

¹Karimov D.Zh., ²Aitbayeva G.D., ²Abeldanova A.B.,
²Akhmejanova D.Zh.

¹Kazakh Academy of Sport and Tourism, Almaty, Kazakhstan

²Kazakh Ablai khan University of International Relations and World Languages, Almaty, Kazakhstan

HEALTH AND WELLNESS TOURISM DEVELOPMENT IN THE KYZYLORDA REGION: ASSESSMENT OF NATURAL THERAPEUTIC RESOURCES, INFRASTRUCTURE, AND A CONCEPTUAL DEVELOPMENT FRAMEWORK

Karimov Dauren Zhalgasuly, Aitbayeva Gulzamira Dzholdasbekovna, Abeldanova Aigerim Bakhytzhonovna, Akhmejanova Dilda Zhaishigaliyevna

Health and wellness tourism development in the Kyzylorda region: assessment of natural therapeutic resources, infrastructure, and a conceptual development framework

Abstract. The growing global demand for health and wellness tourism highlights the importance of the effective use of natural and recreational resources in Kazakhstan's regions. In this regard, the Kyzylorda region, which possesses significant natural therapeutic resources, offers considerable opportunities for tourism development. The aim of this study is to provide a comprehensive assessment of the potential for health and wellness tourism development in the Kyzylorda region. The research employs literature review, statistical analysis, comparative analysis, natural-resource assessment, SWOT analysis, and a systems approach. The study evaluates the region's natural therapeutic resources, as well as the condition of sanatorium-resort infrastructure and tourist flow dynamics. The findings demonstrate that the region has substantial potential for health and wellness tourism development; however, its effective utilization is constrained by insufficient infrastructure, limited transport accessibility, shortages of qualified personnel, and weak marketing promotion. Based on the SWOT analysis and international best practices, a conceptual framework for the phased development of a competitive health and wellness tourism product is proposed. The practical significance of the study lies in the development of recommendations aimed at infrastructure modernization, certification of natural therapeutic resources, digital promotion of tourism services, and the sustainable development of the region.

Key words: health and wellness tourism, sanatorium-resort tourism, natural therapeutic resources, mineral waters, tourism infrastructure, recreational potential, Kyzylorda region.

Кәрімов Дәурен Жалғасұлы, Айтбаева Гульзамира Джолдасбековна, Абельданова Айгерим Бахытжановна, Ахмеджанова Дильда Жайшиғалиевна

Қызылорда облысында емдік-сауықтыру туризмін дамыту: табиғи емдік ресурстар мен инфрақұрылымның әлеуетін бағалау және дамудың тұжырымдамалық моделі

Аңдатпа. Әлемде емдік-сауықтыру туризміне сұраныстың артуы Қазақстан өңірлерінің табиғи-рекреациялық әлеуетін тиімді пайдаланудың маңыздылығын күшейтуде. Осы тұрғыдан алғанда, табиғи емдік ресурстарға бай Қызылорда облысының әлеуетін зерттеу өзекті болып табылады. Зерттеудің мақсаты – Қызылорда облысында емдік-сауықтыру туризмін дамытудың әлеуетін көшенді бағалау. Зерттеу барысында ғылыми әдебиеттерді талдау, статистикалық салыстырмалы және табиғи-ресурстық талдау, SWOT-талдау және жүйелік талдау әдістері қолданылды. Аймақтың табиғи емдік ресурстары, сондай-ақ санаторийлік-курорттық инфрақұрылымның жағдайы және туристік ағын динамикасы бағаланды. Нәтижесінде өңірдің емдік-сауықтыру туризмін дамытуға жоғары әлеуетке ие екендігі анықталды. Дегенмен оның толық іске асырылуына инфрақұрылымның жеткіліксіз дамуы, көлік қолжетімділігінің төмендігі, білікті кадрлардың тапшылығы және маркетингтік ілгерілетудің әлсіздігі кедергі келтіреді. SWOT-талдау нәтижелері мен халықаралық тәжірибе негізінде өңірдің бәсекеге қабілетті емдік-сауықтыру туристік өнімін қалыптастырудың кезеңдік тұжырымдамалық моделі ұсынылды. Зерттеудің практикалық маңызы табиғи емдік ресурстарды сертификаттау, инфрақұрылымды жаңғырту, туристік қызметтерді цифрлық ілгерілету және өңірдің тұрақты дамуын қамтамасыз ету жөніндегі ұсыныстар әзірлеуде көрінеді.

Түйін сөздер: емдік-сауықтыру туризмі, санаторийлік-курорттық туризм, табиғи емдік ресурстар, минералды сулар, туристік инфрақұрылым, рекреациялық әлеует, Қызылорда облысы.

Каримов Даурен Жалғасұлы, Айтбаева Гульзамира Джолдасбековна, Абельданова Айгерим Бахытжановна, Ахмеджанова Дильда Жайшиғалиевна

Развитие лечебно-оздоровительного туризма в Кызылординской области: оценка природно-лечебных ресурсов, инфраструктуры и концептуальная модель развития

Аннотация. Рост мирового спроса на лечебно-оздоровительный туризм усиливает необходимость эффективного использования природно-рекреационного потенциала регионов Казахстана. В этой связи особый интерес представляет Кызылординская область, обладающая значительными природными лечебными ресурсами и перспективами развития санаторно-курортной деятельности. Цель исследования заключается в комплексной оценке потенциала развития лечебно-оздоровительного туризма в Кызылординской области. В исследовании использованы методы анализа научной литературы, статистического, сравнительного и природно-ресурсного анализа, SWOT-анализа и системного подхода. Проведена оценка природных лечебных ресурсов региона,

а также состояния санаторно-курортной инфраструктуры и динамики туристских потоков. Установлено, что регион обладает высоким потенциалом для развития лечебно-оздоровительного туризма, однако его реализация сдерживается недостаточным уровнем инфраструктуры, ограниченной транспортной доступностью, нехваткой квалифицированных кадров и слабым маркетинговым продвижением. На основе результатов SWOT-анализа и международного опыта предложена концептуальная модель поэтапного формирования конкурентоспособного лечебно-оздоровительного туристского продукта. Практическая значимость исследования заключается в разработке рекомендаций по модернизации инфраструктуры, сертификации природных лечебных ресурсов, цифровому продвижению туристских услуг и обеспечению устойчивого развития региона.

Ключевые слова: лечебно-оздоровительный туризм, санаторно-курортный туризм, природные лечебные ресурсы, минеральные воды, туристская инфраструктура, рекреационный потенциал, Кызылординская область.

Introduction. Currently, health and wellness tourism is emerging as an important area of tourism that combines medical, preventive, and recreational services aimed at strengthening public health. This sector contributes to the expansion of the labor market, the enhancement of investment attractiveness, and the development of tourism infrastructure.

