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**ANALYSIS OF THE PROTECTION OF CLIMATE AND THALASSOTHERAPY  
RESOURCES OF AZERBAIJAN DURING THEIR USE FOR TOURISM PURPOSES AND  
THE MAIN FACTORS TO BE TAKEN INTO ACCOUNT**

**Abstract**

Climate and thalassotherapy tourism is directly related to nature and the environment, and the development of this field of tourism should be developed symbiotically with the protection and efficient use of natural resources. Since ancient times, the use of mineral waters for therapeutic purposes and the use of areas with a pure climate for the recreation of the population have led to a sharp decrease in the volume of these resources in many countries, or even to their failure. On the other hand, the massive development of tourism in the modern era and its transformation into an international field paves the way for the direct or indirect use of natural resources during this process. In our country, the history of this field of tourism based on ancient traditions increases the importance of protecting the used natural resources.

The main purpose of the article is to carry out a detailed analysis of the main factors that arise during the tourism use of climate and thalassotherapy natural resources, to discuss the existing and potentially future methods using the scientific literature in this field. The possibilities of analysis, induction, and deduction methods were used in writing the article, and the results were recorded systematically.

**Keywords:** *climate resources, thalassotherapy tourism, environment protection, natural resources, tourism development*

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**İqlim və talassoterapiya resurslarının turizm məqsədləri üçün istifadəsi zamanı onların  
qorunması və nəzərə alınmalı əsas amillərin təhlili**

**Xülasə**

İqlim və talassoterapiya turizmi birbaşa təbiət və ətraf-mühitlə əlaqələdir və turimin bu sahəsinin inkişafı təbii ehtiyatların qorunması və səmərəli istifadəsi ilə simbiotik olaraq inkişaf etdirilməlidir. Qədim zamanlardan bəri mineral suların müalicəvi məqsədlər üçün istifadəsi və saf iqlimə malik ərazilərin əhalinin istirahəti üçün istifadə edilməsi bir çox ölkələrdə bu ehtiyatlarının həcmnin kəskin azalmasına, hətta sıradan çıxmasına gətirib çıxarmışdır. Digər tərəfdən isə müasir dövrdə turizmin kütləvi şəkildə inkişafı və beynəlxalq bir sahəyə çevrilməsi bu proses zamanı təbii ehtiyatların bilavasitə və ya dolaylı yolla istifadəsinə yol açır. Ölkəmizdə isə turizmin bu sahəsinin qədim ənənələrə dayanan tarixi istifadə edilən təbii ehtiyatların qorunmasının əhəmiyyətini daha da artırır.

Məqalənin əsas məqsədi iqlim və talassoterapiya təbii ehtiyatlarının turizm məqsədi istifadəsi zamanı ortaya çıxan əsas amillərin detallı təhlilini aparmaq, bu sahə üzrə olan elmi ədəbiyyatdan istifadə edərək mövcud və gələcəkdə potensial olaraq inkişaf etdirilə biləcək metodların müzakirəsini həyata keçirməkdir. Məqalənin yazılmasında analiz, induksiya, deduksiya metodlarının imkanlarından istifadə edilmiş, nəticələr isə sistemli şəkildə qeyd olunmuşdur.

**Açar sözlər:** *iqlim ehtiyatları, talassoterapiya turimi, ətraf-mühitin qoruması, təbii resurslar, turizmin inkişafı*

### Introduction

Thalassotherapy and climate tourism sectors are developing both in terms of the number of visitors and the areas they cover. These areas of tourism are heavily dependent on natural resources as they form the basis of the activities related, including balneotherapy, thermal therapy and heliotherapy. History of climate and thalassotherapy tourism facilities dates back to ancient Roman and Greek civilisations as they benefitted from these resources proactively by constructing hot-air bathes referred to as 'laconica' (Constantin, Diana, 2019: 441).

Health tourism in Azerbaijan entails various forms of climate and thalassotherapy tourism and its history dates back to the 12th century. Professional climate and thalassotherapy facilities started to be built in the 20th century and are widespread in all regions of the country. Mountainous and diverse ranges of the relief in Azerbaijan allows for the development of subtropical and temperate climate zones in lowland and highland areas of the country, respectively. This creates excellent opportunities to benefit from the resources of diverse climate conditions and mineral water resources altogether (2).

