TOURISM POTENTIAL RANKING IN AZERBAIJAN BY REGIONS THROUGH THE ANALYTICAL HIERARCHY PROCESS

Mürsel Kaya[1]
İslam İSLAMZADE[2]
Mete SEZGİN[3]

Abstract: In recent years, it can be said that many types of tourism have emerged in Azerbaijan, as in the whole world. These types of tourism, which are important in diversifying tourism products, have proven their effectiveness in seeking innovation in tourism, increasing tourism awareness, keeping tourists away from noise and concrete life, natural environment and service quality. These types of tourism are developed in many regions of Azerbaijan and are actively used by tourists today. These types of tourism have an important place in the tourism potential of the country and regions. The main purpose of the study conducted in this direction has been determined as the discovery of the most prominent tourism region of Azerbaijan in terms of tourism potential with the AHP method. After the analysis of the data obtained, the region with the highest value in terms of tourism potential of the country was determined as the Baku-Absheron Tourism Region. The research has the quality to be a reference for future studies on this and similar subjects.

Keywords: Azerbaijan, Tourism Potential of Azerbaijan, AHP Method

INTRODUCTION

Every year, millions of people around the world leave their places and participate in various tourism activities for many reasons such as visiting different places, having fun, resting and meeting new people. The demand of people for tourism activities day by day increases due to factors such as the development of technology, the increase in human influence, freedom of movement, increased leisure time, high income, education levels, urbanization and the right to paid vacation. Expectations for tourism activities stem from the increase in demand volume.

[1]Lecturer PhD, Selcuk University, Silifke-Taşucu VSHE, Tourism and Hotel Management, murselkaya@selcuk.edu.tr
[2]Doktora Öğrencisi, Selçuk Üniversitesi, Sosyal Bilimler Enstitüsü, Turizm İşletmeciliği ABD, ,islamislamzade1996@gmail.com
[3]Prof. Dr., Selçuk Üniversitesi, Turizm Fakültesi, metesezgin@hotmail.com

This brings together different types of tourism. The realization of expectations from tourism activities depends on the increase in demand volume. Depending on the realization of these expectations, different types of tourism emerge.

Today, a sharp competition has arisen due to that the number of countries interested in the development of the tourism sector has increased, which makes it necessary to choose tourism as a subject for researching development problems and regional aspects in Azerbaijan. It should not be forgotten that all types of tourism have a certain social importance and positively affect people's living standards. At the same time, the diversity of tourism in the country is an important component of the state's strategic action plan. The development of tourism in the country contributes to economic growth, the development of regions, the renewal of social infrastructure, including improving the material well-being of the population, the treatment of the lower classes of the population and the satisfaction of social tourism needs. The first Karabakh war, which started at the end of the 20th century, had a very negative impact on the development of tourism and tourism types in the country. Because most of the country's alternative tourism potential was in areas damaged by the war and later occupied.

The aim of the study is to reveal the most prominent tourism region of Azerbaijan in terms of tourism potential with the AHP method. After the necessary literature review and research, criteria were determined for the evaluation of the tourism potential of Azerbaijan. It has been submitted to expert opinions for the correct comparison of the criteria of Transportation, Price, Natural Life, Cultural Structure, Climate, Accommodation Facilities, Tourism Diversity. In this direction, a total of 13 participants, including Tourism agency employees and University academic staff, were interviewed online. The collected data were subjected to pairwise comparisons in the "Super Decisions" program using the AHP method. After the analysis, it was concluded that the most influential region of Azerbaijan in terms of tourism potential is Baku-Absheron, and the lowest score is Lankaran-Masallı.

CONCEPTUAL FRAMEWORK

Importance of Tourism for Azerbaijan Economy

Tourism is an area of global importance in the modern world that regulates social and economic relations, creates relations between different countries and peoples, and expands the scope of commercial interests. In addition to being one of the most active forms of recreation and entertainment, tourism is also of great importance in the realization of many socio-economic, cultural, political and cultural functions. There is a great interest in the

development of tourism at the level of states and civilizations all over the world. For this reason, international financial institutions and organizations increase their interest and attention to the development of tourism (https://kafkazh.com/azerbaycan-iqtisadiyyatinda-turizm).