At the same time, the terms «medical tourism», «wellness tourism», and «health and wellness tourism» are often used interchangeably in scientific literature. However, their content and functional characteristics differ. Medical tourism is mainly focused on receiving professional medical services such as diagnostics, treatment, and surgical intervention, whereas wellness tourism includes a set of preventive and recreational services aimed at maintaining a person's physical, mental, and emotional well-being and improving quality of life. Health and wellness tourism, in turn, is considered a comprehensive type of tourism that combines elements of both areas and is based on the use of natural therapeutic resources, sanatorium-resort treatment, rehabilitation, and wellness programs. In this regard, the main focus of the study is placed on health and wellness tourism.

Medical, health and wellness services are steadily developing in the world market, so, in 2021, global medical tourism amounted to 14 billion US dollars, in 2028 - more than 50 billion US dollars, and Wellness number of tourists is 700 million US dollars. It is assumed that the person will reach. This fact proves that people focus on their health and rely on specialized activities [1].

The demand for health travel today is driven by global demographic and sociocultural trends. These include the processes of population aging, the increase in the share of chronic diseases, the growth of public awareness about healthy lifestyle issues, as well as the transformation of tourist demand from the traditional format of rest to the concept of well-being, which includes physical, mental and emotional healing [2].

In addition, health and wellness tourism as a strategic tool for sustainable economic development

contributes to the development of infrastructure, creation of new jobs, diversification of economic structure of regions, strengthening of tourism image at international level, Easier access to such services through globalization and digitalization, increased competition in the market. This, in turn, will require the development of strategies aimed at promoting therapeutic resources in the regions [3].

The development of health and wellness tourism in Kazakhstan is linked to the formation of a globally integrated, competitive health sector, in these conditions it requires attracting internal and external patients, improving the quality of medical tourism services. While the state coordinates medical and sanatorium-resort, tour operator services, improves service and management in these institutions, promotes the development of medical tourism product on the market and promotion with the use of advanced international experience, this type of tourism can stimulate economic growth, strengthen the country's image at international level and improve quality health services available to the population [4].

The combination of natural and climatic resources of Kyzylorda region such as lakes with high mineral salt content and therapeutic mud, make it attractive in terms of the implementation of health programs. Sanatorium-resorts such as “Zhanakorgan / AK Shuak” and “Zhan-Arai” that treat joint, skin and respiratory diseases are well positioned for this purpose [5].

The development of health and wellness tourism in the region allows us to achieve the following outcomes:

- increase the tourist flow and revenues of the region;
- create new jobs;
- attract investment in infrastructure;
- improve the quality of life of the local population;
- preserve natural healing resources and their rational use.

Thus, the study of the potential of health and wellness tourism in the Kyzylorda region is relevant

from a scientific and practical point of view, as it allows us to determine strategic priorities for the development of the region as a competitive tourist destination at the national and international levels.

Mild winters, hot and long summers, low air humidity in Kyzylorda region create a favorable environment for recreation and rehabilitation of tourists, and therefore play a special role in the development of health and wellness tourism. However, currently, the health and wellness tourism potential of the region is not fully realized due to limited infrastructure and insufficient advertising of the region on the market.

If these resources are used comprehensively, the region could be recognized as prospective destination for the development of health and wellness tourism that contribute to public health improvement and to the acceleration of the region's socio-economic development.

In scientific research, health and wellness tourism (wellness tourism, health tourism, sanatorium-resort tourism) considers comprehensive tourism that combines wellness procedures, recreation and medical services.

Although there is an increase in interest in this type of tourism in Kazakhstan, most of the existing scientific research is focused on the national level or other regions. For example, A.K. Esim analyzes medical tourism in Kazakhstan on a nationwide scale. The author establishes that there are basic prerequisites for the development of health and wellness tourism on the territory of Kazakhstan. In addition, the study considers the health status of the population in Kazakhstan, the expected life expectancy, and notes that the sanatorium and resort industry is in a trend of sustainable development [6].

In the works of A.S. Nurgazina and N.S. Kalila, the tourist and recreational potential of the Kyzylorda region is studied, and the main problem is the weak infrastructure development, although the region has a high natural potential [7].

Analyzing the development of sanatorium-resort complexes in Kazakhstan, A.B. Moldasheva argues that its effective development positively affects the improvement of public health. In particular, the development of sanatorium and spa complexes will contribute to reducing the level of morbidity and disability, reducing the costs of treatment in polyclinics and hospitals. In addition, this process will improve the infrastructure of resorts and health zones, ensure economic stability and profitability of the entire sanatorium complex. According to the author, the development of the sanatorium-resort sector contributes to improving the quality

of sanatorium-resort services and enhancing the competitiveness of the domestic resort complex in the international market, creating conditions for the conservation and rational use of particularly valuable natural therapeutic resources of the Republic [8].

A.A. Zhakupov considers the resource potential of the northeastern part of Kazakhstan on the example of the Pavlodar region and analyzes factors that promote and limit the development of health and wellness tourism. The author proposes specific measures aimed at developing health and wellness tourism in the region [9].

Analyzing the unique natural therapeutic resources of the region under investigation, B.I. Aktymbayeva pays special attention to services for organizing a resort area, resort treatment system, as well as recreational and leisure activities [10].

M. Ordabayeva analyzes the current problems of modern development of health and wellness tourism in Kazakhstan [11].

S.L. Mosokina considers the stages of development health and wellness tourism (including health, sanatorium-resort and medical tourism) in Russia and the CIS member countries, the current state of the sanatorium complex and natural health resources, and also conducts an analysis of tourist flows in the Eurasian area [12].

K.P. Musina, K.A. Omarova, K.B. Tukibaeva analyzed the global modern trends inherent in the development of health and wellness tourism, determined its role in the overall structure of the tourism industry on the basis of statistical and content analysis methods. As a result of the study, conclusions were drawn on inequalities in the development of therapeutic and health tourism, regions of Kazakhstan were identified and classified according to the level of development of the studied type of tourism [13].

E.A. Abenova., S.Z. Saidullayev conducted a comprehensive assessment of the potential for the development of health and wellness tourism in the Almaty region, identifying regions with high potential for the development of this type of tourism and favorable prospects for its development [14].

A comparative analysis of the literature shows that research on health and wellness tourism in Kazakhstan has developed in several main directions: assessment of natural and recreational resources, determination of the socio-economic efficiency of sanatorium and resort complexes, analysis of regional infrastructure issues, and territorial comparison of tourism potential. Although these studies provide a basis for identifying the development opportunities of this type of tourism, most of them examine the issue through separate aspects.

