

The Model Of Development Of Tourism Activity In The Region Of Azerbaijan

¹Vilayat Ismayilov, ²Ulkar Hasanzade, ³Mehriban Mehdizade, ⁴Vugar Mammadli,

⁵Mepara Orujova

¹Azerbaijan Academy of Labor and Social Relations, Azerbaijan; E-mail: ismaylov1953@mail.ru; Orcid: 0000-0003-0892-0365

²Nakhchivan State University, Azerbaijan; ulkerhasanzade@ndu.edu.az; Orcid: 0009-0006-7869-1106

³Azerbaijan State University of Economics; Email: m.mehdizade1964@gmail.com; Orcid:0009-0001-3023-716X

⁴Mingechaur State University, Azerbaijan; vuqarmammadli@mdu.edu.az; Orcid:0009-0003-8493-6067

⁵Azerbaijan Technical University, Azerbaijan; orujova67@67gmail.com; Orcid:0009-0002-1317-2111

Abstract

Objectives: The study is aimed at analyzing the impact of this group of factors on the region's GDP in the tourism industry. The purpose of the study is to study the trends in the development of the tourism sector in the region of Azerbaijan, as well as to identify the main group of factors affecting the GDP growth of the Nakhichevan Autonomous Republic of Azerbaijan.

Theoretical basis: To account for the economic growth of the tourism sector, individual equations are created taking into account the components, which are easier to model due to stable changes from period to period depending on the number of tourists accepted, on the income and expenses of travel companies. Economic growth equations are difficult to model because economic conditions, particularly those in the tourism market, affect this process over time.

Method: In the study, the dialectical method was used to identify common approaches to the study of factors affecting the development of the tourism sector and their relationship to GDP growth. The methods of analysis and synthesis, comparison, induction and deduction, etc. were also used in the work. These listed methods were also used for comparative analysis of GDP indicators and factors influencing its growth. When developing the relationship of the model between the volume of GDP and the two identified groups of factors, an econometric regression model was applied.

Results and discussion: The model of the relationship between the GDP of a country's region and the system of factors is built in the form of a step system. The free variable factors are grouped into two groups. Based on the data (2010-2023), a correlation model of the relationship between GDP and other factors was constructed, and the adequacy of the model was tested for autocorrelation at $\alpha=0.01$ (1%), $\alpha=0.05$ (5%).

Keywords: tourism, activity, factors, impact of GDP, development

1.INTRODUCTION

After gaining independence, as a result of the policy pursued by Azerbaijan, sufficient progress has been achieved towards achieving socio-economic development, increasing employment and integration into the countries of the world. The analysis conducted in the direction of economic development shows that the issues stipulated by the state programs for the development of regions in Azerbaijan, when successfully implemented in a short time, led to the achievement of macroeconomic indicators reflecting the economic development of the country, including the development of the tourism sector [7]. Upgrading infrastructure, increasing employment, creating new jobs, and improving the standard of living of the population laid the foundation for sustainable economic development in the region to achieve an increase in the number of foreign tourists as the main objective in government programs covering the development of the tourism sector in all 14 economic regions of Azerbaijan [7]. The goals that countries set for themselves to achieve the development of the tourism industry directly depend on the level of development of the country and may be different. A number of countries (especially developed ones), developing the tourism sector, set out in the tourism development strategy, benefit from it as a source of income [19, 20]. Others benefit from the source of employment for the population living there, seeking to

create jobs through new companies established in the tourism sector [22]. The role of tourism in the economic development of Azerbaijan, which currently has a high growth rate, is increasing (with the exception of 2020-2021). That is why tourism, which directly and indirectly meets the tourist needs of people and is characterized by accessibility, is one of the most favorable areas of activity. In 2024, the number of tourists making international trips increased compared to 2019 (about 1.4 billion tourists), as noted in the latest report prepared by the UN Office of Tourism. International travel to the country shows an increase of 11% compared to 2023. This means that now that global tourism has reached pre-2020 levels, it is likely that this figure will continue to grow in the future. Since international tourism may grow by 3-5% in 2025 [30].

