

ASSESSMENT OF THE POTENTIAL OF ECO-CULTURAL HERITAGE IN THE DEVELOPMENT OF SUSTAINABLE TOURISM IN AZERBAIJAN (ON THE EXAMPLE OF SHUSHA CITY, TUGH, TAGHLAR AND AZYKH VILLAGES)

Vugar DARGAHOV ^{1*}, Anar NURIYEV ², Rashad AHMADOV ³,
Farida MURSHUDOVA ⁴, Elshad MUSTAFAYEV ⁵

¹ Baku State University, Faculty of Geography, Department of Economic and Political Geography of Foreign Countries and Tourism, Baku, Azerbaijan; vugardargahov@bsu.edu.az (V.D.)

² Baku State University, Faculty of Geography, Department of Hydrometeorology, Baku, Azerbaijan; anar_nuri@yahoo.com (A.N.)

³ Azerbaijan Tourism and Management University, Baku Azerbaijan; ahmedovrashad88@gmail.com (R.A.)

⁴ Baku State University, Department of Master Education, Baku, Azerbaijan; fmrshudova@gmail.com (F.M.)

⁵ Azerbaijan State University of Culture and Arts, Baku, Azerbaijan; elshad6640@mail.ru (E.M.)

Citation: Dargahov, V., Nuriyev, A., Ahmadov, R., Murshudova, F., & Mustafayev, E. (2026). Assessment of the potential of eco-cultural heritage in the development of sustainable tourism in Azerbaijan (on the example of Shusha city, Tugh, Taghlar and Azykh villages). *Geojournal of Tourism and Geosites*, 67(3), 1918–1925. <https://doi.org/10.30892/gtg.67308-1820>

Abstract: This study examines the utilization of cultural, ecological, and ethno-cultural heritage in the development of sustainable tourism in Azerbaijan, with a particular focus on the spatial organization of the natural-ecological, cultural, and ethno-cultural heritage potential in the Karabakh region. It also outlines methodological approaches for transforming areas with concentrated eco-cultural and ethno-cultural potential into tourism destinations. The research explores the applicability of modern methodological frameworks at the local level in promoting cultural and eco-cultural tourism. A multi-criteria assessment of existing resources is conducted using the Fuzzy Analytic System (FAS) method. Through integral calculations within the FAS method, the competitive advantages and strengths of destinations rich in cultural and eco-cultural heritage across the study region are identified. The study further analyzes the role of stakeholders in the formation of the city of Shusha as a cultural and creative tourism center, evaluating both advantages and challenges using the FAS method. Additionally, the advantages of efficient resource utilization in the development of the villages of Tugh, Taghlar, and Azykh as eco-cultural, ethno-cultural, and ecological tourism centers are substantiated. The principles guiding the planning of the research area and the zoning of its primary functional components were established, and key priorities for tourism development were identified. The results of the integrated assessment were substantiated as a central component for future tourism development, emphasizing the active participation of local communities in settlement processes, comprehensive management of cultural heritage resources, enhanced opportunities for official designation, and improvements in infrastructure and accessibility. Therefore, it is clear that the FAS method helped to identify areas of priority within the decision-making process for the project. The research was carried out based on an evaluation of cultural and eco-cultural potential in the region. Additionally, the framework ensures sustainability in tourism development.

Keywords: cultural, ecological, eco-cultural, ethno-cultural, FAS method, Shusha, Tugh, Taghlar, Azykh

* * * * *

INTRODUCTION

Eco-cultural heritage tourism promotes the conservation of natural, cultural and ethnic heritage (ethno-heritage), as well as the sustainable use of registered heritage through the tourism sector, ensuring its ecological and social sustainability. This type of tourism provides visitors with the opportunity to travel to natural and cultural heritage sites and contributes to the protection of the environment and the development of local communities. Eco-cultural tourism (ECT) combines environmental protection, promotion of cultural heritage, development and sustainability of local communities. Eco-cultural tourism destinations on a global scale can be noted both in destinations where natural and cultural heritage is concentrated, which are included in the UNESCO heritage, and in other countries.

Thus, national parks combining Maori culture and natural heritage in New Zealand, destinations covering indigenous culture and natural heritage in Costa Rica, Bali Island in Indonesia, Serengeti National Park in Tanzania, etc. can be noted (Demkova et al., 2022). At the same time, the Shusha and Khojavend regions, which were selected as research areas, are rich in cultural, ethno-cultural, eco-cultural, and ecological heritage, and the city of Shusha, Turshsu settlement, Tugh, Yukhari and Ashaghi Taghlar, Azykh estate complex, the surroundings of Gulabli village, as well as the archaeological heritage of the Aghdam region are suitable for organizing eco-cultural tourism destinations.

* Corresponding author

RELEVANCE OF THE RESEARCH

It is relevant in terms of environmental protection, the application of sustainable development in the transformation of cultural and ethno-cultural heritage into tourism products, increasing the activity of local communities in the tourism business, and expanding the concept of “green” tourism. Eco-cultural tourism consists of the protection of natural resources and ecosystems, tourists’ discovery of natural wealth, the use of local culture and traditions, historical-cultural, artistic and creative heritage. Supporting the concepts of sustainable development in global tourism makes it necessary to involve local communities, which in turn stimulates economic development and promotes local eco-cultural heritage to a wider audience, ensures a balance of protection and use, and protects it for future generations without harming the ecological and cultural heritage. It should also be noted that the encroachment of natural and cultural heritage in the study area, and the complete destruction of some of them, has led to the emergence of “grey” zones from an ecological and economic point of view. In this regard, the application of the eco-cultural heritage concept in the development of sustainable tourism in the region would be more effective in terms of restoring and protecting existing resources.

