "yes" or an unconditional "no". The sea route from the Atlantic to the Pacific Ocean along the northern coasts of Siberia can be traveled in a few weeks on a suitable steamboat with a crew of experienced sailors. But in general, this way, as we know the regime of ice off the coast of Siberia, is unlikely to have an effective significance for trade" [2, Nordensköld A.E., p. 159]. The second conquest of the Northern Sea Route, but the first one in the direction from Asia to Europe, was made by the expedition of the Russian sailor B. Vilkytsky, consisting of two icebreaking vessels — "Vaigach" and "Taimyr". This expedition departed in 1914 from the Bering Strait and opened new geographical objects: Severnaya Zemlya and the island of Maly Taimyr. But, as well as A. Nor-

densköld, B. Vilkytsky was destined to winter in the ice, and only the next year his expedition arrived in Arkhangelsk. The third passage of the North-Eastern route was R. Amundsen's expedition that took two years. After leaving Vardø on the ship “Maud” in 1918, R. Amundsen twice stopped for forced wintering on the way to the Bering Strait and reached the Pacific Ocean only on July 21, 1920.

Formally, the Great Northern Route was opened. But the experience of its passage, despite the actual success, contributed only to confirmation of skepticism about the creation of stable navigation here. Against this historical background in the early 1930s, a new expedition to conquer the Northern Sea Route was prepared in the USSR. For the Soviet Union, the development of this highway was of fundamental importance, because from an economic point of view, the Arctic Ocean is a transport link with Siberia and the Far East, and from a political perspective — the key to the new, Soviet, colonization of the Arctic. And in the framework of the so-called Second Polar Year (1932), the USSR had thrown a historical challenge to other northern states i.e., for the first time to pass the Arctic sea route without wintering. This responsible mission was entrusted to the All-Union Arctic Institute. Head of the expedition, Professor O.Yu. Schmidt said: “the task set by the party before the expedition was formulated simply and clearly: to overcome the North-East Passage in one navigation; to reach the mouth of Lena from the West and to follow further to the East; to reach the Pacific Ocean; to explore the path for future regular navigation” [3, Shneiderov V.A., p. 3]. At the same time, it was not enough to pass the Great Northern Way. It was necessary to properly “show” it on the screen because in the 1930s cinema became the most effective media both inside and outside the country.

Vladimir Adolfovich Shneiderov (1900–1973), a pioneer of expeditionary cinema in the USSR, became the head of the film group. He started his professional activity with ethnographic film sketches “Around Samarkand” (1924), “Around Uzbekistan” (1924), etc. In 1925, based on film materials about the Soviet aviation expedition Moscow — Ulaan-Baatar — Beijing — Shanghai — Tokyo, he created the film “The Great Fly”. But the most famous in the history of Soviet cinema were his expeditionary films made in the late 1920s — early 1930s: “The Foot of Death” (1928) about the Pamir, “El-Yemen” (1929) filmed in the south of the Arabian Peninsula, and “Two Oceans” (1933) — about the trip along the Northern Sea Route on the icebreaker “Alexander Sibiryakov”. The films of V.A. Shneiderov gained popularity in the film distribution of the USSR and foreign countries, received recognition among researchers, and eventually took their place in the category of world film classics. At the same time, with rare exceptions [4, Golovnev A.V.; 5, Sarkisova O.], these and numerous other expeditionary films of the Soviet period remain virtually unexplored in modern science, which actualizes the need for their research analysis. The film “Two Oceans” (1933) is a subject for this article. It is an indicative film-text, combining posters and slogans-titles reflecting the specifics of the state cinematography.

Directly the film expeditions of the “Mezhrabpomfilm” to the Arctic were preceded by preparatory work, incl. the study of published scientific papers on the geography of the area. Accord-

ing to V.A. Shneiderov, “going to remote and little-known countries, the author relies on the careful study of materials, conversations with scientists, maps and iconographic materials and he always has enough opportunities to define in advance the character of his future film, to develop his author's script” [3, p. 11]. Not the last role at this stage was played by the scientific consultant of the film — O.Yu. Schmidt. According to the memoirs of O.Yu. Schmidt, he relied on the long experience of the film director in expeditionary conditions, choosing V.A. Shneiderov for the position of the director of the film group: “He managed to visit Pamir, Tien Shan, Arabia, and China, but in the Arctic V.A. Shneiderov was for the first time. "It gives special sharpness to his perception, and the rich experience of the traveler allows comparing with other difficulties” [3, Shneiderov V.A., p. 3]. O.Yu. Schmidt, who had experience in Arctic expeditions, supplied the group of V.A. Shneiderov not only with scientific data on various areas of research but also took a lively part in the discussion of the scenario sketch of the future film.

Figure 1. Movie group (right to left): directed by V. Shneiderov, operator M. Troyanovsky, assistant director Ya. Cooper.

V.A. Shneiderov, unlike his famous contemporary Dziga Vertov, was a principal supporter of pre-shooting script development in documentary films, preliminary creation of the future film on paper. “Only after mastering the material, understanding it, having imagined the contours of the future film, it is necessary to develop a first sketch of the next literary author's script based on the selected topic. Briefly describing the plot of the future scenario, revealing the main content of the film, author's libretto is the original document, the creative plan” — insisted the film director [3, Shneiderov V.A., p. 12]. The script of the film “Two Oceans” was not based on the principle of a simple display on the screen of the expedition path and acquaintance with physical and geographical materials about polar regions, but it was showing a film campaign through the prism of the heroic feat of sailors and scientists performing a historical mission. Such a construction of the film determined the introduction of several scenario episodes, which under another decision could be omitted altogether: household scenes on the ship, hunting polar bears, everyday work of sailors, command staff and scientists, the situation of marine scientific stations, rush job on the hull of the

ship when passing through the ice. At the same time, the script was introduced and subsequently deployed in separate episodes, all cases of the approach of the ship to the ground — to the island of Dixon, the Bay of Tiksi, the Medvezhiy Islands, the shores of Novaya Zemlya and Severnaya Zemlya. In the preparation, carefully designed and coordinated with scientific consultants, the scenario was divided in two parts: planned and eventful. The first included a plan of mandatory filming and the second implied freedom of recording materials depending on the specific conditions on the scene.

The subsequent expedition work of the film group also shows its methodological nuances. On this occasion, the director recalled: “As we prepare for the shooting, we carefully inspect and study the ship. There is no such place on the deck, on the bridge and holds, wherever we go in search of the best shooting spots, designed for all possible shooting options. The lowest point is the paws of the anchor hanging from the nose of the ship to the water. The highest point is the “crow nest”, that is, an iron barrel attached high on the front mast of the icebreaker. It opens special possibilities of landscape shooting from a high point” [6, Shneiderov V.A., p. 73]. Also, interesting for research is the analysis of the combination of documentary and staged film techniques used in the creation of the film: from reportage shooting to reconstructions of complex shooting events. On the question of whether staging is allowed in the documentary film, participants of the V.A. Shneiderov's group answered positively. “In this case, we do not falsify events, but only reproduce them exactly the same, that is, we observe the basic commandment of documentaries, which states that in a documentary from the beginning to the end there must be authentic people, authentic places of action, real, characteristic events selected in accordance with the objectives of the film, sometimes restored or organized only for the purpose of ensuring possibilities of their filming”, — the film-director justified the general position [6, Shneiderov V.A., p. 69]. Thus, the reconstruction of one of the most heroic scenes of the film — the repair of the blades of the icebreaker screw was shot in expeditionary conditions. Besides, the feature of Shneiderov’s filming can be called the mounting filming — fixing the sequence of frames inside the scenes, as well as scenes inside the film according to advance designed director's plan. And at the final stage, it remained only to carry out the technical editing of the film, i.e., to glue fragments of the film in a certain sequence, providing the film narrative with information titles.

