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Transformation of the Socio-Economic Space of the Russian Arctic in the Context of Geopolitics, Macroeconomics, and Internal Factors of Development *

© **Tatiana P. SKUFINA**, Doc. Sci. (Econ.), Professor, Chief Researcher

E-mail: skufina@gmail.com

Luzin Institute for Economic Studies, Apatity, Russia

© **Marina N. MITROSHINA**, Postgraduate

E-mail: fridma@mail.ru

Luzin Institute for Economic Studies, Apatity, Russia

Abstract. The purpose of the article is to review scientific ideas about the transformation of the Russian Arctic's socio-economic space in the context of geopolitics, macroeconomics, and intraregional factors of development. This review's significance is determined by the fundamental problems that accompany the development of the Russian Arctic, the growing importance of this territory for the national economy. These contradictions' objectivity is confirmed, which naturally indicated the shortcomings of economic theory, which does not allow us to solve these contradictions. For example, the contradiction between the high costs of functioning of the economy, social sphere and the need to raise the level of socio-economic development of the Russian Arctic; between the tasks of increasing the exploitation of resources and the requirements of the environment, etc., that is, what objectively makes it challenging to solve the problem of sustainable development of the Arctic. However, the numerous scientific studies considered, correlated with transformations in politics, economy, and demography, allowed us to assert that ideas have their driving force, influence, and provide transformational processes in the Arctic. The specificity and the strong influence of geopolitics on socio-economic transformations in the Russian Arctic are identified, but at the same time, the significance of the manifestation of expansionism as an internal human need for settlement, fame, and wealth is emphasized, which also ensures the development of the Arctic. Systemic changes are identified, socio-economic trends in the Russian Arctic are presented, which allowed us to establish the positive impact of modern policy on the development of the Russian Arctic, which marks a trend of reducing demographic losses. The prospects for the socio-economic development of the Russian Arctic are considered, taking into account the current situation of the coronary crisis, internal transformation processes, the influence of politics.

Keywords: *expansion, Arctic, transformation process, socio-economic space, regulation, geopolitics, macroeconomics, regional factors.*

Introduction

This article differs not only in external massive characteristics (significant volume, the number of scientific literature sources, the complexity of the presented review, etc.), but also in the specificity of the genesis and functional orientation towards the expansion of ideas about transformations in the Arctic, suggesting the expansion of the journal "Arctic and North" in the global information space. The article was written within the framework of the state program "Scientific and technological development of the Russian Federation" in terms of the implementation of the backbone event "Supporting the expansion and strengthening of the international authority

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of national knowledge bases (banks), including journals and their collections”, in this case due to financial support through the RFBR competition “Expansion”.

We emphasize the internal logic, structure and explanatory value of the “expansion” semantics for the presentation and development of Arctic problems. Let us recall that, in a general sense, expansion in the Russian language is traditionally associated with the logic of the development of living organisms, characterizing their ability to spread in space beyond their original habitat. However, this concept is often used not in biology, but in the social sciences, extrapolating the initial essence and the desire to spread living things in space to social processes. In recent years, world science has been considering the phenomenon of expansion much broader than the traditional representation of the social sciences, that is, more than a certain, albeit significant, but just a component of the politics of countries, regions, social groups, etc. Expansion is now presented as an independent social phenomenon that determines the course of history, the specifics of civilizational dynamics, the development of individual territories, in particular — the territory of the Arctic [1, Shaptalov B.N., p. 18-29].

A characteristic feature of the policy of expansionism is the combination of spontaneous, natural processes with purposeful, conscious actions to spread meanings, symbols, value orientations, etc. on the basis of a verified, scientifically grounded technology of such distribution. In many respects, the history of the development of economic thought is associated precisely with the formation of a theory that provides an effective technology for such distribution. In this regard, it is worth mentioning the work of Mark Blaug, which should be read with special attention, since it contains not only a verified history of economic thought, but also an important context — a strong grasp of a critical understanding of the theory from the standpoint of changing views of politics, considered on the basis of a thorough economic analysis of data [2, Blaug M., p. 200–206, 444–445, 549–552]. Of particular interest is the separation of theoretical approaches and even schools to the study of the manifestation of expansionism in the Arctic by the media [3, Parrtovaab B., p. 37].

The socio-economic space of the Arctic is a world of expansionism, to some extent even larger than the rest of the territories: due to the decisive influence of politics on public life because of obvious limitations in realizing the potential of internal self-development against the background of the geopolitical significance of the Arctic. Thus, social and economic development in the Arctic is inconceivable outside the context of the policy of expansionism. That is why the key place in the thematic journal “Arctic and North” is occupied by the issues of settlement processes in the North and the Arctic, illustrating the processes of biological, social and cultural expansion, issues of economic growth, politics and management, illustrating economic and political expansion.

Reflection of the results of the expansionism manifestation is in the transformational dynamics. The purpose of this study is an overview of the transformation of the socio-economic

space of the Russian Arctic in the context of geopolitics, macroeconomics, taking into account the influence of intraregional development factors.

The fundamental scientific significance and, at the same time, the practical relevance of the proposed review is determined by the fundamental nature of the problem, consisting in the contradiction between the strengthening of the geopolitical and economic significance of the Arctic zone of the Russian Federation (AZRF) and the simultaneous increase in the socio-economic problems of these territories, accompanied by an increase in the structural imbalances of the economy, backwardness characteristics of the life quality of the population in comparison with non-northern territories, objective factors pushing the population and business out of the Arctic territories [4, Baranov S.V., p. 46–48; 5, Porfiriyev B.N.; 6, Kryukov V.A., Kryukov Ya.V., p. 26; 7, Skufina T.P., Baranov S.V., p. 66–68; 8, Regions of the North and the Arctic of the Russian Federation ..., p. 18–34, 76–79; 9, Economy of the Modern Arctic..., pp. 27–39, 56–62, 144–149, 154–185].

