PROSPECTS FOR THE DEVELOPMENT OF ECOTOURISM IN THE EAST KAZAKHSTAN REGION IN THE CONTEXT OF IMPLEMENTING THE CONCEPT OF SUSTAINABLE DEVELOPMENT OF THE REPUBLIC OF KAZAKHSTAN

¹Zh.T. Konurbaeva, ¹S.N. Suieubayeva, ¹A.M. Zakimova, ¹L.A. Mezentseva, ²A.Zh. Turegeldinova [∞], ²B.B. Amralinova

¹D. Serikbayev East Kazakhstan Technical University, Ust-Kamenogorsk, Kazakhstan, ²Kazakh National Research Technical University named after K.I. Satpayev, Almaty, Kazakhstan

This study is aimed at analyzing the development of ecological tourism in the natural territories of the East Kazakhstan Region (EKR) through a systemic approach to the implementation of the national concept of sustainable economic development in the Republic of Kazakhstan. The objective of the study is to conduct a comprehensive analysis and develop a strategy for the advancement of ecological tourism in this region. The research is based on the interrelation and influence of factors such as natural territories and tourist infrastructure. To achieve this objective, various research methods were employed, including the search for scientific materials across different platforms and a literature review on the research topic. The search for materials was conducted over three months, from January to May 2024. The research also incorporated both domestic and international experiences in sustainable tourism development. Additionally, the study involved a comparative analysis, SWOT analysis, and correlation-regression analysis of the impact of various tourism industry indicators on the region's GDP. The research findings emphasize the importance of preserving the natural and cultural heritage, as well as biodiversity, during the development of ecotourism, highlighting the significance of sustainable resource use, adherence to environmental standards, and principles of environmental responsibility. The study also underscores the critical role of local tour operators and the population in the development of ecotourism to preserve cultural heritage and ensure the sustainable development of ecological tourism in the East Kazakhstan Region, within the framework of the implementation of the sustainable economic development concept of the Republic of Kazakhstan.

Keywords: sustainable tourism, ecotourism, destination, natural resources, cultural heritage, tourist infrastructure.

ЭКОТУРИЗМНІҢ ДАМУ БОЛАШАҒЫ ШЫҒЫС ҚАЗАҚСТАН ОБЛЫСЫ ҚАЗАҚСТАН РЕСПУБЛИКАСЫНЫҢ ТҰРАҚТЫ ДАМУ КОНЦЕПЦИЯСЫН ЖҮЗЕГЕ АСЫРУ ЖАҒДАЙЫНДА

 1 Ж.Т. Қоңырбаева, 1 С.Н. Сүйеубаева, 1 А.М. Закимова, 1 Л.А. Мезенцева, 2 А.Ж. Төрегелдинова $^{\bowtie}$, 2 Б.Б. Амралинова

 1 Д. Серікбаев атындағы Шығыс Қазақстан техникалық университеті, Өскемен, Қазақстан, 2 Қ.И. атындағы Қазақ ұлттық зерттеу техникалық университеті. Сәтбаев, Алматы, Қазақстан, e-mail: a.turegeldinova@satbayev.university

Зерттеу Шығыс Қазақстан облысының (ШҚО) табиғи аумақтарында экологиялық туризмнің дамуын талдауға бағытталған, бұл Қазақстан Республикасының ұлттық тұрақты экономикалық даму тұжырымдамасын жүзеге асыру үшін жүйелік тәсілді қолдануды көздейді. Зерттеудің мақсаты –

Correspondent-author: a.turegeldinova@satbayev.university

осы аймақта экологиялық туризмнің дамуына кешенді талдау жасау және стратегия әзірлеу. Зерттеу табиғи аумақтар мен туристік инфрақұрылым факторларының өзара байланысы мен әсеріне негізделген. Мақсатқа жету үшін әртүрлі зерттеу әдістері қолданылды: ғылыми материалдарды әртүрлі платформалардан іздеу жүргізіліп, зерттеу тақырыбы бойынша әдеби шолу жасалды. Материалдарды іздеу үш ай бойы жүргізілді: 2024 жылдың қаңтарынан мамырына дейін. Тұрақты туризмнің дамуына арналған материалдарда отандық және шетелдік тәжірибе зерттелді. Сонымен қатар, зерттеу барысында Шығыс Қазақстан облысындағы экологиялық туризмнің дамуына салыстырмалы талдау және SWOT-талдау жүргізілді, сондай-ақ, туристік саланың әртүрлі көрсеткіш-факторларының өңірдің ЖІӨ-не әсер етуіне корреляциялық-регрессиялық талдау жасалды. Зерттеу нәтижелері экотуризмді дамыту барысында табиғи-мәдени ұлттық мұраны және биологиялық әртүрлілікті сақтауға негізделген, бұл ресурстарды тұрақты пайдаланудың маңыздылығын, экологиялық стандарттарды сақтау және экологиялық жауапкершілік қағидаттарын баса көрсетеді. Сондай-ақ, экологиялық туризмді дамытуға жергілікті туроператорлар мен халықтың қатысуы мәдени мұраны сақтауда және Шығыс Қазақстан облысында экологиялық туризмді тұрақты дамытуда маңызды рөл атқаратыны атап өтіледі.

Түйін сөздер: тұрақты туризм, экотуризм, дестинация, табиғи ресурстар, мәдени мұра, туристік инфрақұрылым.

