

Health Tourism Potential of Kalbajar

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Abstract.

The Kalbajar region, known for its rich natural resources, mountainous terrain, and healing mineral springs such as Istisu, holds significant potential for the development of health tourism.

This article explores the health tourism potential of the Kalbajar region, which is among the territories of Azerbaijan liberated from occupation and known for its unique natural therapeutic resources.

Kalbajar's rich mineral and thermal water resources, mountainous climate, and clean ecological environment make it a strategically important region for the development of health and wellness tourism. The relevance of the study lies in the fact that the development of health tourism in the post-conflict period has significant potential for the socio-economic revitalization of the region, both locally and internationally. Scientifically grounded planning in this area is essential for sustainable growth. The main objective of the article is to evaluate the health tourism potential of the Kalbajar region by analyzing its natural-geographical features and hydro-mineral resources and to determine development directions based on international experience.

The scientific novelty of the study is that, for the first time, Kalbajar's health tourism opportunities are examined in a systematic way using a comprehensive approach that includes SWOT analysis, statistical data, and comparative insights from the experience of Turkic states.

This serves as a scientific foundation for future planning and investment decisions. The findings of the research indicate that with the establishment of modern infrastructure, preservation of ecological balance, and efficient use of natural resources, Kalbajar has the potential to become a competitive health tourism destination in the South Caucasus in the near future.

Keywords: Kalbajar, health tourism, Istisu, mineral springs, tourism infrastructure, sustainable development, post-conflict region, ecotourism, natural resources

Потенціал оздоровчого туризму Кяльбаджару

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Анотація

Кяльбаджарський регіон, відомий своїми багатими природними ресурсами, гірською місцевістю та цілющими мінеральними джерелами, такими як Істіс, має значний потенціал для розвитку оздоровчого туризму.

У цій статті досліджується потенціал оздоровчого туризму Кяльбаджарського регіону, який є однією з територій Азербайджану, звільнених від окупації, та відомий своїми унікальними природними лікувальними ресурсами.

Багаті мінеральні та термальні водні ресурси Кяльбаджару, гірський клімат та чисте екологічне середовище роблять його стратегічно важливим регіоном для розвитку оздоровчого та велнес-туризму. Актуальність дослідження полягає в тому, що розвиток оздоровчого туризму в постконфліктний період має значний потенціал для соціально-економічного відродження регіону, як на місцевому, так і на міжнародному рівні. Науково обґрунтоване планування в цій галузі є важливим для сталого зростання. Головною метою статті є оцінка потенціалу оздоровчого туризму Кельбаджарського регіону шляхом аналізу його природно-географічних особливостей та гідромінеральних ресурсів, а також визначення напрямків розвитку на основі міжнародного досвіду.

Наукова новизна дослідження полягає в тому, що вперше можливості оздоровчого туризму Кельбаджарського регіону розглядаються систематично з використанням комплексного підходу, що включає SWOT-аналіз, статистичні дані та порівняльний аналіз досвіду тюркських держав. Це слугить науковою основою для майбутніх рішень щодо планування та інвестицій.

Результати дослідження свідчать про те, що завдяки створенню сучасної інфраструктури, збереженню екологічного балансу та ефективному використанню природних ресурсів, Кельбаджар має потенціал стати конкурентоспроможним напрямком оздоровчого туризму на Південному Кавказі найближчим часом.

Ключові слова: Кельбаджар, оздоровчий туризм, Істіс, мінеральні джерела, туристична інфраструктура, сталий розвиток, постконфліктний регіон, екотуризм, природні ресурси

Introduction.

Tourism is not only one of the strategic sectors of the economy but has also become a key driver of regional development. In recent years, global interest in health tourism has increased significantly, and this sector has emerged as a distinct type of tourism. Health tourism encompasses not only the treatment of illnesses but also prevention, rehabilitation, and psychological well-being.

The territories recently liberated in Azerbaijan, particularly the Kalbajar district, possess substantial potential in this regard. Kalbajar's geographical position, high-mountain climate, abundant mineral springs, and therapeutic mud resources make it an ideal setting for the development of health tourism. Furthermore, fostering tourism in this region could play a crucial role in both economic and social rehabilitation.

In the post occupation period, the reconstruction efforts have paved the way for reintegrating Kalbajar into the tourism map. This reintegration will be instrumental in shaping a new economic and social identity for the region (Guliyev, 2023).

Geographic, Climatic, and Demographic Factors. The Kalbajar district is located in western Azerbaijan, along the border of the Lesser Caucasus Mountains, characterized by mountainous terrain and extensive forested areas. The total area of the district is 3,054 km². According to 2020 statistics, its population numbered approximately 77,000. These factors, combined with the abundance of various thermal springs, further enhance the region's potential for health tourism (Global Wellness Institute, 2021). The district's elevation ranges from 1,500 to 3,200 meters above sea level, shaped by rugged mountainous landscape. Its climate is temperate continental, featuring cool summers and cold winters. Such climatic conditions are particularly conducive to the treatment of chronic diseases, including asthma, dermatological disorders, and rheumatism. With a population of roughly 80,000, the district also possesses a viable labor force to support the organization of tourism services.