METHODS

The conducted studies show that research on eco-cultural heritage mainly reveals three scientific approaches, which are ecological, cultural and community oriented. In addition, the concept of sustainability is taken as the basis for the use of eco-cultural heritage as a tourism product. The following theoretical and methodological approaches can be noted in the research on the use of eco-cultural heritage in tourism:

- **The theory of sustainable development** is widely used in the transformation of eco-cultural heritage into a tourism product, which researchers note the need to protect natural, ecological, cultural, traditions, as well as improve the socio-economic well-being of local communities (Weaver, 2016).
- **Theory of ecosystem services.** This theory is based on the assessment of ecosystem services of natural areas and heritage objects. Thus, the mentioned theory requires the protection and development of the natural environment in the formation of eco-cultural tourism products, which is similar to the concept of ecological and “Soft” tourism. This approach offers tourists the opportunity to use natural and cultural heritage in a regulated manner without harming nature, and to jointly benefit from natural and cultural heritage (Honey, 2019).
- **Theory of cultural and traditional heritage protection.** This approach promotes the preservation of cultural heritage, traditions and local lifestyles in tourist destinations, and the protection of cultural property (Hao et al., 2019).
- **Holistic theory (Holism).** This approach emphasizes the inextricable link between cultural and natural heritage and is based on the advantage of joint use in eco-cultural tourism. Thus, eco-cultural heritage tourism seeks to ensure the protection and use of both natural and cultural values, considering the mutual effects of nature and culture (Jopp et al., 2022).
- **Theories of natural heritage promotion and community development.** This theory is aimed at increasing the value of natural heritage and its protection. It is aimed at regulating natural tourism activities in relation to the sustainability of natural heritage and ecosystems and preventing disruption of their self-recovery processes. At the same time, the benefits of eco-cultural tourism activities to local communities include not only tourism revenues, but also social, cultural and economic benefits for the local population, support and stimulation of their development (Rotherham, 2013).

In addition, eco-cultural tourism studies have highlighted the importance of sustainable tourism strategies, increasing the role of local communities, protecting cultural heritage and presenting it as a tourism product, in many ecological, ecotourism, cultural and ethno-tourism studies.

LITERATURE REVIEW

Studies conducted in the field of cultural and ecological tourism highlight the concept of a combined approach and, in some cases, the possibility of joint use. From the analysis of the literature, research on eco-cultural tourism began at the beginning of the 21st century and provided the formation of destinations based on the principles of the concept of sustainable development. According to Cajee, eco-cultural tourism encompasses the concept of sustainability by forming the basis of environmental, cultural and economic sustainability (Cajee, 2014). Here, the advantages of using tourism services by communities and protecting the environment in the form of regional development are shown (Jopp et al., 2022).

Rotherham based on the development concepts and examples of eco-cultural tourism, noted the advantages of cultural heritage, the use of local traditions as a tourism product and proposed a “circular solution” model in the destination (Rotherham, 2013). Tiberghien, Bremner and Milne noted eco-cultural tourism as the advantages of attractive factors, tourist behavior, environmental protection and ensuring the participation of communities (Tiberghien et al., 2017).

Hao, Wang and Ren put forward the concept of joint use of existing resources in the formation of eco-cultural tourism products, which allows for the creation of new innovative products. The authors attached special importance to such models as geographical environment, landscape-ecological factors, socialization, increasing the role of communities, transformation of cultural and traditional heritage into a tourism product, and advantages in the global market as UNESCO heritage (Hao et al., 2019). Dargahov, Talibov and Mammadov support the concept of transformation of eco-cultural heritage into a tourism product by considering the environment, eco-landscape, lifestyle of communities, demand for cultural and ethno-culture in the global market and propose “green” and “circular solutions” tourism models (Dargahov et al., 2021). Institute of Economics Ministry of Science and Education of the Republic of Azerbaijan analyze the institutional foundations of the post-conflict economy, focusing on structural transformation, infrastructure restoration, human capital development, and regional economic integration through a systematic approach. The authors identify priority areas for

economic growth based on the theory of comparative advantage and propose strategic development models for their implementation. Within this framework, the tourism sector is highlighted as a priority area of the economy, and the economic effects of its attractive factors are comprehensively examined (Institute of Economics, 2023).

Gavurova and others proposed a hybrid model integrating multi-criteria analysis for the assessment of regional sustainable tourism development. Their approach emphasizes the importance of incorporating sustainability-oriented criteria into regional tourism evaluation frameworks. The mathematical analysis, based primarily on expert assessment methods, prioritizes multi-criteria indicators when comparing alternative development scenarios. The expert-based evaluation model for determining the level of sustainable tourism in a region was developed and empirically tested using data structured around four principal groups of criteria: cultural, ecological, tourism-specific, and socio-cultural indicators (Gavurova et al., 2025).

DISCUSSION

Cultural tourism on a global scale allows for the development of urban destinations, the transformation of historical and cultural heritage into a tourism product. Cultural tourism accounts for 35-40% of international tourist flows and the annual growth rate is 3-5%. Analysis of World Tourism Organization data shows that UNESCO heritage and traditional cultural tourism destinations have retained their importance in cultural and ethno-cultural tourism (Eggleton et al., 2023).