ПЕРСПЕКТИВЫ РАЗВИТИЯ ЭКОТУРИЗМА ВОСТОЧНО-КАЗАХСТАНСКОЙ ОБЛАСТИ В УСЛОВИЯХ РЕАЛИЗАЦИИ КОНЦЕПЦИИ УСТОЙЧИВОГО РАЗВИТИЯ РЕСПУБЛИКИ КАЗАХСТАН

 1 Ж.Т.Конурбаева, 1 С.Н.Суйеубаева, 1 А.М.Закимова, 1 Л.А.Мезенцева, 2 А.Ж.Турегельдинова $^{\bowtie}$, 2 Б.Б. Амралинова

¹Восточно-Казахстанский технический университет им. Д.Серикбаева, Усть-Каменогорск, Казахстан,

² Казахский национальный исследовательский технический университет им. К.И.Сатпаева, Алматы, Казахстан,

e-mail: a.turegeldinova@satbayev.university

Исследование направлено на анализ развития экологического туризма на природных территориях Восточно-Казахстанской области (ВКО) с использованием системного подхода для реализации национальной концепции устойчивого развития экономики Республики Казахстан. Цель исследования заключается в комплексном анализе и разработке стратегии развития экологического туризма в данном регионе. Исследование основывается на взаимосвязи и влиянии факторов: природных территорий и туристской инфраструктуры. Для достижения цели были применены различные методы исследования: проведён поиск научных материалов на различных платформах и сделан литературный обзор по теме исследования. Поиск материалов проводился в течение трёх месяцев: с января по май 2024 г. На материалах, посвященных теме развития устойчивого туризма, был изучен отечественный и зарубежный опыт. Также в ходе исследования был проведён сравнительный анализ и SWOT-анализ развития экологического туризма на территории Восточно-Казахстанской области, а также выполнен корреляционно-регрессионный анализ влияния на ВВП региона различных показателей-факторов из сферы туристской отрасли. Результаты исследования основываются на сохранении природно-культурного национального наследия и биологического разнообразия при развитии экотуризма, которые подчеркивают важность устойчивого использования ресурсов, соблюдения экологических стандартов и принципов экологической ответственности. Также отмечается важная

роль участия местных туроператоров и населения в развитии экотуризма для сохранения культурного наследия, обеспечения устойчивого развития экологического туризма в Восточно-Казахстанской области в рамках реализации концепции устойчивого развития экономики Республики Казахстан.

Ключевые слова: устойчивый туризм, экотуризм, дестинация, природные ресурсы, культурное наследие, туристская инфраструктура.

Introduction Tourism is one of the fastestgrowing and most significant industries globally, serving as a primary source of income for many countries. Sustainable tourism is grounded in the principle of caring for the environment, society, and the economy. According to a report on environmentally safe travel published by Booking.com in honor of Earth Day 2023, 87% of travelers worldwide expressed a desire to travel sustainably. Sustainable tourism encompasses practices aimed at minimizing negative impacts while maximizing positive outcomes. It considers the needs of tourists as well as the requirements of host communities, local businesses, and the environment, thereby contributing to sustainable methods of transportation, accommodation in more environmentally friendly hotels, and the consumption of local and eco-friendly food products.

The positive impact on the destination (areas prioritized for development) includes job creation, the preservation and interpretation of cultural heritage, protection of pristine nature, and restoration of natural landscapes, among others. Conversely, negative consequences may include economic leakage and environmental degradation [1].

Sustainable tourism is defined by the United Nations Environment Program and the World *Tourism Organization as "tourism that fully considers its current and future economic, social, and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities" [2]. Furthermore, sustainable tourism "refers to the environmental, economic, and sociocultural aspects of tourism development, and it is necessary to establish an appropriate balance between these three aspects to ensure its long-term sustainability."

The World Tourism Organization also defines

sustainable tourism as "sustainable development that meets the needs of current tourists and host regions while protecting and enhancing opportunities for the future" [2]. It is expected that this will lead to the management of all resources in such a way that economic, social, and aesthetic needs can be met while preserving cultural integrity, essential ecological processes, biological diversity, and lifesupport systems.

The growth of the global population, coupled with the irrational use of natural resources, exerts a destructive impact on our planet, leading to climate change, destruction of nature, and increased pollution levels. Therefore, one of the sustainable development goals is to transform current unsustainable production and consumption patterns into those that do not harm the environment and resources.

Challenges and Prospects in Kazakhstan's Tourism Sector The Kazakhstan Tourism Association (KTA) believes that the challenges faced by the tourism industry can only be resolved through strong governmental support:

- the tourism infrastructure requires updating and refinement, including roads, airports, and hotels;
- Kazakhstan lacks small aviation services for tourists and helicopter tours;
- the tourist transportation system, especially in mountainous areas, is outdated, and modern, reliable, and comfortable buses are needed;
- a more active marketing campaign is necessary to attract foreign tourists, as well as support for tourists from countries not included in the visa-free list;
- efforts to develop tourism need to be intensified in the regions, including in the East Kazakhstan Region.

Another significant issue is the lack of qualified personnel in the industry. According to the Institute

of Economic Research (ERI), by the end of the 2022-2023 academic year, the number of students enrolled in educational programs such as "Tourism," "Cultural and Leisure Activities," and "Restaurant and Hotel Management" in Kazakhstan amounted to only 31 individuals. At the same time, the number of graduates in these specialties was only 1,760, which constitutes 11% of the total number of bachelor's degree graduates across all programs.

In July 2023, the Concept for the Development of the Tourism Industry for 2023-2029 was adopted in Kazakhstan. It aims to increase employment in this sector to 800,000 people and grow the gross value added in the industry to 6 trillion tenge. It is also planned to increase investment growth in accommodation and catering services to 260 billion tenge. All these measures are expected to increase the number of domestic tourists to 11 million by 2030 and inbound tourists to 4 million [3].

Systemic Approach to Ecotourism Development An essential aspect of a systematic approach to studying the problems of ecotourism development is considering the seasonality of tourist demand and its distribution in the East Kazakhstan region, allowing for more efficient use of available resources and preventing excessive pressure on the region's ecosystems. The introduction of systematic analysis in the development of ecological tourism in the natural territories of the East Kazakhstan region will contribute to the sustainable development of the region's economy and the preservation of its unique natural and historical heritage.

