

The Impact of Ecological Factors on Tourism in Azerbaijan

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Abstract — We discuss the uniqueness of natural and geographical conditions for tourism in the Sheki-Zagatala region of Azerbaijan in this article. The role and place of tourism in the development of the national economy are considered, the tourist potential of the region is characterized, the ways of tourism development are determined.

The need to develop a new strategy for the development of urban planning organization and improving the design of recreation and tourism complexes is noted.

It is analyzed the opening of a new corridor linking Nakhichevan with the western regions of Azerbaijan and, accordingly, Turkey with Central Asia, which will significantly affect regional development, including opening up wide opportunities for the development of tourism in the region.

Keywords — Ecology; Pollution; Tourism; Urban Planning; Design

1 Introduction

Tourism is considered one of the main and most profitable sectors of the global economy of the 21st century. It is developing dynamically and plays an important role in the socio-economic development of the state. Tourism is not only an indicator of social welfare in society, but also a source of income, new jobs, modern infrastructure, and protection of historical and cultural monuments [1].

Approximately 20 years ago, the key aims of tourism planning were summarized in the following way: ‘to ensure that opportunities are available for tourist to gain enjoyable and satisfying experiences and at the same time to provide a means for improving the way of life for residents and of destination areas’ [2].

The environment is being increasingly recognized as a key factor in tourism. In the last decade of the 20th century, it was noted that tourism depends ultimately upon the environment, as it is a major tourist attraction itself, or is the context in which tourism activity takes place [3]. However, tourism – environment relationships are complex. The relationship of tourism with the environment involves many activities that can have adverse environmental effects. Many of these impacts are linked with the construction of general infrastructures such as roads and airports, and tourism facilities, including resorts, hotels, restaurants, shops, golf courses, and marinas. The negative impacts of tourism development can gradually destroy the environmental resources on which it depends. On the other hand, tourism has the potential to create beneficial effects on the environment by contributing to environmental protection and conservation [4].

With good environmental planning and management, natural-areas tourism can make a major contribution to

conservation; but if poorly managed, the tourist industry will damage precisely those areas with the greatest conservation value.

Located along with one of two highways that connect Baku and Tbilisi, the Sheki-Zagatala region has long been a hotbed of regional Azerbaijani culture with more than 100 ancient fortresses, palaces, mausoleums, mosques, towers, and hotels. If regional tourism can work in Azerbaijan, the Sheki-Zagatala region will be its epicenter. Currently, recreational tourism enterprises operate in Gabala, Sheki, Zagatala and the region lie along an international tourism route with a terminal in Baku, Tbilisi, and Batumi Georgia. Although Sheki-Zagatala offers unique nature, culture, and heritage: a classic formula for tourism development, the region lacks the necessary human capital for a profitable, sustainable, and thriving tourism sector. This skillset deficit adversely affects the profitability and competitiveness of the region’s plethora of small and medium-sized tourism enterprises.

This Tourism Potential Assessment provides a deeper understanding of community dynamics in Sheki-Zagatala and offers new approaches for future tourism development. The assessment aims to diversify the region’s economy by supporting efforts to protect the natural environment and preserve historical attractions, two key competitive advantages for this region. This assessment aims to reveal opportunities for workforce development and economic opportunities within a tourist market that is laden with potential.

The state of modern tourism in Azerbaijan is briefly described in the paper. The tourist resources of the Sheki-Zagatala region of Azerbaijan are presented. The uniqueness of natural and geographical conditions for domestic and international tourism in this region is

substantiated. The role and place of tourism in the development of the national economy are considered, the tourism potential of the region is characterized, the ways of tourism development are determined. The article presents environmental problems that hinder the development of tourism in the region and also notes the importance of a comprehensive consideration of the issue in the post-war period.

2 Natural Resources of Sheki-Zagatala region

Azerbaijan, located at the border of two great cultures - Europe and Asia, attracts the attention of local and foreign tourists. The north-western part of the Azerbaijan Sheki-Zagatala region is a rather developed tourism zone, which is extremely favorable for the construction of sanatoriums, boarding houses of tourist complexes (figure 1). A landscape in which areas alternate from deciduous forests to mountainous zones, from flowering meadows to turbulent rivers, the absence of large enterprises that pollute nature, are attractive for tourism.



Figure 1. Location of Sheki-Zagatala region

It should be noted that there is no large-scale tourist activity in the region yet. On the other hand, at present, a large flow of tourists from Azerbaijan is focused on foreign countries, especially Turkey, although this potential flow of tourism can be reoriented to local tourists, sanatorium, and resort complexes of the republic. The natural and climatic conditions of the Sheki-Zagatala region are not worse than in foreign resorts, and the presence of the richest mineral and thermal waters here makes it possible to intensively develop medical and recreational procedures. The mountainous terrain here forms completely original tourist resources, based on which diversified tourism can develop. The rich historical and cultural potential creates conditions for the formation and development of international tourism. In this region, ancient Albanian temples, khan's palaces, fortresses, complexes of rock

carvings, caravanserais of the Middle Ages, burial mounds and caves, and much more are potential objects for educational tourism [5].