On the other hand, contemporary ecological and social problems highlight the importance of sustainable tourism and protection of nature and the interests of local communities while engaging in tourism activities. For instance, the UN urges tourism facilitators to cut down carbon emissions at least by 50% over the next decade by following Glasgow Declaration on Climate Action in Tourism and its 5 pillars, namely measure, decarbonize, regenerate, collaborate, finance (3,4).

Furthermore, factors to be taken into accounting while engaging in thalassotherapy and climate tourism activities are not confined to climate and covers a wide spectrum, including pursuing well-being of local communities. This requires in-depth research of the mentioned factors with additional scrutiny which will contribute to the literature in this field.

#### **Climate and thalassotherapy resources of Azerbaijan and their dispersion.**

Azerbaijan has an excellent level of mineral water resources and climate conditions which are renowned for their healing properties. Starting from mineral water springs between 4 and 64°C. The coldest mineral water sources are found close to Shahdag, Khinalig, and Tufandag, which are covered in snow. Mineral waters can be categorised using the temperature indicators as indicated in the table below, taking into consideration the effects of temperature on human health, their applicability and potential for treatment, and the unique qualities of the source's natural conditions:

<i>Groups</i>	<i>Temperature range</i>	<i>Number of sources</i>	<i>Chemical composition</i>	<i>Areal range</i>
Cold	0-17	31	Carbonate	Nakhchivan, Gadabay, Tovuz
Cool	7-12	133	Hydro-carbonate and carbonate	Shusha, Lachin, Gadabay, Dashkesen
Temperate	12-20	140	Sodium-chloride and carbonate	Shaki-Zaqatala, Daghigh Shirvan, Guba-Khachmaz
Hot	20-37	157	Hydrogen-sulfide, methane, sulfuric	Absheron, Nabran, Lankaran zone
Very hot	37-40	36	Sulfide, sulfuric	Absheron, Talysh, Kalbajar

Source: (Sultanova et al., 2017: 215).

Regarding climate conditions, the republic has a highly broad range of climates. Our territory's subtropical location and the yearly entry of several air masses are the main causes of the aforementioned diversity. Furthermore, it should be mentioned that 35% of our land is in the temperate zone and the remaining 65% is in a dry subtropical environment. The country's diverse topography, including its large number of mountainous regions, has contributed to its diverse range of climates. Thus, nine distinct climates are produced in the nation based on the vertical belt and the distribution of rainfall. This has stimulated the growth of many forms of tourism. In the plains and foothills of the country, the average yearly temperature is typically above 10°C, and the winters are pleasant. This area has a large amount of sunny days, which is advantageous for heliotherapy treatments (Sultanova et al., 2017).

### **Protection of environment as an important factor.**

Environmental protection plays a pivotal role in the development of thalassotherapy and climate tourism. Thalassotherapy, which involves the therapeutic use of seawater and marine elements, relies heavily on the preservation of marine ecosystems. Sustainable practices such as responsible waste management, protection of coastal areas, and minimizing pollution are essential to ensure the health and vitality of marine environments, which are the foundation of thalassotherapy.

Similarly, climate tourism, which involves traveling to destinations for the purpose of experiencing specific climates or natural phenomena, depends on the preservation of diverse ecosystems and stable climatic conditions. Climate change poses a significant threat to the viability of such destinations, making it imperative to adopt strategies that mitigate carbon emissions, conserve natural habitats, and promote environmentally-friendly tourism practices.

In both cases, environmental protection is not only a moral imperative but also a practical necessity for the long-term sustainability of thalassotherapy and climate tourism industries. By prioritizing conservation efforts and implementing sustainable practices, stakeholders can ensure that these forms of tourism continue to thrive while minimizing their ecological footprint and safeguarding the natural resources on which they depend (6).

Generally speaking, we can describe the whole process as the following bullet points:

- Preservation of natural recreation areas' biological diversity;
- Raising the degree of economic sustainability in the ecotourism-related regions;
- Enhancing the ecological awareness of those taking part in ecotourism;
- Preserving recreation places' ethnographic status and preservation of natural recreation areas' biological variety.

