

Brief information about the project

Title	AP25795209 'Development of a model for cross-border sustainable tourism in Western Tien-Shan, a UNESCO World Heritage Site, based on DMO approaches'
Relevance	The relevance of the study is determined by the need to establish an effective sustainable tourism management system in the unique transboundary region of the Western Tien Shan, which includes the territories of Kazakhstan, Kyrgyzstan, and Uzbekistan. Despite the region's considerable resources and strong tourism development potential, there is currently no coordinated mechanism for managing tourism activities among these countries. This leads to fragmented management that fails to ensure adequate protection of the natural and cultural heritage. In the context of increasing anthropogenic pressure and growing interest in ecotourism, there is a pressing need to develop an integrated model of transboundary sustainable tourism using modern management tools such as the Destination Management Organization (DMO) approach. The formation of such a model would enable the three countries to consolidate their efforts in protecting ecosystems and cultural assets, while minimizing the risks associated with unsustainable tourism practices. This gives the research both high practical relevance and scientific significance.
Purpose	The goal is to create a cross-border sustainable tourism model for the Western Tien Shan (Kazakhstan, Kyrgyzstan, Uzbekistan) to manage tourist flows, minimize environmental and cultural impact, preserve biodiversity, and promote socio-economic sustainability. A DMO will ensure coordinated efforts between the countries for sustainable development.
Objectives	1. Analysis of the current state of tourism in the Western Tien Shan. To assess tourist activity, data will be collected on the existing infrastructure, tourist flows and their distribution across the regions of Kazakhstan, Kyrgyzstan and Uzbekistan. The analysis of these data will make it possible to identify the main directions of tourism development, assess its impact on the ecosystems and cultural heritage of the Western Tien Shan, as well as identify key problems related to cross-border tourism management. Legal and administrative barriers to cross-border tourism, including visa and environmental restrictions, will also be investigated to identify key issues and risks. 2. Study of international practices of sustainable tourism management (DMO). A literary review of previous studies and an analysis of successful examples of the use of tourist destination management (DMO) models in international practice,

	especially in protected natural areas, will be conducted. The legal aspects of cross-border cooperation in tourism, including legal agreements, memoranda of understanding and examples of coordination of actions for environmental risk management, will also be studied. Based on the data obtained, an assessment of the applicability of these models to the specific conditions of the Western Tien Shan will be carried out. The results will help identify the best practices for managing cross-border tourism. 3. Development of a model of cross-border sustainable tourism. A comprehensive model will be created that takes into account environmental, cultural and socio-economic factors of the region. Special attention will be paid to the development of coordination mechanisms between Kazakhstan, Kyrgyzstan and Uzbekistan for effective management of tourist flows. The inclusion of elements of sustainable development will minimize the negative impact of tourism on nature and cultural heritage. 4. Creation of a system for monitoring and assessing the impact of tourism. To continuously monitor tourist activity and its impact on natural and cultural sites, a system will be developed that includes environmental, social and economic indicators. As part of this task, GIS technologies will be used to analyze tourist flows and identify areas with increased stress on ecosystems and cultural heritage sites. 5. Development of a strategy to reduce the environmental burden and protect cultural heritage. Based on the collected data and the results of the analysis, measures will be identified to reduce the negative impact of tourism on vulnerable ecosystems in the region. Environmentally friendly tourist routes and infrastructure will be developed to ensure the conservation of biodiversity and cultural sites of the Western Tien Shan.
Expected and Achieved Results	1. The project will carry out a comprehensive analysis of tourism infrastructure and flows, which will identify key areas for tourism development and assess its impact on ecosystems and cultural sites. Based on these data, a framework will be created for the development of sustainable tourism management strategies aimed at minimizing negative consequences for the nature and culture of the region. 2. A study of international experience in the implementation of DMO models in protected natural areas will be conducted. As a result, a comparative analysis of the best tourism management practices will be prepared, which will allow us to offer the most effective solutions adapted to the conditions of the Western Tien Shan. 3. Data on the state of ecosystems and tourist activity in protected areas will be collected and analyzed in detail.