When Azerbaijan declared itself an independent state to the world in 1991, it faced many unprecedented political, military, social and economic problems. In the transition to a free market economy, he saw the future development of the Azerbaijani economy, and by taking bold steps in this direction, he enacted important laws that manage the economy in a stable manner and lead to the future. The sudden collapse of the economic structure, which made the dependency between the republics systematically obligatory in the USSR period, in the transition to the market economy; Production has come to a standstill due to the lack of an economic, political and legal infrastructure, the old technology, the lack of knowledge of the free market model, the loss of 20% of the lands as a result of the Armenian occupation, 1.2 million people becoming refugees in their own country, and so on. In this case, the initiative on the economy was completely lost (Islamzade, 2021: 67).

Tourism in Azerbaijan is becoming one of the most revenue generating sectors after the oil and natural gas sector. The increase in the number of foreign tourists visiting the country and the increase in the value of the money they spend here increase the role of tourism in the economy. Considering the statistics of tourism in the last 20 years, it is seen that important and positive results have been obtained. Its useful geography, natural resources, colorful climate, rich historical and cultural heritage also create additional opportunities for the development of tourism. At the same time, consistent and purposeful work to promote tourism in the country: "Tourism Development Program in Azerbaijan 2002-2005", "State Program for the Development of Tourism in Azerbaijan 2010-2014", "Tourism Development Program in Azerbaijan in 2011" Year", holding the International Tourism Fair (AITF) in Baku every year, improving the regulatory framework and management system related to tourism, etc. Congresses are an indication of the state's level of attention and care in this area. All this has created a fertile ground for the dynamic development of tourism in the country (http://www.anl.az/down/meqale/azerbaycan/2013/dekabr/340586.htm).)

Table 1. Annual Tourism Revenues in Azerbaijan

Years	Revenues *(Thousand Dollar)*
2014	2.431,533
2015	2.309,485
2016	2.713,789
2017	3.011,781
2018	2.634,163
2019	2.891,514
2020	244,117
2021	865,800

Source:(https://www.stat.gov.az)

As can be seen from Table 1, tourism revenues in Azerbaijan are increasing every year. However, tourism has been one of the sectors in which the Corona virus epidemic has had the most negative impact in 2020, as well as in the world, in Azerbaijan. The closure of international flights, land borders and the implementation of curfews in the country have rendered the tourism sector unusable. After the pandemic, tourism revenues in the country decreased by 85%. The abolition of restrictions and the reduction of the virus as of 2021 caused a revival in tourism.

Azerbaijan's Tourism Potential and Tourism Regions

In 2003, the Ministry of Youth, Sports and Tourism determined 7 tourism routes according to regions in order to accelerate the development of tourism in Azerbaijan, to bring the country's domestic tourism potential to the world market and to attract the attention of foreign tourists. Four of these, are considered as the main route and 3 as an additional route. The main tourist routes are Baku-Khachmaz, Baku-Balaken, Baku-Astara and Baku-Gazah, additional routes are Baku-Absheron Peninsula, Baku-Dalglik Karabakh, Baku-Nakhchivan. The domestic tourism potential of Azerbaijan is determined, first of all, by the favorable natural-geographical location, rich flora and fauna and beautiful nature of the regions. At the same time, the construction of recreation centers and hotels that meet modern needs in individual regions, and the creation of road and transportation infrastructure in recent years have increased the interest of both foreign and domestic tourists in these regions (http://www.anl.az/down/meqale/medeniyyet/2010/aprel/116654.htm).

Baku-Absheron Tourism region - has a favorable geographical location, settling in the east of Azerbaijan, on the coast of the Caspian Sea. The region specializes in faith, health, sports and congress tourism (Rahimov, 2007: 835).

Guba-Khachmaz Tourism Region - It is located in the north-east of Azerbaijan, on the Baku-Khachmaz tourism route. The region specializes in the field of recreation, entertainment and sports (Alimuradova , 2015: 32).

