COMPARATIVE GEOGRAPHICAL ANALYSIS OF TOURISM AND RECREATION MANAGEMENT MODELS IN NATIONAL NATURE PARKS

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Abstract. The article presents a comparative geographical analysis of international models for managing tourism and recreational activities in national nature parks. The funding sources, environmental control mechanisms, advantages and limitations of the state-led, public-private partnership and community-based management models are systematized. Drawing on the concepts of sustainable tourism and ecotourism, the importance of functional zoning, regulation of recreational load and carrying capacity, minimal and adaptive infrastructure, environmental education and the participation of local communities is substantiated. For the conditions of Uzbekistan, it is proposed that, rather than fully transferring foreign models, their strengths should be combined within an integrated management system.

Keywords: national nature park, tourism, recreation, management model, public-private partnership, community-based management, functional zoning, recreational carrying capacity, environmental monitoring, sustainable tourism.

Аннотация. В статье проведён сравнительно-географический анализ международных моделей управления туристско-рекреационной деятельностью в национальных природных парках. Систематизированы источники финансирования, механизмы экологического контроля, преимущества и ограничения государственной, государственно-частной и общественно-ориентированной моделей управления. На основе концепций устойчивого туризма и экотуризма обоснована роль функционального зонирования, нормирования рекреационной нагрузки и ёмкости, минимальной адаптивной инфраструктуры, экологического просвещения и участия местных сообществ. Для условий Узбекистана предложен интегрированный подход, объединяющий сильные стороны рассмотренных моделей.

Ключевые слова: национальный природный парк, туризм, рекреация, модель управления, государственно-частное партнёрство, местное сообщество, функциональное зонирование, рекреационная ёмкость, экологический мониторинг, устойчивый туризм.

Annotatsiya. Mazkur maqolada milliy tabiat bog'larida turistik-rekreatsion faoliyatni boshqarishning xalqaro modellari qiyosiy-geografik jihatdan tahlil qilingan. Davlat boshqaruvi, davlat-xususiy sheriklik va jamoa asosida boshqaruv modellarining moliyalashtirish manbalari, ekologik nazorat mexanizmlari, afzalliklari hamda cheklovlari tizimlashtirilgan. Barqaror turizm va ekoturizm konsepsiyalari asosida funksional zonalashtirish, rekreatsion yuk va sig'imni me'yorlashtirish, minimal va moslashuvchan infratuzilma, ekologik ta'lim hamda mahalliy jamoalar ishtirokining ahamiyati asoslangan. O'zbekiston sharoitida xorijiy modellarni to'liq ko'chirishdan ko'ra ularning kuchli tomonlarini integratsiyalashgan boshqaruv tizimida uyg'unlashtirish maqsadga muvofiqligi taklif etilgan.

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Kalit so‘zlar: milliy tabiat bog‘i, turizm, rekreatsiya, boshqaruv modeli, davlat-xususiy sheriklik, jamoa boshqaruvi, funksional zonalashtirish, rekreatsion sig‘im, ekologik monitoring, barqaror turizm.

INTRODUCTION

National nature parks are a distinct form of the nature conservation system: while preserving biological and landscape diversity, they also serve to meet the tourism and recreational needs of the population. For this reason, tourism management in these areas is not limited to providing services or expanding infrastructure. It requires comprehensive management that integrates interrelated tasks such as maintaining the natural state of geosystems, regulating visitor flows, taking into account the interests of local residents and supporting the regional economy [3, 5].

International experience shows that the effective organization of tourism in national nature parks depends directly on the institutional form of management, the level of environmental control, funding mechanisms and the involvement of local communities. From this perspective, the state-led, public-private partnership and community-based management models are of considerable scientific and practical importance. The aim of this article is to carry out a comparative geographical analysis of these models, identify their strengths and weaknesses, and develop the methodological foundations of an integrated management approach for the conditions of Uzbekistan.

