DEVELOPMENT OF TOURISM IN RUSSIA IN THE PARADIGM OF SUSTAINABLE NATURE MANAGEMENT

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Abstract

In modern conditions, tourism development in Russia is becoming especially relevant as a strategic direction for economic diversification and sustainable regional development. The country's rich natural resource potential creates fundamental prerequisites for the formation of a competitive tourism product. However, increasing anthropogenic pressure on natural ecosystems, climate change and worsening environmental problems require a rethinking of traditional approaches to organizing tourism activities. The paradigm of sustainable nature management offers a conceptual basis for harmonizing the economic, social and environmental aspects of tourism, ensuring the preservation of the natural and cultural heritage for future generations. This approach is of particular importance in the context of the growth of domestic tourism in Russia observed in recent years and the need to develop tourism infrastructure in specially protected natural areas. The article analyzes modern trends and features of the formation of the tourism potential of Russian regions taking into account environmental, social and economic factors, identifies key contradictions between the intensification of tourism activities and the preservation of natural ecosystems, proposes a conceptual model of sustainable tourism development based on the principles of rational use of natural resources, minimization of anthropogenic impact and distribution of economic benefits among local communities.

Keywords: sustainable tourism, recreational load, nature management, specially protected natural areas, ecotourism, tourism, ecology.

I. Introduction

The formation of a scientific and methodological basis for tourism development in the paradigm of sustainable nature management is a complex interdisciplinary process integrating the conceptual provisions of the theory of sustainable development, rational nature management, regional economics, social ecology, and recreational geography. Sustainable tourism is considered not only as a specific form of economic activity, but also as a complex socio-ecological phenomenon that has a multifaceted impact on natural ecosystems, the socio-cultural environment, and the economic development of territories. The actualization of theoretical research in the field of sustainable tourism is due to a number of objective factors: the growing role of tourism in the structure of the world economy; increased anthropogenic impact on natural complexes in tourist destinations; the need to ensure a balance between the economic interests of tourism market entities,

the social needs of local communities, and the imperatives of preserving the natural heritage for future generations.

The genesis of the concept of sustainable tourism is inextricably linked with the formation and development of a broader paradigm of sustainable development, which received fundamental justification in the report of the World Commission on Environment and Development "Our Common Future" (1987) [[18]]. The original interpretation of sustainable development was "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [[16]], was specified in relation to the field of tourism in the works of such researchers as J. Swarbrook [[14]], D. Weaver [[17]], B. Bramwell [[2]].

Several stages can be distinguished in the evolution of conceptual approaches to sustainable tourism. At the initial stage (late 1980s – early 1990s), the eco-centric interpretation dominated, focusing on minimizing the negative impact of tourism activities on natural ecosystems. This approach was reflected in the works of R. Butler [[4]], who presented the concept of the "life cycle of a tourist destination" and substantiated the need to take into account the maximum recreational capacity of the territory.

The second stage (mid-1990s – early 2000s) saw the expansion of the conceptual framework of sustainable tourism by including socio-economic aspects. In particular, D. Hunter [[8]] proposed to interpret sustainable tourism as an "adaptive paradigm" that involves balancing environmental, social and economic interests. During this period, the World Tourism Organization (UNWTO) formulated a definition of sustainable tourism as "tourism that takes full account of its current and future economic, social and environmental impacts, while meeting the needs of visitors, industry, the environment and host communities" [[19]].

II. Methods

The modern stage (from the mid-2000s to the present) is characterized by the integration of the concept of sustainable tourism into the broader context of global challenges, including climate change, loss of biodiversity, and social inequality. A significant contribution to the development of the theoretical foundations of sustainable tourism was made by the works of S. Goessling and K. Hall [[7]], which substantiated the need for a systematic and interdisciplinary approach to the study of sustainable tourism.

In the Russian scientific school, the theoretical foundations of sustainable tourism were developed in the works of such researchers as S.A. Bogolyubova [[1]], S. Dagman [[5]], D.A. Kotelnikov [[9]], O.P. Zvyagintseva [[13]], S.A. Tumenova.