The East Kazakhstan region has significant potential for developing various types of tourism, ranging from ecological to business tourism. This is facilitated by the rich history of the region, which has left many archaeological and historical monuments on its territory. This is ensured by the unique geographical location, where untouched corners of nature can be found in various landscapes, including on the Kalbinsky trail, where adventure tourism can be developed and implemented. This type of tourism is ideal for mountain explorers, adventure enthusiasts, and fans of an active lifestyle. It includes activities such as hiking, trekking, canyoning, exploring caves, diving, jeep tours,

buggy tours, and more, all directly related to discovering new things and overcoming challenges.

Historical and Cultural Significance The territory of East Kazakhstan is the cradle of Turkic civilization. The region is home to more than 300 historical monuments. One unique archaeological site, unparalleled in Kazakhstan, is the Berel Mounds (Valley of the Kings) located in the Katon-Karagay district.

It is necessary to enhance the investment appeal of the region by developing a tourism cluster, which will allow for profit generation, increase tax revenues, and create new jobs in the region.

Materials and Methods The source materials include the results of a marketing study conducted in the winter of 2024, where the respondents were residents of three countries: Kazakhstan, Russia, and China. The survey was conducted anonymously using the Google Forms platform. The technological cycle included six components: defining the research goal, developing the questionnaire, piloting, making adjustments, launching and conducting the survey, and evaluating and interpreting the results. The preferences of consumers who had undertaken tourist trips and received hospitality services were identified during the marketing study. The research methods included surveys, data grouping, comparison, and ranking.

The purpose of this research is to identify, analyze, and classify various factors influencing the development of ecotourism in the EKR and to analyze these factors based on a comprehensive analysis and the development of a strategy for ecological tourism development in the natural territories of the East Kazakhstan Region. The main focus is on applying a systematic approach that allows for the consideration of natural territories and tourist infrastructure in their interrelation, taking into account all factors and influences.

The research methodology included a questionnaire survey of Kazakh and foreign experts in the field of tourism services. Structural-functional analysis, cluster analysis, object-oriented approach, economic-statistical methods of data collection and processing, traditional methods of comparison and

generalization, and correlation-regression analysis of the influence of factor indicators on the final resulting indicator were used.

Additionally, structural-content analysis of texts describing the natural landscapes of Kazakhstan and the EKR, in particular, expert assessments, self-report methods, and extrapolation system methods were employed.

The research involved a scientific-methodological analysis, including thematic studies and a literature review. The significance of the presented indicators was studied based on the results of the questionnaire survey. Conclusions and recommendations for the development of tourism in the East Kazakhstan Region and general recommendations for further development of ecotourism in the Kalbinsky Ridge area are offered.

In addition to the comparative analysis, a SWOT analysis was also conducted during the research. These methods provided additional information and allowed for comparing the advantages and disadvantages of various approaches and practices.

The chosen research topic is highly relevant in the current conditions of sustainable tourism development, due to the growing interest in ecological domestic tourism.

The methodological and theoretical basis of the research is the system-structural analysis as an expression of dialectics. Structural-content analysis of various interpretations of the concept of "sustainable tourism" showed that it is advisable to include in the list of defining characteristics of sustainable ecotourism the following features:

- 1) Ensure the optimal use of natural resources, which are the main element of tourism development;
- Respect and preserve cultural heritage and traditional values, contribute to intercultural understanding and tolerance;
- 3) Provide and fairly distribute socio-economic benefits for all participants: employment, income opportunities, social security.

Results and Discussion The literature review analyzed several studies dedicated to various aspects of tourism development in Kazakhstan and the

East Kazakhstan Region in particular. The authors of the studies consider various factors influencing the development of domestic ecotourism and offer recommendations and strategies for sustainable development to enhance the efficiency of the tourism industry in the region [4-6].

Global tourism is rapidly recovering after the pandemic [7]. According to the Bureau of National Statistics, the number of tourists in Kazakhstan in 2023 exceeded 62 million people. On September 1, 2023, in his Address, the President of Kazakhstan, Kassym-Jomart Tokayev, noted that "breakthrough projects should be implemented in the tourism sector." Indeed, in the latest global tourism ranking (The World Economic Forum), Kazakhstan currently ranks 66th out of 117 countries worldwide (previously, Kazakhstan held the 80th position) [8]. The state needs to invest in the development of local tourism, which will lead to a revival in the travel industry.

Rashida Shaikenova, Director of the Kazakhstan Tourism Association (KTA), believes foreigners have started coming to Kazakhstan not only in summer but also throughout the year. Additionally, domestic tourism has become more active, which business has immediately responded to: local investors have begun investing in the tourism sector [9]. The second positive development is that tourism worldwide is finally returning to pre-pandemic levels. According to forecasts, in 2024, tourists are expected to make 15 billion trips globally - more than in 2019. This favorable trend is already reflected in Kazakhstan. The third important factor is the declared Year of Chinese Tourism in Kazakhstan. The Ministry of Tourism and Sports of the Republic of Kazakhstan has developed a comprehensive plan that includes about 35 events covering major cities in China: Beijing, Xi'an, Shanghai, Urumqi, Hong Kong, Hangzhou, Chengdu. Tourists from China have already entered the TOP-5 tourists who visited Kazakhstan in 2023: according to statistics for the first nine months of 2023, the total number of visitors from China to Kazakhstan exceeded 200,000 people [9].

For the first half of 2023, the amount of taxes from tourism amounted to 208 billion tenge. In

2023, tourism taxes amounted to 389 billion tenge. This indicates that tourism has become a significant source of income. According to the World Travel & Tourism Council (WTTC), the share of tourism in Kazakhstan's GDP in 2022 reached 3.9% of GDP,

and the country aims to increase the share of tourism in GDP to 8% by 2025 [10].

Over the past few years, the list of tourist destinations in Kazakhstan has doubled in table 1.