The factors influencing tourist demand can be classified into three groups [11; 12]: - economic factors (income from tourism, expenses and opportunities to use transport, logistics); -social factors (people's lives, cultural level, family characteristics, level of proficiency in a foreign language and the socio-political situation in the visited country); - psychological factors (the worldview and motivation of the tourist, cultural style of behavior, changes in fashion and tastes).

In tourism, logistical problems are encountered in the organization of the movement of tourist flows, with a rational organization in the development of a new product and its distribution. The goal of logistics is to minimize the cost of bringing a product to the consumer. At the same time, great attention should be paid to advertising logistics. It is necessary to clearly identify the areas of advertising activity, priority-advertising methods, and marketing research based on statistical data. All systems must be in place to reduce costs and ensure the quality of travel products. For the best functioning of logistics in the company, a system of specific question-asking is used in each situation, i.e. certain tasks are set. In addition to the above, logistics links the tasks of quality and safety with legal responsibility. When performing any task assigned by the company, there is a constant process of linking this task with the legal framework [3].

2.MATERIALS AND METODS

The theory and methodology of this research area are based on the research of domestic and foreign researchers on the development and achievement of sustainable tourism. The following methods were used in the study. The dialectical method was used to identify common approaches to the study of factors affecting the development of the tourism sector and their relationship to GDP growth. The methods of analysis and synthesis, comparison, induction and deduction, etc. were also used in the work. These listed methods were also used for comparative analysis of GDP indicators and factors influencing its growth. When developing the relationship of the model between the volume of GDP and the two identified groups of factors directly affecting it, an econometric regression model was applied.

To determine the adequacy of the econometric model, it was tested based on the Darbin-Watson criterion. At the end of the article, based on an analysis of the influencing groups of factors on the change in GDP, suggestions and recommendations will be given.

3.RESULTS

3.1. Analysis of macroeconomic indicators of the tourism sector of Nakhichevan

Autonomous Republic

The global tourism system and the rapid formation of its elements form international hotel chains, tourist transportation (logistics) by many modes of transport and a computer system for pre-booking places. Changes in the dynamics of international tourism have a corresponding effect on the growth rates of gross domestic product and the global economy.

The market of tourist services is a sphere of meeting the demand of the population for recreation, entertainment or healthcare services. The market of tourist services has a structure corresponding to the consumer characteristics of these services. There are two main structural components of this market:

- The consumer market is a market where there is a demand for travel products;
- The producer's market-in this market, the organizers' activities are aimed at creating demand [11].

The tourism industry provides a variety of opportunities for fairly differentiated and specialized travel [27]. Almost any requirements of tourists can be met by the tourism industry: a summer cruise to the cold Arctic places inhabited by polar bears; a catamaran descent along the African Zambezi River among hippos and crocodiles that wait in vain; a week-long visit to Western American farms with horse riding and cowboy

training; Mountain bike rides on the bumpy roads of Nepal or jeep rides through the Bolivian Andes and more, which is performed at an altitude of over 2,500 meters for every mile of the way.

An analysis of Azerbaijan's macroeconomic indicators shows that in 2024, compared with 2019, the economy grew dynamically (41,109.3 million manats, or 50.2%), and the state's support for this development increased. And this support directly stimulates the development of tourism. The rapid growth of household incomes in the comparative period (2,1281.2 million manats or 37.5%) and an increase in the average monthly salary will ensure an increase in the number of people interested in using tourism services [15].

Azerbaijan, located at the junction of East and West, attracts tourists with its existing infrastructure and ancient historical monuments. Thus, the city of Baku, among other things, is famous for its picturesque nature, national parks and reserves, religious monuments, etc. The city has a tourist attraction with other economic regions (IR), which have the above-mentioned tourist sites. It is no coincidence that Baku has the largest share in the international tourist reception of Azerbaijan. According to the collection of tourism statistics and Internet portals, Baku is home to the most popular tourist centers of Azerbaijan (3/4), which are accepted by international tourists. And the tourist sites preferred by one quarter of tourists are divided into 13 other tourist centers of Azerbaijan [24].