The peak in inbound tourist arrivals to Azerbaijan was recorded in 2019, reaching approximately 2.8 million visitors. Following the COVID-19 pandemic, the recovery process progressed gradually, albeit with comparatively modest indicators. Over the past four years, the tourism sector has not fully regained its pre-pandemic performance levels, and a substantial growth rate in inbound tourism has yet to be observed.

Table 1. Dynamics and main indicators of tourists visiting Azerbaijan (The State Statistical Committee of the Republic of Azerbaijan, 2025)

Indicators	2019	2020	2021	2022	2023	2024	2025
Total number of foreigners arriving for tourism purposes (thousand persons)	2863.5	519.4	461.7	1058.1	1402.6	1855.1	2081.4
Leisure and entertainment	1164	164.9	132.4	398.5	858.3	1161.6	1243.1
Business	850.5	150.4	176.7	340.5	156.6	261.0	270.3
Visiting relatives and friends	519.9	98.5	90.5	154.8	160.7	203.8	250.6
Cultural and other tourism activities	265.2	88.9	53.9	150.3	207.1	208.5	274.2
Treatment and health	63.9	10.2	8.2	14.0	19.9	23.2	43.2
Spending by incoming tourists (thousand manats)	2971.4	414.7	492.6	1340.2	2439.2	3403.5	4334.2
GDP share of the tourism sector (%)	4.5	1.9	2.1	2.9	4.1	4.7	4.6

Analysis of international tourist flows in Azerbaijan shows that in the post-pandemic period, an increase in the dynamics of arrivals was observed (Imrani et al., 2025). The number of people arriving in the country for tourism exceeded 2.1 million people in 2025, which is 67.5% compared to 2019, the highest period of tourist flows. Among tourists arriving in the country, those arriving for recreation and entertainment purposes amounted to 1243.1 thousand people (Figure 1). Among those arriving for recreation, cultural tourism indicators are determined by the dynamics of foreign tourists arriving in the cities of Baku, Sheki, as well as reserves under the State Tourism Agency (STA). In particular, the number of tourists visiting the country for cultural tourism purposes reached more than 274 thousand in 2025, exceeding the peak level recorded in 2019. This trend is consistent with the broader tourism-economic development nexus, wherein sustained growth in tourist arrivals correlates with expansion in the sector's contribution to national GDP (Sokhanvar et al., 2018).

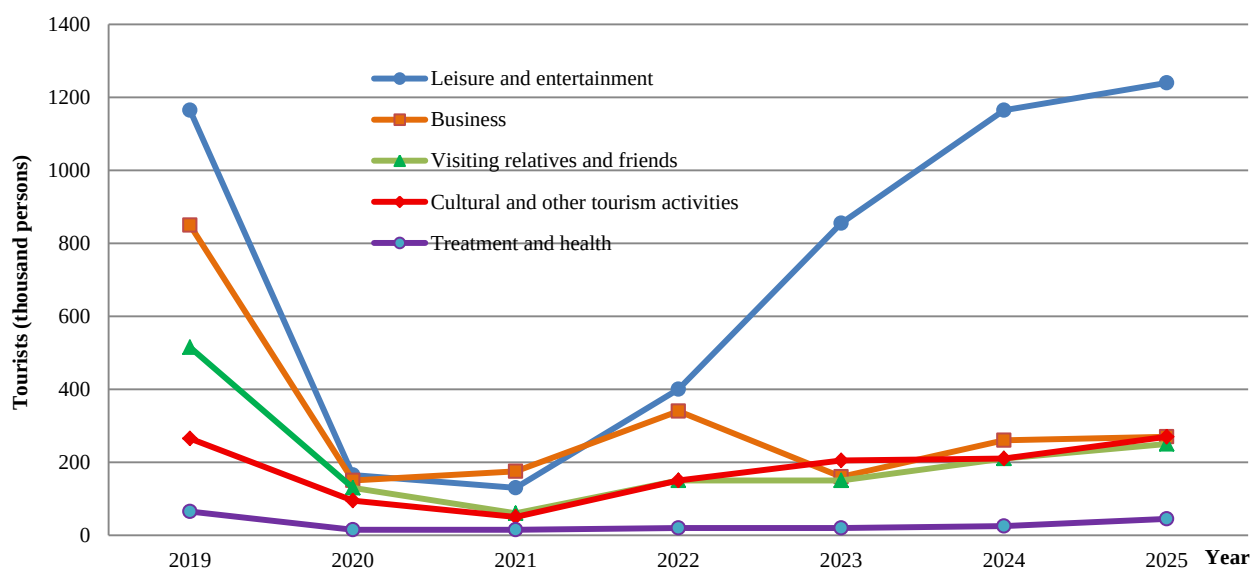


Figure 1. Structure of Inbound Tourist Arrivals by Purpose in Azerbaijan (Source: SSCRA, 2025)

At the same time, it is possible to determine the dynamics of visitors to historical and cultural reserves and archaeological monuments under the Ministry of Culture based on the analysis. Thus, the number of visitors to reserves under the STA amounted to 663.5 thousand people in 2024, which is a 35% increase compared to the previous year. 460.3 thousand incoming tourists were foreign tourists. Foreign tourists visiting the country amounted to 2.4 million people in 2024, of which 19.2% traveled to cultural tourism facilities (SSCRA, 2025).