Table 1 - Ranking of priority tourism development areas in Kazakhstan by region

No	Tourist areas	Name of the settlement	
1	Khan Ordasy	West Kazakhstan region	
2	Kargalinskoye reservoir	Aktobe region	
3	Shchuchinsko-Borovskaya resort area Akmola region		
4	Akbura	Akmola region	
5	Imantau-Shalkar resort area	North Kazakhstan region	
6	Bayanaul	Pavlodar region	
7	Katon-Karagay resort area	East Kazakhstan region	
8	Alakol resort area	Abai and Zhetisu regions	
9	Turgen	Almaty and Almaty region	
10	Kaskelen ski complex	Almaty and Almaty region	
11	Koksai Resort	Zhambyl region	
12	Lake Balkhash	Karaganda region	
13	Turkestan	Turkestan region	
14	Baikonur Cosmodrome	Kyzylorda region	
15	Ulytau village	Ulytau region	
16	Warm Beach	Mangistau region	
17	Sarayshik settlement	Atyrau region	
18	Center for Gastronomic Tourism	Shymkent	
19	Expo Tourist Area	Astana	

It should be noted that at present, thirteen new global trends in tourism development have emerged shown in table 2.

Table 2 - Characteristics of new tourism trends

No	Trend name	Characteristics of the trend	
1	Sustainable tourism	Travel that minimizes impact on nature; supports regional economies and	
	and conscious travel	local residents. For hotels, sustainability includes using local products in the	
		restaurant, implementing eco-friendly practices, saving energy, and sorting	
		waste; hosting events that introduce local traditions, crafts, etc.	
2	Immersion in local	Involving tourists in the life of the local population rather than observing	
	culture	it; growing interest in culture and history. A way to follow this trend is to	
		connect with local communities.	
3	Seeking unique	Gaining unique culinary experiences: the beauty of presentation, aroma,	
	gastronomic	and taste of food, the atmosphere of the place. Gastronomic themes add	
	experiences	color to the promotional campaigns of regions.	

4	Self-discovery and learning new skills	Acquiring new knowledge and skills, developing wellness programs aimed at helping participants achieve harmony, develop creativity and
	rearming new sixins	communication skills, enrich their inner world.
5	Flexible booking and	The COVID-19 pandemic has heightened the uncertainty factor in travel
	payment conditions	planning. It is necessary to offer booking conditions that allow tourists to
		change the date and/or destination without significant penalties.
6	Places where famous	Locations where "star" films were shot - tourist attractions. In Kazakhstan,
	movies or TV series	this is the village of Teriberka. Interactive quests and reconstructions of
	were filmed	scenes from films will add uniqueness to tours.
7	Travel for special occasions	Significant personal events become reasons for travel.
8	Emotional balance	Growing demand for digital detox programs using practices for physical
	restoration	and mental recovery.
9	Spontaneous travel	Related to tourists' desire to explore unknown places and enjoy unplanned
		trips; the appeal of last-minute tours.
10	Countries and	This trend arose in response to climate changes, due to which traditional
	regions with a	beach resorts sometimes become too hot for comfortable rest; fans of
	temperate climate	cooler climates visit mountain resorts.
11	Visiting unexplored	Choosing alternative destinations instead of familiar ones (this trend
	countries and regions	applies to both beach resorts and mountains).
	(instead of popular ones)	
12	Attributes of	A way to relax comfortably and brightly without significant expenses.
12	"beautiful life"	The trend requires a balanced approach from tour operators and hotels
	for budget travelers	in forming offers: base prices for trips accessible to a wide range of
	<i>5</i>	consumers should be complemented by a wide list of high-quality services.
13	Use of innovative	Statistics from Booking – 48% of travelers trust artificial intelligence
	technologies in travel	(AI) to plan their trips (from 8% in the UK to 63% in the US). AI
	planning	can quickly analyze large volumes of information, provide personalized
		recommendations, and optimize routes.

Sources: Expedia Group, Skyscanner, Booking

Tourism Operators and Sustainable Development Tour operators contribute to the sustainable development of tourist areas by creating jobs for local residents. Additionally, they can include visits to special attractions (museums, workshops, etc.) that support local communities in their programs, and give tourists the opportunity to engage in environmental projects. All this will allow guests to feel involved in preserving the cultural and natural heritage of the regions they visit. Promoting programs based on the principles of sustainable tourism can become a unique feature that distinguishes the tour operator's product [11].

Competent marketing is crucial for the success of creating a new trend: in an advertising campaign, it is important to show the advantages of a new destination, emphasizing its uniqueness and, at the same time, its similarity to what is already known to the market [12].

The results of the literature review on the research topic can be used to form strategies and policies for the development of ecological tourism in the East Kazakhstan Region of the Republic of Kazakhstan. As EKR borders Russia and China, this gives good prerequisites for foreign travelers to visit the region. There are also excellent prospects for the domestic

tourist product of EKR. Among the main tasks that will bring success to travel agencies in this area are the development of roadside services, the opening of new accommodation facilities, and the improvement of existing ones. In the first place, these are private mini-hotels and guest houses. Tourism statistics in Kazakhstan claim that they have almost equaled traditional hotels in popularity.

From September 21 to 26, 2023, filming of • USA (28,160, 15 times more). the educational travel program "Orel and Reshka. Kazakhs" took place in the Katon-Karagay district. The filming was organized through the joint work with local executive bodies in such tourist destinations as: Osinovsky Pass, Rakhmanovskie Keys, the old Austrian road, and others. The episode is scheduled to air in the second quarter of 2024 on the "Jibek Joly" TV channel.

Several ski resorts are located near the cities of Ust-Kamenogorsk and Ridder: "Nurtau" and "Altai Alps" are the most famous among them.

"In East Kazakhstan, we have three major destinations for the development of ecotourism -Katon-Karagay, Ridder, and the Ulan district. Plus, the fourth - Ust-Kamenogorsk as the logistics hub of tourism in EKR," noted Mukhtar Toibazarov. The entrepreneur said that currently, about 15 antler therapy centers operate in EKR, which can receive no more than 6,750 people per season. All guest houses and hotels in the Katon-Karagay district can accommodate no more than 3,000 people.