Achieving the objective involves answering three questions, which are presented as research tasks.

The first question (first objective): what is the impact of geopolitics, internal factors of development on the socio-economic processes in the Arctic? The scientific novelty of this result is determined by the refinement of ideas about the reflection of geopolitics and internal factors in the real transformational processes of the development of the Russian Arctic from the beginning of the 20th century to the present day. The key question is: does geopolitics really determine the real socio-economic transformations of the Russian Arctic, and if so, to what extent?

The second question (second objective): identifying systemic changes, providing an assessment of the socio-economic trends in the Russian Arctic that were interrupted, as well as new trends that developed in the post-Soviet period, including an analysis of the impact of macroeconomics and intraregional development factors. The scientific novelty of this result is presented in a comprehensive diagnosis of transformational changes, carried out on the basis of interdisciplinary tools.

The third question (third objective): what are the prospects for the socio-economic development of the Russian Arctic, taking into account the presented diagnostics of the current situation, the genetics of transformation processes, the influence of geopolitics. The scientific novelty of this result is determined by the complexity of ideas about the probable development processes of the Russian Arctic.

Review of the current state of research on transformational dynamics in the Arctic

Issues related to socio-economic, political transformations, governance in the Arctic are currently in the focus of discussions around the world among politicians, public administration, scientists, and business structures. This is due to the growing strategic importance of the Arctic,

which indicated a clear trend in the transformation of political and related economic relations in the Arctic. It is even possible to say that the transformations of political and economic relations in the Arctic are some kind of indicator of changes in world politics. So, in recent years, a significant place in world studies has been given to the analysis of the transfer of power, interests, opportunities for the implementation of tasks in the Arctic by countries and regions of the world, including those that are not traditional "Arctic" powers. Researchers from European countries emphasize the need for "collective management" of the Arctic. "At the moment, we need to focus on the importance of international geopolitical relations, aimed at comprehensive cooperation in the European Union, which will allow the collective management of the Arctic" [10, Danilo V., p. 50]. Increased attention is paid to discussing the attention to the Arctic of actively developing Asian countries with an emphasis on Sino-Russian relations. It is noted that a powerful factor of economic growth marked the transition of political and economic power to China. Responsibly, the rhetoric has also changed. So, earlier China positioned the Arctic as a common heritage of mankind, and now it calls itself an "almost Arctic" country [11, Gjedssø B., Galluccib V., p. 240; 12, Anosova L.A., Trigubenko M.E., Lezhenina T.V., Nguyen K.Kh., Yakovlev A.A., p. 12–36]. It is obvious that the current conditions of the pandemic will significantly change the alignment of world forces and significantly strengthen China's claims to the Arctic, including the continuation of active investment in the largest Russian Arctic projects.

So far, no one can reliably assess how deep the changes in the global alignment of forces will be, how great China's claims to the Arctic will be, what is the role of Russian-Chinese relations in this, and how exactly the Arctic space is being transformed in this renewed reality. However, there is no doubt that these changes will have the most significant impact on the politics and national economy of Russia. Thus, Russia is characterized by the longest coastline in the Arctic among all five coastal states that share Arctic territories. The Arctic is a geostrategic territory for Russia due to the huge reserves of minerals, which enhances its strategic importance in the long term. In Russia, the increased importance of the Arctic issues is naturally reflected by the declared priorities of ensuring the processes of sustainable socio-economic development, enshrined in the formed normative and legal literature, in order to solve geopolitical, economic, interrelated social development problems of the Russian Federation [13, Kudryashova E.V., Zarubina L.A., Sivobrova I.A., p. 39–42; 14, Zaikov K.S., Kondratov N.A., Kudryashova E.V., Lipina S.A., Chistobaev A.I., pp. 5–7]. At the same time, some inconsistency of the scientific basis accompanying the management of the transformational dynamics of the Arctic is noted.

We believe that this inconsistency is explained by two main factors. The first factor was named by academician Minakir P.A. "strategic dead ends". The essence of the deadlock is a conflict of goals, objectives, mechanisms declared in the national strategy of spatial development of the Russian Federation with the postulates of the theory of spatial development and regional strategies [15, p. 967]. As a result, the macroeconomic situation does not contribute to the confi-

dent development of the industrial sector, which is especially problematic for the old industrial regions of the North [16, Uskova T.V., Lukin E.V., Mel'nikov A.E., Leonidova E.G., pp. 63, 70]. The second factor is the inconsistency of the theory of development and management of the socio-economic space of the Russian Arctic. This inconsistency makes it especially important to consider modern theoretical views on the transformation in the Arctic.

Note that the analysis of research cannot be concentrated specifically on the AZRF due to the fact that this zone actually stood out as an object of management only in 2016, but a much wider zone - the North of Russia as an object of research and management, including the territory of the modern AZRF, has a long the history of transformational dynamics, including the management system and the corresponding policy [17, Skufina T.P., pp. 17–19]. It was this policy that was able to ensure during the USSR the development of not only the economy, but also high standards of quality of life of the population relative to the best foreign analogues [18, Samarin A.V., p. 450–455].