LITERATURE REVIEW AND METHODOLOGY

Issues of tourism and recreation management in protected natural areas have been widely addressed in the works of Ceballos-Lascuráin, Eagles et al., Honey, Leung et al., Western, Zabelina, Khrabovchenko and in studies of international organizations [3–10]. The concept of sustainable tourism implies meeting the needs of the present generation in the use of natural and cultural resources while preserving the opportunities of future generations [10, 11]. The tourism area life cycle theory proposed by Butler emphasizes that when tourist load exceeds ecological carrying capacity, natural systems degrade and the tourist attractiveness of the area declines [2].

The study employed comparative geographical, systems and structural analysis methods. Three main models of national nature park management were taken as units of analysis: the state-led model, the public-private partnership model and the community-based management model. Each model was compared in terms of funding, environmental control, organization of tourism services, participation of local residents, and main risks and limitations. The integrated model presented in the article was developed as the authors’ analytical synthesis of the international experience and chapter conclusions presented in Section 1.3 of the dissertation.

RESULTS AND DISCUSSION

In world practice, various management mechanisms have evolved in national nature parks depending on their natural-geographical conditions, political and economic systems, and traditions of resource use. The most widespread approaches can be divided into three groups.

Table 1. Comparative analysis of international management models for national nature parks

Model	Countries	Funding source	Environmental control	Advantage	Limitation
State-led management	USA, Canada	State budget and centralized funds	Strict control by state agencies	High level of environmental safety and protection	Heavy burden on the state budget
Public-private partnership	Germany, France and other European	State subsidies and private investment	Combination of state environmental control	Rapid infrastructure development and service	Risk of commercialization

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	countries		and private audit	quality	
Community-based management	Kenya, Tanzania and other countries of Africa and Southeast Asia	International grants and local tourism revenues	Control by local communities and NGOs	Local employment, reduced poaching	Lack of scientific management

Source: compiled by the authors based on the comparative analysis in Section 1.3 of the dissertation.

The state-led management model is widely applied in countries such as the USA, Canada and Australia. In this model, the protection of natural resources, regulation of visitor movement, planning of tourism infrastructure and monitoring are carried out on the basis of a unified state policy. The main strength of the model lies in strong environmental control and centralized management, whereas its limitation relates to the high financial burden on the state budget [5].

The public-private partnership model is more common in European countries. Here, the state retains its powers over nature conservation, environmental control and spatial planning, while the private sector actively participates in developing hotels, services, excursions and ecological routes. This approach creates a favourable environment for investment and service quality; however, if nature conservation requirements are not given sufficient priority, it may intensify pressure towards commercialization.

In the community-based management model, local residents are directly involved in conservation, guiding, handicrafts, the production of eco-products and the operation of guesthouses. According to Western, the economic interest of local communities increases the effectiveness of nature conservation and reduces illegal resource use [6]. However, an important condition of this model is the adequate organization of scientific management and professional monitoring.