Along with this, an increase in the dynamics of tourists visiting historical and cultural reserves under the Ministry of Culture is also observed, which can be considered an indicator of the increase in tourists visiting the country with cultural motives. The number of tourists visiting the 13 historical and cultural reserves under the Ministry of Culture was 223.4 thousand people in 2024, of which 102.6 thousand were foreign tourists. It should also be noted that the main part of those visiting historical and cultural reserves falls on the Gobustan Historical and Artistic Reserve, which is 132.4 thousand (State Tourism Agency of the Republic of Azerbaijan, 2025).

It should also be noted that the number of tourists visiting the Icherishahar (Old City in Baku) historical and cultural reserve, which is included in the UNESCO intangible heritage, was 235.6 thousand people in 2024. It can be noted that more than half of the tourists visiting the museums and other historical heritage of the Old City were foreign tourists. Also, the number of tourists visiting the city of Shusha, which has the status of a historical and cultural reserve, was 78.4 thousand people in 2024 (State Service for Protection, Development and Restoration of Cultural Heritage, 2025).

It is clear from our research that the development of cultural tourism destinations in the country, especially the presentation of historical and cultural reserves under the STA as a tourism product, and the implementation of a digital market have allowed tourists to be attracted. In addition, although 13 historical and cultural reserves under the Ministry of Culture have been restored, low indicators of marketing planning and lack of information have affected the low number of visitors (State Service for Protection, Development and Restoration of Cultural Heritage, 2025).

The advantage of the cultural and natural heritage potential in the Karabakh economic region, which is the study area, and its favorable location for organizing tourism activities ensure the development of tourism in the region. In this regard, the organization of tourism activities requires a multi-criteria assessment (MCA) of the existing potential using the FAS methodology. The multi-criteria assessment approach using the FAS methodology allows us to determine the comparative advantages of cultural, ethno-cultural, ecological, and other resources in tourism (Perles-Ribes et al., 2024). The formation of tourism-recreation zones in such regions parallels the broader practice of establishing special economic zones as a mechanism for stimulating regional tourism development (Plisetsky, 2012).

The assessment of tourism potential using the FAS methodology is an analytical analysis approach based on factors, assets and investments. In assessing the potential in the study region, preference was given to the rating and integral approach method, which determines the advantages of the FAS method of resources. Development directions are determined using the assessment of the cultural and creative heritage potential of the city of Shusha. Thus, it is carried out based on the FAS method and the analysis of indicators shows prospects.

The use of the FAS method in assessing the potential of the city of Shusha allows for the development of a basic concept including relief, climate, landscape, upper and lower infrastructure, hospitality and cultural characteristics of the population, security situation, legislation and state policy.

The mild climate in the city of Shusha in summer, cold in winter, high dry and comfortable indicators in the summer months, the presence of a dry climate and rich oxygen have led to its formation as a mountain-climatic resort. The fact that the city of Shusha covers an area of 4.5 km² on the plateau of the same name and is surrounded by forests and forest-steppe landscapes creates an attractive landscape in terms of tourism (Dargahov et al., 2023). The infrastructure of Shusha city was vandalized and destroyed during the occupation. The infrastructure is being restored, which consists of the restoration of the city's main energy supply, utilities, communications, and internal city roads.

Currently, the city's Karabakh street has been reconstructed, and a certain part of the main museums and buildings has been restored. Four mosques, one church, three museums, and 14 historical and architectural buildings have been restored in the city, which are presented to tourists visiting the city (Dargahov et al., 2023).

In determining the weight coefficient of factors in accordance with the FAS methodology, resource assessment and analysis capabilities have been determined based on integral approach methods. Here, the weight coefficient of cultural heritage indicators determines the cultural tourism opportunities of Shusha city. In this regard, based on the FAS methodology, the city's tourism potential and cultural tourism opportunities are assessed based on integral score indicators and added value creation. The integral assessment is calculated by the following formula (Baltagi, 2021):

$$P = \sum (W * Q)$$

P-Integral evaluation index;

W-Weight coefficient;

Q-Quantitative indicator.

Based on the above formula, the results of the factor analysis can be calculated:

$$P = (0.25 \times 9) + (0.15 \times 7) + (0.20 \times 6) + (0.10 \times 8) + (0.10 \times 5) + (0.10 \times 7) + (0.10 \times 6)$$

$$P = 2.25 + 1.05 + 1.20 + 0.80 + 0.50 + 0.70 + 0.60 = 7.10$$

The horizontal X-axis represents the factors applied in the multi-criteria evaluation and constitutes a nominal variable. The vertical Y-axis ranges from 0 to 2.5 points and is calculated as the product of the assigned weight and the corresponding quantitative value.

Table 2. Weighting coefficient and evaluation of cultural tourism potential in Shusha city

Factors	Weighting coefficient (W)	Quantitative score (Q)	Evaluation (WxQ)
F1 (Exotic nature and landscape)	0.25	9	2.25
F2 (Historical and cultural heritage)	0.15	7	1.05
F3 (Creative heritage and art)	0.20	6	1.20
F4 (Accessibility & Infrastructure)	0.10	8	0.80
F5 (Tourism infrastructure)	0.10	5	0.50
F6 (Tourism Services & Facilities)	0.10	7	0.70
F7 (Safety & Political Stability)	0.10	6	0.60
Total:	1	48	7.10

From the analysis of the table, although Shusha city has a high cultural tourism potential and has historical and cultural heritage and security as its strengths, the weak infrastructure and digital marketing and shortcomings do not fully support the development of tourism. Therefore, it is important to organize cultural events at an international level in the city, promote investments in tourism infrastructure (hotels, catering and transport), strengthen digital marketing and branding activities, and involve the local population in cultural tourism activities.