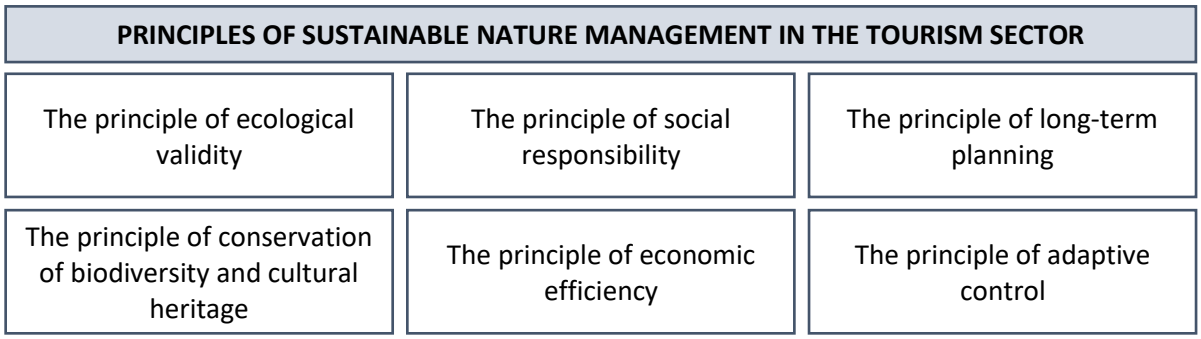

Figure 1: Principles of sustainable nature management in the tourism sector

Particular attention in the works of domestic researchers was paid to the issues of adapting international principles of sustainable tourism to Russian conditions, taking into account the specifics of the natural resource potential, socio-economic development of the regions and the institutional environment.

The theoretical and methodological basis for sustainable nature management in the tourism sector is formed by key principles (Fig. 1).

The principle of ecological justification assumes the conformity of forms and scales of tourist activity with the ecological capacity of the territory, taking into account the limits of stability of natural ecosystems to anthropogenic impacts. The principle of conservation of biodiversity and cultural heritage focuses on minimizing the negative impact of tourism on biological diversity and cultural and historical resources of the territory, which are the fundamental basis for the attractiveness of tourist destinations. The principle of social responsibility emphasizes the need to take into account the interests of local communities, their involvement in the processes of planning and management of tourist activities, and the fair distribution of economic benefits from tourism.

III. Results

The principle of economic efficiency provides for ensuring the profitability of tourism activities subject to compliance with environmental and social sustainability criteria. The principle of long-term planning focuses on the development of strategic approaches to tourism development, taking into account long-term consequences for the natural environment and local communities. The principle of adaptive management assumes the flexibility and adaptability of management approaches to changing environmental, social and economic conditions, the use of feedback mechanisms to adjust tourism development strategies [[10]].

Tourism development in Russia is characterized by progressive dynamics, accompanied by the expansion of the geography of tourist routes and an improvement in the quality of tourist infrastructure. In recent years, there has been a significant increase in domestic tourism, which was facilitated by both state programs to support the industry, including the tourist cashback program, and the active development of new tourist clusters in various regions of the country. According to S.A. Bogolyubova, diversification of the tourist offer is becoming an important trend - in addition to the traditional areas of cultural, educational and beach tourism, ecological, gastronomic, medical and event tourism are actively developing, which allows for a more complete disclosure of the tourist potential of various regions of Russia [[1]].

Despite positive trends, the development of the tourism industry faces a number of challenges that require systemic solutions. Key issues include insufficient transport accessibility of a number of promising tourist destinations, seasonality of tourist demand, shortage of qualified personnel and non-compliance of service quality with international standards in some regions. To overcome these barriers, it is necessary to comprehensively develop tourism infrastructure, including modernization of transport networks, improvement of the personnel training system for the hospitality industry, introduction of modern technologies for managing tourist flows and digitalization of tourism services. Strategic planning of tourism development taking into account regional specifics and focus on the principles of sustainable development will create the basis for the formation of a competitive national tourism product.

The most significant anthropogenic impact of tourism on natural ecosystems in Russia is observed in several types of tourist destinations: coastal zones, mountainous areas, specially protected natural areas, suburban recreational zones of large agglomerations. Coastal tourist destinations (the Black Sea coast of the Krasnodar Territory, the Crimean coast, the Baltic coast of the Kaliningrad Region) are characterized by a high degree of concentration of tourist infrastructure and seasonal peaks of anthropogenic load. As S.A. Tumenova notes, on the Black Sea coast of the Krasnodar Territory in the high season, the recreational load reaches 1500-2000 people/ha/day, which is 5-7 times higher than the maximum permissible indicators for this type of ecosystem [[15]]. The main negative consequences of excessive anthropogenic load are: erosion of the coastline, pollution of coastal waters, degradation of coastal ecosystems, fragmentation of natural landscapes, reduction of biodiversity. On the coast of Crimea, there is an uneven distribution of recreational load with the formation of "hot spots" of anthropogenic impact in the areas of popular beaches and

attractions. Of particular concern is the state of coastal ecosystems in the area of the southern coast of Crimea, where degradation of relict plant communities, disruption of the hydrological regime, and pollution of the sea area are observed.