A full analysis of the film “Two Oceans” would be incomplete without considering the cultural and ideological context where the cinematography of the studied period developed. In 1932, the expedition on the icebreaker “Sibiryakov” went to the Arctic Ocean with an ambitious historical task: to pass the Northern sea route from Arkhangelsk to the Far East in one navigation. The entire world community followed the expedition and was interested in its outcome. In this regard, the film group of V.A. Shneiderov had a serious responsibility, i.e., to create a film image of the expedition. Such a project was obviously a state one in form and content. After all, by that time, the general principles of centralized leadership had embraced cinematography: all its plans were

determined by the Organizing Bureau of the Central Committee of the CPSU(b), coordinated with departments and sent for execution in the film organizations. And the political leadership of the country determined not only what is necessary to build, but also how it should be removed [7, p. 189]. The cinematography was established in the program of the party, adopted at the VIII Congress of the CPSU (b) as one of the main educational resources and over time, turned into an important tool of the cultural revolution [8, Lebedev N.A., p. 67]. “The most important of the arts” (expression by V.I. Lenin) i.e., — the cinema was considered a key media and agitation tool for Bolshevik leaders. Therefore, they pointed out the need to start the production of new films, permeated with the communist ideas and reflecting the Soviet reality, with special attention paid to the film chronicle and documentary films: as an effective visual channel designed to “practically show how socialism should be built” [7, p. 185]. The state setting with an emphasis on agitation affected the prime of the special direction of “agitfilms”. In particular, the instructions of the First All-Union Conference on Cinematography contained the norm: “Considering cultural film (popular scientific, ethnographic, educational) one of the powerful means of dissemination and popularization of common and technical knowledge, it is necessary to put its production exemplary; It is necessary to ensure the accessibility of cultural films to the wide audience in its content” [9, p. 449].

The USSR built its cinema to serve the new country, on the one hand, as a “factory of dreams” (feature film), on the other hand, as an industry of “truth” (documentary). And the design of the revolutionary “film truth” (the term by Dziga Vertov) became the main agenda of the entire film industry. Yes, as you know, creative approaches to the creation of official documentaries have been different. Thus, in the mid-1920s there were strong positions of Dziga Vertov and his fellow filmmakers who relied on experiments with the form of the film language: this methodology involved sending agents operators to different parts of the Union for filming cinematic "raw materials", and then mounting from the original materials of its own “cinema-truth” [10, McKay J., p. 41]. But already at the turn of the 1920s — 1930s, under the influence of the departmental will, the revolution of form in cinematography was completely subordinated to the revolutionary content. The establishment in the USSR of the political course on industrialization changed thematic plans of the state order in cinematography. New movie heroes appeared on the screen — builder of unmaintained roads and workers of socialist construction sites — the characters of the next Soviet myth, which was so needed by the party leadership. In these conditions, V.A. Shneiderov built his creative methodology not from the experiment, but from careful preparation of materials, from scientific consultations, from personal experience in expeditionary works. It is no coincidence that he, by that time, the title person in documentalism, had the role of the creator of the film chronicle of Soviet colonization of the Arctic. According to the head of the Arctic campaign of 1932 O.Yu. Schmidt, “it would be wrong to say that in the face of comrade Shneiderov we had only the “movie eye” of the expedition. Comrade Shneiderov is a Bolshevik, one of the most active members of the expedition, and through his entire film the consciousness of the great importance of the cam-

paign, responsibility to the party and the government for the performance of the task passes" [3, Shneiderov V.A., p. 3].

In this film project, V.A. Shneiderov fully confirmed his reputation as a skillful filmmaker and popularizer, laying the foundations for the subsequent implementation of the project of the geographical cinema atlas of the USSR, in its turn reformatted into a known TV program "Club of film travelers". Memoirs of V.A. Shneiderov clearly testify to the ideological position of the main director of the direction of Soviet view (geographical) films: "If, abroad, in bourgeois countries, the view paintings serve the purposes of imperialist propaganda, distorting the reality, presenting it as the capitalists wish to submit it, then in our country these films are telling the truth about the present day of our Motherland, show the beauty and richness of its unseen edges, show the life of Soviet people and the transformation of nature, carried out by them according to the great Stalinist plans" [6, Shneiderov V.A., p. 160]. Released in 1933, qualitatively filmed and genuinely imbued with the pathos of the historical feat of Soviet sailors and researchers, the film "Two Oceans" gained unprecedented popularity in cinema distribution, giving the opportunity to ordinary viewers to make a grand arctic film journey, to share the experience of the difficulties of passing and the joys of conquest of the Northern sea route [8, Lebedev N.A., p. 15].

Thus, the film "Two Oceans" fulfilled its multifaceted task. On the one hand, it became a contribution to the history of science. It was one of the first film documents about the development of the Arctic and the life of its population. On the other hand, it captured the processes of Sovietization of the region: opening and name of new lands, construction of social institutions and economic bases, development of new transport routes and resettlement projects — universal components of construction state community in the USSR at the turn of the 1920s — 1930s [11, Tishkov V.A.]. And his applied methodology of combining techniques of feature and documentary cinema in the course of film creation is relevant for use in the modern expeditionary film making [12, Golovnev, Golovneva; 13, Williams, Golovnev]. At the same time, the distinctive feature of cinema as a means of research is the possibility of capturing and retransmitting not only information about the phenomenon or event but also its multilayer context. As you can see, the documentary "Two Oceans" by V.A. Shneiderov is a complex historical source that reflected not only the dramatic twists of the Arctic expedition on board of "Sibiryakov" along the Northern Sea Route but also the peculiarities of the ideology of its time: because the image of the Soviet ship alone breaking the eternal ice is the obvious hypostasis of the "Revolution" — the quintessence of the official heroic in the USSR.

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On the collective monograph "Ethnonational processes in the Arctic: trends, problems, and prospects" *

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Abstract. The article represents the review of the collective monograph "Ethnonational processes in the Arctic: trends, problems, and prospects." The monograph is an original joint work of researchers at Russian research centers specializing in the study of the Arctic. The researchers focus on ethnonational processes in the context of the socio-economic, socio-political, legal, socio-cultural development of the Arctic territories of Russia. The interdisciplinary nature of the research, the full coverage of ethnonational policies and subregions, the depth of the study, the visualization of the material with tables, charts, graphs, maps determines not only the academic but also the comprehensive nature of the monograph under review.
Keywords: *the Arctic, ethnonational policy, migration, the Arctic zone of the Russian Federation, the Arctic Council.*

The peer-reviewed work is an original collective work of researchers from Russian scientific centers specializing in the study of the Arctic [1]. The Russian Arctic is considered a separate region, where the interdisciplinary approach is applied. The analysis of the political situation in the Russian Arctic is carried out by researchers specializing in the field of historical, sociological, political, economic, and legal sciences.

The subject of research is ethnic and national processes in the context of socio-economic, socio-political, legal, socio-cultural development of Arctic territories of Russia and other states of Europe and America.

The research on Russia partially includes the events of the 18th century (sometimes even earlier periods), but mainly the attention of the authors is focused on the 20th — 21st centuries. The monograph gives a detailed analysis of the history of the development of the northern territories with all their contradictions (chapter 1). In detail, the normative and institutional foundations of the national policy of Russia in the late 20th — early 21st centuries are investigated (chapter 2) in relation to the dynamics of its ethnic and national structure (chapter 3), migration and demogra-

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phy (chapters 4 and 5). Concerning Scandinavia, Finland (chapter 15), the Arctic regions of the USA and Canada (chapter 16), the authors limited themselves to a brief outline of the ethnic and national policy of the 20th century and the beginning of the 21st century. Historical and modern aspects of the research are refracted through the analysis of ethnic and national policy of Russia and other northern states in 2000–2010.

The monograph is distinguished by the verified theoretical and methodological conceptualization, detailed analysis of the concepts and terms. The Introduction defines the interdisciplinary nature of the study, based on a combination of anthropological, historical, and system-structural approaches which help conceptualization and choice of the conceptual thesaurus. The content of the following concepts reveals: “Arctic”, “Arctic states”, “ethnopolitical processes”, “ethnicity”, “ethnopolitical policy of Arctic subjects” and “national policy of the state”, “indigenous peoples”, “demographic”, “migration”, “cultural policy”, and “ethnic situation”. Theoretical research is correlated with the analysis of legal, normative and methodological documents, and political programs of the states.

One of the strengths of the monograph is the study of ethnic and national policy in the Arctic regions in close connection with the natural-territorial (geographical), demographic and migration realities. The authors used extensive databases and statistics from various official sources (population censuses, interdepartmental information, and statistical systems, demographic yearbooks, and other data of federal and territorial state bodies and municipal administration). Official political and legal instruments (UN and ILO conventions, national laws and regulations, draft legislation, state reports, federal and regional targeted programs, concepts, strategies of public policy, reports of ministerial departments, bulletins, and press releases). All this is supplemented by data of corporations and public associations, sample surveys of territories (cities) and complex sociological studies (surveys of employers, research of Russian centers of demoscopy, and author's sociological research). The work correctly uses the data of many scientists, but the main part of the material is obtained by the authors of this monograph, incl. studies supported by scientific funds, as well as obtained in the implementation of scientific programs of academic institutions and universities. Among the subjects influencing the ethnic and national policy of the Russian territories, the authors studied not only the state bodies represented by federal and territorial institutions (legislative, executive, control and supervision), also municipal bodies, enterprises, NGOs, diaspora, cultural and national autonomies.