Lankaran-Masalli Tourism Region - This region, which has a subtropical climate, specializes in recreation, treatment, thermal and eco tourism due to its rich mineral waters and abundance of balneological facilities (Rahimov, 2007: 840).

Sheki-Zagatala Tourism Region - The city of Sheki, which is rich in mineral resources, mountain lakes and waterfalls, has a great potential for mountaineering, rafting, eco tourism, cultural tourism and entertainment tourism. "The Sheki Caravanserai hotels serve tourists (Alimuradova, 2015: 31).

Shamakhi-Ismayilli Tourism Region - This tourist area specializes in recreation, sports and cultural tourism (Alimuradova, 2015: 28).

Ganja-Gazah Tourism Region - Mountain, plateau, recreation, thermal, health, sports, rural and many alternative tourism types are shown as examples of tourism types developed in the region (Alimuradova, 2015: 29).

Karabakh Tourism Region - This region is specialized in Mountain and Winter, Health, Ecotourism, Thermal, Hunting, Faith, Sports tourism types. (Huseynov and Afandiyeva, 2007: 123).

Nakhchivan Tourism Region - The areas where tourism develops are mountain, cultural, historical and health tourism (İslamzade, 2021: 52). Recreation areas, hostels and tourist destinations have been created on the shores of Batabat and Kanlıgöl (Bilalov, 2005: 93-95).

Method

As a priority for the research, the necessary literature has been scanned and the current tourism potential and tourism regions of Azerbaijan have been researched, and important criteria have been determined for the evaluation of tourism regions. Priority aspects have been researched in order to rank the regions in Azerbaijan according to their tourism potential. After the examinations, it has been determined that more than one factor is effective for the evaluation of the tourism potential in Azerbaijan. In this direction, AHP (Analytic Hierarchy Process) method, one of the Multiple Criteria Decision Making

(MCDM) methods, was preferred for the necessary analysis because the AHP method offers the opportunity to evaluate by combining more than one criterion under a single title.

The Analytical Hierarchy Process was developed by Tomas L. Saaty in the 1970s. AHP is a decision making technique used to solve complex problems with many criteria. When decision makers have to make a decision about complex issues; AHP allows them to model this problem in a hierarchical structure that shows the relationship between the main target, criteria and sub-criteria, and alternatives (Özdemir and Demirer, 2015: 62).

One of the most important features of AHP is that the decision maker can include both objective and subjective perspectives in the decision making process. The main features of AHP are that it is comprehensive, simple and logical, intuitive, suitable for solving complex decision problems, sensitive and flexible, easy to explain for non-technical managers and useful for business decision making (Uğur and Sarıoğlu Uğur, 2019: 265).

AHP Method Stages

Stage 1: Establishing the Hierarchical Structure of the Research

Stage 2: Creating the Comparison Matrix

Stage 3: Determining Pairwise Comparison Matrices

Stage 4: Performing Consistency Analysis in Comparison

In general, AHP is based on three main steps: breaking down the problem and creating a hierarchy, making a comparative decision, creating a preference matrix, and synthesizing priorities.

Analysis of the Research

The aim of the study is to reveal which of the tourism regions of Azerbaijan stands out among certain criteria and the hierarchical sequence among them. In this context, a comparison was made among 8 tourism regions in Azerbaijan (Baku -Absheron, Sheki-Zagatala, Ganja-Gazah, Shamakhi-Ismayilli, Guba-Khachmaz, Karabakh, Lenkaran-Masalli, Nakhchivan). AHP method was used to make the comparison among regions. These 8 tourism regions were evaluated according to seven criteria (Transportation, Price, Natural Life, Cultural Structure, Climate, Accommodation Facilities, Tourism Diversity). AHP multi-criteria decision making method helps to reach the result easily through the Excel program and the "Super Decisions" program in electronic environment. Both methods are performed according to the steps shown below:

1.Determining the purpose,

2.Ordering the criteria,

3.Identifying alternatives,

4.Creation of hierarchical structure,

5.Determining the importance levels of pairwise comparisons for each level of the hierarchy, 6.Calculation of priorities by comparing alternatives according to criteria,