From the analysis of the state of the Nakhichevan Autonomous Republic tourist market, it can be seen that there are 1,162 historical and cultural monuments in this region (58-world, 455-country, 649-local significance). Among them are 663 archaeological, 285 architectural, 31 monumental documents, 36 historical, 140 shrines, and 7 listed as natural monuments [29].

According to Data Pandas tourism statistics, the top 10 countries that have received the largest number of tourists in recent years include France (89.4 million people), Spain (83.7 million), the United States (79.3 million), China (65.7 million), Italy (64.5 million), Turkey (51.2 million), Mexico (45.0 million), Thailand (39.8 million), Germany (39.6 million) and the United Kingdom (39.4 million) [23; 31]. In our opinion, the reasons why the reception of tourists in the countries in the top ten of the rating is higher than in other countries can be determined by: - the greater number of UNESCO heritage sites in these countries; - greater compliance of the tourism facilities located on their territory with tourist attractiveness; - objective reasons (availability of high-level tourist infrastructure, price-quality ratio of services provided, features and specifics of tourist display facilities); - subjective reasons (stereotypes, ideas formed over the years, experience, consumer preferences, social status), etc.

The performance indicators of travel agents and tour operators in Azerbaijan by economic region are shown in Table 1.

Table 1.

The number of tourist travel documents (envelopes) sold by individual economic regions, units.

Indicators	2018	2019	2020	2021	2022	2023	The trend in 2023 compared to 2019, %, (+), (-)
Total for Azerbaijan	49992	63885	5342	9811	16803	27007	-45,9
The city of Baku	40760	59290	4817	8513	13528	23509	-42,3
Nakhichevan Autonomous Republic	3717	43	18	-	-	5	-99,9
Absheron-Khizi Economic Region	1655	1931	-	70	423	829	-49,9
Ganja-Dashkesan ER	562	728	-	236	379	393	-30,1
Kazakh-Tovuz ER	1747	-	-	-	118	282	-83,8
The Lankaran-Astara ER	452	631	247	-	917	319	-29,4
Central Aran ER	265	929	255	410	199	615	+2,32 dəfə
Milsko-Mugansky	-	-	-	-	-	22	-

ER							
Shaki-Zagatala ER	650	226	-	582	1239	1026	+57,8
Shirvan-Salyan ER	184	107	5-	-	-	7	-96,1

Source: Tourism in Azerbaijan. Statistical collection. (2024). The State Statistics Committee Of The Republic Of Azerbaijan. Baku, p.33

An analysis of the data shows that the number of travel tickets sold in the country decreased by 45.9% during the comparison period. The largest decrease in this indicator was noted in Nakhichevan Autonomous Republic (99.9%), the smallest - in Lenkoran-Astara (-29.4%) and Janja-Dashkesan (-30.1%) economic regions. In addition to the recession, growth occurred in two regions: the Central Aran and Shaki-Zagatala economic regions. Even in the Central Aran region, this increase was 2, 32 times, or 350 units [24]. In our opinion, the main reason for the sharp decrease in the number of travel vouchers sold to tourists in a number of regions, including the Nakhichevan Autonomous Republic, is that they remain in the blockade zone, even after years of infection (with the exception of a very small number of travel vouchers (5 units) in 2023 alone), continuing decline in general in those years (2021-2022) this can be explained by the zero unit, that is, the absence. The decrease in this indicator in the Autonomous Republic, which lives under blockade, may be directly related to both the insufficient organization of the number of flights and the fact that transit passengers do not use the Nakhichevan territory as transit.

If in 2018 the number of travel vouchers sold in Azerbaijan to foreigners and stateless persons amounted to 6,139 units, then in 2023 it amounted to 4,741 units. In 2023, the number of these envelopes decreased by 1,398 units compared to 2018. Baku accounted for 65.0% of the total number of tours sold, Central Aran district - 12.9%, Sheki-Zagatala-8.5% and Lenkoran-Astara - 6.7%. Thus, in the total amount of envelopes sold to foreign citizens, these four economic regions accounted for 93.1%, while envelopes issued to other regions together accounted for 6.9%. As we have already noted, the main advantage in this indicator, which we analyzed, was the city of Baku. But we should note that according to this indicator, we have regions with other names that use and do not use these envelopes sufficiently. In our opinion, the reason why these regions did not use these envelopes can still be justified by the unrest and unsuitability for travel caused by infectious diseases that persist from that time to this day in countries around the world [24].