In the peer-reviewed monograph the ethnonational policy of all 8 subjects of the Russian Federation, incl. territories officially recognized as the Arctic. They are the Murmansk Oblast and the Arkhangelsk Oblast, the republics of Komi and Sakha (Yakutia), the Nenets and the Yamal-Nenets Autonomous districts, Chukotka and the Krasnoyarsk Krai. The state ethnic policy is considered as a combination of three directions (chapter 9):

1) consolidation of all peoples living in the studied territories in the context of the Russian nation formation, the integrity of the Russian state and subjects of the Russian Federation;
2) interaction with migration policy and demographic development of territories;
3) preservation and development of small indigenous peoples of the North in the context of sustainable development of territories of traditional nature use.

All of the above distinguishes the content of the peer-reviewed work from others, e.g., from the fundamental monograph "Russian Arctic: indigenous peoples and industrial development", where the policy of the state is analyzed concerning indigenous peoples and industrial development only in two northern territories of the Russian Federation [2].

The authors of the monograph do not ignore the acute problems of the ethnic and national policy of Russia and foreign states in the Arctic, stemming from the contradictions of traditional nature management and industrial development, indigenous demography and migration exchange, historical memory and modern development, sometimes leading to inter-ethnic conflicts. Based on the positive experience and contradictions, recommendations are given for improving the institutional framework and practice of ethnic and national policy of Russia and its subjects.

Wide coverage of ethnic and national policy and subregions, depth of research, visualization of material with tables, diagrams, graphs, maps determine not only academic but also encyclopedic nature of the peer-reviewed monograph. And this makes it useful for a wide range of researchers (ethnologists, political scientists, sociologists, lawyers, cultural scientists, social geographers, specialists in international relations and regional studies), teachers, students, graduate students and all interested in multi-ethnic regions where people live and work in the unique conditions of the Arctic.

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On scientific approaches to the Arctic boundaries' delimitation*

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Abstract. The article deals with the boundary delimitation of the Arctic and the territories belonging to it. The authors identified political, economic, and other factors influencing the delimitation of the Arctic territories. The approaches of the subarctic countries Canada, the USA, Norway, and Denmark, to the problem of the borders of their Arctic territories are considered. The authors analyze Russian regulatory legal documents, expert assessments, the boundaries of the Arctic zone of the Russian Federation and determine their importance for the socio-economic development of the country. The authors draw attention to the need for Russia to protect its sovereignty in the Arctic.
Keywords: *the Arctic, Russia, the Arctic zone of the Russian Federation, the Arctic space.*

Introduction

The idea of the Arctic as a physical-geographical area, its size, and boundaries has been repeatedly clarified throughout almost the entire 20th century and remains the subject of various studies and discussions [1; 2; 3; 4; 5].

Initially, the term "Arctic" was used for a part of the territory, which includes only the deep-sea Arctic basin, the seas and the islands of the Arctic Ocean, bounded from the south by the isotherm of July 5ºC. Some experts also referred the northern part of the tundra zone (Arctic tundra) and the Arctic deserts to the Arctic. In this case, the Arctic included not only islands with landscapes of Arctic deserts and Arctic tundra but also the periphery of continents with arcttundra landscapes. Later, the Arctic began to be understood as the space occupied by different circumpolar landscapes located north of the border of forests and therefore includes Arctic deserts and all varieties of tundra.

Exhaust grounds for defining the boundaries of the Arctic are several interrelated natural-geographical, socio-economic and political-legal criteria.

The Arctic as a mega-region

In territorial terms, the Arctic is confined to 8 member countries of the Arctic Council (USA, Canada, Norway, Sweden, Finland, Denmark, Iceland, Russia) and occupies 40.3 million square kil-

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ometers. In these countries, more than 530 million people live. Less than 5 million of them — near the Arctic ocean [3, Lukin Yu.F., pp. 77–78].

The Arctic deep-water basin in the central part of the ocean around the North Pole; 10 seas — Greenland, Norwegian, Barents, White, Kara, Laptev, East Siberian, Chukotskoye, Beaufort, Baffin, Fox Basin, numerous straits and bays of the Canadian Arctic Archipelago, and the northern Pacific and Atlantic Oceans. Arctic islands and archipelagos: Vaigach, Wrangel, Greenland, Dixon, Franz Josef Land, Canadian Arctic Archipelago, Queen Elizabeth, New Earth, Novosibirsk, Nordenskiöld, North Earth, Svalbard, etc. [2, Lukin Yu.F., p. 18].

The importance of the Arctic space does not decrease but increases, acquiring even mainly not economically pragmatic essence, but some completely different metaphysical and sacred value. The Arctic region is socially perceived as a reserve green space of the whole world. In the Arctic, people see a global reservoir of clean air, freshwater (it is a third of the world's freshwater reserves), and it is presented as the cleanest territory.

At the end of the twentieth century, the concept of “Arctic” expands, it is defined as “the northern polar region of the Earth, including the outskirts of Eurasia and North America, almost the entire Arctic Ocean with islands (except for the coastal islands of Norway), as well as the adjacent parts of the Atlantic and Pacific Oceans. The southern border of the Arctic coincides with the southern boundary of the tundra zone and its area is about 27 million km^2. Sometimes the Arctic is viewed as limited from the south by the Arctic Circle (66°33' N). In this case its area is 21 million km^2.” In this definition, the southern boundary of the Arctic is not clearly defined.

If the Arctic is limited from the south only by the conventional line of the Arctic Circle (66°33’44" northern latitude), then its area is 21 million km^2. If the southern border of the Arctic coincides with the southern boundary of the tundra zone, in this case, its area is about 27 million km^2, which is 3 times more than the area of Europe [2, Lukin Yu.F., pp. 42, 77, 78].

The Arctic countries, too, have no clear definition of the boundaries of the Arctic. Canada defines its Arctic area as a territory that includes the Yukon watershed, all lands north of 60° N and the coastal area of Hudson Bay and James Bay. The area of polar territories of Canada is 1,430 million km^2.

The current Arctic areas of the United States consists of the US territories north of the Arctic Circle and south of it, incl. the chain of the Aleutian Islands, territories north and west of the border formed by the rivers of Porcupine, Yukon, and Kuskokwim, as well as all adjacent seas, incl. the Beaufort Sea, the Bering Sea, and the Chukchi Sea. The polar area of the United States is 0,126 million km^2.

Norway does not define its Arctic territories in national regulations. But when the Arctic Environment Ministers signed on 13 June 1997 the Arctic Marine Oil and Gas Guidelines determined that for the purposes of the Guidelines, the Arctic territory of Norway are the areas of the Norwegian Sea north of 65º N. The area of the polar possessions of Norway is 0.746 million km^2.

Denmark has included Greenland and the Faroe Islands in its Arctic region. The extension of Danish sovereignty over Greenland was fixed by the decision of the Permanent Court of International Justice in 1933. The polar area of Denmark is 0.372 million km^2.

It should be noted that the uncertainty of the criteria of "Arctic" and its boundaries regularly arises both in the scientific environment and in public administration when it comes to the development of strategic solutions to the problems of the region.

In 1989, State Commission under the Council of Ministers of the USSR for Arctic Affairs fixed its concept as a "single physical-geographical region, which includes (within the polar zone and distribution of year isotherms of July +5ºC) sea waters covered in summer with drifting ice, creating unfavorable conditions for navigation, and land areas where the continuous eternal permafrost there is an ice cover or a forested tundra"[1].

The main criteria for the allocation of the southern boundary of the Arctic were the Arctic Circle, the mid-year isotherm of July +10ºC and permafrost zone. Since these criteria included variable characteristics and did not fully reflect the physical and structural properties of natural objects, these criteria were not widely applied to the identification of the territory of the Arctic.

However, the geographical boundaries of natural objects of the Arctic should have stable contact and barrier functions. The use of political, socio-economic and other subjective criteria for identifying the territory of the Arctic should also be excluded.

The Arctic is a natural economic system and a three-dimensional structure: geographical, economic and political and legal dimensions.

Geographic criteria

The question of defining the boundaries of the Arctic as a polar physical-geographical area remains debatable. The geographical boundaries of the Arctic (the idea of which was repeatedly changed during the 20th century) do not coincide with the administrative and territorial boundaries of the northern territories of the Arctic States. This circumstance creates difficulties in the Arctic identification of natural areas. Accordingly, when preparing strategic planning documents related primarily to the protection of the Arctic environment, this issue becomes relevant [6].