Among the fairly extensive literature covering in detail the positive, negative facts and transformations in the North, as well as the specifics of scientific support, one should especially highlight the generalizing monographic work under the scientific editorship of Academician Porfir'eva B.N. "Socio-Economic Problems of the Russian Arctic in the Research of the Institutes of the Russian Academy of Sciences: History, Modernity, Prospects" [5]. It is obvious that artificial extraction of AZRF studies from this set of fundamental data on the North is not appropriate.

So, the state of modern research is a huge and diverse layer of information, including the theoretical and scientific-practical groundwork of the USSR in the theory of management, politics, economics of development and settlement of the territories of the North and its Arctic component; modern developments that give rise to rather contradictory ideas of domestic scientists about the prospects, priorities and policies of the North and the Russian Arctic; as well as foreign research focused mainly on the formation of such a policy, which concentrates not on conceptual priorities, but on solving practical problems in the formation of factors of sustainable development of specific territories of the circumpolar North with a separate emphasis on environmental policy issues [19, McCannon J.; 20, Gutnev M.Yu., Konyshov V.N., Sergunin A.A., p. 108]. All these aspects and many others determine their views on the problems of the modern state policy formation and the corresponding transformations in the Arctic.

The modern array of information can be conditionally divided into three components. The conventionality of this division is determined both by the indicated multidimensionality and by the interpenetration of the selected directions.

Firstly, these are investigations aimed at studying the internal properties, connections, relations of the functioning of the socio-economic space of the North and the Arctic, including forecasting developments. Numerous works of this group can be classified from the standpoint of methodological differences in the predominance of the method of obtaining information. Thus, a

three-component grouping is possible into studies based on statistical developments, on the analysis of the institutional environment, as well as on the analysis of sociological methods (including observation, interviews, questionnaires, etc.).

The author's observations show that the priority of statistics is given in the studies of the USA, Canada, and considerable attention is paid to such studies in Russia [21, Korchak E.A., p. 141; 22, Skufina T.P., Baranov S.V., pp. 52–54, 60–62; 23, Skufina T.P., Baranov S.V., Korchak E.A., pp. 25–27]. As a rule, these studies not only determine some quantitative dependencies and patterns, but also highlight promising directions, specific competitive advantages of certain northern territories that can provide economic and social development, often taking into account the ecological context [24, Healy A., pp. 29–31].

Priority to sociological approaches and research methods of the northern territories is given in the works of scientists from Scandinavian countries [25, Markkula I., Turunen M., Rasmus S., p. 1070]. At the same time, the general context of the “Scandinavian” component of research, as a rule, is the priority of “sociality” over the economic constraints of development, the substantiation of the need for increased spending on the social sphere of northern settlements is especially active among other works. These studies often consider the worldview issues of perception of reality by indigenous peoples, migrants, adapters, the cultural and spiritual significance of ecosystems, etc. Promising direction among studies in Russia is the combination of mathematical modeling with sociological methods for studying the socio-economic dynamics of the North. In particular, the authors of the article are adherents of this approach, which gives a unique combination of quantitative characteristics of objective reality and the reflection of this reality in the minds of the population, social groups [26, Baranov S.V., Skufina T.P., Gushchina I.A.; 27, Skufina T.P., Bazhutova E.A., Samarina V.P., p. 51].

Institutional investigations are more characteristic for Russian studies. However, it should be noted that these works are based not on a typical understanding of institutional analysis (traditionally based on a powerful mathematical apparatus, game theory, the study of institutions with sociological verified methods, etc.), but only a narrow part of the methodology of institutionalism, an exciting analysis of legislative ensuring the functioning of the socio-economic and ecological environment of the North and the Russian Arctic. To clarify, foreseeing possible objections, we are talking about the “predominance” of research, which does not mean the absence of the traditional use of typical mathematical tools of institutionalism, for example, in research of works based on a sociological approach to the study of formal and informal institutions for the functioning of management and the formation of policy in the North. But all these studies emphasize the effect of the northern rise in prices, which generates requirements for protectionism and compensatory functioning of the economy and social sphere. At the same time, different measures of protectionism and compensation are justified. The second part of the works on the formation of policy is devoted to this.

So, secondly, these are studies focused on the formation of a policy that determines the specifics of the life of the economy and social sphere of the North and the Arctic.