Ecological tourism is considered one of the most promising types in the modern world. Anthropogenic pollution is forcing residents of large cities to go out into nature. This trend has become one of the priority areas in the life of modern people. In the Sheki-Zagatala region, there are enough ecologically favorable territories, modern parks were created, which opens up prospects for ecological tours for foreign tourists.

3 Environmental issues

It is difficult to evaluate the role of ecological threats, which are of particular importance in modern conditions due to some reasons: 1) The basis of the frequent ecological occurrences is not only natural but also anthropogenic causes; 2) Ecological disasters have become more frequent during these some last decades; 3) The relationship between the population and the environment has been expanded and has become intensive, which has led to increased environmental vulnerability; 4) Spatial scale of geo-ecological phenomenon (local and from regional to global) has changed; 5) Health of the population has become the indicator of ecological welfare. The activation of these processes has put forward ecological safety problems, including tourism, as the ecological factor determines the number of tourists for host destinations [6].

Important land resources include minerals, fossil fuels, fertile soil, forests, wetland, and wildlife. Increased construction of tourism and recreational facilities has increased pressure on these resources and on scenic landscapes. Direct impact on natural resources, both renewable and non-renewable, in the provision of tourist facilities can be caused by the use of land for accommodation and other infrastructure provision, and the use of building materials. Forests often suffer negative impacts of tourism in the form of deforestation caused by fuelwood collection and land clearing.

Taking into account these problems in addition to the mentioned positive factors that make the northwestern part of Azerbaijan attractive for tourism, it is necessary to note some environmental problems that need to be addressed. The ecology of Azerbaijan, including air pollution, is associated with the development of oil and mineral deposits, operations of petrochemical and chemical industries, as well as the mass destruction of flora and fauna, natural resources, cultural and historical heritage in the territories of Azerbaijan previously occupied by Armenia, including production of large-

scale fires in the occupied territories, which have become one of the biggest environmental problems for the country.

Deposits of polymetallic ores in Azerbaijan act as natural sources of environmental contamination with radionuclides. They are concentrated mainly in the northeast of the country (Greater Caucasus, Belokan district) where geological prospecting wells were drilled during the 1960s and 1970s and not properly preserved. Currently, these wells leak radionuclides and constitute natural sources of pollution.

An additional source of pollution with heavy metals is road transportation. Increased traffic on the Silk Road through Azerbaijan connecting Asia and Europe undoubtedly contributes to heavy metal pollution of soil and vegetation along the road.

An even greater threat and danger of radioactive contamination for the whole region is the technologically outdated Metsamor nuclear power plant, located in the territory of Armenia in a seismic zone. On the other hand, wastewater used to cool the reactors in Armenia is discharged into the river Araks in the border zone to Azerbaijan.

All this makes it necessary to monitor the ecological situation in Azerbaijan, especially the atmospheric precipitation by heavy metals and radionuclides of natural and anthropogenic origin, as well as to eliminate these problems.

4 Development of tourism in the Sheki-Zagatala region

Sheki- Zagatala region is assessed as a region with a high potential coefficient on the impact on the economic development among the regions of the republic due to the tourism resources. Covering the administrative districts of Balakan, Zagatala, Sheki, Gakh, Oguz, Gabala, this economic region is located in the north-west of Azerbaijan, on the southern slopes of the Greater Caucasus Mountain (figure 2), has a total area of 8.96 thousand km², has a population of 626,7 thousand man (2020) [7,8].



Figure 2. The administrative districts of Sheki- Zagatala region

The number of tourists visiting the Sheki-Zagatala region, which is rich in the ancient natural, historical, and cultural tourism potential of Azerbaijan, is growing every year. With the expansion of the areas serving tourists in the region (accommodation, food, transport, excursions), there is an opportunity for the development of various types of tourism (table 1). The latest statistics and market research show that the number of foreign visitors who want to spend their holidays in the region and get to know it better is growing every year (table 2, table 3).

Table 2. The number of tourist complexes by the year

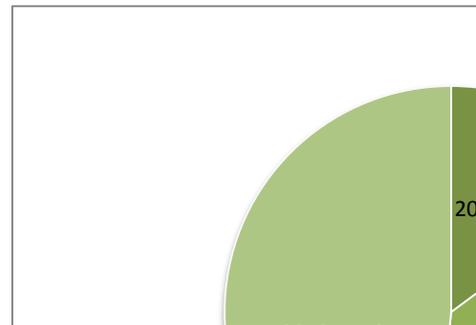
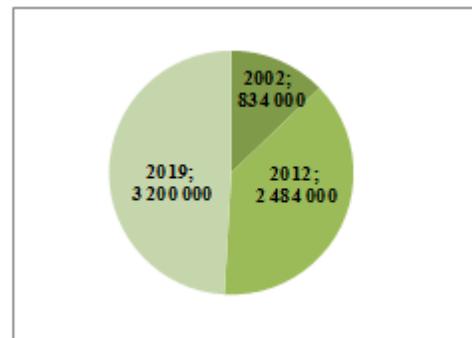


Table 3. The number of tourists by the year



There are many mineral springs in Gakh, such as Oglanbulag, Gizilbulag, Mosku, Hamambulag, Bum in Gabala, Khalkhal, Bugusshor and Agbulag in Oguz. There are several sanatoriums in the area. Architectural monuments of Caucasian Albania are concentrated in the Sheki-Zagatala economic region. Today's Gabala is the capital of Albania.