In strategic planning documents, the AZRF is positioned as part of the Arctic. In fact, the AZRF includes territories that extend beyond the natural zones of the Arctic. Land areas of the AZRF are located not only within the Arctic climatic zone, Arctic deserts and polar tundra, which traditionally belong to the Arctic but also within the territories with subarctic climate and landscapes of the northern taiga.

After the decision on the composition of the land territories of the AZRF, par. 2 of the Fundamentals of State Policy of the Russian Federation in the Arctic for the period up to 2020 and fur-

[1] The decision of the State Commission under the Council of Ministers of the USSR on Arctic Affairs of April 22, 1989 Archive of the Ministry of Economic Development of Russia.

ther perspective is a subject to clarification[2]. In this paragraph, it is necessary to clarify that the AZRF is not only a part of the Arctic but also covers the Subarctic zone. The southern administrative-territorial boundary of the AZRF should be defined as the boundary of the historically formed Arctic natural and economic complex, combining sea and land species activities and management. Strategic planning documents should consider the presence of the Arctic and subarctic natural territories and comfort zones within the AZRF. The status of AZRF as a macro-region and the mechanism of coordination of activities (management) in this macro-region are also subject to clarification.

Within the AZRF, we can allocate zones, incl. coastal territory and coastal waters, with the normative legal establishment of the respective powers of the subjects of the Russian Federation in part strategic planning for the development of the coastal territory and coastal waters.

Political and socio-economic criteria

Political and economic criteria for establishing the boundaries of the Arctic are applied for management and definition of economic zones. Based on these criteria, the Arctic zone was determined.

The motivation for the allocation of the Arctic zone was the discovery in the north of the country, in the 1980s, of unique offshore oil and gas fields, the development of which required the creation of large mining centers with the developed infrastructure of transportation and processing of raw materials. The Arctic transport and logistics infrastructure should serve a factor for the economic development of coastal territories. The development of the Arctic transport system, primarily the Northern Sea Route, the creation of large territorial production complexes in the Arctic zone is focused on obtaining economic benefits and socio-economic challenges.

In the Fundamentals of State Policy of the Russian Federation in the Arctic, the Arctic zone of the Russian Federation (AZRF) refers to the part of the Arctic (northern area of the Earth, incl. the deep-sea Arctic basin, shallow coastal seas with islands and adjacent parts of the continental land of Europe, Asia and North America). Within the Arctic there are five Arctic States: Russia, Canada, the United States of America, Norway and Denmark, which have an exclusive economic zone and continental shelf in the Arctic Ocean. In Russia, it includes the territories (or their parts) of the Republic of Sakha (Yakutia), the Murmansk Oblast and the Arkhangelsk Oblast, the Krasnoyarsky Krai, Nenets, Yamal-Nenets and Chukotka autonomous districts, as well as the lands and islands specified in the Resolution of the Presidium of the Central Executive Committee of the USSR dated April 15, 1926 “On the declaration of the territory of the USSR of lands and islands located in the Arctic Ocean” and the surrounding territories, lands and islands in internal sea waters,

[2] Osnovy gosudarstvennoj politiki Rossijskoj Federacii v Arktike na period do 2020 goda i dal'nejshuyu perspektivu [Fundamentals of the state policy of the Russian Federation in the Arctic for the period up to 2020 and beyond]. Approved by the President of the Russian Federation on 18.09.2008 № Pr-1969. [In Russian]

territorial sea, the exclusive economic zone and the continental shelf of the Russian Federation within which Russia has sovereign rights and jurisdiction in accordance with international law[3].

The northern boundary of the AZRF within the maritime spaces is determined by the outer limits of the continental shelf of the Russian Federation and the exclusive economic zone of the Russian Federation, and its southern border is located on the land territory and coincides with the administrative boundary of the respective autonomous districts and municipalities. Clarification and regulatory consolidation of the boundaries of the AZRF are necessary to protect the national interests of the Russian Federation in the Arctic, to implement strategic planning of the development of the Arctic territories, and also to solve current problems of social and economic development, incl. those related to the provision of life within the AZRF, considering the specifics of the region.

The AZRF is positioned in the Spatial Development Strategy of the Russian Federation until 2025, February 13, 2019, not as an economic macro-region, but as a geostrategic territory of nine constituent entities of the Russian Federation [3, pp. 28–29]. This document identifies 12 macro-regions of Russia: Centralnyj, Centralno-Chernozemnyj, Severo-Zapadnyj, Severnyj, YUzhnyj, Severo-Kavkazskij, Volgo-Kamskij, Volgo-Uralskij, Uralsko-Sibirskij, Yuzhno-Sibirskij, Angaro-Enisejskij, Dalnevostochnyj. They include territories of several Arctic regions of the Russian Federation. Their socio-economic conditions require identifying areas, priorities, goals, and objectives of socio-economic development in working out the strategic planning documents [3; 8; 9; 10; 11; 12; 13].

In 2014, the composition of administrative-territorial formations on the land territory of the AZRF was specified[4]. The land territories of the AZRF include the territories of the Murmansk Oblast, the Nenets Autonomous Okrug, the Chukotka Autonomous Okrug, the Yamal-Nenets Autonomous Okrug, Municipalities of Vorkuta (the Komi Republic), “Town of Arkhangelsk”, “Mezensky municipal district”, “Novaya Zemlya”, “Town of Novodvinsk”, “Onega municipal district”, “Primorsky municipal district”, “Severodvinsk” (the Arkhangelsk Oblast), Allaikhovsky ulus (district), Anabar national (Dolgan-Evenky) ulus (district), Bulunsky ulus (district), Nizhnekolymsky district, Ust-Yansky ulus (district) (the Republic of Sakha (Yakutia), urban district of Norilsk, Taimyr Dolgan-Nenets municipal district, Turukhansky district (the Krasnoyarsk Krai), as well as lands and islands located in the Arctic Ocean, specified in the Resolution of the Presidium of the Central Executive Committee of the USSR dated April 15, 1926. “On declaring the territory of the USSR of lands and islands located in the Arctic Ocean” and other acts of the USSR[5].

[3] Osnovy gosudarstvennoj politiki Rossijskoj Federacii v Arktike na period do 2020 goda i dal'nejshuyu perspektivu [Fundamentals of the state policy of the Russian Federation in the Arctic for the period up to 2020 and beyond]. Approved by the President of the Russian Federation on 18.09.2008 № Pr-1969. [In Russian]

[4] «O suhoputnyh territoriyah Arkticheskoj Zony Rossijskoj Federacii» [“On land territories of the Arctic Zone of the Russian Federation”] Decree of the President of the Russian Federation of May 2, 2014, № 296. [In Russian]

[5] Nacionalnyj atlas Arktiki/ Federal service of state registration, cadastre, and cartography. M.: Roscartographiya, 2017. 495 p. Bibliogr.: pp. 492-495. [In Russian]

The composition of land territories of the AZRF was determined considering the following criteria: integrity of natural, economic and management systems, as well as ethno-economic areas of the small indigenous peoples of the North; infrastructure development of coastal territories and facilities for the benefit of marine potential and socio-economic development of administrative entities bordering the sea coast; transport attraction to the Northern sea route [14; 15].

The composition and boundaries of administrative-territorial formations on land territory in certain periods of socio-economic development undergo partial change. In 2017, three municipal districts of the Republic of Karelia — Belomorsky, Lowhsky, and Kemsky were included in the AZRF [16].

In accordance with the decisions of the State Commission for the Development of the Arctic, a federal law "On the development of the Arctic zone of the Russian Federation" is being developed and caused the creation of the ASRF as a part of the Arctic within which the Russian Federation has sovereignty, sovereign rights, and jurisdiction, and includes:

a) the territories (parts of the territory) of the subjects of the Russian Federation, as defined by the Decree of the President of the Russian Federation of May 2, 2014, № 296;
b) all open and able to be opened lands and islands located in the Arctic Ocean north of the coast of the Russian Federation to the North Pole and located in the limits of spaces delineated by lines secured by international treaties of the Russian Federation and the legislation of the Russian Federation;
c) internal waters and territorial sea of the Russian Federation adjacent to the territories specified in sub-paragraphs "a" and "b";
d) the exclusive economic zone and continental shelf of the Russian Federation within the limits of sovereign rights and jurisdiction of the Russian Federation;
e) airspace over the territories and waters listed in sub-paragraphs "a — d".

I would like to note that now there is an incomplete process of delimitation of marine spaces of the Arctic Ocean. It is particularly true for the continental shelf, where significant potential hydrocarbon reserves are concentrated.

In accordance with the current legal acts, sea and land boundaries of the AZRF may be specified depending on the status of the territory, legal regime, socio-economic feasibility and the powers of different levels of government.