The factors influencing the development of the tourism sector in the Republic of Azerbaijan include the number of tourists received, the degree of comfort of the services provided, the income and expenses of tourism enterprises, tourism logistics, as well as the number and level of professionalism of employees employed at enterprises of this type, etc [12]. Thus, the attractiveness of tourist sites and the high level of the service sector are important conditions for accelerating the reception of tourists. In order for a tourist to re-select an institution where he rested in subsequent years and return with positive impressions of this facility, it is necessary that he be attracted by the availability of facilities, nature, landscapes, high level and timely catering for tourists, the right choice of catering facilities and ensuring their accessibility, which is one of the important conditions.

From the analysis of tourist data, it can be seen that in 2017-2023, the number of tourists visiting the Nakhichevan region increased in 2017-2019, decreased by almost 8 times during the pandemic years, and only since 2022 has there been a relative increase. However, despite the growth in these years, so far it has been possible to receive up to 78.9% of tourists from 2019 [24]. It should also be noted that the weak growth of this indicator can be explained by the closure and still not opening of land borders with neighboring countries, as well as the fact that foreign tourists from Nakhichevan territories do not use transfers to other regions as passengers.

Looking at the global tourism statistics for 2024, let's analyze a few key results for 2023. For comparison, if in 2019 the number of tourists traveling around the world amounted to about 1,462 billion, then in 2024, from January to September alone, about 1.1 billion international tourist arrivals (with overnight stays) were registered, which indicates a high trend. According to experts, by the end of 2024, the total number of international tourists will exceed previous annual records. Let's consider the changes taking place in the number of international tourists by regions of the world (Table 2).

Table 2.**The level of international tourist reception by regions of the world in 2024**

Regions of the world	Recovery rate (in 2024 compared to 2019)	Key factors
The Middle East	122%	Visa accessibility reforms, high demand, implementation of major events: EXPO 2020, etc.
Africa	96%	The growth of domestic and inter-regional travel based on nature tourism
Europe	94%	Improved air service between the states, an increase in the number of cultural tourist trips
America	90%	Distribution of business, leisure and wellness trips
Asia-Pacific Region	65%	Gradual resumption of activity, increasing trends in ecotourism

Source: compiled by the authors based on [5; 14; 28]

A comparison of tourist arrivals in five regions of the world with the figures for 2019 shows that only the Middle East region was able to restore its previous level in 2024, even increasing the number of tourist arrivals by 22% [28]. In our opinion, the main key factors accelerating this growth may be the high requirements for reforms to simplify the visa regime between the states of the region, as well as the holding of global events (for example, Expo 2020).

Citizens coming and going to Azerbaijan use various modes of transport, which plays an important role in the development of the tourism-related transport sector (logistics). It is noted that higher efficiency of tourism is achieved in countries with a developed tourism sector if the ratio of the number of departing and arriving tourists is observed, approximately 5:1. From this point of view, it is considered an important issue for the effective operation of travel companies to bring the number of tourists traveling from our country to other foreign countries for travel, medical treatment and other purposes in line with the number of tourists accepted from abroad. In our opinion, as one of the priorities adopted in the document on the strategic development of the tourism sector in the country, leveling the difference between the number of incoming and outgoing tourists at the initial stages and reducing this difference at subsequent stages is one of the extremely important conditions for tourism enterprises in our country.

The development of various types of tourism is reflected in the relevant articles of the state program. In this context, the state program covers issues such as the design of a themed tourist center near Lake Batabat, the creation of the Ordubad theme park, the construction of a themed tourist center for the Batabat astrophysical Observatory, and the inclusion of tourism in the value chain [32]. Thus, the tourism infrastructure is an essential component of the successful functioning and sustainable development of the tourism sector. In the tourism sector, infrastructure not only determines the cost of a tourist product, but also has a direct impact on the quality and marketing of a tourist product [6]. Thanks to its formation, there is a more intensive development of tourist resources, the attractiveness of the destination increases, and the foundations are laid for the development of economic and socio-cultural spheres.