"The entire population of Ulken Naryn is about 23,000 people. And for tourism to benefit the population of border areas, for it to be significant, we need tourists. And if there were at least 25,000 tourists, the entire district would feel it. If we had at least 70,000-100,000 tourists throughout EKR, the whole region would feel it, all hotels in Ust-Kamenogorsk would be filled, all restaurants would be full, and there would be a need to build new ones," concluded Mukhtar Toibazarov.

From January to September 2023, Kazakhstan was visited by 37% more foreign tourists than during the same period in 2022 - 8,349 thousand people according to the Ministry of Tourism and Sports of the Republic of Kazakhstan. According to its data,

most tourists in the first nine months of 2023 came to Kazakhstan from [13]:

- Russia (356,850, 12% more than in January-September 2022):
- China (75,131, twice as many);
- Turkey (41,134, 2% less):
- India (34,757, 34 times more);

The structure of visitors to the Republic of Kazakhstan is presented in Figure 1.

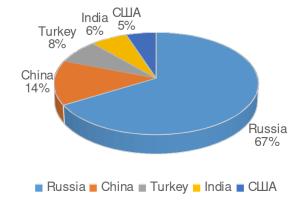


Figure 1 - Structure of Visitors to the Republic of Kazakhstan in 2023

In Kazakhstan, the tourist tax for foreigners was canceled. By order of the Minister of Tourism and Sports of the Republic of Kazakhstan dated December 27, 2023, No. 347, changes were made to the rules for paying the tourist tax for foreigners, according to which a zero rate will be applied throughout Kazakhstan. The tourist tax bedtax was introduced in Kazakhstan at the beginning of 2023. The main goal of its introduction was to accumulate funds for the development of regional tourism in Kazakhstan. The minimum bedtax rate was 0.3 MCI (1,035 tenge in 2023), the maximum - 0.5 MCI (1,725 tenge) depending on the growth of tourists [10].

In 2024, Kazakhstan will spend 586 million tenge to attract foreign tourists and promote the country's tourist image (according to the press service of the Ministry of Tourism and Sports of the Republic of Kazakhstan) [14]. At a government meeting, Minister Ermek Marzhikpaev emphasized that after the pandemic, the tourism

sector worldwide is actively competing for tourists' attention. States are investing significant funds in . advertising and promoting their countries. Emphasis will be placed on the Kazakhstan Tourism Year in China, increasing the number of international exhibitions, attracting foreign media. A mechanism is also being developed for off-budget financing of large-scale events in the tourism sector through • the Corporate Fund for Supporting the Tourism and Sports Industry.

Kazakhstan ranked 5th on the list of the best • countries for adventure tourism according to the British Backpacker Society. This is fully justified • Laying safe trails for hiking, horse, and cycling by the vast variety of suitable natural spaces and its great potential. EKR has 24 tourism sites, but it is necessary to develop the 25th - the Kalbinsky Ridge [14].

An excellent idea for the development of sustainable tourism in EKR would be the cooperation of recreation bases - a kind of "exchange of tourists" and the development of new interesting tourist routes. We offer several real initiatives that can change the situation in the tourism industry. Among them:

- Road repairs (2024, the head of EKR declared the Year of Roads) to major tourist sites;
- Installation of sanitary and hygiene units every 50

km of roads, with subsequent maintenance;

- Construction of observation platforms in beautiful locations in the region;
- Opening airports in Katon-Karagay and Ulken Naryn;
- Opening more guest houses and yurts in villages;
- Training local residents in service rules and techniques, preparing guides and tour guides in special profile courses;
- Opening a craftsman center for the production of yurts from local materials;
- routes (e.g., along the Kalbinsky Ridge);
- Opening a modern visitor center in Ust-Kamenogorsk with representatives of tour operator companies;
- Holding international image events and festivals in EKR (climbing Kyzyl-Tas, berkutchi festival, "Taste of Altai" cuisine festival);
- Creating three winter clusters for active winter recreation and skiing in Ridder, the Ivanovsky Ridge, Gornaya Ulbinka, and near the regional center;
- Improving logistics for the uninterrupted delivery of tourists from Ust-Kamenogorsk to vacation spots.

Table 3 – Key Data on Accommodation and Visitors in EKR for 2023

Single capacity (beds) of accommodation facilities, units			
Hotel occupancy rate (beds), %	27,6		
Visitors served by accommodation facilities for domestic	582948		
tourism (residents), persons.			
Visitors served by accommodation facilities for domestic	29741		
tourism (residents) persons, persons			

The East Kazakhstan Region is one of the promising regions for inbound tourism. Tourism statistics in Kazakhstan indicate that travelers visit EKR for a variety of purposes (table 3). Family vacations are usually organized at Lake Alakol with its famous black pebble beaches and the healing properties of its waters [13]. You can also go for health purposes to the Katon-Karagay National

Park, which houses many sanatoriums, rest houses, and antler therapy centers. People also go there to admire natural beauty and visit historical and cultural sites, of which there are many.

Statistics show that most travelers head to the mountainous areas of the East Kazakhstan Region. Conditions for developing this market niche are the most favorable here. In addition to the Altai spurs, the region includes the Sauyr-Tarbagatai Mountains, some of the most beautiful in Central Asia, with peaks covered with eternal glaciers on their northern side. The Kalbinsky Mountain Ridge, with its powerful strip of granite intrusions covered with pine forests, is also popular among tourists.

One of the most important factors for attracting tourists is the level of awareness of the region's residents about the existence of sites of interest and their specific features. In the survey, respondents were asked to mark the places in the East Kazakhstan Region they had heard of and the places they had visited. The survey results are presented in Table 4.