Table 1 – Comparison of regional studies on health tourism in Kazakhstan

Author(s)	Region	Methods	Main concepts
Esim A.R.	Kazakhstan	Statistics, recreational analysis	The sanatorium-resort industry of the Republic of Kazakhstan is rich in significant recreational resources for the development of health tourism.
Nurgasina A.S., Kalila N.S.	Kyzylorda	Questionnaire, recreational analysis	High potential, weak infrastructure.
Moldasheva A.B.	Kazakhstan	Statistics, recreational analysis	The development of the sanatorium-resort complex in Kazakhstan has a positive impact on improving the health of the population, reducing the incidence and disability rate, as well as reducing the cost of treating patients in polyclinics and hospitals
Zhakupov A.A.	Pavlodar region	Statistics, recreational analysis	Imperfection of the regulatory framework; low competitiveness of Health Services; lack of developed transport and engineering infrastructure; shortcomings in the training of professional and qualified personnel; high influence of the seasonality factor on the attractiveness of resorts in Pavlodar region for tourists
Aktymbayeva B.I.	Shalkar district, Aktobe region	System analysis, sociological survey	The limited capacity of many facilities does not allow opening large recreational complexes with high architectural, engineering equipment and sanitary level
Ordabayeva M.	Kazakhstan	System analysis	For the development of health and wellness tourism, it is necessary to develop measures of state support
Mozokina S.L.	Eurasian space	Methods of scientific research: analysis and synthesis, expert-analytical method, structural-logical analysis, modeling and forecasting methods.	Proposes the creation of a single digital platform, unification of information and technology support, as well as the development of network educational programs aimed at training specialized personnel
Musina K.O., Omarova K.A., Tukibayeva K.B.	Kazakhstan	Analysis and synthesis, content analysis, classification and grouping methods, forecasting methods, structural-logical method.	Insufficient development of medical, health and wellness tourism in Kazakhstan
Abenova E.A., Saidullayev S.Z.	Uigur district, Alakol resort area, town Kapshagai	Cartographic method, generalization of statistical data, analysis of theoretical sources, empirical method.	The development of health and wellness tourism creates a multiplier effect on the development of related industries, contributes to increasing the investment attractiveness of the region and the development of domestic tourism
Note: compiled by authors			

In the studies by A.K. Esim and A.B. Moldasheva, health and wellness tourism is considered at the national level, with emphasis on the general prerequisites for the development of the sanatorium and resort sector and its socio-economic significance. The works of A.A. Zhakupov, E.A. Abenova and S.Z. Saidullayev analyze regional resource potential and infrastructural conditions.

Meanwhile, the studies by K.P. Mussina, K.A. Omarova and K.B. Tukibayeva apply a comparative and classification-based approach to the regions of Kazakhstan. However, these studies do not sufficiently address the issues of transforming natural therapeutic resources into specific tourism products, adapting them to market demand, and ensuring service and infrastructure support.

Studies related to Kyzylorda region indicate the region's natural and recreational potential and infrastructural weaknesses. However, the possibilities of using therapeutic muds, mineral waters, salt lakes and sanatorium facilities as tourism products have not been comprehensively analyzed. In addition, service quality, human resource capacity, marketing promotion and management mechanisms have not been sufficiently examined in an interconnected way.

Therefore, although existing scientific works describe certain aspects of health and wellness tourism in Kyzylorda region, there is still insufficient comprehensive assessment of the region's natural therapeutic resources in connection with infrastructural, economic and managerial factors. This study aims to address this research gap and identify priority directions for the sustainable development of health and wellness tourism in Kyzylorda region.

The purpose of the study is to analyze the potential for the development of health and wellness tourism in the region.

Research objectives:

- to assess the state of the existing infrastructure of sanatorium and resort facilities;
- to analyse natural healing resources of the region;
- to identify main problems and opportunities for the development of health and wellness tourism.

Materials and methods. The study used quantitative and qualitative research methods in order to comprehensively assess the potential for the development of health and wellness tourism in the Kyzylorda region. The object of the study was the natural therapeutic resources of the Kyzylorda region, sanatorium-resort organizations, tourist infrastructure and socio-economic factors affecting the development of health and wellness tourism.

As materials of the study, data from the Bureau of national statistics of the Republic of Kazakhstan, statistical data on sanatorium-resort organizations, scientific papers related to natural healing resources of the Kyzylorda region, regulatory documents, as well as previously conducted domestic and foreign studies were used. In addition, information on salt lakes, silt therapeutic mud, mineral waters and sanatorium-resort facilities in the region in open sources was analyzed.

The following methods were used in the course of the study:

1. The method of literature review was used to systematize scientific papers in the areas of health tourism, medical tourism, wellness-tourism and

sanatorium-resort activities. Through the review of the literature, trends in the development of health and wellness tourism in Kazakhstan and abroad, the main problems and scientific conclusions were identified.

2. Statistical analysis was used to assess the number of sanatorium-resort organizations in Kazakhstan and the Kyzylorda region, bed stock, number of visitors, indicators of medical rehabilitation organizations and the dynamics of tourist flow. This method made it possible to characterize the current state of the industry on the basis of quantitative indicators.

3. Through a comparative analysis, the potential of Kyzylorda region in the field of medical and health tourism was compared with other regions of Kazakhstan. In particular, the level of development of Sanatorium-resort organizations in Turkestan, Almaty, Akmola and other regions was considered, the advantages and weaknesses of Kyzylorda region were identified.

4. Method of natural-resource analysis. This method was used to assess the healing properties of salt lakes, silt mud and mineral waters in the region. The location, availability, possibility of medicinal use of Natural Resources and their importance in the development of sanatorium-resort tourism were analyzed.

5. SWOT analysis was used to identify the internal strengths and limitations of health and wellness tourism in Kyzylorda region, as well as external development opportunities and potential threats. The SWOT criteria were formed through a systematic grouping of the factors affecting the development of health and wellness tourism in Kyzylorda region. First, the natural therapeutic resources of the region were analyzed, including salt lakes, therapeutic muds, mineral waters and climatic conditions. Then, these resources were assessed in relation to infrastructure, transport accessibility, service provision, seasonality, official status and human resource capacity. Finally, external development conditions were considered, including investment opportunities, regional development programs, scientific research and certification prospects, GIS mapping, market promotion, environmental risks and competition. This made it possible to use SWOT analysis not only as a descriptive tool, but also as a method for identifying the key internal and external factors influencing the development of health and wellness tourism in the region.

6. The system analysis gave rise to the consideration of health and wellness tourism as a set of interrelated factors, such as natural resources,

infrastructure, investment opportunity, tourist demand, environmental sustainability and state support, and helped to summarize the results of the study in a comprehensive manner.

The integrated application of these methods became the basis for a comprehensive assessment of the potential for the development of health and wellness tourism in the Kyzylorda region, identifying the main problems and developing practical recommendations for improving sanatorium and resort activities in the region.

Results. The results of the study show that health and wellness tourism in the Republic of Kazakhstan in recent years shows a trend of sustainable development. According to statistical data, an increase in the number of sanatorium-resort organizations and an increase in demand for medical rehabilitation services prove the strengthening of the importance of this area. In addition, the dynamics of tourist flow indicates an increase in public interest in health restoration and preventive services. This, in turn, determines the gradual strengthening of the role of health and wellness tourism in the country's economy. In the course of its analysis, a number of important aspects were considered. In particular, the number of sanatoriums, resorts and health centers, the number of consumers and the dynamics of the tourist flow in recent years were differentiated. At the same time,

natural healing resources, in particular salt lakes Zhanakorgan, Zhaksykylysh, Kamystybas, Arys, Sanatorium «Zhanakorgan», Kupek, Terisken silt mud, as well as the chemical composition, healing properties, availability and potential of mineral waters in the Aral Sea, Syrdarya Basin and salt lake system were evaluated.