	These results will form the basis for the creation of a monitoring system and the development of measures aimed at minimizing the negative impact of tourism on the environment. 4. A comprehensive model of sustainable tourism development will be developed, taking into account the natural, cultural and socio-economic characteristics of the region. The model will ensure coordinated interaction between countries, contributing to the effective management of tourist flows and minimizing their negative impact. 5. A reporting system will be developed to regularly assess the condition of natural and cultural sites, as well as the effectiveness of tourism management. This will allow continuous monitoring of the impact of tourism activities and prompt measures to reduce the negative impact on the ecosystems and cultural heritage of the region. 6. A system for monitoring and assessing the impact of tourism is being created, which allows tracking the impact of tourist activity on natural and cultural sites in the region. This ensures an accurate assessment of the environmental and social impacts of tourism and allows timely measures to be taken to preserve ecosystems and cultural heritage. 7. A strategy will be prepared to reduce the negative impact of tourism on ecosystems and cultural sites. The document will offer specific recommendations for the preservation of the natural and cultural heritage of the region.
Research team members with their identifiers (Scopus Author ID, Researcher ID, ORCID, if available) and links to relevant profiles	1. Mr. Pazylkhayyr Bauyrzhan Meyrambekuly, Master of Science in Tourism, Cultural Heritage and Sustainable Development, PhD candidate. Scopus ID – 59312549400 https://www.scopus.com/authid/detail.uri?authorId=59312549400 ORCID – 0000-0002-2296-9512 2. Assipova Zh.M., PhD, Associate Professor. h-индекс: 5. Scopus Author ID: 56124528100 https://www.scopus.com/authid/detail.uri?authorId=56124528100. Web of Science ResearcherID: B-4536-2013 https://publons.com/researcher/2672362/zhanna-assipova/
List of publications with links to them	1. Assipova Zh., Pazylkhayyr B., Karatayev D. Best examples of tourism environmental management at the destinations: Integrative literature review. Economic series of the bulletin of L.N.Gumilyov Eurasian National University. Astana, Kazakhstan. – 2022. – Vol.141(4). – 258–271. https://doi.org/10.32523/2789-4320-2022-4-258-271 2. Pazylkhayyr B., Assipova, Zh., Aktymbayeva, A. Research in eco-tourism in Kazakhstan as a successful mechanism in the development of environmental tourism

	management. Central Asia Economic Review. Almaty, Kazakhstan. – 2023. – Vol.1. – 83-97. https://doi.org/10.52821/2789-4401-2023-1-83-97 3. Akbar I., Pazylkhaiyr B., Myrzaliyeva Z., Tazheкова A., Saulembaev A. An analysis of the development of the tourism industry in the Aksu-Zhabagly Biosphere Reserve of Kazakhstan. Geography series Bulletin KazNU. Almaty, Kazakhstan. – 2023. – Vol.68(1). – 107-116. https://doi.org/10.26577/JGEM.2023.v68.i1.09 4. Pazylkhaiyr B., Assipova Zh., Bertocchi D. Development of tourism environmental management in Kazakhstan based on successful international experience. Bulletin of the Karaganda University, Economy series. – 2023. – Vol.2(110). – 79-89. https://doi.org/10.31489/2023ec2/79-89 5. Akbar I., Tazheкова A., Myrzaliyeva Z., Pazylkhaiyr B., Mominov S. Positive Outcomes of Cross-Border Tourism Development Cooperation: A Case of Kazakhstan, Kyrgyzstan and Uzbekistan. REGION. Vienna, Austria. – 2024. – Vol.11(2). – 43–62. https://doi.org/10.18335/region.v11i2.494 Pazylkhaiyr B. Local communities' participation in sustainable tourism development: Mangystau region case study. KazUTB. – 2024. – Vol.3(24). – 520-530. doi:10.58805/kazutb.v.3.24-526.
Patents	-