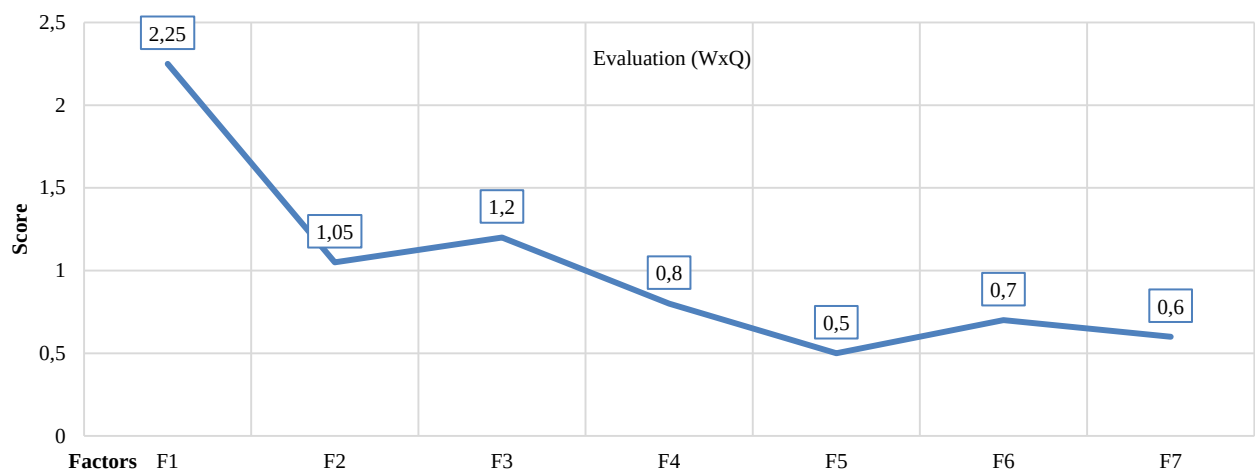


Figure 2. Evaluation scores based on FAS MCA methodology

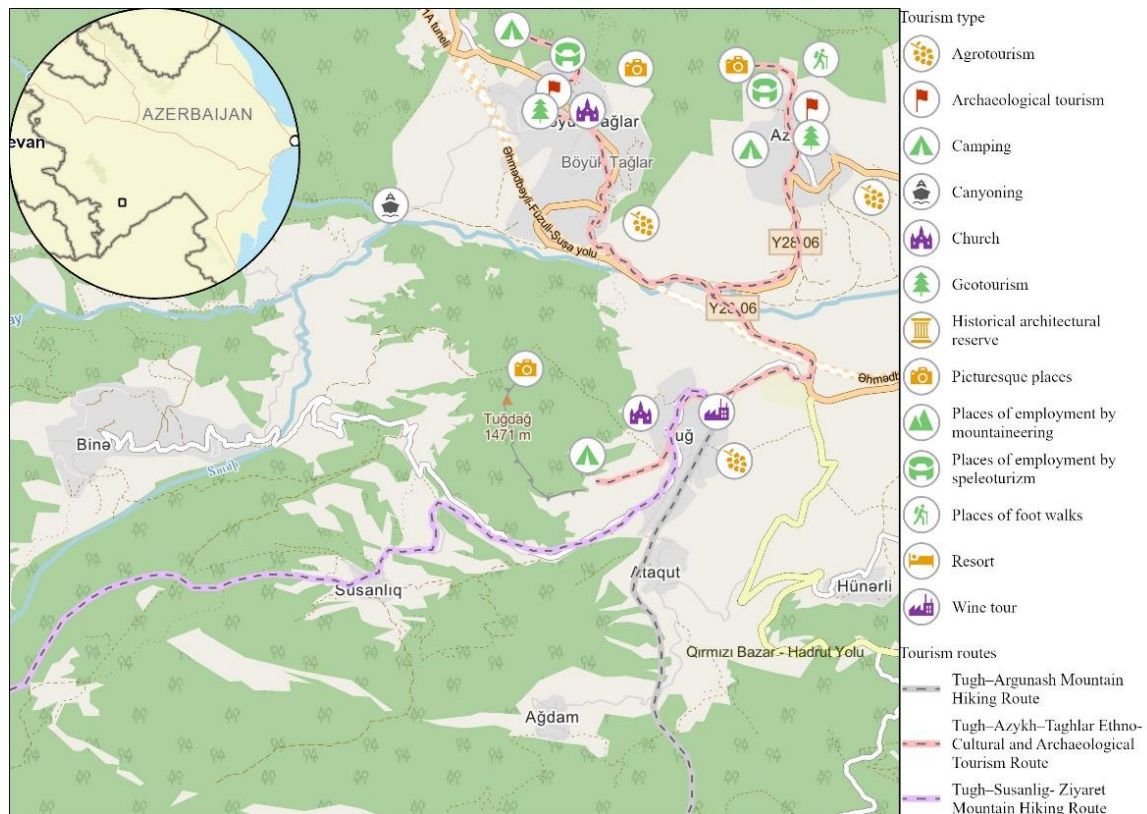


Figure 3. Map of the investigation area (Source: Author's own elaboration)

In addition, the institutional support of the state, the implementation of tourism management strategies, and various projects create conditions for the identification of new directions for the presentation of tourism opportunities. The holding of three international festivals per year in Shusha, the operation of three hotels, one hotel-restaurant complex, and the holding of many state and international events increase its importance in terms of tourism.