According to the authors, political and economic purposes of the development of the Russian Federation require that the main criterion of assigning the territory to the AZRF should if the subject of the Russian Federation or its separate municipal districts are linked to the seas of the Arctic Ocean.

Concentrated and balanced development of the Northern Sea Route, the coastal marine spaces of the Arctic Ocean and the AZRF could give additional economic impetus to the development of the North of our country.

Legal criteria

There is no single international treaty defining the legal status of the Arctic. Regulation is carried out by international law, national legislation of the Arctic States and bilateral agreements.

The following territories are distinguished by the types of the legal regime in the Arctic: state territory; territory with the international regime; territory with the mixed regime.

State territory is the territory that is under the sovereignty of a particular state, i.e., belongs to a specific country, carrying out its territorial supremacy within its limits.

The territory under the international regime includes terrestrial areas outside the state territory which do not belong to anyone separately but are shared by all states in accordance with international law (the high seas, the airspace above it and the deep seabed beyond the continental shelf). The international legal regime of the high seas is governed by international treaties and international legal customs that regulate the relations of states with respect to the high seas and establish rules for its use for navigation, fishing, etc.

The territories with a mixed regime include the continental shelf and the economic zone. These areas are not under the sovereignty of states and are not part of State territories, but each coastal State has sovereign rights to explore and exploit natural resources the adjacent continental shelf and the maritime economic zone, as well as the protection of the natural environment of those areas. The scope of these rights is determined by international law, in particular, the Convention on the Continental Shelf (1958) and the UN Convention on the Law of the Sea (1982). Within the limits of these rights, each state shall issue its own laws and regulations governing these activities. Otherwise, the principles and rules of international law of the sea apply to the continental shelf and in the economic zone.

It should be noted that some Arctic countries, like the United States, have not ratified the UN Convention on the Law of the Sea and it creates practical difficulties in the implementation of these principles.

The definition of the Arctic border largely depends on scientific specialization and political conjuncture. Often confusion arises because of the unclear use of concepts “Arctic”, “Arctic region”, “Far North”, etc. Professor of Social Anthropology Mark Nuttall (University of Alberta, Canada), who completed anthropological research and fieldwork in Greenland, Canada, Finland, Alaska, correctly and accurately noticed: “No way to define the Arctic is satisfactory for all purposes, and most often practical definition becomes necessary for research projects, reports, assessments, scientific monographs, university, and college courses to determine and distinguish between the physical, environmental, political, social and cultural processes to be covered.[6]”

Russia submitted applications for the expansion of its Arctic shelf in 2001 and 2015 to the UN Commission after a special scientific research. The study of the application began in August 2016, and the decision is expected to be taken within 2-4 years. In addition to Russia, in 2013, the application for the expansion of the continental shelf in the Arctic Ocean was filed by Canada. At the same time, Canadian representatives reported about the plans to claim a part of the seabed

[6] Encyclopedia of the Arctic. Volume 1 A—F. Mark Nuttall, Editor. Routledge New York and London, 2005.

beyond 200 miles exclusive economic zone. Denmark filed several applications, the last one in 2014.

In our view, in the face of the sharp deterioration of the current international situation, a favorable decision on this issue is unlikely possible. And if it does, it will significantly reduce our intentions in the expansion of the Arctic shelf. It is also necessary to prepare for such a situation.

In these circumstances, the primary task for Russia is to prevent conflicts in the region. It is important to do for preservation and expansion of Russia's sovereignty in the Arctic, for further study, exploration, extraction, and use of the riches of the northern territories our country. To protect its national interests, Russia should make every effort to develop the Arctic infrastructure to expand its influence in the Arctic. It will strengthen the position of the Russian Federation and contain the "struggle for the Arctic" in the framework of diplomatic cooperation within the UN and various forums, and it is in the interests of all humanity.

The current need, according to Doctor of Economics, Professor N.D. Yeletsky, is to overcome the negative attitudes that have emerged in recent decades to refuse to protect the Russian Federation sovereignty over significant waters of the northern seas — installations inevitably associated with the attendant weakening of geopolitical positions, international authority, as well as tangible economic losses [17].

Russia's recognition of the fundamental provisions of the UN Convention on the Law of the Sea means a radical change in the legal status of territories previously defined as "polar possession", and ratification of this convention in 1997 led to the official loss of sovereignty over 1.7 million km^2 of previously Russian Arctic waters. It is significant that the US has not signed this Convention.

Today speaking about Russia's ratification of the UN Convention on the Law of the Sea, we see that, based on this Convention, many states, and primarily the US, want to "internationalize" the Arctic region and it is not in the interests of Russia. And therefore, the statement of Arthur Chilingarov, the special representative of the President of the Russian Federation for international cooperation in the Arctic and Antarctica, is understandable: "I would like to say that there are different views on the convention (the UN Convention on the Law of the Sea, 1982), but the common view is that we may have rushed to ratify it[7]." As it was rightly noted by the senior researcher of IMEMO RAS E. Labetskaya: "Russia's ratification of the Convention in 1997 and its official submission of the application in 2001 to the relevant UN Commission to determine the outer limits of its continental shelf de-facto undermined the "sectoral regime"[18].

In these circumstances, it is necessary, in our view, to recognize the mistakes that have been made. The legislative and executive authorities begin to correct them and minimize their negative consequences. According to the member of the Federation Council, Chairman of the Arc-

[7] Chilingarov A.N. Problemy i perspektivy effektivnogo osvoeniya i razvitiya Arkticheskoj zony i prilegayushchih regionov Rossii [Problems and prospects of effective development and development of the Arctic zone and adjacent regions of Russia]: Proceedings of the meeting of the "Mercury Club" October 8, 2014 [In Russian]

tic and Antarctic Council of the Federation V.A. Shtyrov: “the best option for Russia would be an agreement on the return to the sectoral division of the Arctic and the securing the status of historical waters over the seas: Laptev, Kara, East Siberian and a part of Chukotka (from the island of Wrangel to the Bering Strait)” [19].

Conclusion

The definition of the AZRF boundaries was an objective necessity and required considerable long-term work of the state authorities of Russia, as well as representatives of science. It is important for defining and clarifying the policy of the state in the Arctic territories. The Russian approach to defining borders is, in the opinion of the authors, the most acceptable, corresponding to the current stage of development of the Arctic region. In the future, depending on climatic and other conditions, incl. the identification of areas of development support zones, they may be modified in order to address economic, social and environmental problems of the ASRF and the implementation of a more effective state regional policy. Structuring these boundaries will require the use of modern techniques, incl. modeling, synthesis of knowledge and modern practices, considering national interests and values in domestic and foreign policy, tasks of ensuring the security of Russia in the Arctic.

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SUMMARY

Authors, titles, abstracts, and keywords

SOCIAL AND ECONOMIC DEVELOPMENT

ЗАЙКОВ К.С., КОНДРАТОВ Н.А., КУДРЯШОВА Е.В., ЛИПИНА С.А., ЧИСТОБАЕВ А.И. Сценарии развития арктического региона (2020–2035 гг.)

ZAIKOV K.S., KONDRATOV N.A., KUDRYASHOVA E.V., LIPINA S.A., CHISTOBAEV A.I. Scenarios for the development of the Arctic region (2020–2035)

Аннотация. Важность выбора развития Арктики представляется актуальной, поскольку в этом регионе происходят стремительные и необратимые перемены, яркими примерами которых являются изменение климата и глобализация. Комплекс факторов оказывает как положительное, так и отрицательное влияние на природопользование и позиционирование многих государств, расположенных не только внутри арктической зоны, а также и вне её. Возникают вопросы: какое значение эти перемены имеют для географии, политики и системы управления? Как должно строиться осмысление этих процессов? Актуальность выбранной темы усиливается тем, что Россия имеет самый большой арктический сектор среди государств, имеющих выход к Северному Ледовитому океану, поэтому нашей стране принадлежит ведущая роль разработчика стратегий развития Арктики. Используемый в статье комплексный (с учётом экономико- и политико-географических позиций) подход к анализу направлений развития арктических территорий раскрывает возможности их устойчивого развития, что обеспечит стратегические выгоды для России как в рамках арктической зоны, так и в глобальном пространстве. В статье рассматриваются сценарии развития Арктики, в том числе Арктической зоны РФ, в долгосрочной, до 2035 г., перспективе. Обоснование сверхдолгосрочных перспектив развития арктического региона, несмотря на проводимые в России и зарубежом исследования, представляется малореалистичным по причине нехватки знаний о природе и последствиях климатических изменений, наблюдаемых в настоящее время в этом регионе и оказывающих влияние на природопользование в глобальном масштабе. Авторы приходят к выводу, что приоритетными направлениями развития Арктики должны стать те, которые опираются на позитивные и инновационные тренды.

