Environmental tourism potential of the Arctic regions of Russia

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Abstract. Tourism is an important field for international cooperation. The Arctic zone has a potential for the tourism activities development, the question remains on what policy principles should forming this industry be carried out. The goal of the work is to determine the advantages of the Arctic territories as a network cluster that takes into account modern security requirements and creates conditions for the development of territories based on tourist attractions. The work considers the best practices in the field of tourism clusters development in the world, Russian legislation aimed at activating the process of cluster formation in the field of tourism, key factors that determine the unique characteristics of the tourism sector of the Arctic. The main methods used were analytical generalization, comparative analysis, retrospective analysis of the legislative framework in the tourism sector of Russia. As a result, stating certain successes in the field of tourism development in the Arctic, the authors note the need for the development of the environment to attract the local population to forming cultural code of territory and note the key areas of digitalization that could contribute to improving the processes of tourist cluster formation in the Arctic territories.

1 Relevance

The year spent in long lockdowns has once again confirmed the importance of free movement, which acutely affects people's health and well-being. This made it clear that tourism: firstly, it promotes the balanced and harmonious development of the individual as a person, supplying them not only with recreational opportunities, but also opening up new horizons of nature and society, history and the modern world, as well as developing the world cultural heritage; secondly, by offering specific goods and services, tourism forms a special branch of national and global economy, and thirdly, it is a means of individuals to perceive themselves as an integral part of an emerging united humanity, thereby helping to shape global societal change, acting as one of the most important types of migration of people within and beyond their countries. Moreover, the classic mass routes have become in part inaccessible due to the danger of the spread of the cornovirus. And more isolated and somewhat less popular destinations have benefited from greater safety and sustainability. And the Arctic here can become a flagship destination for eco-tourism, which has been developing actively in recent years, increasing both economic the turnover and the number of people traveling around the world. This, in its turn, increases the anthropogenic load not only on the mass and welldeveloped tourist routes, but also forces the industry to look for new unique places for tourists and mechanisms

for improving environmental friendliness and sustainability. In the past few years, the Arctic, which provides the opportunity to visit unique natural landscapes, has been a planetary centre of environmental tourism. This leads to the need to work out a strategy for the tourism development in the Arctic Zone, taking into account the crucial environmental role played by this region.

2 Review of approaches to tourism

Tourism, in its modern sense, is a fairly young phenomenon with deep historical roots. And as for any complex socio-economic and spiritual-cultural category with a variety of functions performed and a large number of forms of manifestation, there is no single canonical definition for the concept of "tourism". In the early interpretations, tourism was understood as a temporary movement of people for a certain period of time from a permanent place of residence. In the process of historical development, this term acquired new interpretations and various additions.

The tourism industry includes hotels, catering establishments, sightseeing firms, museums, cinemas, sports centers and other facilities. All of them are engaged in organizing the conditions for tourism and recreation. If we turn to the etymology of the word "tourism", then initially it came from the combination of the words "grand tour" or "great tour" - a familiarization

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trip. In the 17th and 18th centuries, such trips were made by representatives of the aristocracy to get to know different countries, cultures and nations. With the development of civil society, tourism became available to more and more people, and at the present stage has become a mass phenomenon.

According to the definition adopted by the United Nations (hereinafter - the UN) in 1954, "tourism is active recreation, affecting the health, physical development of man, associated with movement outside the permanent place of residence" [1,2].

In 1994, the UN World Tourism Organization (UNWTO) [3] approved a new expanded interpretation of the concept of "tourism", replacing the 1954 definition, which belongs to the UN Statistical Commission and was the first official and universally used one. Distinctive features of the new definition are the established "time limits" of tourism - " not exceeding one year in a row", as well as the specified possible purposes of tourists - "for recreation, business and other purposes" [4].

In order to streamline and systematize terminology in the field of tourism, as well as to make it easier to find the necessary definitions, at the beginning of the 21st century, the World Tourism Organization published the Thesaurus on Tourism and Leisure Activities [5] in three of the six official UN languages. This Thesaurus is a collection of terms and concepts directly related to tourism, tourism infrastructure and leisure activities [6].