1. Collection and analysis of statistical data:

– number of sanatoriums, resorts and health centers;

– the number of visitors and the dynamics of the tourist flow in recent years.

As of the end of 2023, 175 organizations engaged in rehabilitation treatment and medical rehabilitation were registered in the Republic of Kazakhstan, including 115 sanatoriums, 26 rehabilitation centers, 25 specialized sanatoriums and other organizations, as well as 9 preventive centers [15].

And according to the statistical business register as of January 1, 2025, the number of entities working in the field of «activities of sanatorium-resort organizations» reached 333. Of these, the organizations of rehabilitation treatment and medical rehabilitation are 333 units: 216 are registered for the main type of economic activity, 50 for the secondary type of activity. At the same time, among private business entities, 41 work in this area as the main type of activity, 26 as the secondary type of activity.

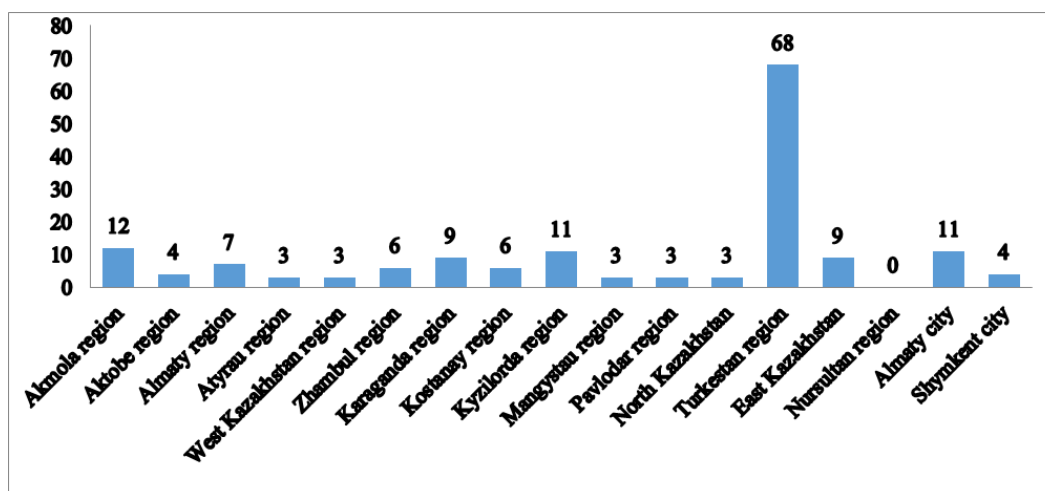


Figure 1 – Sanatorium-resort activities in the Republic of Kazakhstan [16]

According to the data provided, the regions with the largest concentration of sanatorium-resort institutions are Turkmenistan region (68), Almaty city

(11) and Akmola Region (12). 24% of the total number of sanatoriums and preventive centers is owned by state property.

Table 2 – Number of organizations of rehabilitation treatment and medical rehabilitation as of January 1, 2025

Organizations of rehabilitation treatment and medical rehabilitation as of January 1, 2025			
Administrative-territorial units	Total	Urban area	Rural area
The Republic Of Kazakhstan	333	158	175
Abay	7	2	5
Akmola	20	8	12
Aktobe	7	7	-
Almaty	22	4	18
Atyrau	4	4	-
West Kazakhstan	3	-	3
Zhambyl	16	9	7
Zhetysu	9	4	5
Karagandy	13	13	-
Kostanay	8	5	3
Kyzylorda	17	6	11
Mangystau	7	4	3
Pavlodar	7	4	3
North Kazakhstan	3	2	1
Turkestan	117	19	98
Ulytau	1	1	-
East Kazakhstan	6	-	6
Astana city	12	12	-
Almaty city	34	34	-
Shymkent city	20	20	-

Note: Compiled by the authors based on the data of the National Bureau of statistics of the Republic of Kazakhstan

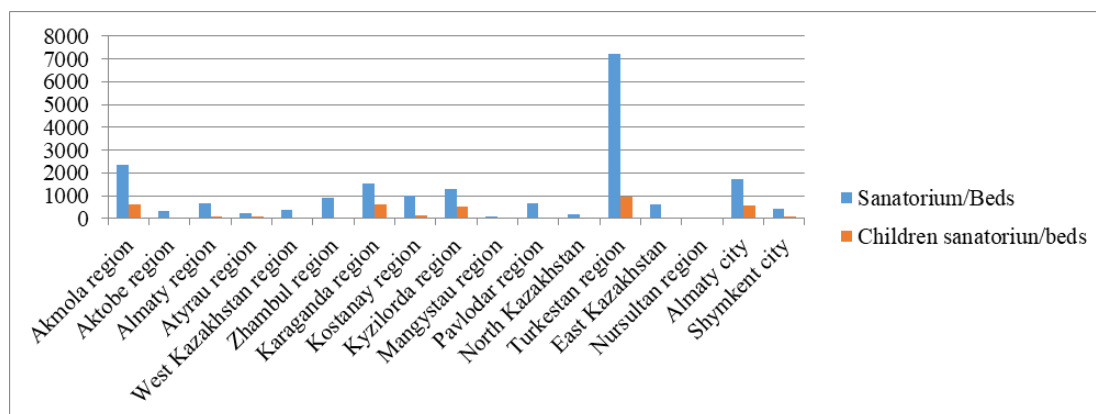


Figure 2 – The number of beds in sanatorium-resorts in the Republic of Kazakhstan [17]

According to tabular data for 2025, there is a significant increase in the number of medical rehabilitation and health and wellness organizations in a number of regions of Kazakhstan. In particular, the number of medical rehabilitation facilities in Akmola region amounted to 20 organizations, while in Almaty region this figure reached 22 organizations. And in the Turkestan region, the number of organizations of medical rehabilitation and rehabilitation treatment increased to 117, showing one of the highest indicators in the country. This dynamic shows a constantly increasing demand for health and wellness services among the population, as well as the active development of this industry at the regional level.

By the end of 2023, the number of doctors in sanatorium-resort organizations amounted to 672 people, and 2,210 middle-level medical workers.

In 2023, more than 413 thousand people rested in sanatoriums, including 243 thousand women and 785 non-residents. This figure is 8.9% higher than

in the previous year. In 2023, the average length of stay in health and wellness places was 10 days [17].

Despite the fact that the number of visitors to sanatoriums in Kyzylorda region fluctuates, in 2025 there is an upward trend: until March 1, 2004 people rested at sanatoriums (mainly at the sanatorium «Zhanakorgan»), and by July the total number of foreign tourists reached 2512 people. Despite the fact of delay in the implementation of the annual plan, data show a revival of the health and wellness direction in the region. Sanatorium «Zhanakorgan» is one of the leading facilities of the region: with a capacity of 380 places and received 1392 of 2004 arrivals. Although the target of 10,000 people was not met until mid-year, performance trends show an upward trend. This speaks about the development of sanatorium-resort holidays in the Kyzylorda region.