Ключевые слова: *Арктика, стратегии развития, изменение климата, геополитика, социально-экологические системы, инновации.*

Abstract. The importance of selecting the development of the Arctic seems to be relevant since rapid and irreversible changes are taking place there. Climate change and globalization are their prominent examples. A complex of factors has both positive and negative impacts on the use of natural resources and the positioning of states located not only within the Arctic but also outside it. The questions arise: what is the significance of these changes for geography, politics, and the management system? How should the comprehension of these processes be built? The relevance of the topic is enhanced by the fact that Russia has the most significant Arctic sector among the states with access to the Arctic Ocean. Therefore, our country has a leading role in working out strategies for the development of the Arctic. The comprehensive approach (considering the economic and political-geographical positions) is central in the article to analyze the directions of development of the Arctic territories. The method reveals the possibilities of sustainable development, which will provide Russia with strategic benefits within the Arctic and globally. The article discusses scenarios for the development of the Arctic, including the Arctic zone of the Russian Federation, in the long-term perspective (until 2035). Substantiation of the long-term prospects for the development of the Arctic, despite Russian and foreign research, seems to be unrealistic due to lack of knowledge about the nature and consequences of climatic changes currently observed in this region and affecting global environmental management. The authors concluded that the priority directions of the Arctic development should be the ones based on positive and innovative trends.

Keywords: *the Arctic, development strategies, climate change, geopolitics, socio-ecological systems, innovation*.

ИВАНОВ В.А. Условия и возможности реализации потенциала сельского хозяйства зоны Севера

IVANOV V.A. Conditions and opportunities to realize the agricultural potential of the North

Аннотация. В статье показана роль аграрного сектора зоны Севера в обеспечении населения свежими продуктами питания, сохранении коренными этносами исторического уклада жизни, устойчивом развитии северных территорий, обеспечении продовольственного суверенитета страны. Рассмотрена организация сельского хозяйства на северных и арктических территориях Скандинавии, Канады и Аляски и возможность её использования на Российском Севере с учётом собственного богатого исторического опыта. Обобщение практики ведения сельского хозяйства в зарубежных северных странах позволяет рекомендовать для Европейского Севера скандинавский путь развития аграрной сферы и, прежде всего, опыт Финляндии. Установлено, что канадская модель развития сельского хозяйства малопригодна для Российского Севера, так как она рассчитана на редконаселённые территории. В работе выявлены возможности и ограничения развития сельского хозяйства зоны Севера. В качестве предпосылок для социально-экономического развития аграрной сферы выступают наличие природных и трудовых ресурсов, возможность организации органического (экологического) производства продукции традиционных отраслей, индустриальный характер экономики, позволяющий направлять значительные финансовые ресурсы для модернизации отрасли и комплексного развития сельских территорий. В работе выявлены возможности и ограничения развития сельского хозяйства зоны Севера. Установлены сдерживающие факторы развития сельского хозяйства и продовольственного самообеспечения, связанные с экстремальными природными условиями, низкой обеспеченностью биологическими ресурсами, неудовлетворительным состоянием материально-технической базы аграрной сферы, дефицитом и низким профессионально-квалифицированным уровнем и качеством жизни крестьян, неблагоприятной внешней средой, неэффективными механизмами господдержки, недоступностью льготного кредита, неустойчивым сбытом аграрной продукции. Выявлены изменения в сельском хозяйстве северных территорий в результате Всероссийских сельскохозяйственных переписей 2006 и 2016 гг. Результаты исследования послужат основой для обоснования концептуальных подходов к развитию аграрного производства и повышения уровня продовольственного самообеспечения проживающего здесь населения.

Abstract. The article shows the role of the agricultural sector of the North in providing the population with fresh food products, preserving the traditional way of life of the indigenous ethnic groups, sustainable development of the northern territories, and ensuring the country's food security. The organization of agriculture in the north and Arctic territories of Scandinavia, Canada and Alaska and the possibility of its use in the Russian North, considering its own rich historical experience, is discussed in the article. The generalization of agricultural practices in northern countries allows us to recommend the Scandinavian development of agriculture and, above all, the experience of Finland for the European North of Russia. Canadian model of agricultural development is of little use for the Russian North since it was designed for sparsely populated territories. The study revealed the possibilities and limitations of the development of agriculture in the North. The critical points for the socio-economic development in the agrarian sector are the availability of natural and labor resources, the possibility of organizing organic (ecological) production within the traditional industries, the industrial nature of the economy that directs significant financial resources for the industrial modernization and the integrated development of rural areas. The study also revealed the possibilities and limitations of the agricultural development of the North. The constraints of agricultural development and food self-sufficiency are explicit. They are related to extreme natural conditions, low availability of biological resources, the poor technical support of the agrarian sector, low-qualified employees and hard living conditions of peasants, unfavorable external environment, inefficient state support, unavailability of loans, and unsustainable sales of agricultural products. The changes in the agriculture of the northern territories after the All-Russian Agricultural Censuses 2006 and 2016 revealed. The results of the study serve the ground for substantiating conceptual approaches to the development of agricultural production and increasing the level of food self-sufficiency of the local population.

Ключевые слова: *сельское хозяйство, зарубежные северные страны, возможности и ограничения развития аграрной сферы, Всероссийская сельскохозяйственная перепись, формы хозяйствования, ресурсный потенциал, инфраструктура, инновационные технологии, зона Севера.*

Keywords: *agriculture, foreign northern countries, opportunities and constraints on the agricultural development, All-Russian Agricultural Census, forms of economic management, resource potential, infrastructure, innovative technologies, the North.*

МИНЕЕВ А.А. Развитие регионального бизнес-сотрудничества: опыт Северной Норвегии и возможности его применения в России

MINEEV A.A. Development of regional business cooperation: experience of the Northern Norway and how it can be applied to Russia

Аннотация. Северные регионы Норвегии и России имеют схожую проблематику: новые мегапроекты по развитию нефтегазовых месторождений и объектов инфраструктуры представляют собой не только возможность, но и проблему для развития средних и малых предприятий местной промышленности. Чтобы подключиться к проектам, региональным предприятиям необходимо повышать свои компетенции и находить возможности группового взаимодействия. В статье представлены результаты исследования процесса формирования регионального бизнес-альянса в Северной Норвегии, проведён анализ возможности применения северо-норвежского опыта в России. Показано, что хотя с теоретической точки зрения это представляется затруднительным, предпосылки для удачного применения изученного опыта существуют в Архангельской и Мурманской областях. В этих регионах успешно функционируют бизнес-ассоциации, которые были построены с учётом Норвежского опыта, но с активным участием местной промышленности и органов власти, а также принимая во внимание региональную специфику, ценности и традиции. Это представляет собой мощный фундамент для дальнейшего формирования кооперационных форм бизнес-сотрудничества. В статье сформулированы практические рекомендации для формирования таких форм сотрудничества. В частности, предлагается принимать во внимание следующее: квалификация координатора, государственно-частная схема финансирования, открытость и интегрированность проекта, первичность технологической и вторичность юридической идеи построения сотрудничества.

Ключевые слова: *кооперация, бизнес-сотрудничество, региональные предприятия, Северные регионы, Норвегия, Россия.*

Abstract. The northern regions of Norway and Russia have similar issues: new mega-projects for the development of oil and gas fields and infrastructure are not only an opportunity but also a challenge for the development of regional small and medium-size enterprises. To connect to projects, regional enterprises need to increase their competencies and find opportunities for cooperation with each other. The article presents the results of a study of the formation of a regional business alliance in Northern Norway. Further, it offers an analysis of the possibility of applying the North Norwegian experience to Russia. It is concluded that, although from a theoretical point of view, this is difficult, the prerequisites for the successful application of the studied experience exist in the Arkhangelsk Oblast and the Murmansk Oblast. Two business associations are successfully operating there. They were built considering the Norwegian experience, but with the active participation of local industry and authorities, as well as accounting regional specifics, values, and traditions. It is a powerful foundation for the further development of business cooperation. The article contains several recommendations for such forms of collaboration. It is proposed to pay attention to the following: qualification of the coordinator, public-private financing scheme, openness and integration of the project, primary importance of technological cooperation idea and secondary significance of the legal form to be chosen.