Another definition is provided by the World Trade Organization (WTO), which interprets tourism as "the activities of people who travel and stay in places outside their usual environment for a period not exceeding a year for leisure, business or other purposes not associated with activities subject to remuneration for the place of stay "[7]..

According to the International Association Of Scientific and Practical Experts (AIEST) [8], in the relevant field, the concept of "tourism" refers not only to the economic sphere, but equally to the social one. In this context, tourism is considered as a set of connections and phenomena that arise in the process of movement of people on territory, different other than a permanent residence, with the purposes different from their work [5].

Turning to the consideration of tourism sphere in Russia, first of all, it should be noted that so far our country has not formed aconceptual apparatus in this area, exceptfor a number of concepts enshrined in Federal Law No. 132-FZ "On the foundations of Tourist Activity in the Russian Federation" (hereinafter 132-FZ) [9].

In Russia, tourism as a phenomenon in the modern sense (i.e., mass tourism) appeared during the period of the USSR. It was one of the main elements of social and cultural life of the population. Particular attention was paid to the development of health tourism in sanatoriums and rest homes, which was in line with the state policy of health protection of each citizen and the population of the state as a whole. Popularization of mass tourism among Soviet citizens took place in the context of "rational use of free time." It is important to note that at

the turn of the 1970s and 1980s tourism in the USSR reached really high economic indicators compared to the world tourism industry, thanks to state management and, accordingly, to the absence of the risk of bankruptcy. After the collapse of the USSR, the transition to market principles of tourism organization in Russia led to a significant slowdown in the development of the industry. State regulation of the industry in that period was haphazard. In 1996, the first federal law in the field of tourism was issued, where it is interpreted as a sphere of services and becomes an object of state regulation in order to ensure constitutional rights of citizens to recreation and freedom of movement. In 2004, tourism came under the jurisdiction of the Ministry of Economic Development, and subsequently came under the jurisdiction of the Federal Agency for Tourism (Rosturizm). During this period, the key directions of state policy in the active development of tourism were not only to create comfortable conditions for tourists, but also to ensure travel safety.

the latest version of the Federal Law No.132-FZdefines tourism as "temporary departure of Russian citizens, foreign citizens, and stateless persons from their place of permanent residence for medical, health precautions, recreational, educational, sports, professional and business and other purposes without engaging in activities related to income generation from sources in the country of temporary stay"[9].

The Strategy for tourism development in the Russian Federation for the period up to 2035 continues in the post-pandemic era [10]. The implementation of the Strategy implies e comprehensive development of domestic and inbound tourism in the Russian Federation by creating conditions and promoting quality and competitive tourist product in the domestic and international tourist markets, strengthening the social role of tourism and ensuring the availability of tourist services, recreation and health for citizens of the Russian Federation. Regional strategies for tourism development are elaborated and adopted on the basis of this Strategy. The availability of regional strategies makes it possible to take into account a huge variety of types of tourism that may take place in Russia, and strategizing ensures identification and fixation of priorities relevant the region. In accordance with the available recreational potential of the country, the following main types of tourism have formed in Russia:

- cultural and educational tourism, which is characterized by a high level of travel costs
- active forms of tourism such as adventure and sports tourism, are becoming more and more popular in the world
- special forms of tourism, such as medical and health tourism, event tourism, eco-tourism, educational tourism and science tourism
- business tourism, which may include business meetings, conferences and various events.

The general state of the tourist market has been changing lately. This is due to the following factors, which, in turn, determine the positive and negative aspects. Negative factors include:

- aggravation of the political situation and complication of intercultural communication
 - difficulties in obtaining visas
- a decrease in the level of safety of outbound tourism due to the spread of coronavirus infection
 - unstable situation with the currency
- insufficient development of infrastructure for inbound tourism
 - lack of qualified personnel in the industry
- limited access to financial risk insurance instruments for travel operators
- lack of effective investment incentives for the development of the tourist industry.