2. Analysis and evaluation of natural therapeutic resources:

– Analysis of the chemical composition and medicinal properties of salt lakes, silt and mineral waters.

Table 3 – Natural therapeutic resources of the Kyzylorda region

Resource	Location	Healing properties	Availability
Salt lake	Zhanakorgan, Zhaksykylysh, Kamystybas, Arys	Joint, skin diseases	average
Silt mud	Sanatorium «Zhanakorgan», Kupek, Terisken	Arthritis, rheumatism	high
Note: compiled by authors			

From the table, it can be seen that the therapeutic potential of the region's resources is high, but their level of availability is heterogeneous, which limits the efficient use in sanatorium-resort purposes.

Salt lakes of the Kyzylorda region are located in the arid zone, typical for the south of Kazakhstan, in a dry lowland with a concentration of non-flowing salt lakes (Zhaksykylysh, Kamystybas, Arys, etc.).

Salt lakes are characterized by a high level of mineralization: the water contains the main components such as sodium and chlorides, as well as trace elements like iodine, bromine, boron, zinc, manganese, iron. For example, the level of mineralization of water in Lake Arys averages about 32.5 g/l and contains the listed elements [18].

Seasonal changes: many lakes dry up completely in the summer, which leads to a concentration of salt and the formation of thick salt shells and dense salt deposits.

Thanks to high mineralization, salt lakes are similar to the Dead Sea, where concentrated salts

and trace elements are considered to have beneficial effects on skin conditions and musculoskeletal disorders. Local therapeutic lakes with their rich mineral composition attract visitors looking for wellness procedures aimed at relieving skin, bone and joint diseases.

Silt mud (peloids). In several lakes of the Kyzylorda region, including Kupek and Terisken, layers of silt mud have been observed. These mud deposits may represent a potentially valuable resource for the development of health and wellness tourism due to their presumed therapeutic properties. According to available literature, mineralized clay-silt deposits in salt lakes may contain salts and trace elements that are traditionally associated with therapeutic and recreational use [18]. However, due to the lack of certified laboratory data on their chemical composition, microbiological safety, and balneological properties, their therapeutic effects cannot be regarded as scientifically confirmed at this stage. Therefore, their value should be interpreted as

presumed therapeutic potential based on historical, empirical, and locally observed practices. Further laboratory analysis, certification, and expert assessment are required to confirm their chemical composition, safety, and therapeutic properties.

3. Assessment of availability and operational potential.

Most of the lakes are located far from large cities and developed infrastructure, which limits access, but makes it possible to form specialized tourism and medical routes.

For effective use for therapeutic and recreational purposes, it is necessary to develop access roads, sanitary zones, service points, as well as conduct research and monitoring of the quality of resources.

Assessment of accessibility and operational potential shows that most of the lakes are located away from large cities and developed infrastructure, which limits access. However, this makes it possible to form special tourist and therapeutic routes and requires the most effective use of the therapeutic and recreational potential of the regions. Through the development of infrastructure, research and monitoring of resources, it is possible to ensure the safety and quality of tourist routes, which will contribute to the development of medical and health tourism and increase the economic potential of the region.

4. In order to comprehensively assess the potential and limiting factors, SWOT analysis was carried out. The SWOT analysis was conducted using a qualitative analytical approach based on the

systematic review and grouping of secondary data. The initial list of factors was identified through the analysis of scientific literature, regional tourism development materials, open-source information on natural therapeutic resources, and available data on tourism and sanatorium-resort infrastructure in the Kyzylorda region.

The identified factors were classified into four SWOT categories. Internal regional characteristics, including the availability of natural therapeutic resources, climatic conditions, infrastructure, transport accessibility, and the level of scientific study of therapeutic mud and mineral waters, were classified as strengths and weaknesses. External factors, including investment opportunities, regional development programmes, market competition, environmental risks, climate change, and the potential for positioning the region in the health and wellness tourism market, were classified as opportunities and threats.

The inclusion of factors in the SWOT matrix was based on their relevance to health and wellness tourism, influence on the use of natural therapeutic resources, impact on tourism infrastructure development, environmental significance, and potential contribution to regional socio-economic development. Based on this systematic grouping of secondary data, the key internal and external factors influencing the development of health and wellness tourism in the Kyzylorda region are presented in Table 4.

Table 4 – SWOT analysis (compiled by the authors)

S - Strengths	O - Opportunities
1. Availability of natural therapeutic resources: salt lakes and silt mud with high mineralization and a rich microelement, including Na, Cl, Mg, Br, I, and others. 2. Natural origin of the resources increases their attractiveness for resort and ecotourism development. 3. Wide distribution of salt lakes across extensive territories creates potential for their integrated use in treatment, recreation and tourism. 4. The climatic conditions are favorable for a resort-based and wellness tourism. 5. Relatively low anthropogenic pressure in several areas helps preserve the natural therapeutic properties of these sites.	1. Development of health resort and medical tourism at regional and interregional levels. 2. Carry out scientific research and laboratory analyses of therapeutic mud and water and, as a consequence, their certification. 3. Development of GIS maps and inventories of natural therapeutic resources with a view to planning for the rational use of natural therapeutic resources. 4. Attracting public and private investments in the framework of regional development programmes and tourism. 5. Diversification of the region's economy, reduction of dependence on commodity sectors. 6. Formation of ecological and therapeutic routes (eco-cycling, wellness tourism). 7. The possibility of comparing and effectively positioning resources with known foreign similar objects (salt lakes of other countries).
W - Weaknesses	T - Threats
1. Insufficient level of knowledge on the chemical composition and therapeutic properties of selected lakes and mud (lack of certified data).	1. Degradation of ecosystems due to climate change, drought and desertification.

2. Lack of developed resort infrastructure (sanatoriums, balneological centers). 3. Low transport accessibility of many facilities, distance from large settlements. 4. Seasonality of resource use (drying up of lakes in the summer). 5. Lack of official status of therapeutic resources in the vast majority of facilities. 6. Limited number of qualified specialists in the field of resort studies and pelotherapy (mud treatment) in the region.	2. Irrational use of resources (illegal extraction of mud, pollution). 3. Risk of deterioration of the environmental situation as a result of economic activity. 4. Insufficient funding for Scientific and infrastructure projects. 5. Increased competition with popular resort regions of Kazakhstan and near abroad. 6. Risk of loss of medicinal properties in the absence of control and protection zones.
Note: Compiled by the authors based on a systematic review and grouping of secondary data from scientific literature, regional materials, and open sources.	

The natural therapeutic resources of the Kyzylorda region are of high potential importance, but the level of their effective use is limited by insufficient knowledge of resources and underdeveloped infrastructure. In the context of scientific research, cartographic work and investment projects, the region

can become a promising region for the development of sanatorium-resort and health tourism.