Natural Health Promoting Resources of the Kalbajar Region. The Kalbajar district stands out as one of Azerbaijan's most promising areas in terms of natural therapeutic resources. The mineral springs, mountain climate, and soil properties present here play a foundational role in fostering the development of health tourism.

Mineral Springs. Kalbajar hosts over 200 distinct mineral water sources exhibiting diverse chemical compositions. Many of these springs possess therapeutic qualities comparable to renowned medicinal waters worldwide. Among the most notable are:

Istisu Spring – Emitting hydrogen sulfide-rich water at high temperatures (58–60 °C), this spring proves effective in treating rheumatism, dermatological disorders, and neurological conditions.

Kelferec, Garasu, Mozchay Springs – These springs

are suitable for the treatment of gastrointestinal ailments as well as liver and kidney disorders.

During the Soviet era, the Istisu sanatorium operated in the Kalbajar region and annually attracted thousands of both domestic and international visitors. This historical usage underscores Kalbajar's longstanding significance in health tourism. (Aliyev, 1988).

Mountain Climate and Atmospheric Conditions. Kalbajar lies within mountainous terrain, ranging in elevation from 1,000 to 3,500 meters above sea level. This altitudinal variation, coupled with pristine mountain air, supports respiratory health, cardiovascular conditioning, and psychosomatic wellness. The region shares several climatic and environmental characteristics with high-altitude health resorts found in Switzerland (e.g., Davos) and Austria (e.g., Bad Gastein) (World Health Organization, 2020).

Therapeutic Mud and Soil Resources. Research indicates the presence of therapeutic mud deposits in certain areas of Kalbajar. These muds can be utilized in dermatological and rheumatic treatments. Additionally, the richness of the local soil and vegetation offers promising opportunities for phytotherapy (treatment with medicinal plants), expanding the region's portfolio of natural therapeutic resources.

Types of Health Tourism and Their Application in Kalbajar. Health tourism refers broadly to travel undertaken to protect health, seek medical treatment, or support psychological recovery by temporarily changing one's environment. It encompasses several major categories:

Sanatorium-Resort Tourism. This form of tourism relies on natural therapeutic resources and involves long-term rest, treatment, and rehabilitation. In mineral-rich regions such as Kalbajar, the establishment of sanatorium-resort centers is both economically viable and highly demanded. Historically, the Istisu resort served as an exemplary model of such a center. Its renovation and modernization to meet current standards is now considered a priority (Rzayeva, 2022).

Thermal and Balneological Tourism. Thermal tourism promotes wellness through immersion in natural hot springs. In contrast, balneology includes the therapeutic use of mineral waters both internally (drinking) and externally (bathing). Kalbajar's Istisu and related springs offer significant potential for such healing practices. Comparable regional developments in Turkey – such as Afyon, Yalova, and Pamukkale – demonstrate successful models for nurturing thermal and balneological tourism (Demir, 2019).

Phytotherapy and Mountain-Spa Tourism. Phytotherapy uses medicinal plants in treatment, and Kalbajar's rich flora and biodiversity make it well-suited for introducing such services. Simultaneously, mountain-spa concepts combine ecological environments, physical activity, and psychological relaxation into a comprehensive wellness experience. These integrated

services are among the highest-income segments in European and Japanese wellness tourism markets (Global Wellness Institute, 2021).

Infrastructure and Current Status. Tourism Infrastructure Pre Occupation

Before the occupation, the tourism infrastructure in Kalbajar was limited and primarily concentrated around the Istisu resort. Following the occupation by Armenian armed forces in 1993, all tourism and civilian infrastructure in the region was completely destroyed. Reconstruction Since 2020 After the Azerbaijani army liberated the region in 2020, reconstruction and restoration processes were initiated across the district.

Transportation Infrastructure. Due to Kalbajar's mountainous terrain, transportation infrastructure holds strategic importance. Currently, reconstruction of the Lachin – Kalbajar and Kalbajar – Ganja highways is underway. In addition, the construction of the new “T 1 Tunnel” – the country's longest tunnel – is progressing,

significantly improving regional accessibility (Ministry of Digital Development, 2023).

Social and Service Infrastructure. As of now, Kalbajar lacks tourism facilities, sanatoriums, and hotel complexes. However, the government has begun constructing the Istisu Health and Thermal Center, initially planned as a 5 star resort complex (Azertac, 2023).

Additionally, plans include creating a “green energy zone” to supply heat and power using modern technologies, aligning with the eco- and health-tourism concept.

Human Resources and Tourism Management. A key challenge is the absence of specialized personnel in the tourism sector. There is a high demand for professionals such as therapists, balneologists, hydrotherapists, and resort managers. Government-sponsored training courses and educational programs are necessary to meet this demand.

Below is a summary table of the main health-tourism-related infrastructure indicators in Kalbajar.