Keywords: *Business cooperation, regional businesses, High North, Norway, Russia.*

POLITICAL PROCESSES AND INSTITUTIONS

ВОРОНЕНКО А.Л., ГРЕЙЗИК С.В. Перспективы сотрудничества России со странами Северо-Восточной Азии в Арктическом регионе

VORONENKO A.L., GREIZIK S.V. Prospects of cooperation between Russia and North-East Asian countries in the Arctic region

Аннотация. В условиях значительного повышения внимания мирового сообщества к Арктике, а также интенсивного развития технологий по её изучению и освоению, всё большую актуальность приобретает сотрудничество в этом регионе между различными странами. В данной статье рассмотрена история и современное состояние взаимодействия на территории Арктического региона между Россией (и её предшественником СССР) со странами Северо-Восточной Азии (СВА) — Китаем, Японией и Республикой Корея. В статье отмечены факты повышающегося научного и практического интереса со стороны стран СВА к изучению Арктики, проанализированы заинтересованность и основные устремления указанных стран к сотрудничеству с Россией. Также рассмотрены основные внутренние законы и нормативные акты, регламентирующие их деятельность в Арктике. В результате делается вывод о высокой перспективности сотрудничества стран Северо-Восточной Азии с Россией, приводятся основные направления возможного взаимодействия в регионе, выделяется особое положение Дальнего Востока РФ как одного из основных связующих звеньев.

Ключевые слова: *Арктический регион, Северо-Восточная Азия (СВА), Северный морской путь (СМП), Арктическая зона РФ (АЗРФ), инициатива «Один Пояс — Один Путь», Дальний Восток РФ, территории опережающего социально-экономического развития (ТОСЭР).*

Abstract. Significant increase in global attention to the Arctic, as well as the intensive development of technologies for its study, makes the cooperation between various countries increasingly important. The article discusses the history and current interaction in the Arctic region between Russia (and its predecessor, the USSR) with North-East Asia (NEA) — China, Japan, and the Republic of Korea. The author noted the increasing scientific and practical interest of the NEA countries to study the Arctic, analyzed it and main aspirations of these countries to cooperate with Russia. Also, the author reviewed the most significant internal laws and regulations governing their activities in the Arctic. It was concluded that the high prospects for cooperation between the countries of Northeast Asia and Russia occur. Main directions of possible interaction in the region are presented in the article along with the highlighted unique position of the Russian Far East as one of the critical links.

Keywords: *the Arctic region, North-East Asia (NEA), the Northern Sea Route (NSR), the Arctic zone of the Russian Federation (AZRF), Initiative "One Belt — One Road," the Far East of the Russian Federation, Territory of Advanced Socio-Economic Development (TASED).*

ЕМЕЛЬЯНОВА Е.Е. Системные проблемы и направления развития муниципалитетов российской Арктики

EMELYANOVA E.E. System problems and directions of municipal development of the Russian Arctic

Аннотация. Предметом исследования являются муниципальные образования Арктики, имеющие свою специфику функционирования и развития в сравнении с южными районами арктических государств. Цель работы заключалась в выявлении проблемных точек развития арктических регионов, оказывающих воздействие на социально-экономическое положение муниципалитетов Арктики, перспектив и направлений их развития. Теоретико-методологическую основу составили труды отечественных и зарубежных ученых, посвященные вопросам регулирования и стимулирования социально-экономического развития регионов и муниципалитетов Арктики. Исследо-

Abstract. The subject of the study is the municipalities of the Arctic, their specifics of functioning and development in comparison with the southern regions of the Arctic states. The purpose of the work was to identify problem areas of regional development that affects the socio-economic situation of the Arctic municipalities, prospects, and directions of their development. The theoretical and methodological basis consisted of the works of Russian and foreign scientists on regulating and stimulating the socio-economic development of the territories and municipalities of the Arctic. The study grounds on an integrated approach to the functioning and development of municipalities in the specific conditions

вание основано на комплексном подходе к изучению вопросов функционирования и развития муниципальных образований в специфичных условиях Арктики, а также общих и особенных факторов развития данных процессов в АЗРФ с учётом зарубежных исследований по проблематике. Анализ основных показателей, характеризующих социально-экономическое положение арктических территорий, показал, что для всех арктических территорий характерен ряд общих проблем развития муниципалитетов, а основные силы государственного регулирования должны быть направлены на решение вопросов развития человеческого потенциала, социальной и транспортной инфраструктуры, малого предпринимательства и особой государственной поддержки арктических территорий. Государственная политика по минимизации негативных процессов и факторов функционирования муниципалитетов АЗРФ должна строиться с учётом зарубежного опыта решения подобных вопросов. Результаты исследования могут быть использованы органами власти и управления при разработке бюджетной, налоговой, инвестиционной политики, при формировании программ и планов, направленных на социально-экономическое развитие арктических территорий.

Ключевые слова: *Арктическая зона, муниципальные образования, социально-экономическое развитие, инвестиционная деятельность.*

of the Arctic, as well as general and specific factors for the growth in the Russian Arctic, considering international research. An analysis of the leading indicators of the socio-economic situation of the Arctic territories showed several common problems for the development of municipalities. The main forces of state regulation should be aimed at solving the issues of human development, social and transport infrastructure and require the approval and state support of the Arctic territories. Government policies to minimize negative processes and factors for the municipalities of the Russian Arctic should base on international experience. Authorities and management can use the results of the study for the development of fiscal, tax, investment policy, programs, and plans for the socio-economic development of the Arctic territories.

Keywords: *the Arctic zone, municipalities, socio-economic development, investment activity.*

NORTHERN AND ARCTIC SOCIETIES

КВАШНИН Ю.Н. «Сие семейство отыскано и теперь находится в Обдорской волости…» (размышления над списком самоедов Берёзовского округа 1832 года)
KVASHNIN Yu.N. “This family has been found and is now located in Obdorsk region…” (reflections on the list of Samoyeds of Berezovsky district in 1832)

Аннотация. В статье подробно рассмотрен список «самоедов», составленный в 1832 г. тобольским миссионером иеромонахом Макарием. Родовые названия и фамилии, указанные там, показывают, что они относились к европейским, приуральским и сибирским тундровым ненцам и не случайно оказались в одном списке. Это была небольшая часть «войкарской самояди», обособленной территориальной группы ненецкого этноса, кочевавшей в XVII–XIX вв. по обеим сторонам Приполярного Урала. На основе сведений из «Списка», обобщения материалов из архивных документов и работ учёных и путешественников XVIII–XX вв. удалось выдвинуть обоснованные предположения и уточнения о происхождении некоторых ненецких родов и патронимий, местах

Abstract. The article details the list of “Samoyeds”, compiled in 1832 by Tobolsk missionary Hieromonk Makarii. The generic names and surnames indicated there show that they belonged to the European, Ural and Siberian tundra Nenets, and it was not by chance that they were on the same list. It was a small group from the “Vojkar Samoyeds”, a separate territorial group of the Nenets ethnos, wandering in the XVII-XIX centuries on both sides of the Subpolar Urals. On the basis of information from the “List”, generalization of materials from archival documents and works of researchers and travelers of the 18th-20th centuries, it was possible to put forward several reasonable assumptions and clarifications about the origin of some Nenets families and patronyms, places of their settlement and marital relations. In

их расселения и брачных связях. Кроме этого, впервые удалось отыскать сведения о составителе «Списка», его жизни и деятельности задолго до миссионерской поездки на север Берёзовского округа.

Ключевые слова: *иеромонах Макарий, ненцы, миссия, крещение, войкарская самоядь, роды, патронимии, происхождение.*

addition, for the first time, it was possible to find information about the compiler of the “List”, its life and activities long before the missionary trip to the north of the Berezovsky department.

Keywords: *hieromonk Makarii, Nenets, mission, christening, Voykarsky Samoyeds, clans, patronymy, origin.*

ПАНИКАР М.М., СОКОЛОВА Ф.Х., ШАПАРОВ А.Е., ЗОЛОТАРЕВ О.В., КАПИЦЫН В.М. Механизмы интеграции иммигрантов в Норвегии и России: сравнительный анализ

PANIKAR M.M., SOKOLOVA F.Kh., SHAPAROV A.E., ZOLOTAREV O.V., KAPITSYN V.M. Integration mechanisms for immigrants in Norway and Russia: a comparative analysis