The increased geopolitical attention to the northern territories, as well as the developed nature of the economies of all foreign circumpolar countries (i.e., sufficient economic opportunities) predetermine the relative commonality of strategic priorities aimed at shaping policies that ensure sustainable development. The model of this sustainable development is understood in many ways, including rational nature management, environmental protection, the human dimension and international cooperation at the regional and global levels [21, Korchak E.A., p. 124]. The fact that despite the diversity of the tract model of sustainable development, the countries of the world demonstrate the same approaches to financing such development is of particular interest. [28, Anosova L.A., Kabir L.S., pp. 20–22]. From the standpoint of management, two types of work are clearly distinguished among foreign studies. Works of the first type are of an exclusively practical nature. Thus, a significant amount of research is aimed at optimizing costs to ensure economic and social effects in local communities of the North, as well as regulatory support of protective economic conditions for the functioning of northern settlements, including issues of compensation from the exploitation of the natural environment [29, Tolvanen A., Eilu P., Juutinen A., Kangas K., Kivinen M., Markovaara-Koivisto M., Naskali A., Simila J., pp. 832–834]. Works of the second kind are of an interdisciplinary nature and link several aspects of ensuring a sustainable development model at once, but also, as a rule, with a clear practical meaning: for example, a particularly relevant area is the development of recommendations for politicians and management based on the connection between climate change and expected changes in the life of northern peoples [30, O’Faircheallaigh C., p. 102; 31, Bring A., Shiklomanov A., Lammers R.B., pp. 79–82; 32, Karen K., Ljubicic G., p. 47]. Two properties are characteristic for foreign studies in the field of substantiating policy in relation to the socio-economic space of the North and its Arctic component. Firstly, it is the relative theoretical and methodological commonality of ideas about the policy of ensuring the socio-economic life of the northern territories [33, Serova N., Korchak E., Skufina T., p. 6]. Secondly, as a rule, there is a great focus on solving current practical problems, which, perhaps, is explained precisely by the absence of theoretical and methodological contradictions. It should be noted that experts on Arctic issues in Russia rightly believe that foreign experience is difficult to apply in Russian management practice due to significant differences in the institutional environment, the economic importance of Arctic resources, management relations, etc. At the same time, foreign experience often gives some new ideas, development guidelines, actualizes the need to revise a number of policy components in the North and in the AZRF.

As for Russian investigations, the authors’ generalizing studies show that over a number of years they have been characterized by a lesser unity of reference points in the formation of a policy for the management of the North and the Arctic [34, Skufina T.; 35, Skufina T.P., pp. 25–27]. Some researchers are still discussing the feasibility of integrated socio-economic development,

generating conflicting opinions, up to focusing on a predominantly rotational way of developing the AZRF [36, Kozlov A.V., Gutman S.S., Rytova E.V., Zakharov A.N., pp. 19–23].

Still, the vast majority of researchers take a pragmatic position — to provide scientific support for the implementation of state policy in order to achieve the declared task of integrated socio-economic development of the Russian Arctic as a single macro-project as a single planning object. The significance of this task is associated with national security, which is determined by at least two factors: firstly, the resources of the Russian Arctic are the main source of filling the country's budget; secondly, the task of the complex socio-economic development of the Russian Arctic cannot but be set as a basic guideline for policy in the Arctic due to the necessary synchronization with global processes. Such a pragmatic position of providing scientific support for the management of the AZRF is being implemented actively and on a large scale, characterized by its complexity and interdisciplinarity [37, Laverov N.P.; 38, Minakir P.A., Krasnopolskiy B.Kh., pp. 12–14].

So, the policy objectives were specified before the implementation of the Arctic megaproject, support development zones are being formed, the implementation of which determines not only economic development, but also an improvement in the quality of life of the population of the Russian Arctic. At the same time, according to the academician Kryukov V.A., the formation of an effective policy (both long-term and anti-crisis) should include taking into account the historical features of the formation of industry and infrastructure in the North and its Arctic component, as well as the current global trend of changing public relations [9, *Economy of the Modern Arctic: the Basis of Success is Effective Interaction and Management of Integral Risks*, pp. 8-19]. Summarizing, Kryukov V.A. notes: “The basis for the formation of relationships in a changing economy should be an understanding of the fact that the economy is not limited to achieving commercial efficiency, to comparing costs and benefits in monetary terms. Changes in the economy in the world are increasingly assessed by social metrics.” [39, Mekhanic A., p. 46] This confirms the feasibility and importance of considering the third component of Arctic research — the context of the quality of life of the Arctic population.

So, the third component is the investigations devoted to the quality of life — a category that characterizes the essential circumstances of the public life of the population. The sociological and philosophical view of the category of quality determines the value of the quality of life as the ability of a specific norm for a particular person (community) to act as a form of representing and meeting people's needs. In this regard, researchers note “the shift in the focus of research to subjective parameters of life, and the concept of subjective quality of life becomes a generalizing category for describing the subjective conditions for the formation of psychological well-being” [40, Lebedeva A.A., p. 4].

This approach to quality of life offers great opportunities for learning. However, the majority of economic research, both fundamental and practical, with all its diversity, takes a different position and actually studies the structure of needs and the possibilities of satisfaction. At the

same time, two types of work are traditionally observed: either with a bias towards the perception of the quality of life as a kind of integrated social indicator [41, Bjerregaard P., Dahl-Petersen I., Larsen C., p. 149–153], or the decisive importance is given to the material security of life, the economic side of social life [42, Korchak E.A., Serova N.A., Emelyanova E.E., Yakovchuk A.A., p. 3–4; 43, Okrepilov V.V., Chudinovskikh I.V., p. 490–492].

In Russian studies of the quality of life, as a rule, the main attention is paid to the economic side of life. We believe this is due to a whole series of reasons of objective and subjective properties. Thus, this is due to the relevance of considering the impact of crisis processes on the development of certain regions and the spatial development of the country as a whole, which requires the study of quantitative components of the quality of life based on formal statistical indicators. Besides, differences in economic specialization and other numerous facts of the diversity of the regions of the Russian Federation determine not only the theoretical, but also the practical significance of studying the interregional differentiation of the parameters of the quality of life, which also requires the ratio of verified indicators of the category of “quality of life”, and this focuses on the statistical indicators that characterize precisely the economic side of the “quality of life” category.