Table 4 - Assessment of the Awareness of 10 Recreation Sites in the East Kazakhstan Region

What places have you heard about / What places have you been to		Share of respondents, %	
		Visited	
Sanatorium "Rakhmanovskie Klyuchi"	17,3	3,9	
"Sibinsky Lakes"	19,1	8,1	
Bukhtarma Reservoir Heard	40,3	13,2	
Ski complexes "Altai Alps" and "Nurtau"	20,6	11,1	
Lake Alakol	39,1	15,6	
"Valley of the Kings" Katon-Karagay National Park	11,5	5,4	
Lake Zaisan	12,7	6	
Lake Markakol	7,9	3,9	
Kalbinsky Ridge	5,8	3,9	
Kiin-Kerish Gorge	5,8	2,1	
No awareness / Never visited	30	63,7	

As can be seen from the survey results, the most well-known sites among residents of Kazakhstan, Russia, and China are "Bukhtarma Reservoir" (40.3%), Lake Alakol (39.1%), and the ski complexes "Altai Alps" and "Nurtau" (20.6%). At the same time, 30% of respondents from territories bordering East Kazakhstan had never heard of any recreation sites in East Kazakhstan. The sanatoriums "Rakhmanovskie Klyuchi" (17.3%) and "Sibinsky Lakes" (19.1%) are little known to residents, and they are practically unfamiliar with the attractions of Lake Markakol (7.9%), Kalbinsky Ridge, and Kiin-Kerish Gorge (both 5.8%).

The survey shows that 15.6% of respondents visited Lake Alakol. The Bukhtarma Reservoir was visited by 13.2% of respondents. The ski complexes of EKR were visited by 11.1% of respondents. A total of 63.7% of respondents had never visited the recreation sites of East Kazakhstan [13].

The survey results indicate a lack of awareness among residents of the three countries about the attractions of the Altai region and the need to develop a comprehensive program for promoting ecotourism in the region of the Altai Mountains and the Blue Lakes - the jewel of Kazakhstan.

During the study, the authors conducted an assessment of the strengths and weaknesses of tourism development in the East Kazakhstan Region. The generalized results of the analysis of the dynamics and trends of tourism services development, as well as the prerequisites for forming practical recommendations for increasing the attractiveness of the tourism services market, are presented in the form of a SWOT analysis matrix (Table 5).

This analysis shows that ecological tourism has development potential in the East Kazakhstan region but requires efforts to develop infrastructure, increase awareness of natural resources and environmental issues, and ensure a sustainable and responsible approach to the tourism industry as a whole.

Table 5 – SWOT Analysis of Forming the Attractiveness of Tourism Services in the East Kazakhstan Region

Strengths	Weaknesses
Production of tourism services at the lowest cost in the place of consumption; Local population's interest in developing inbound and domestic tourism; Development of new tourism services; Continuous improvement of service quality; High informatization of all participants in the tourism services market, resulting from the dynamic development of information and communication systems; Rich natural resource potential and beautiful natural landscapes; Rich historical and cultural heritage of the region; Representation of national color; Availability of a conceptual basis for developing the tourism industry in the region; Development of economic and cultural ties with all regions of Kazakhstan; Rich traditions of hospitality, experience in receiving and serving visitors; Favorable conditions for developing various types of tourism;	Uneven distribution of natural potential, climatic conditions determine the seasonality of tourism services (summer and winter periods); High cost of the tourism product; Individualization of service provision, increasing quality requirements as a consequence of growing competition; Lack of incentives for developing inbound and domestic tourism; Lack of qualified specialists in the tourism industry; Lack of marketing activities; Unfavorable environmental situation in EKR; Weak logistical and transport infrastructure
Scientific and educational potential for training specialists in the region; Relatively stable socio-economic situation; Advertising promotion - social networks Instagram, 2GIS. Opportunities	in EKR. Threats
Continuously growing demand in this market and the emergence of new customers; Growth of economic potential through the development of new tourism services; Possibility of diversifying the tourism product; New developments and opportunities for modern types of tourism development; Possibility of developing tourism infrastructure by attracting investments; Improving service quality in all sectors of the economy; The flourishing of the services market era on a global scale; Possibility of rapid development with the restoration of pre-pandemic demand levels in the tourism services market as a whole; Sustainable domestic demand for visiting historical and cultural heritage sites; Increasing productivity of companies included in the tourism cluster, i.e., increasing innovative potential and creating new business projects; Developing new tourism products for visiting little-explored areas, such as the Kalbinsky Ridge; Expanding the range of services offered, improving service quality and tourist safety; The pandemic has led to an increase in the number of tourists engaging in active sports - mountain tourism, trekking, hiking, and walking.	The emergence of new services in the market; Increasing market requirements for service quality; Changing nature of demand for various types of services; Decline in business activity due to the worsening economic situation in the country and the world; Intensifying competition in the struggle for investment resources; Availability of alternative uses for territories suitable for tourism development; Unstable demand in the tourism services market due to seasonality and other factors; Imperfection of legislation on tourism activities regulation; Difficulty attracting qualified specialists and personnel to the tourism sector; Destruction of historical and cultural monuments due to insufficient measures for their preservation; Low quality and uniformity of tourism products;

Kazakhstan Region saw the following dynamics of key tourism indicators:

- The volume of services provided by accommodation facilities amounted to 47.119 million tenge (an increase of 23.5% compared to the same period in 2022);
- 2.812 thousand citizens of Kazakhstan used accommodation services (an increase of 13.7% compared to the same period in 2022);
- The number of foreign tourists amounted to 147 thousand people (an increase of 16.6% compared to the same period in 2022);
- Investments in fixed assets in the tourism sector amounted to 9.457 million tenge (an increase of 33.0% compared to the same period in 2022).

socio-economic phenomena, characteristic that along with significant factors shaping the level of the effective indicator, many factors influence it. This indicates that the relationships between the phenomena being studied are correlational in nature and are analytically expressed by the function $Y_x = f(x)$. Determining

From January to September 2023, the East the regression equation and the strength of the relationship between the studied phenomena constitutes the essence of correlation-regression analysis (CRA).