3.2. Hypotheses for modeling the relationship between the region's GDP and the factors influencing its growth

Definition of a group of factors. The study considers the following grouping of a set of possible factors influencing the region's GDP growth: I. The number of tourists people (NTP) (X_{i1}) and the number of overnight stays (X_{i2}) (NOS), overnight accommodation. II. Income (X_{i3}) (\bar{IE}), thousand manats and expenses (X_{i4}) (CE), thousand manats received from the service of tourists hosted in hotels in the region [10]. The formula of the linear regression model for studying the influence of selected factors of groups I and II on GDP is as follows [13]:

$$Y=a.X+b, \quad (1)$$

where: Y- is the number of observations of GDP growth in independent variables ($k=4$) ($N=14$); a are regression coefficients, $a=1,2, \dots, 4$. Data providing GDP growth in the region depending on the values of

groups of factors characterizing tourism activity, based on statistical data $N (I=1,2,..., n)$ for the period covering 2010-2023, the calculated values obtained using the "Vizual Studio Code" program are also shown in Table 3 [24, 25].

Table 3.

Initial data and calculation results

	y	x1	x2	x3	x4	ŷ
▶	1171305.7	287634	41906	2582.9	1811.1	1349152.5348
	1786341.6	305765	53798	3880.8	2702.1	2291445.2691
	2103424.3	329872	57800	4386.9	2863.6	2462045.6712
	2338927.7	342654	61552	4592.8	2920.4	2543946.2078
	2391004.2	361534	61733	4639.3	3058.6	2381111.4915
	2467422.4	389823	61879	4711.9	3202.7	2135460.8622
	2582361.4	403275	62054	5102.9	3310.4	2261151.1414
	2701663	413357	62156	5107.4	3312.8	2159471.4039
	2773020.5	414688	63264	5665.6	3014.8	2538820.5896
	2839650	415932	66089	6613.6	2999.3	3221487.1788
	2907810.5	51104	14009	1744.3	1049.5	2699684.5531
	3016315	51985	6917	2411.1	1490.2	2998569.4639
	2990130.1	205724	8166	4406.6	1871.1	2742804.0844
	1424277.8	328213	5096	4861.7	3198.9	1708303.7482
*						

Source: the calculation is based on [24, 25] data using the "Vizual Studio Code" program

As can be seen from the analysis of the calculated results, the influence of factors I ($X_1; X_2$) and II ($X_3; X_4$) groups taken separately on economic growth ($R_I^2=0.12615$ and $R_{II}^2=0.3109$) did not lead to a very high indicator. However, when choosing, it can be noted that the sphere of influence of perceived factors in the second group is higher than in the first. The result of this calculation shows that the combined influence of the factors that we select in both groups may lead to a higher adequacy of the model. Therefore, there is a need to explain the combined effect of the indicators adopted for the model.

Based on the data for 2010-2023, an econometric model (2) has been developed that ensures GDP growth in Nakhichevan Autonomous Republic. It fully covers subsequent years, reflecting all the indicators used to present the results of the analysis in a comparative form for 2010. In general, the model looks like this:

$$Y = a_0x_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + u, \quad (2)$$

where: a_0, a_1, a_2, a_3, a_4 -express the coefficients. To determine the magnitude of these coefficients in the calculation, we assumed that $x_0=1$. As a result of the calculation, we got:

$a_0=1760354,515$; $a_1=-10,5996$; $a_2=20,7959$; $a_3=672,3182$; $a_4=16,3508$; $R_m = 0,831464$; $R^2 = 0,69133$; $SE = 335519,92052$; $DW = 2,2315$.

Taking into account the values of the coefficients in formula (2), we obtain a general model (3) in the following form:

$$\hat{Y} = 1760354.515 - 10.5996 \text{ NTP} + 20.7959 \text{ NOS} + 672.3182 \text{ IE} + 16.3508 \text{ CE}. \quad (3)$$

As can be seen from formula (3), within the identified variable factors $X_1 - X_4$, only X_2 had a negative impact, while the role of other X_1, X_3, X_4 in the growth of the gross domestic product of Nakhichevan Autonomous Republic was positive.