In addition to the study of the statistical indicators dynamics in the context of the quality of life, a number of studies add sociological methods. On the basis of combining population surveys with the analysis of statistical data, the reasons for differences in the level of wages, cash incomes of the population by region are studied, the issues of perception by the population of the constituent living conditions of the northern and Arctic territories are investigated [44, Rimashevskaya N.M.; 45, Gushchina I.A., Kondratovich D.L., Polozhentseva O.A., p. 502]. A certain specificity of the research of the Kola, Karelian, Vologda scientific centers of the Russian Academy of Sciences, which traditionally study the quality of life of the population of the North and the Arctic on the basis of detailed surveys of the population, is to determine the features of the reflection of the authorities’ activities and the policy pursued on the components of the quality of life in the minds of the population. There appears an evidence base not only for the strengths and weaknesses of management, but also for the fact that socio-cultural factors are an underutilized reserve of economic growth of territories [46, Shabunova A.A., Leonidova G.V., Chekmareva E.A., pp. 162-164, 176].

The basis for the involvement of this reserve is social innovation. A certain interest, which makes one think about the available reserves of the participation of research centers in the development of social innovation, is represented by works that testify to the empirically confirmed facts of the separation of scientists from the creation of successful practices of social innovation with the simultaneous active production of technological innovations. According to colleagues from developed countries, this distinguishes qualitatively the functional orientation of Russian research centers for the territory from the situation in developed countries of the world [47, Social Innova-

tion: a New Innovation Paradigm for Social Development ..., pp. 219–221]. However, the most important issue for us is the fact of underutilization of the capabilities of scientific centers in the production of social innovations, which outlines the possibilities for the further development of conjugation of science with territorial needs.

Summing up, the diversity, ambiguity, controversy of research results concerning socio-economic transformations, politics and management in the Russian Arctic Zone can be noted again. However, it is possible to single out general theses of governance and geopolitics concerning the priorities of maintaining geopolitical stability, the declaration of sustainable development priorities, responding to the challenges of climate change, ensuring international cooperation, and the demand for scientific support of social and economic processes in the Arctic. At the same time, these theses break down on “political inability” in terms of Heininen Lassi [48, p. 195]. Therefore, in order to clarify the answers to the questions posed by us, we propose to consider the socio-economic transformations in the Russian Arctic in the context of the declared policy reflecting the geopolitical situation, macroeconomic tasks, and regional development conditions.

Transformation of the socio-economic development of the Russian Arctic through the prism of politics

A review of numerous studies devoted to the history of the manifestation of expansionism in the Arctic, confirms the priority influence of two interpenetrating processes on socio-economic transformations in the Arctic [19, McCannon J.; 33, Serova N., Korchak E., Skufina T., p. 6].

Firstly, this is the spontaneous development of the Arctic space due to the inevitable human need for resettlement, knowledge of the unknown, striving for fame and wealth. It recalls the thesis of the great polar explorer Roald Engelbregt Gravning Amundsen, who successfully completed almost all of his hardest expeditions and lost his life while rescuing the Arctic expedition on the airship Umberto Nobile: “A person can get used to everything except the cold.” A significant amount of pages in the annals of the North and the Arctic belongs to Russia. So, even in studies of a clearly anti-Russian sense, the importance of Russian polar research and the development of the northern space of the Tsarist and Soviet period, carried out by the efforts of Arctic enthusiasts at the risk of their lives, is emphasized — Count Fyodor Litke, industrialist Mikhail Sidorov, pilot Yan Nagurskiy and many others [19, McCannon, pp. 34–82, 118–126].

Secondly, these are systematic steps towards the development of the northern outskirts under the pressure of geopolitical factors that give rise to the state expediency of the development of the North and the Arctic. For more than four hundred years, the Russian state has invested human resources and money in the formation of reference points and the infrastructure development of Russia in the northern territories. For example, under the pressure of geopolitics and internal interests, in contrast to the British and Dutch, in 1584 the Arctic port of Arkhangelsk was founded. In 1600, the fortified center of Mangazeja was created to advance the Russians deep into

Siberia and collect yasak. Successful examples of geopolitically significant decisions to “bring the space” of the Pacific Ocean closer to European Russia through the construction of the Great Siberian Railway, the attempts of imperial Russia to connect Murmansk with Vladivostok by laying the Northern Sea Route, which subsequently ensured the development of remote territories, are given in the collective monograph by the academician Kryukov V.A. [9, Economy of the Modern Arctic..., p. 5–6].

The most powerful impuls to transformations in the North and in the Arctic was provided by the period of the USSR [49, Fauzer V.V., Smirnov A.V., p. 112]. To summarize, the well-known scholar Korchak E.A. defines the intensive and purposeful development of the North and the Arctic during the Soviet period due to the geopolitical component and the value of resources, notes the large-scale motivational component of the Soviet propaganda for the development of the Arctic territories, aimed at attracting qualified personnel [21, pp. 121–125]. This ensured the creation of industrial centers, an extensive network of mono-settlements, infrastructure development, including the development of the Northern Sea Route. The transformation of the sparsely populated territories of the Russian North and the Arctic is characterized by a sharp increase in the population during the USSR and its decline in the post-Soviet period.

