METHODOLOGICAL APPROACH OF CLASSIFICATION OF THE ARCTIC’S GLOBAL PROBLEMS

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Abstract. The author describes the role of global problems in global economic relations, which are changing rapidly in the active world that affects the structure of global problems. This process is ongoing: in the course of it, some global problems lose their former importance and are reduced to the level of regional in scale and private in importance and the importance of others, on the contrary, increases. Moreover, new global problems are constantly arising and conceptualizing and some of them grow (upon reaching global, planetary proportions) from regional and private problems, the danger of which was underestimated, at one time. Others arise as a response of the system to sharp changes in its development accompanied by inevitable distortions, errors, miscalculations, modernization, carried out through the destruction and breaking of previous structures and etc. All this creates a kind of cycle of global problems in nature, which makes it difficult to identify and classify them. In the present article, the concept of classification of global problems of the Arctic in the system of world economic relations of the world. The author proposed a methodological approach and its classification of global problems of the Arctic.

Keywords: global problems of the Arctic, regional problems of the Arctic, classification of problems, development of the Arctic territories, world economic relations

1. Introduction
The growing international interest to the Arctic is associated with observed and expected climate change. On the one hand, changes can open up new opportunities for the development of this complex region, and on the other hand, they can lead to new serious problems, as the area of permafrost ice of the Arctic Ocean is steadily decreasing.

Accordingly, the economic activity of the Arctic is being activated and active integration into the world economy is taking place. The Arctic, with its uniqueness is in danger of reducing the variety of flora and fauna, reducing the number of indigenous small-numbered people because climate change affects the economic activity of the region. Reducing permafrost leads to damage and destruction of buildings and structures, pipelines, roads and Railways, airports and helicopters.

Natural disasters are becoming more frequent. An increase of water level in Arctic waters led to flooding along the coast. The coastal erosion is increasing. The interruption of traditional life with increased economic activity on the land and in the Arctic Ocean will increase the environmental burden in the Arctic, which has remained relatively unchanged. It is against this background that the
objective of this article is to demonstrate the methodological approach to the classification of global problems in the Arctic. The paper is a theoretical study

2. Methods

Research methods are systemic and complex analysis, the method of scientific abstraction, formal logic (induction and deduction), classification, evolutionary approach, including theoretical ideas presented in publications

2.1. Degree of knowledge of the topic

Consideration of the complex issues related to the problems of exploitation of Arctic deposits, sustainable development in the region and prospects for cooperation, classification of the global problems presented in the publications of foreign scientists: R. Gilpin, R., Hubert, G. J. Ikenberry, D. Vidas, W. Ostreng, S. Dahl, O. Langhelle, H. Meldal, J. Solbakken; S. Ollus, T. Tuisku; D. Torston., [1-3] In addition, the results of the working bodies of the Arctic Council and the Barents Euro-Arctic Council, which prepared reports on the parameters and problems of the Arctic development, are of particular importance. These reports summarize the prospects for the development of innovative technologies for the development of the Arctic. The work of authoritative domestic experts in the field of international relations: G.A. Arbatova, A.G. Arbatova, Gudkov A.V., Didenko N.I., Klochkov Yu. Skripnyuk D.F. and others.

Research in the Arctic region, as a rule, was focused on international or technical and climatic issues related to resources in the Arctic. The socio-economic and environmental aspects of life in the North have been studied in considerable depth. However, the problems of international economic relations in the region are poorly studied.

Some research has been initiated to coordinate the efforts of various countries in the exploration and development of the Arctic. [4] In this context, Russia is particularly interested in the foreign experience of cooperation in the development of Northern deposits and evaluation of the most promising partnerships, both bilateral and regional.

2.2. Methodological approach

Global experience shows that, nowadays, there are two main approaches to the organization of international cooperation in the Arctic. Within the framework of the first approach, the state pursues a policy of “open doors”, which allows attracting foreign capital at all stages of the development of the Arctic potential. The second approach is characterized by the fact that the state pursues a restrictive policy regarding the exploration and extraction of minerals and participation in the socio-economic activities of the Arctic.

Norway's experience is very interesting and useful for Russia, the success of which in ensuring a high level of use of hydrocarbon resources in the interests of society is due to state policy, contributed to the establishment of partnerships between foreign and local companies [5], [6].

Joint ventures have also been established in the service sector based on the principles that Norwegian engineering companies have been able to access advanced technologies. The Norwegian experience shows that the process of access of foreign companies to the development of the region can be effectively used as a tool for solving a number of technological, economic and social problems.

A. King and B. Schneider, the authors of the “Roman Club” model, identified four main interdependent problems [7]: the ecological and environmental world; population; energy; food.

On a global scale, population growth is also associated with negative pressure on the environment and increased consumption of resources and emissions into the environment. The demographic and environmental problem is related to nutrition. There is a close connection between the problems of ecology and energy, which has several aspects: the depletion of energy resources; increase in power supply, which increases the greenhouse effect of air pollution, the problem of changing the structure of the balance of fuel and energy of the Earth. Interweaving of interactions, causes and effects, which are
often part of the global problems of mankind, that is, all countries, regardless of the size of the territory, population, economic development. Global human problems are characterized by a number of fundamental features. First of all, it is the scale of these problems, which go beyond even the largest state. Global problems have global dimensions that are highly acute, complex and interrelated.