Аннотация. Важным компонентом в структуре иммиграционной политики развитых стран выступает интеграция мигрантов. Политика интеграции мигрантов направлена на решение проблем адаптации, инкультурации, трудовой мобильности, натурализации, политического участия. Интеграция представляет собой реципрокный процесс, который предполагает взаимодействие мигрантов и принимающего общества. Политика интеграции направлена на формирование у мигрантов качеств и компетенций, позволяющих им участвовать в экономической, социальной, политической и духовной сферах общества страны-реципиента. Провалы политики интеграции неизбежно повышают конфликтогенный потенциал принимающего общества, ведут к социальной эксклюзии, маргинализации мигрантов и росту ксенофобии. Статья посвящена сравнительному анализу политики интеграции двух северных стран — Норвегии и России. Норвегия имеет большой опыт реализации политики интеграции мигрантов, занимает лидирующие позиции в индексе интеграции мигрантов MIPEX. Россия, хотя и обладает большим опытом инкорпорации различных этносов в состав национального государства, однако решение проблем интеграции и адаптации мигрантов долгое время игнорировались государством. Цель исследования: проанализировать национальные модели и практики интеграции и адаптации мигрантов. Методология исследования основана на использовании методов демографии, социологии, политологии, права, миграционной статистики. Для сравнительного анализа иммиграционных политик Норвегии и России использован комплекс индикаторов, отражающих качество и состояние политики интеграции мигрантов, MIPEX (рынок труда, воссоединение семей, долгосрочное пребывание, политическое участие, защита от дискриминации, натурализация). Сделан вывод, что

Abstract. An essential component in the structure of the immigration policy of developed countries is the integration of migrants. The integration policy for migrants is aimed at solving the issues of adaptation, inculturation, labor mobility, naturalization, and political participation. Integration is a reciprocal process which involves the interaction of migrants and the host society. The integration policy goal is the formation of migrants' qualities and competencies that allow them to participate in the economic, social, political, and spiritual spheres of the recipient country. The failure of integration policies inevitably increases the conflict potential of the host society, leads to social exclusion, marginalization of migrants, and an increase in xenophobia. The article is devoted to the comparative analysis of the integration policy of the two Northern states — Norway and Russia. Norway has extensive experience in implementing the integration policy, occupies a leading position in the index of integration of migrants MIPEX. Russia has extensive experience in the incorporation of various ethnic groups into a national state, but the state has long ignored the solution of issues of integration and adaptation of migrant issues. The study aims to analyze national models and practices of integration and adaptation of migrants. The research methodology is linked to the methods of demography, sociology, political science, law, and statistics. For the comparative analysis of the immigration policies of Norway and Russia, a set of indicators reflecting the quality and status of the integration policy, MIPEX (labor market, family reunification, long-term stay, political participation, protection against discrimination, naturalization) was applied. It is concluded that the policy of integration in Russia should have different objects of regulation, be differentiated by goals and objectives.

политика интеграции мигрантов в России должна иметь различные объекты регулирования, быть дифференцирована по целям и задачам.

Ключевые слова: *иммиграционная политика, интеграция мигрантов, натурализация, Россия, Норвегия.*

Keywords: *immigration policy, integration of migrants, naturalization, Russia, Norway.*

REVIEWS AND REPORTS

ГОЛОВНЕВ И.А. Арктика в объективе советского кино: «Два океана» Владимира Шнейдерова
GOLOVNEV I.A. The Arctic in the Soviet cinema lens: “Two Oceans” by Vladimir Shneiderov

Аннотация. Исследование направлено на введение в научный оборот неизученных материалов — кинодокументов советского периода, связанных с освоением российского Севера. Особое место в истории советской визуальной антропологии занимало направление так называемых экспедиционных фильмов — киноработ просветительского содержания о народах и территориях СССР, — достигшее своего расцвета на рубеже 1920-х — 1930-х гг. Одним из первопроходцев этого направления по праву считается режиссёр В.А. Шнейдеров, автор серии фильмов о территориях Советского Союза («Великий перелёт», «Памир (подножие смерти)», «На высоте 4500» и др.). Помимо решения творческих задач, производство таких фильмов являлось частью государственного эксперимента по конструированию образов регионов и страны в целом. Советская власть использовала ресурсы кинематографа как средство массовой информации и агитации. В данной статье на примере экспедиционного фильма «Два океана» классика документального кино В.А. Шнейдерова показана история покорения Северного морского пути и советской колонизации Арктики. В качестве контекста, в котором происходило создание фильма, рассматриваются параллельные процессы в советской культурной политике и кинематографе. Делается вывод об исследовательской ценности советского экспедиционного кино как комплексного исторического источника.

Ключевые слова: *Арктика, советское кино, Владимир Шнейдеров.*

Abstract. The study aims at introducing unstudied materials, i.e., film documents of the Soviet period, related to the development of the Russian North, into the scientific circulation. So-called expedition films occupied a special place in the history of Soviet visual anthropology — films of educational content about the peoples and territories of the USSR. They reached its heyday at the turn of the 1920s — 1930s. One of the pioneers of Soviet visual anthropology is considered to be the filmmaker V.A. Shneiderov, the author of a series of films about the USSR territories (“The Great Flight”, “The Pamirs (the bottom of death)”, “At the height of 4500”, etc.). In addition to solving creative issues, the production of such films was part of a state experiment on the construction of local images and the country. The Soviet authorities used the resources of the cinematographer as a media source and agitation. In this article, the author considers the example of the expedition film “Two Oceans”, the classic of documentary films where V.A. Shneiderov pictured the history of the Northern Sea Route and the Soviet colonization of the Arctic. The context of the filmmaking, i.e., parallel processes in Soviet cultural politics and cinema, is discussed as well. The author conclusions contain thoughts about the research value of the Soviet expeditionary film as a complex historical source.

Keywords: *the Arctic, Soviet film, Vladimir Shneiderov.*

КАПИЦЫН В.М., ШАПАРОВ А.Е., КОВАЛЕНКО В.И., МАГОМЕДОВ А.К. О коллективной монографии «Этнонациональные процессы в Арктике: тенденции, проблемы, перспективы»
KAPITSYN V.M., SHAPAROV A.E., KOVALENKO V.I., MAGOMEDOV A.K. On the collective monograph “Ethnonational processes in the Arctic: trends, problems, and prospects”

Аннотация. Рецензия на коллективную монографию «Этнонациональные процессы в Арктике: тенденции, проблемы, перспективы». Рецензируемая монография представляет собой фундаментальный коллективный труд исследователей

Abstract. The article represents the review of the collective monograph "Ethnonational processes in the Arctic: trends, problems, and prospects." The monograph is an original joint work of researchers at Russian research centers specializing in the study

российских научных центров, специализирующихся на изучении Арктики. В фокусе исследователей этнонациональные процессы в контексте социально-экономического, социально-политического, правового, социокультурного развития арктических регионов России. Междисциплинарный характер исследования, широкий охват аспектов этнонациональной политики и субрегионов, глубина исследования проблем, визуализация материала с помощью таблиц, диаграмм, графиков, карт определяет не только академический, но и энциклопедический характер рецензируемой монографии.

Ключевые слова: *Арктика, этнонациональная политика, миграция, Арктическая зона РФ, Арктический Совет.*

of the Arctic. The researchers focus on ethnonational processes in the context of the socio-economic, socio-political, legal, socio-cultural development of the Arctic territories of Russia. The interdisciplinary nature of the research, the full coverage of ethnonational policies and subregions, the depth of the study, the visualization of the material with tables, charts, graphs, maps determines not only the academic but also the comprehensive nature of the monograph under review.

Keywords: *the Arctic, ethnonational policy, migration, the Arctic zone of the Russian Federation, the Arctic Council.*

КОЧЕМАСОВА Е.Ю., ЖУРАВЕЛЬ В.П., СЕДОВА Н.Б. О некоторых научных подходах к определению границ Арктики

KOCHEMASOVA E.Yu., ZHURAVEL V.P., SEDOVA N.B. On scientific approaches to the Arctic boundaries' delimitation

Аннотация. В статье рассмотрена проблема определения границ Арктики и территорий, относящихся к ней. Авторами определены политические, экономические и иные факторы, влияющие на определение территорий, относящихся к Арктике. Рассмотрены подходы приарктических стран, в частности, Канады, США, Норвегии и Дании, к проблеме границ их арктических территорий. На основе отечественных нормативных правовых документов, оценок экспертов определены границы Арктической зоны РФ, их значение для социально-экономического развития страны. Авторы обращают внимание на необходимость защиты Россией своего суверенитета в Арктике.

Ключевые слова: *Арктика, Россия, Арктическая зона РФ, арктическое пространство.*

Abstract. The article deals with the boundary delimitation of the Arctic and the territories belonging to it. The authors identified political, economic, and other factors influencing the delimitation of the Arctic territories. The approaches of the subarctic countries Canada, the USA, Norway, and Denmark, to the problem of the borders of their Arctic territories are considered. The authors analyze Russian regulatory legal documents, expert assessments, the boundaries of the Arctic zone of the Russian Federation and determine their importance for the socio-economic development of the country. The authors draw attention to the need for Russia to protect its sovereignty in the Arctic.

Keywords: *the Arctic, Russia, the Arctic zone of the Russian Federation, the Arctic space.*

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