"Ilisu" State Reserve is located in Gakh. There are suitable places for hunting in some areas of the region. "Sumug" fortress in Gakh, "Kurmuq" temple are very important from the historical point of view.

"Zagatala" State Reserve, Zagatala Central Culture and Recreation Park - "Heydar" Park, "Zarifa Aliyeva" Park, "Dada Gorgud" Square are the favorite recreation

places of the people of Zagatala. The "Fairy" and "Devil" fortresses located in Zagatala are of great importance in terms of historical tourism.

Oguz is called the "Switzerland of Azerbaijan" due to its forest resources.

The Marxal tourism zone located in the Sheki region is especially different. Seven beautiful waterfalls are famous in Gabala. "Gelersen-Gorensen" fortress and Khan's palace are of historical significance in Sheki. The Albanian temple built in the village of Kish in Sheki is the first Christian church in the Caucasus.

The construction of new transport communications linking Nakhichevan with the western regions of Azerbaijan and, accordingly, Turkey with Central Asia, will play a great place in tourism (figure 3). The opening of this corridor to Nakhichevan not only "significantly changes the economic system of Azerbaijan, but will also significantly affect regional development. We think this corridor will open up wide opportunities for the development of tourism in the region. It will positively affect the tourism relations between Azerbaijan and Turkey as it will create a more comfortable land route for the movement of tourists. In a broader sense, the corridor promises to give Ankara another route to access the Caspian Sea and the Turkic world in Central Asia.



Figure 3. New transport communication linking Nakhichevan with the western regions of Azerbaijan

5 Conclusion

In this work, tourism resources are analyzed and the uniqueness of natural and geographical conditions for tourism in the Sheki-Zagatala region of Azerbaijan is substantiated. The role and place of tourism in the development of the national economy, as well as the tourism potential of the region, are identified, the ways of tourism development are determined.

It was analyzed the opening of a new corridor linking Nakhichevan with the western regions of Azerbaijan and, accordingly, Turkey with Central Asia, which will

significantly affect regional development, including opening up wide opportunities for the development of tourism in the region.

The necessity of developing a new strategy for the development of urban planning organization and improving the design of recreation and tourism complexes is shown. An integrated approach is required in solving the assigned tasks.

Thus, the development of a new strategy for the development of urban planning organization of recreation and tourism complexes in the region is an important task today. It is also necessary to determine the ways to improve the design of tourist zones and recreation complexes in the region for the next 5 years, taking into account the post-war situation in the republic.

References:

- [1] Hasanov A. N. Natural tourist resources of Azerbaijan. Scientific journal Service plus. Tourism. 2012, 3, p.11-15.
- [2] Mathieson A., Wall G. Tourism: Economic, Physical, and Social Impacts. Longman Group Limited, Longman House, Burnt Mill, Harlow, Essex, United Kingdom. 1982. 208p
- [3] Holden A. Environment and Tourism. London, Routledge, 2016, 302p
- [4] Sunlu U. Environmental impacts of tourism. CIHEAM. 2003, p.263-270, <http://om.ciheam.org/article.php?IDPDF=4001977>
- [5] Hasanli A.N. Development of tourism in the Sheki-Zagatala region of Azerbaijan. USBIK International Congress on Social Sciences, Turkey, Kayseri. 2021, p.29
- [6] Letandze N. The impact of ecological factors on tourism development in Kvemo Kartli region. Globalization and business. 2018, p.247-251
- [7] Ismayilova U.T. The main directions of using the recreational and tourist potential of the Sheki-Zagatala economic region when solving the problem of employment of the population. International Scientific Journal "Internauka". 2015, p.12. <http://www.inter-nauka.com/>
- [8] Materials of the State Statistics Committee of the Republic of Azerbaijan, <https://www.stat.gov.az>

Table 1. Tourism data for Sheki-Zagatala region

Years	2010	2015	2016	2017	2018	2019
Number of hotels and hotel-type enterprises (units)	50	54	55	60	63	65
They have:						
Number of rooms (unit)	970	1072	1997	1900	1948	1999
One-time reservation (place)	2180	2583	4469	4308	4432	4561
Placing any number of people (person)	41780	31280	186564	165499	229500	238085
The number of nights (person-night)	62874	51064	334704	247793	368205	372402
Income of hotels and hotel-type enterprises (thousand manats)	3993,9	2634,1	11291,7	19688,7	35450,9	34885,9
Expenses of hotels and hotel-type enterprises (thousand manats)	2242,2	5260,4	11450,4	18360,4	34614,2	34227,4