The periodization of politics in the North in the context of all-Russian politics and the impact of foreign policy factors in the post-Soviet period, as a rule, contains 3 main stages. Stage 1—Situational Policy (1991–2000), was characterized by landslide socio-economic characteristics in the regions of the North, which correlated with the all-Russian situation, but a number of compensatory and protectionist measures in force in the Soviet period were confirmed by specialized legislation (for example, in 1993 the Federal Law “On State Guarantees and Compensations for Persons Working and Living in the Far North and Equated Areas” was adopted, in 1996 the Federal Law “On the Fundamentals of State Regulation of the Socio-Economic Development of the North of the Russian Federation” was adopted (expired from 01.01 .2005), establishing the principle of protectionism and the main directions of state policy in the North). Stage 2 (2000–2005) — a policy declared to reduce interregional differentiation, to strengthen protectionism for the North, but in fact, a number of benefits for business and the population have been reduced, which is fixed by law. Stage 3 (2005–2008) — the stage of the policy of polarized development, the gradual rejection of the recognition of the North as a special object of state policy and management, which is fixed by the absence of a specialized normatively fixed policy in relation to the North as a single territory [21, Korchak E.A., pp. 125–129; 34, Skufina T., pp. 148–150; 35, Skufina T.P., p. 25].

In fact, the need to take into account the specifics of the North in regional policy is replaced in future by the development policy of the Russian Arctic. Thus, the state program of the Russian Federation “Regional policy and federal relations”, approved in 2013, no longer contains the word “North”, it focuses only on the AZRF. Recall that already in 2008, the President of the Russian Federation approved the “Fundamentals of the State Policy of the Russian Federation in

the Arctic for the period up to 2020 and beyond”, in 2013, the “Strategy for the Development of the Arctic Zone of the Russian Federation and Ensuring National Security up to 2020 “, now there is an active rule-making process of the formation of specialized regulatory legal acts concerning the Russian Arctic.

The transformation of politics naturally led to socio-economic transformations in the North of Russia. So, in 1991 (for the first time since 1959) a decline in the population of the North was observed. In 1991, the population of the North decreased by 1.5 million people, in 1992 — by 0.4 million people, in 1993 — by 0.2 million people, in 1994 — by 0.2 million people. The total losses of the northern territories by 2010 amounted to more than 1.6 million people.

We believe that the causes of human losses in the North and the Arctic are different, but in general, they are explained by three facts, which to a certain extent retain their significance to the present day.

The first factor is the benefits established by the state; wage premiums (especially in conditions of significant inflation) have lost their stimulating role. So, the average monthly wage in rubles in the North zone was 471 rubles in 1990 (on average in Russia — 311 rubles), in 1991 — 889 rubles. (on average in Russia — 611 rubles), etc. It is obvious that the excess of wages in the North zone for the analyzed period under conditions of significant inflation did not compensate living in unfavorable conditions caused by special objective factors of “northernness”.

The second factor is the poorly equipped North. For example, the housing provision of the population in the regions of the North at the beginning of market transformations was significantly lagging behind the average Russian indicators. So, at the beginning of 1991, if on average in Russia there were 11 square meters of living space for each resident (at a rate of 12 square meters), then in the North it was 9 square meters. At the same time in Buryatia it was only 4.5 square meters, in the Chita oblast — 6 square meters. In 1991, about 1.110 thousand families of the North (36% of all families) were in the queue to receive a new comfortable housing. At the beginning of 1991 almost 3.5 million square meters of housing, or 2.4%, in the regions of the North was in a dilapidated or emergency condition (in Russia as a whole — 1.3%), and in the Chita oblast the share of such housing was 8%, in the Komi SSR — 6%, in the Sakhalin oblast — 4%, in the Magadan oblast — 3.5%. At the same time, at the beginning of 1991, 5% of the total population lived in adapted premises (beams, trailers), for example, in Yakutia, in the Magadan oblast it was 3%, in the Kamchatka krai — 1% (in Russia as a whole — 0.6%). It should be noted that the reduction in housing construction in the regions of the North was characterized by a faster pace than the national average. So, in the period 1990–2004, the commissioning of residential buildings in the North zone decreased by more than 4 times, while in Russia as a whole — less than 2 times. The main reason is obvious — a sharp reduction in public investment in construction and some weakening of the urgency of the need for housing in connection with the migration outflow of the population from the North.

The third factor is the limited probability of finding a job in a mono-structural economy. Thus, the average annual number of people employed in the branches of the economy in 1990 was 6.153 thousand people, in 1991 — 6,098 thousand people, in 1992 — 6.008 thousand people (total in Russia — 72.071 thousand people), in 1993 — 5.597 thousand people (total in Russia — 70.851 thousand people), in 1994 — 5.414 thousand people (total in Russia — 68.484 thousand people). These data indicate that the rates of decline in those employed in the economy of the North and Russia are generally the same. However, the mono-structural economy of the North provided fewer opportunities for employment of the unemployed population [8, Regions of the North and the Arctic of the Russian Federation ..., pp. 36–39].

The emphasis on the AZRF as a special object of state policy in general had a positive effect on the Arctic regions. The intensification of investment processes led to the development of new fields, the revival of production, the development of infrastructure, ensured the preservation of scientific organizations and the system of higher education, which slowed down the migration losses of the Arctic regions (table 1).

Table 1

The population of the regions, the territories of which are fully included in the AZRF, thousand people¹.