For Russia, as the largest country by area, it is extremely important to form and successfully operate tourism management bodies, both separately at the federal, regional and municipal levels, and in interconnection.

3 Formation of tourist potential in the Arctic zone

In modern Russian reality, unfortunately, there is no unified approach to defining the concept of "tourist potential", as evidenced by the analysis of tourism development programs in the regions. Most often, the tourist potential is understood as a certain number of objects used as an object of tourist attraction. This shortcoming can cause ineffective formation of development strategies for the Arctic regions and, as a result, ineffective use of budget funds, which, naturally, is a serious problem.

Before defining the concept of tourist potential, it is necessary to consider the main approaches to its interpretation. At the moment, there are three points of view on which further approaches to the understanding the tourist potential are based. The first approach is based on the assessment of supply in the tourism industry, the second - on the assessment of demand among tourists using tourist services, the third is a synthesis of the above approaches [11].

The first approach, which proceeds from the evaluation of a proposal, is found in the works of such authors as D. Spotts [12], B. Boers and C. Cottrell [13], A. Sazykin [14], D. Ushakov [15]. This approach is based on the view that tourist potential depends on two fundamental factors [11]. The first factor is the quantity and quality of tourist attractions. The second, in its turn, implies the development of the infrastructure of the tourism industry. This approach in modern Russian reality is the most frequently used by both researchers and representatives of state authorities. Under the first approach, tourist potential is based on both object and an subject" basis. The object basis, in this case, implies the presence of tourist attractors and infrastructure facilities. It should be noted that, if we follow this term, the value of tourist flow directly depends on the number of museums, tourist routes, hotels and other means of accommodation in the region. But, unfortunately, as seen in practice, this hypothesis does not always work. The creation of excessive infrastructure in the Arctic will

lead to the destruction of the ecosystem, and the cost of visiting the Far North will remain high (due to the geographical remoteness) and will not allow the tourist to scale the tourist flow. Therefore, this approach cannot be used when considering the tourism potential of the Arctic.

The representatives of the second approach, which proceeds from the assessment of demand, are the following authors: J. Kripppendorf [16], M. Opperman [17], S. Jurowski and M. Olsen [18]. For example, in the works of J. Kripppendorf, the potential is viewed through the prism of the possibility to create the "final tourist product" and the ability to develop economically sound tourism (with an emphasis on the limitations and opportunities to use these objects to form the final tourist product) [11]. Nevertheless, from the practical point of view, this approach is considered more difficult to assess, but from the methodological point of view, it is more correct. The volume of the tourist flow is the basis for expressing tourist potential. But, unfortunately, the representatives of the second approach did not come to a consensus on what kind of tourist flow should be taken into account in this case (current, which is measured objectively, or predicted, the evaluation of which cannot avoid subjectivity). The only thing that the researchers of the second approach agree on is that the main critics of the tourist attractiveness of the region are tourists. The measure of the tourist potential of the region directly depends on them and their demand.

The pandemic showed a weak correlation between tourist potential and flow. The lockdown led to zero tourist flow, while the demand and desire to travel increased (with the slightest removal of restrictions, the cost of flights to a tourist destination increases many times over). The Arctic has tremendous touristm potential, while the current flow of tourists is low, primarily due to the cost of travel, as well as the need to develop regulations that allow travel in the Arctic zone without harming the ecosystem of the region.

In the process of forming the final approach, such researchers as M. Bulay and S. Yatu [19], L. Vereiro and J. Robeiro [20] and S. Formica [21] played an important role. It is this approach that synthesizes the first two [11]. In the third approach, h main property can be distinguished, which is that the tourist potential takes into account both demand and supply. In this case, the tourist offer of the territory, which includes attractors and infrastructure, will be the most important factor. However, no matter how important the tourist offer is, it directly depends on tourist demand (this may include the actual understanding of the brand of the territory, its history, the attractiveness of this territory for tourists in general). It should be added that in order to fully assess the tourist potential of the territory, it is necessary to understand that tourist supply and tourist demand have a direct impact on each other.