In the areas of Tugh, Taghlar, Azykh villages (Figure 3) and Hadrut settlement of Khojavend region, which are the study area, it is possible to note the wide spread of natural-climatic and attractive landscapes. In addition, the destruction of natural monuments and forest landscapes, and the vandalism of cultural heritage resources have reduced the attractiveness in terms of tourism. The location of the study area in the foothills, the mild climate, comfortable temperature and climatic conditions, the presence of historical-cultural and ethno-heritage, ancient Albanian monuments and mosques, the presence of ethno-, agri-heritage, natural monuments, caves, archaeological samples create a basis for the development of tourism (Dargahov et al., 2022, Imrani et al., 2024). The assets of the FAS method include natural resources (exotic and attractive factors), cultural, ethno-cultural and historical heritage, attractive and unique festivals and mass events, traditional crafts and local cuisine, which are also included in the established integral assessment. Socio-economic factors include human capital (tourism education staff, language skills), institutional support (tourism management, strategies and projects), and financial investment (public and private sector investments) (State Tourism Agency of the Republic of Azerbaijan, 2023).

At the same time, in recent years, the restoration and repair of roads to the mentioned settlements, the construction of some infrastructure facilities have improved tourism opportunities. It should also be noted that the lack of public transport, the exclusion of these villages and settlements from tourist routes, create conditions for more private car owners to come for tourism purposes (Dargahov et al., 2023). From a socio-economic point of view, the transfer of the village of Tugh to the STA, the interest of the returning population in the tourism sector, the preservation of carpet weaving, national cuisine and traditions, which are components of cultural heritage, will determine the development of the tourist service sector in the future. Also, there are favorable conditions for the development of eco-agro, outdoor, archaeological, speleotourism (caving, spelunking), cultural and ethno-cultural tourism in the villages of Tugh, Taghlar, Azykh.

In the assessment of the tourism potential of Tugh, Azykh, Taghlar settlements as eco-cultural tourism centers using the FAS method, the development directions are determined by conducting an analysis of the main factors. In this regard, the historical and cultural heritage of the settlements, attractive landscape ecological features allow for the organization of cultural, ethno-cultural, eco-cultural tourism activities.

Table 3. Assessment of tourism potential and organization of eco-cultural tourism activities in the villages of Tugh, Azykh and Taghlar using FAS methodology

Settlements	Physical factors	Accessibility factors	Socio-economic factors	Tourism activities
Tugh	-foothill exotic forest landscape ancient -Albanian monuments historical settlement -local architecture landscape and ecologically clean nature	- road rehabilitation - weakness of infrastructure - no tourism infrastructure - seasonal difficulties - not on tourist routes	- STA reserve status - protection of historical and cultural monuments - restoration of mining as heritage - community participation is desirable - restoration of agri-heritage	- cultural awareness - ecological - outdoor - eco-cultural - tourism routes
Taghlar	- attractive forest landscape - natural monuments (caves) - Albanian churches - local architecture and archaeology	- poor road infrastructure - no under infrastructure - no tourism infrastructure - seasonal difficulties - not on tourist routes	- traditional village life - community engagement - ecological heritage protection - cultural heritage restoration	- ecotourism - picnic - hiking and trekking - caving - tourist routes
Azykh	- Forest landscape - UNESCO cave - attractive ecological conditions and biodiversity	- access to the cave is possible, information is poor - roads have been restored - infrastructure is poor - tourism infrastructure is absent	- UNESCO World Heritage -preservation of historical and cultural heritage - a basis for economic revival	- Caving; - Ecotourism - Outdoor tourism - Hiking; - Picnic - Camping - Cultural tourism - Tourist routes
Integral assessment	7,3	4,2	5,3	7,6

From the analysis of the table, although the tourism potential of the mentioned settlements is high, the weakness of the basic infrastructure, the absence of overnight accommodation and catering services for tourists do not allow the organization of tourism activities. On the other hand, the presence of physical factors, direct support from the state, and the implementation of stimulating measures for business entities will support the development of tourism in the future.

The analysis of general socio-economic factors shows that the involvement of communities in tourism activities, the protection of cultural and natural heritage, and the restoration of traditional lifestyles will support the increase in tourism potential and the creation of added value. The existence of the potential for organizing various cultural, ecological, agri-eco and outdoor tourism activities in the study area will ensure its formation as an eco-cultural destination.

CONCLUSION

In conclusion, it should be noted that the higher ecological, cultural, ethno-cultural, eco-cultural tourism potential of the research points allows for the formation of new tourism products and increases competitiveness in the global tourism

market. The formation of tourist destinations in the research region, the joint use of cultural and eco-cultural heritage potential in the organization of TRZ is possible, which determines the advantages of tourism types in accordance with the FAS methodology. In this regard, it allows for the formation of the city of Shusha as a creative industry and cultural tourism destination, the formation of the Tugh settlement as a cultural and ethno-cultural center, the villages of Taghlar and Azykh, the surrounding areas as a caving, ecological, eco-cultural tourism zone. Here, the joint organization of ecological and outdoor tourism activities, the involvement of communities in agri-eco tourism will create added value for the region.