Let's check and analyze the adequacy of the model (3) obtained based on the calculation using the program. This statistical check is performed according to the Darbin-Watson criterion. The statistical criterion is checked for the significance of $\alpha=0.01$ (1%) and $\alpha=0.05$ (5%). At this time, d_l and d_u are determined from a special table reflecting the value of the Darbin-Watson criterion. For the case under consideration, with a significance of 1%, the significance levels $d_l=0.441$ and $d_u=1.737$ are set, and for a

significance of 5%, the significance levels $d_l=0.69$ and $d_u=1.97$ are set. We check the econometric model reflecting the GDP growth of Nakhichevan Autonomous Republic for the presence or absence of autocorrelation, and this is done on the basis of three hypotheses [13]:

1. $DW > d_l$, provided that the hypothesis expressing the absence of autocorrelation in the model is not accepted.

2. For the condition $d_l \leq DW \leq d_u$, the hypothesis remains open, which means that the problem has not been solved.

3. In the case of $DW > d_u$, the hypothesis is accepted. In our study, the conditions $DW > d_u$, or $2.2315 > 1.97$ correspond.

The value of the Darbin-Watson statistic, corresponding to a significance level of 5%, suggests that the hypothesis of the absence of autocorrelation was adopted in the econometric model.

Forecasts expressing the volume of GDP of the autonomous republic can be solved by comparing the reported (socio-economic) and actual indicators of the region in order to achieve them. It should be noted that this well-established econometric model justifies itself in determining the dependence of the region's GDP in other sectors of the economy. The calculated values obtained from the model will make it possible to determine the optimal output by comparing the forecast and statistical values of GDP in Nakhichevan Autonomous Republic.

4. DISCUSSION

Some authors, exploring the key provisions of the Spatial Development Strategy of the Russian Federation until 2025, show the theoretical aspects, the key scientific foundations of an important state document: the concept of "center-periphery", or polarized development. The authors focus on the issues of spatial organization of settlement. As a result, they propose to consider the Strategy as a basic document, rather than as a set of specific recommendations for the socio-economic development of individual regions [9].

The paradigm of the Logistics school is based on an understanding of consistency, the importance of the role of logistics as a science of streamlining flow processes in business systems, including in the tourism system. Logistics is considered as a complex, interdisciplinary branch of scientific knowledge, having its own object, subject and methodology [2].

In some countries, including our country, people find time in constant motion from day to day, and this happens at a time when they, in turn, visit their chosen country, which requires guests to have a positive attitude towards the trip. That is why in the articles [3, 4] the authors note that people travel to country hotels, farms, countries, etc., having tourist facilities for organizing effective leisure, searching for ways and their application in life to achieve what they want. Some authors present a political economic model of economic growth, in which they conclude that distribution, educational policy, and economic growth are interrelated and determined endogenously [8].

The Karabakh region of Azerbaijan with an ancient history occupies an area with unique flora and fauna, cuisine, historical, cultural and religious monuments, springs, dense forests and other attractions that attract tourists. The organization of extreme tourism, agrotourism, and various types of "green" tourism in this region rich in natural resources is considered the main element of the state program. All this creates great prospects for the development of tourism in the territories liberated from the illegal occupation of Armenia.

Kelbajar district is an ideal place for winter ski tourism. In our opinion, the state program expects Shusha to become one of the symbols of Azerbaijani tourism. The Lachin State Reserve with an area of more than 21,000 hectares with rich flora and fauna, the mineral spring "Istisu" with medicinal properties will expand the tourist opportunities of these territories. Before the occupation, there were two large sanatoriums of All-Union significance in the village of Istisu in the Kelbajar district, where 50,000 people were treated and rested annually. Istisu mineral water was intended for both indoor and outdoor use. There was even a mineral water bottling plant. Currently, the disposal of water with medicinal value is underway. The topography of the Kelbajar region makes it possible to create the best "cable cars" in the world here. The potential of the region makes it possible to make it the largest tourist center in the Caucasus [34].