The above-mentioned possibility of the Arctic territories to form a tourist flow directly depends on the existing resources of the tourism industry [22]. These resources include:

Tourist attractors

- Infrastructure in the tourism sector (including its development)
- Transport infrastructure and accessibility of the region.

4 Directions for the development of Arctic tourism

The previously identified factors lead to the need for state regulators to pay attention to the development of tourism in the Arctic Zone. The Federal Agency for Tourism (Rosturizm) [23] notes a rather weak tourist capacity of the Arctic territories of the Russian Federation compared to neighboring countries such as Norway and Sweden (the number of tourists visiting the Arctic in Russia is more than 50 times less than similar indicators in other Arctic countries).

This is due to several factors, which include poor infrastructural development, as well as the lack of a legislative framework governing tourism in the Arctic Zone. The formation of new reception infrastructure, reconstruction of ports is required, which will allow developing the most promising type of tourist travel for this region - cruise tourism. we will need active participation of the state in attracting cruise companies to work in Russia, the position of the federal center is important here. We should not forget about the commercial component of the business: the Arctic requires investment and individual work with investors, possibly, including a system of tax preferences for business. In general, we need to understand the fragility of the ecosystem of the Arctic zone and make any decisions taking into account the need to preserve the unique nature of the region. As the experience of other Arctic countries shows, Russia has great potential for the formation of a tourism cluster in the Arctic and is only at the very beginning of the journey [24].

In many ways, the direction of development of the Arctic is related to political decisions, today the region is perceived as a resource center, while other possible sectoral specializations are not given due importance. With developing tourism activities, especially in the Arctic, one should avoid the mistakes made by neighboring states, which include the inequitable distribution of the economic effect, when only the anthropogenic load remains on the territories, and all the profits are concentrated with tour operators. This can be avoided by organizing the work of small vessels, the development of reception infrastructure and the introduction of additional fees for environmental damage. Of course, it is necessary to provide incentives, which include preferential taxation at the initial stage of investment. People travel quite often, which obtaining an interesting unique tourist product can considerable interest, therefore it should be remembered that in the Arctic not only the environment is fragile, but also the social organization of people living in this territory.

In the Arctic Zone there are protected zones that attract tourists, while it is not possible to organize tourism infrastructure on this territory, this is prohibited by current legislation. It is necessary to introduce into the legislative base the possibility of allocating municipal land plots on the borders of protected areas for the creation of mini-tourist clusters.

Even with the further development of tourism in the Arctic, it will not become widespread, therefore, so we should use the opportunities of cross-border cooperation using the experience of other Nordic countries to return investments. The Russian Federation has a unique opportunity to combine visits to eco-environmental trails and eco-parks with places of historical and cultural heritage, which is certainly a competitive advantage.

A unique place in the entire region is the Russian Arctic National Park [25]. With a fairly short season and a lack of the necessary number of equipped vessels capable of calling at Arctic ports, the park continues to attract tourists from all over the world. Today, the infrastructure formed back in the Soviet era is actively used, and new facilities are created to make tourist trips more comfortable. The main way to visit the park for tourists is cruise tourism, which, in its turn, is quite expensive for the average person; for example, at the moment, only 5% of the total number of tourists are citizens of the Russian Federation. development of small aviation can significantly reduce the cost of tours and intensify domestic tourism to the Arctic.

It is worth noting the importance of the development of interregional cooperation, especially in the context of the development of the Northern Sea Route [22], which can become not only a transit route, but also a tourist route. In this regard, the territory of Kamchatka can become a logistics center and a large tourist cluster for tourists wishing to travel in the Arctic. In 10 years it is planned to increase traffic capacity of Kamchatka ports by 10 times, which is facilitated both by development of infrastructure of the region (ports and airport) and by development of country's opportunities for navigating of ships along the Northern Sea Route (nuclear fleet).