> The research aims to determine the dependence of tourism development on the level of socioeconomic development of the region based on correlation-regression analysis. To build a model for forecasting the main socio-economic indicators, which will allow managing the sustainable development of tourism in the East Kazakhstan Region, the correlation-regression analysis method was used based on monthly data for 2023 (Table 6).

> As the dependent variable, we define Y - the volume of income from services provided, million tenge. The following factor indicators were selected as explanatory variables:

> X₁ - the number of citizens of Kazakhstan who entered the territory of EKR, thousand people;

> X_2 - the number of foreign tourists, thousand people;

> X_3 - investments in fixed assets in the tourism sector, million tenge.

Period	Volume of Income	Number of	Number of	Investments in
	from Services	Citizens of	Foreign Tourists	Fixed Assets in the
	Provided (million	Kazakhstan who	(thousand people)	Tourism Sector
	tenge)	Entered EKR		(million tenge)
		(thousand people)		
01.01.2023	517,118	30,089	1,409	1029,577
01.02.2023	519,496	30,112	1,612	1039,985
01.03.2023	527,219	31,244	1,513	1049,985
01.04.2023	526,874	31,189	1,514	1051,778
01.05.2023	519,638	31,502	1,524	1051,258
01.06.2023	522,237	31,588	1,526	1058,983
01.07.2023	526,528	32,897	1,784	1057,145
01.08.2023	523,246	32,421	1,865	1058,962
01.09.2023	529,544	30,158	1,953	1059,327
01.10.2023	518,788	30,457	1,757	1058,322
01.11.2023	520,159	30,101	1,142	1059,537
01.12.2023	522,987	31,105	1,112	1060,899

Table 6 - Initial Data of Correlation-Regression Analysis

To empirically verify the conceptual model, the authors conducted Pearson correlation analysis, as all variables are continuous in nature. All calculations were performed using the "Data Analysis" tool in Microsoft Excel.

As a result of the calculations, it is evident that there is a strong relationship between the amount of income from services rendered and the number of tourists visiting the East Kazakhstan Region, as well as the volume of investments in the tourism sector, with the correlation coefficient R = 0.713 or 71.3%.

The coefficient of determination D = 0.5087 or 50.87%, meaning that 50.87% of the variation in Y is explained by changes in X_1 , X_2 , and X_3 , while the remaining 49.13% is influenced by other factors.

The multiple regression equation is as follows:

$$Y=712.443+2.526\times X_1+1.222\times X_2+0.253\times X_3$$

where 2.526 is the regression coefficient showing how much Y will change with a one-unit change in X_1 (the number of citizens of the Republic of Kazakhstan entering the East Kazakhstan Region);

1.222 is the regression coefficient showing how much Y will change with a one-unit change in X2 (the number of foreign tourists);

0.253 is the regression coefficient showing how much Y will change with a one-unit change in X3 (investments in fixed assets in the tourism sector);

712.443 is the intercept in the regression equation, interpreted as the initial value of Y.

We will assess the statistical significance of the regression equation and its parameters using Fisher's and Student's t-tests (at a 5% significance level) and elasticity coefficients (5% significance level; 3 degrees of freedom).

The theoretical t-value (Ttheor) = 2.23 is the table value of the Student's coefficient. The calculated Student's t-value (T) = 6.551 > 2.23.

Thus, it can be concluded that the linear correlation coefficient is significant and reliable.

The table value of Fisher's criterion: F-criterion = 3.59.

The calculated F-value = 22.761 > 3.59, indicating that the constructed equation is

statistically significant and can be used to calculate forecast values of income in the tourism sector of the East Kazakhstan Region based on changes in the number of domestic and foreign tourists, as well as the volume of investments in tourism.

Conclusion The conducted research demonstrates that the East Kazakhstan Region has tremendous potential for the development of ecological tourism, thanks to its rich natural resources, diverse landscapes, and unique ecosystems, including the Kalbinsky Ridge.

As recommendations for the development of tourism in the East Kazakhstan Region, it is essential to focus on developing a system of state regulation and support for tourism activities. The comprehensive implementation of planned measures will contribute to an influx of foreign tourists to the region, strengthen the material and technical base of tourism, expand the diversity and geography of tourist routes, stimulate other industries, and make a significant contribution to the structural transformation of the regional economy.

Macroeconomic and political stability in Kazakhstan, along with the organization of world-scale events, will provide a powerful impetus for further business cooperation in the field of ecotourism. Developing a sound strategy that considers global practices and experiences will allow ecotourism in East Kazakhstan to become a profitable component of the region's economy.

The conducted study on the impact of the tourism sector on the economy of the East Kazakhstan Region using correlation-regression analysis has revealed a positive correlation between the amount of income from services rendered and the number of tourists accommodated, as well as the volume of investments in the tourism industry. It was found that the development of tourism in the East Kazakhstan Region is primarily driven by domestic tourist flows.

The results of the conducted SWOT analysis form the basis for determining the strategic directions for the development of domestic tourism services and improving tourism support in the East Kazakhstan Region. Thus, it can be concluded that the dynamic development and transformations, equally affecting both the demand for and the supply of tourism services, indicate a transition to a qualitatively new stage in the development of domestic tourism in the

East Kazakhstan Region.

Financing: This research was conducted as part of the implementation of the initiative project 0124PKU0093 "Tourism Potential of the Natural and Historical-Cultural Complex 'Kalbinsky Trails'."