The overall process can be grouped into two main phases which are crucial to be implemented with a stringent approach:

**Planning phase:** In a designated region, the following actions should be taken, at the very least: evaluation of the area's recreational potential; formulation of an environmental strategy in tandem with the area's marketing plan; contemplation of either short-term or long-term activities within the bounds of the law; incorporation of environmental controls into the business plan.

**The organisational stage:** This includes working with various state level structures on legal and environmental matters, developing an investment package for environmental concerns, offering steps to lessen the risk associated with recreation that could arise from such activities, etc.

An essential component of the environmental management programme is thought to be motivation. It is important to support the organisers and executors of ecological tourism activities in their self-affirmation and to meet their material and ethical demands.

The organisational step includes developing an investment package on environmental issues, collaborating with various state level entities on legal and environmental matters, and providing measures (Aliyev, Suleymanov, 2023).

### **Social responsibility and supporting local communities**

Developments in thalassotherapy and climate tourism are largely dependent on social considerations and community support. The health of the local population and ecosystems is closely related to coastal regions and natural environments, where these types of tourism regularly cross.

Participating local communities in the development and implementation of tourism programmes guarantees that their opinions are heard and that their needs are taken into consideration, which promotes a feeling of pride and ownership in the preservation of their environment. This involvement may result in more environmentally friendly resource management techniques and more involvement in conservation initiatives, protecting the ecological integrity of coastal regions and marine habitats that are essential to thalassotherapy (8,9).

Furthermore, there are numerous socioeconomic advantages to promoting local communities through tourism-related projects. Through the provision of job opportunities, skill development initiatives, and local sourcing of goods and services, tourism has the potential to boost economic growth and mitigate poverty in these areas. The money received from tourism-related activities can also be used to fund infrastructure improvements, healthcare, education, and other community development initiatives, all of which will raise the standard of living for locals. Furthermore, preserving local identities and promoting cultural heritage and customs through tourist experiences can improve social cohesion and promote mutual respect and understanding between visitors and host communities. Thus, stakeholders can establish more inclusive and sustainable thalassotherapy and climate tourism by giving local community support top priority and taking social factors into account (10,11).

Finally, there is also an important factor to consider in terms of cultural conservation and social cohesiveness. Deeper respect and understanding between visitors and host communities can be fostered through tourism experiences that embrace and showcase local identities, cultures, and customs. Destinations can enhance visitor experiences and preserve and promote local heritage at the same time by integrating culturally significant elements into tourism projects, such as customs, artisanal workmanship, and culinary traditions. This strategy improves the quality of the tourism experience overall and reinforces social cohesion by encouraging locals to feel proud of their cultural identity and promoting meaningful interactions between tourists and locals (Smith, Edwards, 2006, 92).

### **Conclusion**

In summary, thalassotherapy and climate tourism are the result of a careful balancing act between utilising the healing properties of natural resources and making sure they are preserved for future generations. The historical relevance of these customs, which date back to prehistoric societies, emphasises how crucial it is to protect pure climates and mineral waters for medical and recreational uses. Thalassotherapy and climate tourism are growing in popularity, and Azerbaijan is well-positioned to benefit from this trend thanks to its varied natural landscapes and long tradition of providing health tourism. However, it is crucial that tourism development policies give sustainability and environmental stewardship top priority in light of modern environmental issues including habitat degradation and climate change. Stakeholders can lessen the detrimental effects of tourism on the environment by encouraging responsible behaviour and including conservation measures into tourism planning.

Furthermore, it is impossible to ignore the social aspects of climate tourism and thalassotherapy. Fostering a feeling of pride and ownership in the protection of natural resources requires active engagement with local communities and respect for their cultural heritage. Tourism may become a force for good, bringing people out of poverty and improving their quality of life, by boosting local economies, creating jobs, and funding community development initiatives.

More social cohesiveness and understanding between tourists and host communities can also be achieved by supporting sustainable tourism practices and social responsibility within the tourism sector. In summary, thalassotherapy and climate tourism can fully realise their potential as catalysts for sustainable development while preserving the natural and cultural heritage that makes them so valuable by adopting a comprehensive strategy that incorporates environmental protection, social responsibility, and economic development.

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