Taking into account the identified factors, priority directions for the development of health and wellness tourism are identified, which are presented in Table 5.

Table 5 – Priority directions for the development of health and wellness tourism

Direction	Activities	Expected outcomes
Infrastructure	Renovation and expansion of sanatoriums	Commissioning of new or modernized sanatorium-resort facilities; increased bed capacity; improved accessibility of key lakes and therapeutic mud zones; enhanced treatment, rehabilitation, hygiene, catering, and visitor service conditions
Marketing	Running promotion campaigns	Growth in the number of domestic and inbound tour operators working with the region; increased online visibility and tourist inquiries; stronger recognition of Kyzylorda as a health and wellness tourism destination; promotion of its sanatoriums, salt lakes, and therapeutic mud resources among target tourist segments
Ecology	Conservation of lakes and therapeutic mud	Stabilization of the ecological condition of lakes; prevention of degradation of therapeutic mud deposits; implementation of a monitoring system for key therapeutic sites; reduced risk of resource depletion and uncontrolled exploitation during peak tourist seasons
Note: compiled by authors		

The table shows that the main results of health tourism development depend on an integrated approach: improving infrastructure, promoting the region in the market and ensuring environmental safety. These directions are becoming interconnected and lay the foundation for a sustainable growth of tourist flow.

Thus, the analysis of natural resources, infrastructure and statistics provides a comprehensive picture of the current state of the industry and its prospects.

Discussion. The conducted research shows that Kyzylorda region has significant natural resource potential for the development of health and wellness

tourism. Salt lakes, mineral waters, therapeutic muds and favourable climatic conditions create opportunities for the development of sanatorium-resort, wellness and recreational tourism. However, the full realization of this potential is constrained by infrastructural, institutional, scientific, marketing and environmental limitations.

The comparison with international health and wellness tourism destinations shows that leading resort regions in Germany, the Czech Republic, Hungary and Turkey rely not only on the availability of natural healing resources, but also on their scientific validation, certification, integration with medical and wellness services, high-quality

infrastructure, transport accessibility, digital promotion and effective destination branding. In these countries, natural therapeutic resources are transformed into competitive tourism products through a combination of medical expertise, resort infrastructure, service quality, marketing systems and environmental regulation.

Based on the SWOT analysis and comparison with international health and wellness tourism destinations, a staged conceptual framework for the development of health and wellness tourism in Kyzylorda region is proposed. The framework is not intended as a universal model, but as an applied development logic for the region, reflecting its current

barriers and transition needs. It is derived from the identified weaknesses and threats, including the lack of certified data on therapeutic resources, insufficient resort infrastructure, weak integration between natural resources and medical services, limited marketing, low transport accessibility and ecological risks.

The main purpose of the framework is to show how the region can gradually transform its natural therapeutic resources from locally known and empirically used sites into scientifically validated, certified and market-oriented health and wellness tourism products.

The proposed conceptual framework includes five interrelated stages.

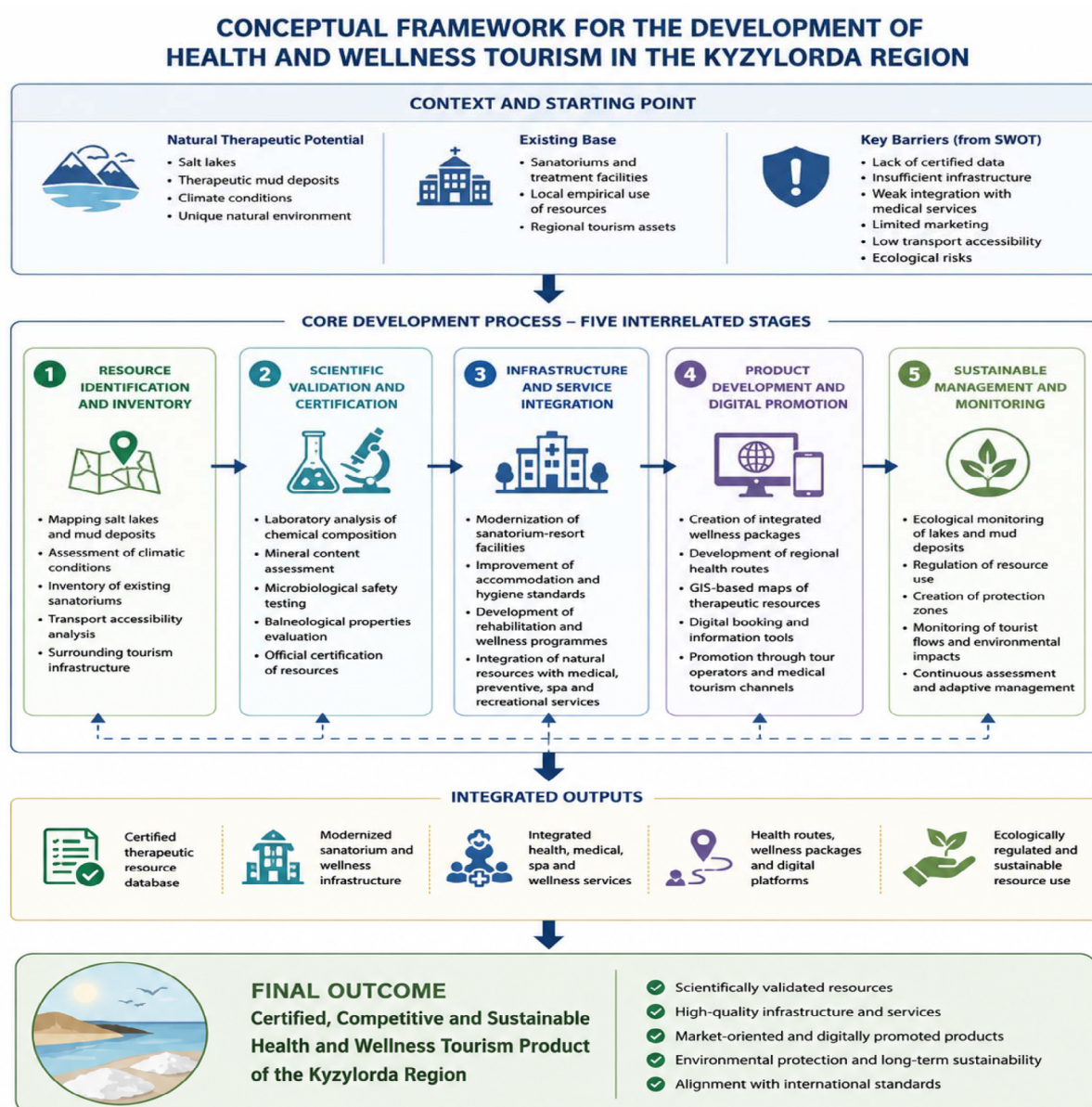


Figure 3 - Conceptual framework for developing a competitive health and wellness tourism product based on therapeutic resources in Kyzylorda region

The first stage is resource identification and inventory. It involves mapping salt lakes, therapeutic mud deposits, mineral waters, climatic conditions, existing sanatoriums, transport accessibility and surrounding tourism infrastructure. This stage is necessary to create a reliable database of the region's therapeutic and tourism resources.