At the end of the XX century ecological problems of mankind sharply aggravated, at the same time caused new global problems: greenhouse effect, destruction of ozone layer, acid rains, secondary pollution and destruction of water ecosystems and etc.

In the Arctic region, the international legal problems of the circumpolar countries are also added.

3. Results
Classification of global problems helps to better understand the nature of the problems and identify ways to solve them. Researchers have proposed many classification options. For the basic version which was developed by Russian scientists, I. T. Frolov and V. V. Zagladin global problems are divided into three groups.

The first group concerns relations between groups of countries with similar political, economic and other interests.

The second group combines the problems of interaction between society and nature. Problems of ecology and environment.

The third group of global problems is connected with the system "individual-society". The group reveals social problems.

Modern international socio-economic relations are ambiguous, unpredictable and difficult to predict. And conflicts and contradictions arising in the international arena are becoming more complex and multifaceted, and involve a large number of participants. In this context, the Arctic occupies a special place.

Taking into account the specifics of the Arctic region, the author proposes the following classification of global problems in the system of world economic relations (Figure 1).
Figure 1. Classification of global problems of the Arctic in the system of world economic relations of the world

1. Indication of the scale or level of generalization of problem situations:
   - Global;
   - Circumpolar countries;
   - A separate country.

2. Sign of functionality:
   - Scientific;
   - Technological;
   - Managerial;
   - Institutional.

3. Indication of the duration and impact on future decisions:
   - Long-term;
   - Medium-term;
   - Short term.

4. Discussion
Climate change and, in this context, broader economic action bring many new challenges and challenges to the world. Firstly, they are associated with the need to protect the unique natural environment and biodiversity of the Arctic ecosystem; in the enclave of the Arctic Ocean to ensure high standards of safe navigation and protect the marine environment from pollution; and respond to emergencies, natural and man-made disasters [14],[15]; State capacity (including the United Nations); mechanism for coordination of circumpolar countries and other countries of the world.

All states are striving in the Arctic region on the one hand for international cooperation and, on the other hand, are pursuing their own interests. In this situation, it is necessary, first of all, to identify global problems and to determine adequate mechanisms to overcome them.

Accordingly, we can conclude that in general the institutional and legal structure of the Arctic zone is still in the process of formation, as evidenced by the existing unresolved problems in the Arctic and the low efficiency of most of the initiatives of organizations created in the region. [16] At the same time, it is clear that the old model of governance in the spirit of classical realism, based mainly on the interaction of national governments, is not suitable. In the North, there is no unity among countries or among regional organizations on collective decision-making on environmental issues, except for common intentions and emerging new problems.

The Arctic is a special natural area, and at the same time it is a unique transnational environment from the point of view of world politics. Nowadays, it is possible to identify the General contours of the complex system of international relations at different levels: the governments of all Arctic States are involved in various governance structures formed as a result of their interaction, there are also real networks of intergovernmental and non-governmental organizations, multinational companies and their partners. [17][18] It is within the framework of this unique transnational environment that the Arctic countries, and the entire world community, are faced with the urgent task of developing new approaches and mechanisms, a new management model - the “transnational model”, which would allow taking into account the interests and capabilities of all elements of this unique transnational environment.

Only through joint cooperation and mutual consideration of the interests of the circumpolar countries is it possible to make the Arctic a zone of peace and security.

Thus, on the one hand, in the Arctic, there is growing competition between the main players seeking to strengthen their positions in the region, on the other hand, no major project can be implemented by any Arctic country alone.[19]

Each of the states has its own development strategy in the Arctic. At the same time, we can see that the strategies of states have some common ground and hence the potential for the emergence of various kinds of conflict situations. For example, the clash between Russia and the United States on the basis of military presence in the Arctic region, as well as a clash of interests over energy resources. Moreover, the uncertain international legal status of the Arctic region creates fertile ground for conflict situations. Accordingly, the confrontation in the Arctic is quite controversial. On the one hand, States seek international cooperation and peaceful coexistence in the region.[20] On the other hand, each country is trying to achieve its own interests at the expense of other Arctic actors. Therefore, a clear classification of problems into global, circumpolar and regional is necessary.

**Conclusions**

The specificity of global problems is that, firstly, they have of a planetary nature and, secondly, they threaten the death of all people and, thirdly, they require the joint efforts of the international community.

Within the framework of the world and Eurasian civilization, the Arctic occupies an important part and participates in all global processes.

There is a need for greater cooperation that will increase understanding of the causes and consequences of rapid changes in the Arctic climate and ecological system, and improve observations, data, models and forecasts of the Arctic region. Basically, it is a question of cooperation of scientists.
in this field of collection of scientific data, the analysis, and joint development of recommendations in the studied sphere and area (ecology, flora, fauna, indigenous peoples, etc.).

The modern world economy can be developed only through expansion, that is, new major projects are needed for economic growth. The main reasons for interest in the Arctic are related to its macroeconomic and geopolitical opportunities.

The importance of the Arctic for the world community can be identified in the main factors:
1. a large area not only with the resources of the coastal zone, but also with economic, information and climate resources;
2. natural resources including mineral resources, fuel and energy reserves and resources of the coastal zone;
3. socio-cultural resource of the indigenous population.

International cooperation is the most progressive mechanism for the development of the world. In the Arctic, there is a close relationship between different countries, this is due to a single fragile natural environment, the shortest sea and air routes and the uniqueness of the spiritual and cultural heritage of the indigenous population.

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