The integrated utilization of multiple destinations within the study area generates relative advantages among different tourism types by fostering interaction mechanisms and synergistic effects through the application of the FAS methodology in the comprehensive assessment of tourism potential. Development trajectories were identified by applying an integrative development model that combines cultural and eco-cultural heritage components in the formation of regional tourist destinations. Within this framework, the organization of tourism-recreation zones (TRZ) is based not solely on natural resource endowment but also on tangible and intangible cultural heritage assets. This approach enhances the distinctiveness of destinations and strengthens their competitive positioning in the international tourism market.

The results of the FAS-based assessment demonstrate that the strategic development of the city of Shusha as a hub for creative industries and cultural tourism is well justified. The city's rich historical and architectural heritage, strong musical and artistic traditions, and significant festival and event potential provide a solid foundation for its evolution as a creative economy center. This enables the promotion of innovative forms of cultural tourism, including event tourism, creative workshops, thematic cultural routes, and international festivals.

Simultaneously, the development of Tugh settlement as a cultural and ethno-cultural destination requires the integration of local ethnographic characteristics, folklore traditions, craftsmanship, and rural lifestyles into the tourism product. This direction supports the establishment of an inclusive, community-based tourism model through the synthesis of ethno-tourism and rural tourism elements, thereby reinforcing regional identity and socio-cultural continuity.

The villages of Taghlar and Azykh, together with their surrounding landscapes, possess substantial potential for speleotourism, ecological tourism, and eco-cultural tourism development. In particular, the presence of Paleolithic archaeological sites, such as the Azykh Cave, provides opportunities for positioning the region within the international scientific and educational tourism market. The organization of ecological and outdoor tourism activities—including hiking trails, geo-ecological excursions, biodiversity observation, and agro-ecotourism initiatives integrated with agricultural practices—can generate additional economic value and diversify tourism offerings.

The active involvement of local communities in agro-ecotourism processes enhances socio-economic sustainability, supports employment growth, and contributes to income diversification. A community-based tourism model simultaneously promotes the preservation of cultural heritage and the rational management of natural resources. Consequently, this integrative and multi-criteria assessment approach not only facilitates the sustainable formation of the region as a competitive tourism destination but also establishes a scientific foundation for long-term strategic development and increased competitiveness in the global tourism market.

Author Contributions: Conceptualization, V.D. and A.N. and R.A. and F.M. and E.M.; methodology, V.D. and R.A.; software, V.D. and A.N. and R.A.; validation, V.D. and R.A. and E.M.; formal analysis, V.D. and A.N.; investigation, V.D. and F.M. and E.M.; data curation, V.D. and A.N. and R.A.; writing - original draft preparation, V.D. and A.N. and R.A. and F.M. and E.M.; writing - review and editing, V.D. and A.N.; visualization, V.D. and A.N. and R.A. and F.M. and E.M.; supervision, V.D. and A.N. and R.A. and F.M. and E.M.; project administration V.D. and A.N. and R.A. and F.M. and E.M. All authors have read and agreed to the published version of the manuscript.

Funding: Not applicable.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study may be obtained on request from the corresponding author.

Acknowledgements: The research undertaken was made possible by the equal scientific involvement of all the authors concerned.

Conflicts of Interest: The authors declare no conflict of interest.

Use of Generative AI: Not applicable

REFERENCES

- Baltagi, B. H. (2021). *Econometric analysis of panel data* (6th ed.). Springer, Cham, Switzerland. <https://doi.org/10.1007/978-3-030-53953-5>
- Cajee, L. (2014). Eco-cultural tourism: a tool for environmental, cultural and economic sustainability (a case study of Darap Village, West Sikkim). *SHS Web of Conferences*, 12, 01029. EDP Sciences. <https://doi.org/10.1051/shsconf/20141201029>
- Dargahov, V. S., Mammadov, Q. V., Nuriyeva, I. F., & Ahmadov, R. I. (2023). Prospects of using the tourism potential of the liberated territories from the point of view of ecotourism. *Journal of Geology, Geography and Geoecology*, 32(2), 224-232. <https://doi.org/10.15421/112321>
- Dargahov, V. S., Talibov, S. A., & Mammadov, G. V. (2021). *Azərbaycanda mədəni irs resurslarının qiymətləndirilməsi və reyestrində beynəlxalq təcrübənin tətbiqi imkanları (Kiçik Qafqaz təbii vilayəti təmsalında)* [Possibilities of applying international experience in