IV. Discussion

Mountain tourist destinations (the Caucasus, Altai, Ural, Sayan) are experiencing increasing anthropogenic impact due to the development of ski tourism, active recreation, and mountaineering. As shown by the research of Yu.P. Suprunenko [15], in the Caucasus in the areas of large ski resorts (Krasnaya Polyana, Dombay, Elbrus region) a complex of negative environmental consequences is observed: disturbance of the soil and vegetation cover on the slopes, activation of erosion processes, changes in the hydrological regime, transformation of habitats of rare species, pollution of high-mountain reservoirs [[20]]. In the Altai region, the state of natural complexes in the area of Lake Teletskoye and Mount Belukha is of particular concern, where in recent years there has been a significant increase in tourist flow without the corresponding development of environmental infrastructure. Studies show that during the high season, the recreational load on the coastal areas of Lake Teletskoye exceeds the maximum permissible values by 3-4 times, which leads to the degradation of unique natural complexes [[11]].

Specially protected natural areas (SPNA) of Russia are becoming increasingly popular objects of tourist interest, which creates complex problems of combining nature conservation and recreational functions. Analysis conducted by S. Dagman [[5]], shows that in the national parks of Russia the most acute situation with exceeding the maximum permissible recreational loads is observed in the Sochi, Curonian Spit, Pribaikalsky, and Russian North national parks. In particular, in the Curonian Spit national park during the peak days of the high season, the recreational load on some areas of the dune complex reaches 1200-1500 people/ha/day, which exceeds the optimal indicators by 8-10 times [[9]]. In the Pribaikalsky National Park, the most significant anthropogenic impact is observed on the coast of Lake Baikal in the area of the village of Listvyanka and Olkhon Island, where the degradation of coastal ecosystems, pollution of the water area, problems with waste disposal, and disruption of the traditional way of life of local communities are recorded.

Suburban recreational zones of large agglomerations (Moscow, St. Petersburg, Yekaterinburg, Novosibirsk) are characterized by high intensity and regularity of recreational impact. Research by D.A. Kotelnikov shows that in the forest park belt of Moscow and the Moscow region, more than 60% of the territories are at stages 3-5 of recreational digression, which is manifested in the disturbance of the forest litter, soil compaction, changes in the species composition of vegetation, and a reduction in the number of birds and small mammals [[9]].

The system of environmental monitoring of tourist areas in Russia is in the process of formation and is characterized by fragmentation, insufficient coordination between various departments and a lack of modern instrumental and methodological support. The most developed monitoring systems operate in specially protected natural areas, where scientific departments and regular observation programs exist.

The Sochi National Park implements a comprehensive environmental monitoring program, including observations of the state of vegetation on tourist routes, the quality of surface water, the dynamics of rare species populations, and the processes of restoration of disturbed ecosystems. Particular attention is paid to monitoring the environmental impacts of the operation of ski resorts in the Krasnaya Polyana area. The Curonian Spit National Park has developed a system of sustainable tourism indicators that allows assessing the environmental impacts of recreational activities and the effectiveness of management decisions. The system includes indicators of the state of dune ecosystems, forest plantations, water bodies, as well as socio-economic indicators reflecting the interaction of tourism activities and local communities.

At the federal level, attempts are being made to create a unified system for monitoring tourist destinations. The Ministry of Natural Resources and Environment of the Russian Federation,

together with the Federal Agency for Tourism, are developing methodological recommendations for organizing monitoring of the impact of tourism on the environment in protected areas. A promising direction for the development of environmental monitoring systems for tourist areas is the introduction of modern geoinformation technologies, methods of remote sensing of the Earth, and mobile applications for data collection.

Meanwhile, an analysis of existing practices of environmental monitoring of tourist areas in Russia allows us to identify a number of problems that require solutions: insufficient coordination of the activities of various departments and organizations, fragmentation of observations in space and time, a shortage of qualified personnel and modern equipment; lack of uniform standards and methods, insufficient use of modern technologies, problems with funding monitoring programs, and weak integration of monitoring results into the system of making management decisions.

To solve the above problems, it seems appropriate to develop and implement a conceptual model of sustainable tourism development in Russia. The proposed conceptual model is based on a systemic approach integrating three key components: environmental, socio-cultural and economic. The fundamental principles of the proposed model are:

- balancing the interests of all stakeholders (government, business, local population, tourists);
- long-term focus on preserving resources for future generations
- adaptability to regional characteristics of Russia;
- inclusiveness in planning and decision-making;
- innovative approaches to organizing tourism activities.