One of their key elements in the development of tourism in the camp is the provision with infrastructure, which includes mass facilities such as hotels, hotels, etc. It has been empirically established that information systems in the hotel business demonstrate economic viability and efficiency when they bring

additional income to the hotel, give competitive advantages in the market, increase market share, They reduce costs, improve the service process and increase the efficiency of both individual departments and the hotel as a whole. In addition, the introduction of such systems can radically transform the methodological, information and technological components of management processes, raising them to a qualitatively new and more efficient level, thereby significantly improving the quality of service in the hotel. The development of tourism is possible if there are recreational resources on the territory. Recreational resources include natural and cultural-historical sites that play a key role in the organization of tourism. When all these resources are offered to tourists as part of a tourist product, the qualities opposed to them come to the fore. At this time, tourist resources change their attractiveness, recreational value, etc., which should attract attention. However, if the country's tourism sector meets these requirements and is equipped with the necessary infrastructure, it can be offered for the selection of tourists.

The integration of historical and cultural values into the tourism industry will contribute to a high level of development of the type of cultural tourism with proper planning and implementation of a marketing strategy [18]. During the implementation of this process, we can carry out a number of activities aimed at the development of cultural tourism, the promotion of historical and cultural values, the preservation of these riches, and the correct assessment of the rich historical and cultural values of our country:

1. Creation of new models of cooperation.
2. Promotion and protection of cultural and historical values.
3. Organization of information events on cultural and historical values.
4. Development of cultural tourism routes and creation of new routes.
5. Ensuring sustainable links between the tourism and cultural industries.
6. Support the contribution of cultural tourism to the development of towns, villages and villages.

5. Conclusions

The socio-economic contribution of tourism to the economic life of the country is a typical example of the discussion. Since there are enough logical or scientific arguments for the development of the tourism industry, there is enough state support for the creation of tourist and recreational zones in the country.

Like the countries of the Central Asian region, Azerbaijan (including Nakhichevan Autonomous Republic) has an extensive historical and cultural heritage, unique cuisine and local traditions, a rich network of towns and villages and unique natural resources recognized beyond national borders. Thus, the number of international tourists accepted in the Autonomous Republic reaches the level of 2012-2015. However, the number of tourists accepted in 2023 amounted to 78.9% of the number that peaked in 2019 (415,932 thousand people), and amounted to 328,213 thousand people [24]. This suggests that the number of tourists wishing to travel to the region, even in a short period of time (1-2 years), will be able to exceed the level of 2019. Based on the analysis, it can be concluded that the econometric model constructed in the article justifies itself in determining the dependence of the region's GDP in other sectors of the economy.

In our opinion, this requires carrying out activities related to the development of tourism in the Autonomous Republic, the attractiveness of natural and religious monuments that support the development of tourism, as well as roads, hotels, etc. The presence of factors such as infrastructure renovation and compliance with standards will help achieve the intended goals.

REFERENCES

1. Abdullayev, K. etc. (2023). The Role of Digital Transformation in Building a Competitive Economy: a Case Study of Azerbaijan. *Economic Affairs* (New Delhi). 68, 705–710
2. Anikin B. A., Ermakov I.A., Belova S. (2015) // GUU Scientific School of Logistics. Management. Vol. 3, No. 2, 5-15
3. Babayeva L. I., Gulomkhasanov E. M. (2022). Logistics in tourism // *Scientific Progress*. -Vol.3, Issue 1, 471-474
4. Bozarov E., Babayeva L.I. (2021). The effectiveness and importance of clusters in the field of tourism // Vol.2, №6, 208-212
5. European Network for Accessible Tourism. (2025). Working together to make Tourism Accessible for All. Latest News
6. Comerio, N., & Strozzi, F. (2019). Tourism and Its Economic Impact: A Literature Review Using Bibliometric Tools / *Tourism Economics*. 25(1), 109-131