Region	1925	1940	1950	1960	1970	1980	1990	1995	2000	2005	2010	2015	2020
Nenets Autonomous Okrug	n/d	n/d	n/d	37	39	47	52	44	41	42	42	43	44
Murmansk oblast	23	202	337	606	799	665	1191	1067	941	857	800	766	741
Yamalo-Nenets Autonomous Okrug	n/d	n/d	n/d	64	80	158	489	478	496	515	524	540	544
Chukotka Autonomous Okrug	n/d	n/d	n/d	47	101	133	162	96	62	51	49	51	50

At the same time, our studies indicate a rather high prevalence of migration sentiments among the population of the Arctic territories. Moreover, studies show that this is a consequence of insufficient consideration of the Arctic specifics in the formation of an all-Russian social policy. For example, when shaping the changes in the pension reform, the demographic risks for the Arctic were not sufficiently taken into account [26, Baranov S.V., Skufina T.P., Gushchina I.A., p. 160]. So, when answering the question “Have your plans for further residence in the Murmansk oblast changed due to the increase in the retirement age?” the most significant groups of the population for the Arctic economy — the youth and the middle-aged population — have already thought about moving to more comfortable climatic conditions and have already changed their plans for

¹ Compiled by the author. Source: Federal State Statistics Service. URL: <https://www.gks.ru/> (accessed 12 June 2020).

further residence (table 2). It is obvious that in the near future this creates significant risks to the stability of the economy of the Arctic region — the Murmansk oblast (Table 2).

Table 2

Distribution of answers of residents about migration attitudes in connection with changes in the retirement age, taking into account gender and age, % of the total of respondents²

Answer options	Men				Women			
	18–29	30–49	50–64	65+	18–29	30–49	50–64	65+
No, they have not changed, I will live and work here	46.6%	50.7%	54.9%	71.0%	41.8%	40.0%	58.0%	67.0%
They have rather changed, I am thinking about moving to more comfortable climatic conditions	21.2%	27.8%	18.8%	9.7%	30.6%	40.8%	20.2%	12.5%
Have definitely changed, have already found another place of residence and work	15.3%	9.5%	4.9%	0.0%	11.2%	6.5%	5.2%	4.5%
I am at a loss to answer	16.9%	12.0%	21.5%	19.4%	16.3%	12.7%	16.6%	16.1%

Currently, the formation of legislation aimed at increasing investment in the Russian Arctic and the formation of new development mechanisms continues³. The formation of development mechanisms as a whole proceeds on the basis of the modern geo-economic paradigm based on the combination of state material and financial resources with business resources with institutional support aimed at creating a comfortable environment for regional reproduction of an endogenous type. Note that a detailed analysis of the responses of the regional economy to the impact of economic, political, institutional, military-political properties from the standpoint of the modern geopolitical paradigm is given in the research [50, Minakir P.A., Prokapalo O.M.]. According to northern scholars, the disadvantage of the mechanism for the development of the Arctic is that “the solution to the problems of the socio-economic development of the Arctic zone of Russia has so far only a “project focus” — cooperation and integration of efforts remain “in the shadows” [50, Minakir P.A., Prokapalo O.M., p. 9].

However, the needs of the practice transform this approach, including the necessary integration. For example, the cooperation of interests and opportunities for the development of the mineral resource sector of the Russian Arctic, characterized by deteriorating mining conditions, the development of more and more complex and more high-risk deposits. So, in the works of Kryukov V.A., numerous examples and conditions of cooperation are given: joint projects of PJSC Novatek to liquefy natural gas (based on attracting large foreign financial and oil and gas companies Total, CNPC and the Silk Road Fund as co-investors); a long-term agreement between “Gazprom Neft” and “Gazprom” for the development of hard-to-recover Achimov oil deposits in the Yamburgskoje field in the Yamalo-Nenets Autonomous Okrug, etc. [9, Economy of the Modern

² Source: authors' interviews [26, Baranov S.V., Skufina T.P., Gushchina I.A., p. 170].

³It should be noted the current and professional work of the Center for the Economy of the North and the Arctic of the ANO "Institute for Regional Consulting" under the leadership of A.N. Pilyasova in the preparation of the information bulletin "Monitoring of the Socio-Economic Development of the Arctic Zone of Russia", where comprehensive information on the latest processes in the Russian Arctic is placed.

Arctic ..., pp. 9–14]. The need for integration with foreign partners is determined by both the need for financial resources and the need for technologies due to the lack of proprietary technologies to ensure the development of Arctic projects, especially in the shelf zone. This is the main risk of the implementation of the model of sustainable development of the Arctic, which makes it expedient to consider the prospects for the socio-economic development of the Russian Arctic, taking into account the presented current situation, the genetics of transformation processes, the influence of geopolitics.

On the prospects for the AZRF development

The prospects for the development of the AZRF cannot be considered outside the context of today's reality — a crisis that for the first time in modern history has a non-economic nature. The depth, duration and strength of the impact of this crisis is largely determined not by the results of the interaction of the main financial and economic factors that can be analyzed and predicted, but in fact by the main two issues: 1) how quickly and with what losses it will be possible to cope with the spread of coronavirus; 2) what kind of policy will be formed: focused on the formation in the minds of business and the population of the idea that the crisis is of a short-term nature or focus on the long-term and deep nature of the crisis.

The analysis of publications allows us to assert that the specifics of the crisis determine the objective problems of forecasting its development due to the impossibility of predicting the behavior of these two main parameters, let us clarify: the impossibility at the present stage. So, the first parameter: how quickly and with what losses it will be possible to cope with the spread of COVID-19 is unknown. Let us clarify that all forecasts of reputable organizations give a scatter of forecast data for COVID-19 in orders, which makes them inapplicable. Consequently, forecasts of the crisis development are virtually absent, being replaced by forecasts of probable trends without the traditional prediction of detailed baseline and forecast data. The second parameter is also not reliably predicted due to the huge range of policies and practices of developed countries, both with regard to quarantine measures in particular, and attitudes for recovery periods. Note that these policies are not always explained by the economic possibilities of fighting the virus and finding a balance between economic losses and quarantine security measures.