The Russian Geographical Society (hereinafter RGS) [26] welcomes attention to the Arctic, educational activities are an important element in the development of a responsible attitude towards the country and the world in general. For the RGS, the main areas of activity in the Arctic Zone are educational and research activities. At the same time, tourism helps to build communication between all stakeholders - the population, businesses and the state. To formulate development strategies for the Arctic Zone, it is important to take into account the opinion of the business community for the formation of a full-fledged industry specialization.

The Arctic is actually quite different and its Russian component is the largest in the world. At the moment, Russia is not developing the Arctic from scratch, there is already a legislative base, which is certainly not enough to overcome all the problems facing today. Solutions are needed for the development of transport accessibility, taking into account the environment [27]. It is important to use the opportunities of cross-border cooperation in tourist activities, which makes it possible to form tourist reception centers in the territory, as well as to activate the local population for the development of folk crafts.

To develop cross-border cooperation, it is important to make changes in the country's visa policy.

5 Conclusions

The plan for the development of the Arctic as a center of eco-tourism requires a unified strategy with the definition of targets of the desired number of tourists and the required amount of infrastructure. At the same time, the opportunities of the Arctic zone can be used to develop environmental tourism in the northern regions. It is worth separating the application of the of state and private business forces, with the market's efforts concentrated on creating a tourist offer and increasing competition. The attention of the state should be aimed at attracting the local population to the creation of unique tourist products, taking into account the culture and traditions of the peoples of the Far North. In this process, we can turn to the institution of selfemployment, which was rapidly introduced in all regions of Russia in July 2020 in order to reduce the negative impact of the crisis associated with the spread of the pandemic coronavirus.

In 2020, the Federal Agency for Tourism made significant efforts to create a separate non-resource sector of the economy in the Russian Federation, this has fully activated eco-environmental tourism in the middle belt of the country, but has not yet had a significant impact on the Arctic regions. Sustainable development and eco-tourism can become a source of investment for northern cities and give new meaning to spatial development. The pandemic has created unique conditions for the launch of domestic tourism, remote work allows small trips for 1-2 days; the developed national project on tourism "Tourism and hospitality industry" (Rostourism, Federal Agency for Tourism) [23] assumes many new support tool, which will affect the spatial development of the territory. Systemic and transparent management mechanisms for the industry will be created, the regulatory framework for the industrywill be improved taking into environmental and social well-being norms, and training for the tourism sector will be organized. Specialists will receive the up-to-date digital and social knowledge and skills. The national project will make it possible to implement the potential of Russia in general and the Arctic in particular on the basis of:

- incorporatingthe priority of eco-environmental tourism and the active development of the territory, the emergence of a design code and the restoration of partially lost attractors
- taking into account modern threats associated with the spread of the coronavirus pandemic, creating conditions for ecology environment, social stability, public health and sustainability of the territories at whole
- increasing the safety of objects of the tourist industry facilities
- introduction of digital technologies in the tourism sector, in particular in the area of obtaining visas, booking accommodation and rental services, information

support on routes, access to databases of the sights of the regional, online currency conversion

- elimination of administrative barriers to the creation of a tourism product, working on a one-stop-shop principle, with the inclusion of digital standards for the provision of public services.

The world is changing, people's needs are changing, the mechanisms of state influence are transforming, the sphere of tourism around the world is growing and developing, there are specific features of different types of tourism, in accordance with this, state management of environmental tourism should be improved in the context of constantly changing conditions of the internal and external environment.