The second stage is scientific validation and certification. It includes laboratory analysis of the chemical composition, mineral content, microbiological safety and balneological properties of lakes, mineral waters and therapeutic muds. This stage is important for eliminating uncertainty regarding the therapeutic value of natural resources and ensuring their safe use in health and wellness tourism.

The third stage is infrastructure and service integration. It involves modernizing sanatorium-resort facilities, improving accommodation and hygiene standards, developing rehabilitation and wellness programmes, and linking natural resources with medical, preventive, spa and recreational services. This stage is aimed at transforming isolated natural resources into functional health and wellness service systems.

The fourth stage is product development and digital promotion. It includes the creation of integrated wellness packages, regional health routes, GIS-based maps of therapeutic resources, digital booking tools and targeted promotion through tour operators and medical tourism channels. This stage supports the transition from resource potential to market-ready tourism products.

The fifth stage is sustainable management and monitoring. It requires ecological monitoring of lakes and mud deposits, regulation of resource use, creation of protection zones, and continuous assessment of tourist flows and environmental impacts. This stage is essential for preventing uncontrolled use of therapeutic resources, pollution, illegal extraction of therapeutic muds, and degradation of natural healing properties.

Thus, the scientific novelty of the proposed approach lies in the development of a staged conceptual framework for transforming Kyzylorda region's natural therapeutic potential into a certified, competitive and sustainable health and wellness tourism product. Unlike general recommendations limited to infrastructure or marketing improvement, this framework integrates scientific validation, certification, infrastructure modernization, service integration, digital promotion and ecological protection into a single development logic aimed at bringing the region closer to international standards.

The research results also make it possible to identify several practical directions for regional development. First, laboratory analyses should be conducted on the region's salt lakes, mineral waters and therapeutic muds in order to confirm their chemical composition, safety and therapeutic properties. Second, a cadastre of natural therapeutic resources and GIS-based maps should be developed. Third, sanatorium-resort infrastructure should be modernized, transport accessibility improved, and service quality enhanced. Fourth, the region should be systematically promoted in domestic and international markets as a wellness, sanatorium-resort and ecological tourism destination.

At the same time, the study has certain limitations. First, the lack of certified laboratory data on some natural therapeutic resources in Kyzylorda region does not allow the assessment results to be fully specified. Second, empirical data on tourist flows, actual demand for health and wellness services, and visitor behaviour in the region remain limited. Third, since the study is mainly based on open data, scientific literature and comparative analysis, future research should include field studies, expert interviews and surveys among tourists.

Overall, the study demonstrates that Kyzylorda region's natural therapeutic potential can become a competitive health and wellness tourism product only if scientific validation, certification, infrastructure modernization, service integration, digital promotion and ecological regulation are implemented as interconnected development priorities. The proposed conceptual framework therefore provides a practical basis for the gradual transformation of the region's natural healing resources into a scientifically grounded, market-oriented and sustainable tourism product.

Conclusion. The study showed that Kyzylorda region has the natural potential necessary for the development of health and wellness tourism. The region's salt lakes, mineral waters, sedimentary therapeutic muds and favourable climatic conditions can serve as a basis for developing sanatorium-resort, wellness and recreational tourism. However, the full realization of this potential is possible only through scientific substantiation, infrastructure development, legal regulation, environmental protection and effective market positioning.

The scientific novelty of the study lies in its comprehensive consideration of the development potential of health and wellness tourism in Kyzylorda region in connection with natural resources, infrastructure, transport accessibility,

certification, environmental sustainability and tourism product development. This approach makes it possible to assess natural therapeutic resources not merely as separate natural sites, but as an important component of the regional tourism system.

In addition, the study proposes a conceptual framework for transforming the region's natural therapeutic resources into a competitive health and wellness tourism product. The framework is based on a staged development logic and includes five interrelated stages: resource identification and inventory; scientific validation and certification; infrastructure and service integration; product development and digital promotion; and sustainable management and monitoring. This framework shows how locally known and empirically used therapeutic resources can gradually be transformed into scientifically validated, certified, market-oriented and environmentally sustainable tourism products.

Based on the research findings, several priority directions for the effective use of the region's natural therapeutic resources were identified: conducting laboratory studies of salt lakes, mineral waters and therapeutic muds and certifying them; developing a cadastre of natural therapeutic resources and carrying out GIS mapping; developing promising sites on a pilot basis; modernizing sanatorium-resort infrastructure; improving transport accessibility and service quality; establishing protection zones for

natural resources and introducing an environmental monitoring system.

From a practical perspective, these measures may contribute to increased tourist flows, job creation, local entrepreneurship development, investment attraction and diversification of the regional economy. In addition, the development of health and wellness tourism can support public health improvement and increase the tourism attractiveness of Kyzylorda region.

The main limitation of the study is the lack of certified chemical, medical and empirical data on some salt lakes and therapeutic muds. Therefore, future research should include laboratory and medical-biological analyses of natural therapeutic resources, surveys among tourists and local residents, expert interviews, and the development of a specific GIS-based model of therapeutic and recreational routes.

In conclusion, Kyzylorda region has strong competitive potential in health and wellness tourism. However, transforming this potential into a sustainable tourism product depends on the consistent implementation of scientific validation, certification, infrastructure modernization, service integration, digital promotion and ecological regulation. Maintaining a balance between preserving natural resources and using them economically is the key condition for the long-term and sustainable development of health and wellness tourism in the region.