Table 1.
The Main Health-Tourism-Related Infrastructure Indicators in Kalbajar:

Indicator	2020	2022	2024	Source
Number of mineral water deposits	3	5	7	Azerbaijan National Academy of Sciences (2023)
Number of rehabilitation and resort facilities	0	1	3	State Tourism Agency (2024)
Annual tourist visits to Istisu resort (persons)	-	2,500	15,000	Azertac / State Border Service data (2023)
Number of hotels and sanatoria under construction	0	2	5	Ministry of Economy (2024)
Number of local professionals employed in tourism	0	30	120	State Employment Agency (2024)
Number of road infrastructure projects	1	3	5	Ministry of Digital Development and Transport (2024)
Investment volume (million AZN)	-	35	120	Ministry of Economy & Karabakh Revival Fund (2024)

SWOT Analysis of Kalbajar's Health Tourism Potential

The strengths and weaknesses of Kalbajar in terms of health tourism, as well as the opportunities and risks facing it, are analyzed in the following table based on the SWOT model:

Strengths.

Abundant mineral springs and thermal water resources

Clean mountain climate and natural environment

Historical experience of Istisu resort

Government support and designation as a political priority

Weaknesses.

Absence of tourism infrastructure and sanatorium system

Lack of professional tourism personnel

Difficult accessibility of the area (due to terrain and weather conditions)

Lack of appropriate medical equipment and technology

Opportunities.

Opportunities for new planning and investments in the post-war period

The region's designation as a “green energy zone”

An open environment to adopting international best practices

Rising global demand for health tourism

Threats.

Risk of ecological balance being disrupted

Regional geopolitical tensions and security issues

Insufficient investor interest

Slow return of the local population

This analysis indicates that Kalbajar possesses

significant potential for health tourism. However, substantial improvements are needed in both infrastructure and management. By accurately assessing its strengths and weaknesses, the district can effectively leverage available opportunities and mitigate potential threats.

National attitudes and intelligence. The development of medical oil and medical tourism in Naples is a successful example in Azerbaijan. Here the systematic integration of natural resources with medical care, the establishment of infrastructure, and the proper marketing strategy have shaped an effective model of health tourism.

An intelligence model may also be proposed for Kulgar: natural resources + medical service + tourism infrastructure + green energy synthesis should be created.

International Best Practices and a Proposed Model for Kalbajar. Global leaders in health tourism demonstrate that the effective development of this sector depends on a well-defined strategy, sustained investment, and the cultivation of human capital. By adapting these lessons, Kalbajar can realize its health tourism potential more effectively.

The Turkish Model. Turkey has achieved notable success in health and thermal tourism over recent decades. Regions such as Yalova, Afyon, and Pamukkale have benefitted from state-supported modern resort complexes, attracting both domestic and international visitors. The main advantage lies in combining the therapeutic qualities of thermal waters with medical services (Demir, 2019).

Proposed application in Kalbajar: At the Istisu center, development should go beyond a hotel. A comprehensive facility should be established, including: A dedicated rehabilitation center, A physical therapy department, Modern laboratories.

The Central European Model (Germany, Austria, Czechia). Health tourism in Europe is characterized by high-quality service, efficient use of natural resources, and long-term treatment packages. Famous spa towns such as Baden Baden (Germany), Karlovy Vary (Czechia), and Bad Gastein (Austria) are world-renowned for their integrated approach to wellness, relaxation, and medical treatment (World Health Organization, 2020).

Proposed application in Kalbajar: Kalbajar can replicate this model by establishing modern and sustainable sanatorium systems that preserve the natural environment while delivering high service standards.

Domestic Integration: The Naftalan Example. Naftalan's therapeutic oil-based treatment tourism is a

successful Azerbaijani model. Systematic integration of natural resources with medical services, coupled with strong infrastructure and effective marketing, has created a model for successful health tourism within the country.

Proposed application in Kalbajar: Natural resource (thermal/mineral water) + Medical services (rehabilitation, diagnostics, therapy) + Tourism infrastructure (lodging, transport, hospitality) + Green energy solutions (sustainability) → Unified health tourism complex.

Conclusions and Recommendations.

Conclusions. Kalbajar's health tourism potential can play a pivotal role in the region's socio-economic development. Its unique natural resources – mineral springs, thermal waters, pristine mountain air, and therapeutic mud – form a strong foundation for health tourism. However, current limitations in infrastructure and human resources represent significant challenges. The key findings are:

1. Significant strides have been made in restoring and protecting natural resources following Kalbajar's post-occupation liberation.
2. The region has potential for various forms of health tourism, including sanatorium-resort, thermal, balneological, and phytotherapy modalities.
3. Rebuilding tourism infrastructure and training professional staff are essential requirements.
4. Government support, adoption of international best practices, and ecological sustainability are critical success factors.

Recommendations:

1. Infrastructure enhancement: Prioritize the rehabilitation of resort centers, procurement of modern medical equipment, and improvement of transport networks.
2. Human resource development: Establish specialized educational programs and a certification system to train qualified personnel for the health tourism sector.
3. Environmental sustainability: Enforce compliance with ecological standards during construction and operation of tourism facilities and expand "green energy" initiatives.
4. International collaboration: Adapt and implement health tourism models from Turkey, Europe, and other countries to the Kalbajar context.
5. Marketing and promotion: Actively promote Kalbajar's health tourism potential at both domestic and international levels.

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