References

- 1. Zakon Respubliki Kazahstan ot 13 ijunja 2001 goda № 211 «O turistskoj dejatel'nosti v Respublike Kazahstan» // Informacionno-pravovaja sistema normativnyh pravovyh aktov Respubliki Kazahstan.
- URL:https://adilet.zan.kz/rus/docs/Z010000211 (accessed: 05.01.2024) [in Russian]
- 2. Tourism in the World. United Nations World Tourism Organization. URL: https://www.unwto.org
- 3. Ob utverzhdenii Koncepcii razvitija turistskoj otrasli Respubliki Kazahstan na 2023 2029 gody. Postanovlenie Pravitel'stva Respubliki Kazahstan ot 28 marta 2023 goda № 262.
- URL: https://adilet.zan.kz/rus/docs/P2300000262 (accessed: 03.03.2024) [in Russian]
- 4. Seken, A., Duissembayev, A., Tleubayeva, A., Konurbaeva, Z., Suieubayeva, S. Modern potential of rural tourism development in Kazakhstan // Journal of Environmental Management and Tourism. 2019. –Vol. 10(6). -P. 1211–1223. DOI: 10.14505//jemt.v10.6(38).03
- 5. Mutaliyeva, L., Kurmanov, N., Akisheva, A. Analysis of tourism potential and ecological tourism development in Kazakhstan // E3S Web of Conferences. EDP Sciences. 2020. Vol. 159. -P. 1–7. https://doi.org/10.1051/e3sconf/202015904031
- 6. Abuev A. Turizm v Kazahstane: issledovanie otrasli, problematika i perspektiv. -2023. URL: https://ffin.kz/research/9-turizm-v-kazakhstane-issledovanie-otrasli-problematika-i-perspektivy (accessed: 21.07.2024)
- 7. Khalid, U., Okafor, L.E., Burzynska, K. Does the size of the tourism sector influence the economic policy response to the COVID-19 pandemic? // Current Issues in Tourism. -2021. -Vol. 24(19). -P. 2801–2820. DOI:10.1080/13683500.2021.1874311
- 8. Mirovoj rejting turizma: kakoe mesto zanjal Kazahstan // Official Website inbusiness.kz. URL: https://inbusiness.kz/ru/last/mirovoj-rejting-turizma-kakoe-mesto-zanyal-kazahstan (accessed: 02.08.2024)
- 9. Kak prevratit' Kazahstan v turisticheskuju Mekku? Mnenie jeksperta. // Official Website Azattyq Rýhy. URL: https://rus.azattyq-ruhy.kz/economics/53058-kak-prevratit-kazakhstan-v-turisticheskuiu-mekku-mnenie-eksperta (accessed: 02.08.2024)
- 10. International Tourism Highlights // Tourism Library. URL: https://tourlib.net/wto/WTO_highlights_2019.pdf?ysclid=lcp2b4u0vu212952496
- 11. Kajnazarova D.A., Bajmagambetova L.K. Postkovidnoe sostojanie i razvitie turizma Kazahstana // Vestnik universiteta «Turan». -2023. –Vol. 2. –P. 216-233. https://doi.org/10.46914/1562-2959-2023-1-2-216-233
- 12. Chernysheva A., Jakubova T. Marketingovye issledovanija i situacionnyj analiz v 2 ch. Chast' 1. Uchebnik i praktikum dlja akademicheskogo bakalavriata. Moscow: Litres, 2020. 244 p. ISBN 978-5-9916-8566-5
- 13. Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. URL: https://www.stat.gov.kz/

14. Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan // Statistical Digest "Tourism Statistics of Kazakhstan 2021–2023". URL:

https://stat.gov.kz/ru/industries/business-statistics/stat-tourism/ (accessed: 05.03.2024)

Information about the authors

Konurbayeva Zh. - D. Serikbayev East Kazakhstan Technical University, Candidate of Economic Sciences, Associate professor, Ust-Kamenogorsk, Kazakhstan, e-mail: zhkonurbayeva@edu.ektu.kz;

Suieubayeva S. -D. Serikbayev East Kazakhstan Technical University, Candidate of Economic Sciences, Associate professor, Ust-Kamenogorsk, Kazakhstan, e-mail: suyeubaeva@mail.ru;

Zakimova A. - D. Serikbayev East Kazakhstan Technical University, Candidate of Economic Sciences, Ust-Kamenogorsk, Kazakhstan, e-mail: zakimovaa@mail.ru;

Mezentseva L. - D. Serikbayev East Kazakhstan Technical University, Ust-Kamenogorsk, Kazakhstan, e-mail: Vvdovin@list.ru;

Turegeldinova A. - Kazakh National Research Technical University named after K.I. Satpayev, Candidate of Economic Sciences, PhD, Almaty, Kazakhstan, a.turegeldinova@satbayev.university;

Amralinova B. - Kazakh National Research Technical University named after K.I. Satpayev, PhD, Associate professor, Almaty, Kazakhstan, b.amralinova@satbayev.university.

Сведения об авторах

Конурбаева Ж. - Восточно-Казахстанский технический университет им. Д. Серикбаева, к.э.н., доцент, г. Усть-Каменогорск, Казахстан, e-mail: zhkonurbayeva@edu.ektu.kz;

Суйеубаева С. - Восточно-Казахстанский технический университет им. Д. Серикбаева, к.э.н., доцент, г. Усть-Каменогорск, Казахстан, e-mail: suyeubaeva@mail.ru;

Закимова А. - Восточно-Казахстанский технический университет им. Д. Серикбаева, к.э.н., доцент, г. Усть-Каменогорск, Казахстан, e-mail: zakimovaa@mail.ru;

Мезенцева Л. - Восточно-Казахстанский технический университет им. Д. Серикбаева, г. Усть-Каменогорск, Казахстан, e-mail: Vvdovin@list.ru;

Турегельдинова А. - Казахский национальный исследовательский технический университет им. К.И. Сатпаев, к.э.н., PhD, Алматы, Казахстан, a.turegeldinova@satbayev.university;

Амралинова Б. - Казахский национальный исследовательский технический университет имени К.И. Сатпаева, к.э.н., доцент, Алматы, Казахстан, b.amralinova@satbayev.university.