References

- 1. United Nations Organization Convention on Customs Concessions for Tourists. Available online: http://docs.cntd.ru/document/1901570 (1954)
- United Nations Additional Protocol to the Convention on Customs Concessions for Tourists, concerning the importation of tourism-related information documents and Available online: http://continentonline.com/Document/?doc id=1009821 (1954)
- 3. World Tourism Organization (UNWTO) Basic Documents Tourists Available online: https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2019-11/130718basicdocumentsenweb.pdf (1993)
- 4. Concepts, definitions and classifications for tourism statistics ("Recommendations for Tourism Statistics" of the UN World Tourism Organization)
 Available online: https://www.unwto.org/ru (1993)
- 5. Tourest. Tourism Handbook Available online: http://tourest.ru/
- 6. E.L. Pisarevsky, State and municipal management in the field of tourism: textbook 2nd ed. (Moscow, Federal Agency for Tourism, 2017)
- 7. World Trade Organization (WTO) Available online: https://www.un.org/ru/wto/ (1995)
- 8. Worldwide network of tourism experts (AIEST) Available online: https://www.aiest.org/aiestprofile/profile/ (1951)
- 9. Federal Law of 24.11.1996 N 132-FZ (as amended on 09.03.2021) "On the Basics of Tourist Activity in the Russian Federation" Available online: http://www.consultant.ru/document/cons_doc_LAW_12462/, free (1996)
- 10. Strategy for the development of tourism in the Russian Federation for the period up to 2035 (approved by the Order of the Government of the Russian Federation dated September 20, 2019 No. 2129-r)

 Available online: https://tourism.gov.ru/upload/iblock (2019)
- 11. T.S. Krasnikova, The tourist potential of the territory and the need for its development, *Society:* politics, economics, law, 6 (2015)

- 12. D.M. Spotts, Regional analysis of tourism resources for marketing purposes, *Journal of Travel Research*, **35(3)**, r 3-15 (1997)
- 13. B. Boers and S. Cottrell, Sustainable Tourism infrastructure Planning: A GIS-Supported Approach, *Tourism Geographies*, 9(1), pp. 1–21 (2007)
- 14. A.M. Sazykin, Geographer's polemic notes on the problems of terminology in recreational geography and tourism Tourism in the Far East: business, investment strategies, education and ecology: materials of the region. Scientific-practical conf. "Daltur-2001" (Vladivostok), pp. 306–310. 7. (2002)
- 15. D.S. Ushakov, *Strategic planning in tourism* (Rostov n / D, 2007), p. 288
- 16. J. Krippendorf, Marketing im Fremdenverkehr. 2 aufl. (Bern; Frankfurt am Main, 1980), p. 168
- 17. M. Oppermann, Regional Aspects of Tourism in New Zealand, *Regional Studies*, 28(2), pp. 155-168 (1994)
- 18. C. Jurowski and M.D. Olsen, Trends in Tourist Attractions, *Journal of Travel & Tourism Marketing*, 4(1), pp. 71–96 (1995)
- 19. C. Iatu and M. Bulai, New approach in evaluating tourism attractiveness in the region of Moldavia (Romania), *International Journal of Energy and Environment*, **5(2)**, pp. 165–174 (2011)
- J.C. Ribeiro and L.C. Vareiro, What influences a tourist to return to a cultural destination?
 International Journal of Tourism Research, 21(2), pp. 280-290 (2019)
- S. Formica, Destination attractiveness as a function of supply and demand interaction. Unpublished doctoral dissertation (Blacksburg, 2000), p. 203
- 22. L.V. Dorofeeva et al., The transport relationship of the Arctic with the Far East, Siberia and the Urals and the issues of socio-economic development of territories, *IOP Conf. Series: Earth and Environmental Science*, **539**, 012083 (2020)
- 23. Federal Agency for Tourism (Rostourism) Available online: https://tourism.gov.ru (2021)
- 24. Roscongress Foundation information analytical platform Available online: https://roscongress.org/ (2020)
- 25. National Park "Russian Arctic" Available online: http://www.rus-arc.ru/ (2020)
- 26. Russian Geographical Society (RGO) Available online: https://www.rgo.ru/ru (2021)
- 27. L.V. Dorofeeva, The essence and features of the infrastructural potential of regions Regional economy and development of territories Collection of scientific articles (St. Petersburg, 2017), p. 183-189