The model of sustainable tourism development in Russia can be structured into six interconnected blocks (Fig. 2).

Thus, the regulatory and legal block in the developed model of sustainable tourism development in Russia provides for the development of specialized legislation and standards in the field of sustainable tourism. The institutional block establishes a multi-level management system with a clear delineation of powers between the federal, regional and local levels. The environmental block ensures the conservation of natural resources through monitoring, determining the recreational capacity of territories and the introduction of environmental technologies. The socio-cultural block in the model is aimed at involving local communities and preserving cultural heritage. The economic block creates mechanisms for the economic sustainability of the tourism industry. The information and analytical block ensures monitoring and analysis of indicators of sustainable development of territories.

The functional mechanisms for implementing the conceptual model of sustainable tourism development in Russia are an interconnected system of tools and processes that ensure the practical implementation of theoretical provisions in real management decisions and actions. The key role in this system is played by strategic planning based on the development of a long-term national strategy for sustainable tourism development with a horizon up to 2040. This strategy is not an isolated document, but is organically integrated into the system of national projects and state programs, which ensures a synergistic effect and intersectoral interaction. At the regional level, specialized strategies are formed that take into account the tourism specifics of the territories, their natural and climatic features and cultural and historical heritage. In parallel with planning, financial and economic mechanisms are being introduced, including the creation of the Sustainable Tourism Development Fund, a system of environmental fees with flexible differentiation by seasons and types of territories, as well as programs of preferential lending and grant support for innovative "green" projects in the tourism sector.

A special place in the system of functional mechanisms is occupied by educational and scientific initiatives and marketing strategies. The introduction of educational standards on sustainable tourism in higher education institutions, the creation of specialized research centers at leading universities and the implementation of advanced training programs for current industry specialists create a personnel and scientific-methodological base for sustainable tourism

development. At the same time, a national brand "Sustainable Tourism of Russia" is being formed, promoted both in the domestic and international markets. The integration of Russian destinations into international sustainable tourism programs and the development of a system of national eco-labeling of tourist services contribute to increasing the competitiveness of the domestic tourism product and the formation of a positive image of Russia as a country committed to the principles of sustainable development. The combination of these functional mechanisms ensures the systematic implementation of the sustainable tourism model and its adaptation to changing external conditions, which is the key to the long-term effectiveness of the proposed approach.