7. Hasanzade, U. (2024). The role of tour operators and travel agents in the sale of tourism products in Nakhchivan Autonomous Republic // *Annali d'Italia. Italia*, №61, 28-31
8. Haveman, R., Wolfe B. (1984). Schooling and economic well-being: The role of nonmarket effects / *Journal of Human Resources*. 1984, -19(3), -pp. 377-407
9. HRE University Creative Industries. What changes are expected in the tourism industry in 2025? Spatial development strategies of the Russian Federation for the period up to 2030 with a forecast up to 2036- [<https://creative.hse.ru/news/4746>]
10. İsmayilov V. etc. (2024). An econometric model of the dependence of economic growth of GDP on a group of factors. *Journal of Ecohumanism*. Vol.3.No 8, 12137-12150
11. Kabirow I. S. (2014). Attractive countries of the world for travel // *Proceedings of the Sochi State University*, No. 4, 91-95
12. Kolesnikov, A.M. (2017). Analysis of factors affecting the tourism services market development / *The economic vector*. №3 (10), 36-42
13. Kremer N.S. (2001). Probability theory and mathematical statistics. Moskou:UNITY. 543
14. Kartsan, P.I. (2021). Development of information technologies in the tourism sector / *Modern Innovations, Systems and Technologies*, 1(3), 22-29
15. National accounts of Azerbaijan. Statistical collection. (2024). The State Statistics Committee Of The Republic Of Azerbaijan. Baku, 130 P.
16. López, X. P, Fernández, M. F, Incera, A. C. (2016). The Economic Impact of International Students in a Regional Economy from a Tourism Perspective / *Tourism Economics*. 22(1), 125-140
17. Lextyanskaya, L.V. (2023). Indicators of the quality of tourist services / *Economi and business*. №6 (2), 9-13
18. Odarenko, T.E. (2016). The modern tourist market and its development prospects / *The Tauride scientific observer*, №1 (yanuar), 29-32
19. Raimova M. D., Makhatov S. I. (2021). Digital economy development priorities in Uzbekistan // *Journal of Central Asian Social Studies*. T. 2., №. 02, 160-168.
20. The CAREC Tourism Development Strategy 2030. (2020). Final draft for approval. Vision, guiding principles and priority tourism clusters. Moscow: INFO, 58
21. Toleuzhanova J.A. (2018). Economics of International tourism / *Elibrary, Conference Proceedings*. Penza, May 27, 41-43
22. Tang, C. F. (2020). The Threshold Effects of Educational Tourism on Economic Growth / *Current Issues in Tourism*. Vol. 24, №1, 33-48
23. TADVİSER. (2025) State. Business. Technologies
24. Tourism in Azerbaijan. Statistical collection. (2024). The State Statistics Committee Of The Republic Of Azerbaijan. Baku, 104 P.
25. World Tourism Ranking by Country 2024. <https://wptravel.io/world-tourism-ranking-by-country/>
26. Yakubova Sh. Sh. (2021). Innovative Approaches for Modeling the Impact of Monetary Policy on Economic Development // *Academic Journal of Digital Economics and Stability*, № 2, 311-318
27. Yun E.A., Maslennikova E.G. (2021). Resources of event youth tourism in Moscow // In the collection: *Modern problems of tourism and service*. Edited by O.E. Afanasyev, E.V. Yudina. - Moscow. 367-379.
28. <https://www.atorus.ru/article/desyat-samykh-trevozhnykh-turisticheskikh-napravleniy-v-mire-60349>. An electronic resource. Date of request: 11.06.2024
29. https://nakhchivan.preslib.az/az_d1.html. An electronic resource. Date of request: 18.02.2025
30. <https://www.atorus.ru/article/mezhdunarodnyy-turizm-v-2025-godu-mozhet-vyrasti-na-3-5-60438>. An electronic resource. Date of request: 11.06.2024
31. <https://www.atorus.ru/article/top-10-krupneyshikh-aviakompaniy-mira-60371>. An electronic resource. Date of request: 18.09.2024
32. <https://www.azerbaijan-news.az/az/posts/detail/naxcivan-turizmi-1644955107>. An electronic resource. Date of request: 02.11.2024
33. <https://real-statistics.com/statistics-tables/durbin-watson-table/> An electronic resource. Date of request: 02.09.2024
34. <https://azerbaijan.az/ru/related-information/223> . An electronic resource. Date of request: 18.09.2024