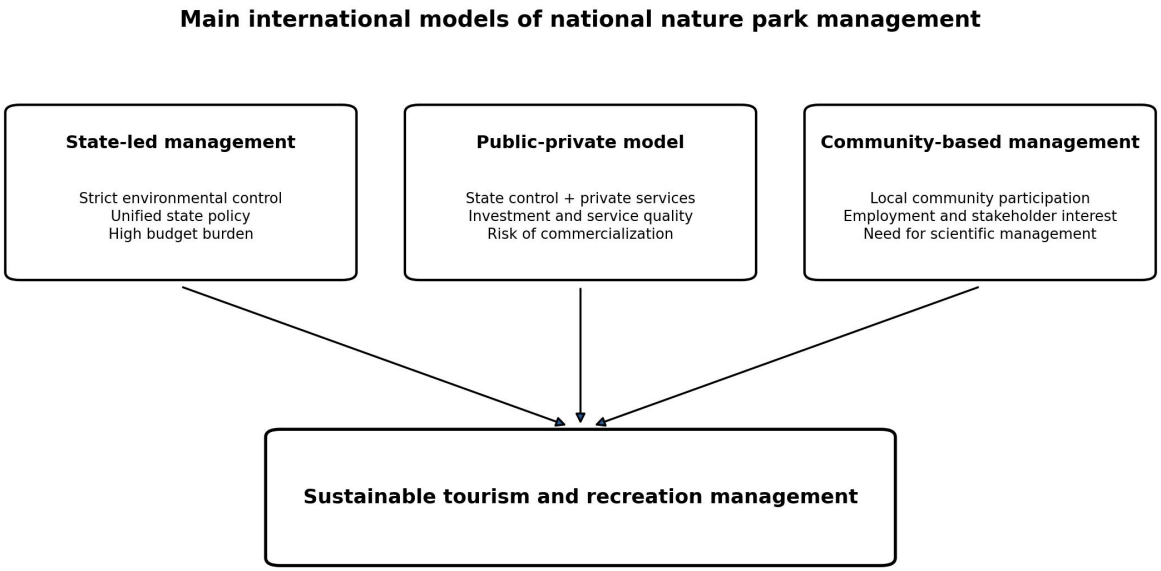


Figure 1. Three main models of national nature park management and their orientation towards sustainable management

Regardless of which model is chosen, the main criterion for developing tourism in national nature parks is that it must not harm nature conservation objectives. In the IUCN and UNWTO approaches, sustainable tourism is associated with the rational use of natural resources, minimization of negative

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environmental impacts, consideration of local residents' interests, economic efficiency and continuous environmental monitoring [3, 5, 10]. Ecotourism, in turn, is regarded as one of the most suitable directions for putting these principles into practice [4].

Table 2. Key mechanisms of sustainable tourism and recreation management in national nature parks

Mechanism	Content	Management function
Functional zoning	Dividing the area into strictly protected, tourism-recreation and service zones	Rational distribution of visitor flows across the area and protection of vulnerable ecosystems
Recreational load and carrying capacity	Linking the number of visitors the area can receive without damage to ecological, biological and psychological factors	Regulation of anthropogenic pressure and reduction of degradation risk
Minimal and adaptive infrastructure	Arranging eco-trails, visitor centres, campsites and other facilities in harmony with the landscape	Preservation of the natural and aesthetic value of the landscape
Environmental education	Eco-trails, visitor centres, interactive museums and information tools	Raising the environmental awareness of visitors
Local community participation	Guiding, hospitality, handicrafts and local services	Strengthening residents' economic interest and improving the effectiveness of conservation
Continuous monitoring	Regular observation of visits, recreational load and the state of resources	Scientific justification and timely adjustment of management decisions

Source: compiled on the basis of Eagles et al. [3], Leung et al. [5], Zabelina [7], Khrabovchenko [8] and the theoretical analysis in Section 1.3 of the dissertation.

Functional zoning is one of the most important theoretical foundations of recreation management in national parks. According to Zabelina's approach, the area should be divided into zones with different protection regimes, and the transition from strictly protected areas to tourism-recreation and service zones should be regulated gradually [7]. This approach makes it possible to redirect visits from the most sensitive natural complexes to relatively resilient areas.

Regulating recreational carrying capacity requires assessing the number of visitors not only in terms of spatial capacity but also in relation to the biological resilience of the landscape and the psychological comfort of visitors. As Khrabovchenko points out, if ecotourism is not organized within the limits of the natural environment's capacity for self-restoration, irreversible degradation processes may intensify [8]. Therefore, managing recreational load is an integral part of the conservation function.

The analysis suggests that, rather than fully transferring a single model to the national nature parks of Uzbekistan, an integrated approach is appropriate, combining the strict environmental control of state management, the investment and service opportunities of public-private partnership, and the local stakeholder-interest mechanisms of the community model. In this approach, scientific monitoring, functional zoning and recreational carrying capacity serve as the core management mechanisms.