References

- 1 Bürchler K. Medical tourism on a growth trajectory in investment migration hubs [Electronic resource] // Henley Global. URL: <https://www.henleyglobal.com/publications/global-mobility-report/2023-q3/global-insights/medical-tourism-growth-trajectory-investment-migration-hubs> (date of access: 12.12.2025).
- 2 Ananchenkova P., Ogurtsova N. Current development trends of the global health tourism market // City Healthcare. - 2022. - Vol. 3. - pp. 114-121. DOI: 10.47619/2713-2617.zm.2022.v.3i4;114-121.
- 3 Trends in wellness tourism in 2025. How the wellness travel industry is developing [Electronic resource]. URL: <https://sber.pro/publication/trendi-velnes-turizma-v-2025-godu-kak-razvivaetsya-industriya-ozdorovitelnih-puteshestvii/> (date of access: 13.12.2025).
- 4 Resolution of the Government of the Republic of Kazakhstan dated March 28, 2023 №262 "On approval of the concept for the development of the tourism industry of the Republic of Kazakhstan for 2023-2029" [Electronic resource]. URL: <https://adilet.zan.kz/rus/docs/P2300000262> (date of access: 15.12.2025).
- 5 "Zhan-Arai" Sanatorium [Electronic resource]. URL: <https://shipadeluxe.kz/sanatorii/zhan-aray> (date of access: 16.12.2025).
- 6 Esim A.K., Yessimova D.D., Bitter N.V. Medical aspects of the development of innovative tourism in the Republic of Kazakhstan // Science and Tourism: Strategies of Interaction: collection of articles. - Barnaul: Altay University Publishing House, 2021. - Vol. 13. - pp. 37-50. URL: <https://cyberleninka.ru/article/n/medical-aspects-of-the-development-of-health-tourism-in-the-republic-of-kazakhstan> (date of access: 16.12.2025).
- 7 Nurgazina A.S., Kalila N.S. The current state of the potential of tourist and recreational development of the Kyzylorda region // Bulletin of K. Zhubanov Aktobe Regional University. - 2022. - Vol. 67. - №1. - pp. 97-104.
- 8 Moldasheva A.B., Zakirova Z. Analysis of innovative tourism in the Republic of Kazakhstan // Central Asian Journal of Innovations on Tourism Management and Finance. - 2021. - Vol. 2. - Iss. 1. - pp. 36-42.
- 9 Zhakupov A.A., Mazbayev O.B., Lorant D. Potential of health and wellness tourism in Pavlodar region of Kazakhstan // Hydrometeorology and Ecology. - 2024. - Vol. 4. - pp. 145-151. URL: <https://journal.kazhydromet.kz/kazgidro/article/view/1986> (date of access: 16.12.2025).
- 10 Aktymbaeva B.I. Organization of health and wellness tourism in Shalkar district // Journal of Geography and Environmental Management. - 2018. - Vol. 43. - №2. - pp. 174-179. URL: <https://bulletin-geography.kaznu.kz/index.php/1-geo/article/view/535> (date of access: 17.12.2025).

- 11 Ordabayeva M. Modern problems and trends in the development of health and wellness tourism in Kazakhstan // Reports of the National Academy of Sciences of the Republic of Kazakhstan. - 2016. - Vol. 6. - №310. - pp. 161-166.
- 12 Mozokina S.L., Plotnikov V.A. The medical tourism development possibilities in the Eurasian Space // Eurasian Integration: Economics, Law, Politics. - 2023. - Vol. 17. - №2. - pp. 58-70. DOI: 10.22394/2073-2929-2023-02-58-70.
- 13 Mussina K., Omarova K., Tukibayeva K. Analysis of trends in the development of medical and health tourism in the Republic of Kazakhstan // Economic Series of the Bulletin of the L.N. Gumilyov ENU. - 2024. - №4. - pp. 254-274. DOI: 10.32523/2789-4320-2024-4-254-274.
- 14 Abenova E.A., Saidullaev S.Z. Comprehensive assessment of the potential of the Almaty Region in the development of health tourism // Central Asian Economic Review. - 2020. - №2. - pp. 182-195.
- 15 Bureau of National Statistics of the Republic of Kazakhstan. Sanatorium and resort activities in the Republic of Kazakhstan, 2023 [Electronic resource]. URL: <https://stat.gov.kz> (date of access: 20.12.2025).
- 16 Official Telegram Channel of the Bureau of National Statistics of the Republic of Kazakhstan [Electronic resource]. URL: https://t.me/stat_gov_kz_official/1968 (date of access: 21.12.2025).
- 17 More than 413 thousand people rested at sanatoriums of the Republic of Kazakhstan in 2023 [Electronic resource]. URL: <https://kzvesti.kz/glavnye-novosti/bolee-413-tys-chelovek-otdohnuli-v-sanatorijah-rk-v-2023-godu-118616> (date of access: 25.12.2025).
- 18 Arys (Lake) // Wikipedia: The Free Encyclopedia [Electronic resource]. - URL: [https://en.wikipedia.org/wiki/Arys_\(lake\)](https://en.wikipedia.org/wiki/Arys_(lake)) (date of access: 28.12.2025).

INFORMATION ABOUT THE AUTHORS // АВТОРЛАР ТУРАЛЫ АҚПАРАТ // ИНФОРМАЦИЯ ОБ АВТОРАХ

"The Author for Correspondence (The First Author)"

Karimov Dauren Zhalgasuly – Master's degree in services, 2nd-year PhD student at the Kazakh Academy of Sport and Tourism, Almaty, Kazakhstan.

"Хат-хабарларға арналған автор (бірінші автор)"

Кәрімов Дәурен Жалғасұлы – қызмет көрсету саласының магистрі, Қазақ спорт және туризм академиясының 2-ші курс докторанты, Алматы қ., Қазақстан.

"Автор для корреспонденции (первый автор)"

Каримов Дәурен Жалғасұлы – магистр в области услуг, докторант 2-го курса Казахской академии спорта и туризма, г. Алматы, Казахстан.

e-mail: dauren050902@mail.ru

ORCID: <https://orcid.org/0009-0006-1902-0433>

Aitbayeva Gulzamira Dzholdasbekovna – candidate of philological sciences, professor at the Kazakh Ablai khan University of International Relations and World Languages, Almaty, Kazakhstan.

Айтбаева Гүлзамира Джолдасбековна – филология ғылымдарының кандидаты, Абылай хан атындағы Қазақ халықаралық қатынастар және әлем тілдері университетінің профессоры, Алматы қ., Қазақстан.

Айтбаева Гүлзамира Джолдасбековна – кандидат филологических наук, профессор Казахского университета международных отношений и мировых языков имени Абылай хана, г. Алматы, Казахстан.

e-mail: z_ussen2018@mail.ru

ORCID: <https://orcid.org/0000-0002-2332-8207>

Abeldanova Aigerim Bakhytzhonovna – PhD, associate professor at the Kazakh Ablai khan University of International Relations and World Languages, Almaty, Kazakhstan.

Абельданова Айгерим Бахытжановна – PhD, Абылай хан атындағы Қазақ халықаралық қатынастар және әлем тілдері университетінің қауымдастырылған профессоры, Алматы қ., Қазақстан.

Абельданова Айгерим Бахытжановна – PhD, ассоциированный профессор Казахского университета международных отношений и мировых языков имени Абылай хана, г. Алматы, Казахстан.

e-mail: abeldanova@inbox.ru

ORCID: <https://orcid.org/0009-0003-3657-687X>

Akhmejanova Dilda Zhaishigalieva – Master of pedagogical sciences, senior lecturer at the Kazakh Ablay khan University of International Relations and World Languages, Almaty, Kazakhstan.

Ахмеджанова Дильда Жайшиғалиевна – педагогика ғылымдарының магистрі, Абылай хан атындағы Қазақ халықаралық қатынастар және әлем тілдері университетінің аға оқытушысы, Алматы қ., Қазақстан.

Ахмеджанова Дильда Жайшиғалиевна – магистр педагогических наук, старший преподаватель Казахского университета международных отношений и мировых языков имени Абылай хана, г. Алматы, Казахстан.

e-mail: dilda_akhmejanova@mail.ru

ORCID: <https://orcid.org/0009-0002-6927-1733>

Date of submission of the article: 14.05.2026

Date accepted for publication: 30.05.2026