In this regard, no assumptions about the development of the AZRF are correct and no theoretical conclusions about the likely development of the Arctic can be valid. However, would anyone seriously deny the need for certain guidelines for development that are inconceivable without prediction and prescription of the future? We propose to consider two possible development scenarios.

The first is to preserve the current vector based on the declared goal of increasing the level of socio-economic development of the Russian Arctic by ensuring economic growth in the Arctic regions. It is based on the implementation of a policy aimed at creating an institutional environ-

ment and management measures to ensure the development of resource mining (including mining in hard-to-reach areas, on the shelf, development of hard-to-recover reserves), associated industrial development, including ones on the basis of the integrated use of raw materials, the development of fishing, fish farming, etc., coordinated infrastructural development and improving the quality of life of the population. At the same time, significant resources are directed to support sectors of the economy that can enhance the development of the Arctic regions in the main types of economic activities and ensure diversification (digitalization, tourism development, support for scientific and educational activities in the Arctic, etc.). Considerable attention is paid to ensuring the sustainable development of indigenous peoples living in the Russian Arctic.

Note that the modern processes of institutionalization of the AZRF development correspond to the logic of this vector of development. Thus, raising the level of socio-economic development of the Russian Arctic is a normatively fixed goal of management. The system of legal regulation continues to develop, which determines the development of the AZRF as a specific object of state planning and management. So, in May 2020, a draft of the Arctic Development Strategy up to 2035 was submitted to the Government of the Russian Federation, developed in accordance with the Fundamentals of State Policy of the Russian Federation in the Arctic for the period up to 2035, approved on March 5, 2020. The Strategy defines development objectives linked to stages of implementation, timing, results, provided with a clearly defined implementation mechanism. A new state program for the socio-economic development of the Russian Arctic is in the process of being developed, which is planned to be adopted by the end of 2020. The system of attracting investment resources is being improved. For example, in June 2020, a tenfold decrease in the investment threshold for obtaining preferences and the status of a resident of the Arctic zone (up to 1 million rubles) was approved, which will expand the possibilities of investment access to the Arctic economy even for small enterprises. Substantial benefits are provided for the development of offshore fields and the production of liquefied gas. Process of facilitation the access of the indigenous peoples living in the Russian Arctic to aquatic and hunting biological resources is in progress. Considerable attention is paid to the development of science and education, both directly in the Russian Arctic and in the Arctic territories to provide the economy with personnel, including highly qualified personnel.

The second scenario is a reduction in economic activity in the Russian Arctic due to the external conjuncture of prices for the main export products of this territory, or due to the introduction of additional sanctions limiting the possibilities for the development of deposits and their economic feasibility, the curtailment of planned facilities in the field of processing, tourism, etc. In this case, an increase in the migration outflow of the economically active population is expected, as well as a corresponding reduction in the scientific and educational infrastructure. The policy is aimed at strengthening the role of the state in helping organizations and citizens adapt to negative

long-term consequences. A separate task is to provide the growing social problems, including the mono-settlements of the Arctic, with less financial resources.

Obviously, the two vectors presented are polar, and, taking the multivariance into account, are unlikely to be realized in practice in their pure form. However, they will be present to some extent in the future precisely because of their polarity.

Conclusion

Summing up, the review study presented has achieved its objective and provided a substantiated response to the questions raised. Thus, a series of concernings regarding the development of the Arctic has been confirmed. For example, the contradiction provided by the inadequacy of the Arctic policy — well named by Heininen Lassi as “political inability” — whenever it is required to find a compromise between the requirements of ecology and economics, between the requirements of sustainable development of the adjacent territory and their own national development goals, etc. Another example is the contradiction characteristic of the capitalist economy, which complicates the task of ensuring the socio-economic development of the Russian Arctic in conditions of increased costs of the functioning of the economy and the social sphere of the Arctic, but at the same time the need to develop natural resources of the Arctic for the national economy, while simultaneously solving the problem of increasing the level of social and economic development of this territory.

The objective nature of the contradictions limits the development of economic theory explaining the development and management of the Arctic. However, consideration of scientific and political views on the Arctic, including those of an expansionary nature, allows asserting that ideas have their own driving force, influence and provide transformation processes in the Arctic. Correlation of these ideas with transformations made it possible to answer the questions posed. Geopolitics largely determines and reflects the real socio-economic transformations of the Russian Arctic. We also note that expansionism, which is inherent in humans as a need for resettlement, a thirst for knowledge, fame, wealth, etc., also has a certain influence on the development of the Arctic. In many respects, it was the emphasis in scientific research and policy on the tasks of ensuring sustainable development, represented in the positions of the Arctic countries and supra-formation organizations, which provided Russia with a return to the tasks of increasing the level of socio-economic development of the Russian Arctic. This made it possible to slow down the systemic changes in the post-Soviet period peculiar to the North (which naturally led to demographic losses), to ensure investment growth and gradual infrastructure development of the AZRF territory. However, a number of objective problems, including the underestimation of the specifics of living and functioning in the Arctic, continue to push the population and business out of this territory. The prospects for the development of the Russian Arctic are associated with two factors. Firstly, how successfully the legislation being formed, aimed at increasing the level of socio-economic development of the Arctic, will cope with these objective problems. Secondly, the extent to which the coronocrisis will distort the

current forecasts and development plans of the Russian Arctic. The answer to this question is unknown. But the future of the Arctic can depend on it.

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