- the assessment and registration of cultural heritage resources in Azerbaijan (in the case of the Small Caucasus Natural Region)]. *News of Baku University Series of Natural Sciences*, 4, 93–101 (in Azerbaijani).
- Dargahov, V. S., Talibov, S. A., & Mammadov, G. V. (2022). Perspectives of formation of eco-cultural destinations in the Small Caucasus natural region (in the example of Tugh, Azykh villages and Miskinli area of Gadabay district). *News of Baku University, Series of Natural Sciences*, 1, 92–108.
- Dargahov, V. S., Talibov, S. A., & Mammadov, G. V. (2023). Small historical towns and the opportunities for the creative cultural tourism products in Azerbaijan (the case of Shusha city). *Geography and Natural Resources*, 1(19), 93–101. <https://doi.org/10.59423/gnr.2023.70.85.013>
- Demkova, M., Sharma, S., Mishra, P. K., Dahal, D. R., Pachura, A., Herman, G. V., & Matlovicova, K. (2022). Potential for sustainable development of rural communities by community-based ecotourism a case study of rural village Pastanga, Sikkim Himalaya, India. *GeoJournal of Tourism and Geosites*, 43(3), 964–975.
- Eggleton, M., Tretyakevich, N., & Sibaja, M. (2023). *Travel market report: 2024 outlook*. Research & Intelligence.
- Gavurova, B., Polishchuk, I., & Polishchuk, V. (2025). Multi-criteria hybrid model of region assessment in the context of sustainable tourism. *Journal of Business Economics and Management*, 26(4), 880–900. <https://doi.org/10.3846/jbem.2025.24601>
- Hao, Y., Wang, J., & Ren, L. (2019). Research on the innovation of eco-cultural tourism products of Royal Prime Minister's Palace in Shanxi Province from the perspective of experiencing consumption. *IOP Conference Series: Earth and Environmental Science*, 267(5), 052035. DOI 10.1088/1755-1315/267/5/052035
- Honey, M. (2019). *Ecotourism and sustainable development*. Island Press, Washington, USA.
- Imrani, Z. T., Huseynzade, A. I., & Bilalov, B. A. (2024). Priority development areas of nature tourism resources in Shaki-Zagatala economic and geographic region. *GeoJournal of Tourism and Geosites*, 54, 921–926.
- Imrani, Z., Zeynalova, K., & Babakhanov, A. (2025). Investment dependence of tourism industry and differences in economic growth in the Republic of Azerbaijan. *GeoJournal of Tourism and Geosites*, 61(3), 1668–1675.
- Jopp, R., Kalantari, H., Lim, W. M., Wee, L. L. M., & Lim, A. L. (2022). Tourist segments of eco-cultural destinations. *Current Issues in Tourism*, 25(14), 2253–2268. MENR (2025). National Parks. Available online: <https://eco.gov.az/az/tebii-servetlerimiz/milli-parklar> (accessed June 14, 2025) Institute of Economics, Ministry of Science and Education of the Republic of Azerbaijan. (2023). *Post-konflikt ərazilər: iqtisadi potensial və müqayisəli üstünlüklər [Post-conflict territories: Economic potential and comparative advantages]*. Baku, Azerbaijan: Institute of Economics (in Azerbaijani).
- Perles-Ribes, J. F., Moreno-Izquierdo, L., Ramón-Rodríguez, A., & Romero, A. (2024). Tourism growth and economic development: Academic and non-academic perspectives. *Tourism: An International Interdisciplinary Journal*, 72(3), 456–473. <https://doi.org/10.37741/t.72.3.11>
- Plisetsky, E. E. (2012). Special economic zones as an effective mechanism for the regional development of the tourist industry in Russia. *Regional Studies*, 36(2), 90–98.
- Rotherham, I. (2013). Concepts and examples of eco-cultural tourism development. *Cultural Tourism*, 13(5), 74–87.
- Sokhanvar, A., Çiftçioglu, S., & Javid, E. (2018). Another look at tourism–economic development nexus. *Tourism Management Perspectives*, 26, 97–106. <https://doi.org/10.1016/j.tmp.2018.03.002>
- State Service for Protection, Development and Restoration of Cultural Heritage under the Ministry of Culture of the Republic of Azerbaijan (2025). *Natural Reserves*. Available online: <http://irs.gov.az/category/qoruqlar> (accessed June 04, 2025). State Tourism Agency of the Republic of Azerbaijan – STAAR (2023). *Tourism strategy of the Republic of Azerbaijan 2023–2026*. Available online: <https://www.tourismboard.az/storage/2024/01/10/CEctUrSzfXO6m7phzeMa6NrB8HMF1VZ6jE2qq5V.pdf> (accessed January 10, 2024). State Tourism Agency of the Republic of Azerbaijan (STA) (2025). *Dövlət Turizm Agentliyinin tabeliyindəki qoruqları ziyarət edənlərin sayı artıb* [Number of visitors to reserves under the STA has increased]. Available online: <https://medeniyyet.info.az/page/news/77615/.html> (accessed January 21, 2025). The State Statistical Committee of the Republic of Azerbaijan (SSCRA) (2025). *Tourism in Azerbaijan* [statistical yearbook, 134 p.]. Available online: https://www.stat.gov.az/menu/6/statistical_yearbooks/source/tourism_2025.pdf (accessed January 1, 2025). The State Statistical Committee of the Republic of Azerbaijan (SSCRA) (2025). *Number of foreign tourists by purpose of visit* [statistical data]. Available online: https://stat.gov.az/source/tourism/en/002_3en.xls (accessed July 14, 2026)
- Tiberghien, G., Bremner, H., & Milne, S. (2017). Performance and visitors' perception of authenticity in eco-cultural tourism. *Tourism Geographies*, 19(2), 287–300.
- Weaver, D. (2016). *Sustainable tourism: Theory and practice* (257 p.). Elsevier, Amsterdam, Netherlands.