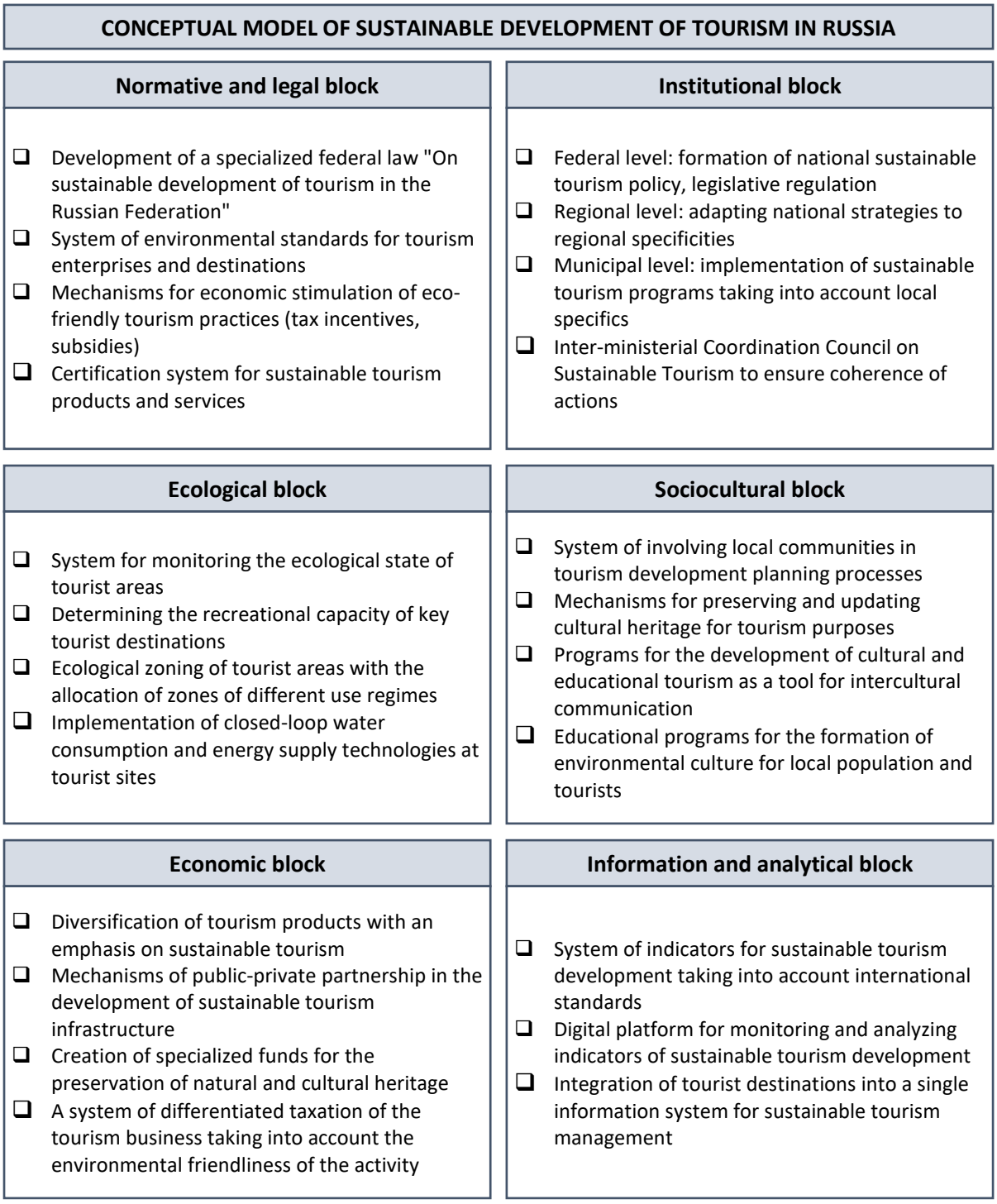

Figure 2: Conceptual model of sustainable tourism development in Russia

Regional differentiation in the conceptual model of sustainable tourism development in Russia acts as a key principle for adapting uniform methodological approaches to the diversity of territorial conditions in the country. Given the unprecedented diversity of natural and climatic zones, cultural and historical features and levels of socio-economic development in Russia's regions, the universal application of standardized mechanisms will inevitably lead to a decrease in the efficiency of the model. Nature-oriented regions, which include territories with unique ecosystems, such as the Baikal region, Altai, and Kamchatka, require priority attention to environmental monitoring, strict regulation of tourist flows, and the introduction of technologies with minimal impact on the environment. For these territories, it is advisable to establish maximum permissible indicators of anthropogenic load and a system of visitor quotas in particularly vulnerable areas. In turn, cultural and historical centers, such as the cities of the Golden Ring, St. Petersburg, and historical settlements of the North Caucasus, need a balanced approach to preserving tangible and intangible cultural heritage while ensuring tourist accessibility of sites.

Coastal areas, including the Black Sea and Azov coasts, the Kaliningrad Region, and coastal areas of the Far East, face the problem of pronounced seasonality and peak loads in the summer, which requires the development of a system for seasonal regulation of tourist flows and stimulation of the development of alternative types of tourism for the low season. The use of differentiated tax rates and fees depending on the season can become an effective economic tool for equalizing the tourist load. Particular attention should be paid to the northern and Arctic regions of Russia, where tourism development should take into account not only the increased environmental vulnerability of the territories, but also specific climatic conditions that require special approaches to organizing infrastructure and ensuring the safety of tourists. For this group of regions, it is advisable to develop special technical regulations for the construction of tourist facilities and the formation of a unique tourist offer based on Arctic exoticism and the phenomena of northern nature. Thus, regional differentiation not only takes into account territorial features, but also creates conditions for the formation of a diverse and competitive tourist product reflecting the diversity of Russia's natural and cultural wealth.

Thus, the formation and implementation of a conceptual model of sustainable tourism development in Russia is a complex task that requires a systematic approach and coordinated actions of all stakeholders. The study shows that sustainable development of the tourism industry is impossible without integrating environmental, socio-cultural and economic aspects into a single paradigm of nature management. The proposed model with its multi-level structure, differentiated regional approach and clear functional mechanisms creates a methodological basis for the balanced development of tourism that contributes to the conservation of natural resources and cultural heritage while ensuring economic growth and improving the quality of life of the local population.

Prospects for further development of tourism in Russia in the paradigm of sustainable nature management are associated with the need to institutionalize the proposed approaches, improve the regulatory framework and form a system of incentives for the introduction of environmentally responsible practices in the tourism industry. Key factors for the successful implementation of the model are the integration of sustainable development principles into educational programs, the development of public-private partnerships and the formation of public consciousness focused on the values of responsible tourism. The use of a differentiated approach to various types of tourist regions while observing uniform methodological principles will allow the most effective use of Russia's recreational potential, preserving it for future generations.

CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

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