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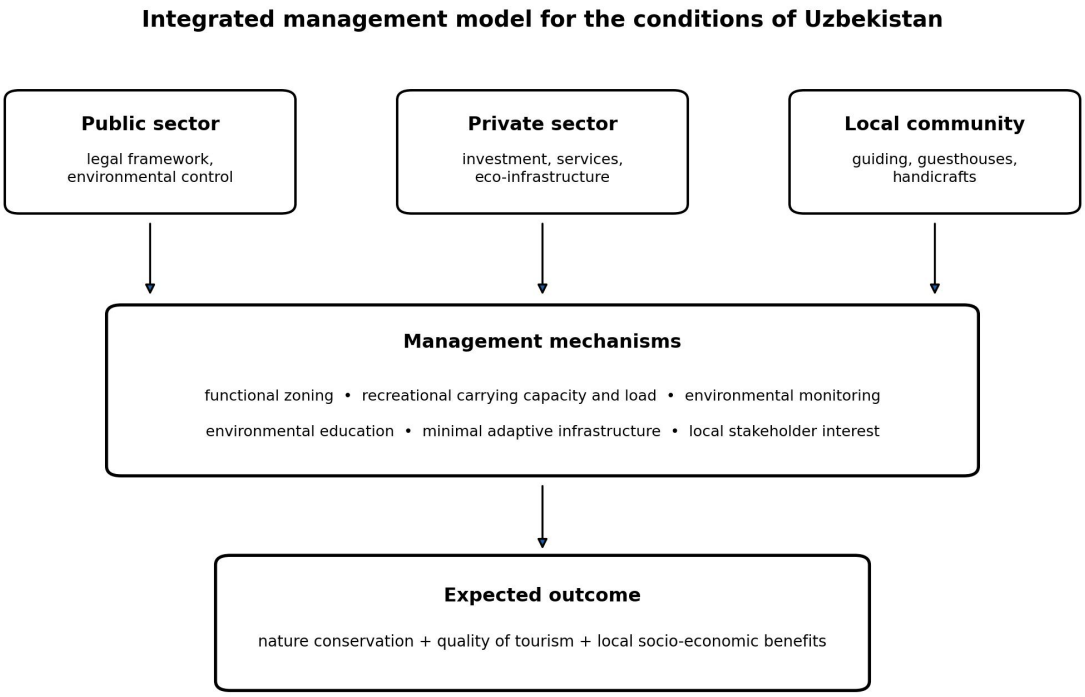


Figure 2. Integrated tourism and recreation management model for the conditions of Uzbekistan (authors' analytical synthesis)

Table 3. Functional roles of the main actors in the integrated management model

Actor	Main function	Contribution to the integrated system
Public sector	Protection regime, zoning, environmental control and monitoring	Ensuring environmental limits and long-term sustainability
Private sector	Services, investment, infrastructure meeting environmental standards	Improving service quality and financial sustainability
Local community	Guiding, guesthouses, handicrafts and local services	Generating local income, employment and social interest in conservation
Scientific monitoring unit	Monitoring recreational load, carrying capacity and the state of natural resources	Data-driven updating of decisions and early detection of risks

Note: the table was developed on the basis of the authors' analytical synthesis of the international management models and chapter conclusions in Section 1.3.

CONCLUSION

Managing tourism and recreational activities in national nature parks requires viewing nature conservation and tourism development not as opposing processes, but as interrelated elements of a single territorial management system. The comparative analysis showed that the state-led model is superior in environmental control and institutional stability, the public-private partnership model in developing investment and services, and the community model in increasing the interest of local residents.

In the conditions of Uzbekistan, an integrated system that harmonizes the strengths of these three models may prove more effective. In such a system, the state sets environmental limits and monitoring,

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the private sector develops services and infrastructure that meet environmental standards, and local residents gain economic benefits through tourism services. Functional zoning, regulation of recreational load and carrying capacity, environmental education and scientific monitoring should be mandatory management mechanisms of this model.

The main difference between the proposed approach and the previous theoretical thesis is that the central object of research here is not the general theoretical content of tourism and recreation, but specifically the institutional models of national nature park management, their comparative advantages and the integrated management mechanism.

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