7. Compliance analysis,

8.Ranking of alternatives according to priority values,

9. Making sensitivity analysis (Akgöz et al., 2020: 55).

According to the stages shown above, the necessary questionnaire was created to rank the tourism regions of Azerbaijan with the AHP method. Research data were collected from Azerbaijan tourism sector workers and teachers who give university education in the tourism department. The data used in the research were obtained from 13 participants- 6 of them are online interviews with Tourism Agency employees operating in Azerbaijan and 7 of them are academic staff working at Baku State University. The collected data were recorded in the "Super Decisions" program according to the hierarchical structure shown below. In this direction, the AHP hierarchy model was created and the criteria affecting the tourism potential and the tourism regions of Azerbaijan were compared with each other (Figure 1).
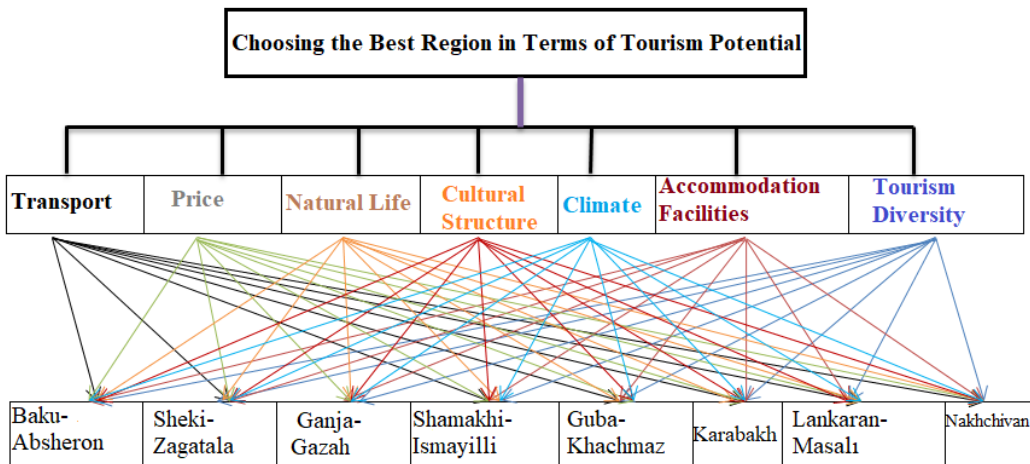
Figure 1. AHP hierarchy model

FINDINGS

The data obtained from the agency employees operating in Azerbaijan tourism and the academic staff of the University were transferred to the "Super Decisionss" program and subjected to the necessary evaluations. As a result of the evaluations, separate tables have been prepared for all tourism regions of Azerbaijan and the factors that are effective in the evaluation of tourism regions have been determined. While evaluating the tourism potential of the Baku-Absheron region, it is seen that the most effective criterion is Transportation. Other criteria that are effective in potential evaluation are listed as Accommodation Facilities, Cultural Structure and Tourism Diversity. While evaluating the tourism potential of the Sheki-Zagatala tourism region, located in the North and North West of Azerbaijan, the most important factor is Natural Life. The least effective criterion in this region is Price. The Ganja-Gazah tourist region is located in the North West and North of the country. The tourism potential of this region has gained more value according to the Price and Transportation criteria. The least effective factor in evaluating the tourism potential of the Ganja-Gazah tourism region was the Cultural Structure criterion. Natural Life and Climate criteria are the ones that see the highest value in the evaluation of the potential of the Shamakhi-Ismayilli Tourism region with a ratio of 0.192 and 0.161, respectively. The least effective factor in this region is that it is difficult to get to tourism destinations. Guba-Khachmaz tourism region is located in the North of Azerbaijan. In this region, the Natural Life and Climate criteria were evaluated the highest. Accommodation Facilities and Tourism Diversity ranks 3rd with equal proportion. Climate is the most effective criterion in the tourism of the Karabakh region. In the evaluation of the tourism potential of Karabakh, the Cultural Structure and Natural Life criteria take the 2nd and 3rd places, respectively. According to the data obtained from the participants, in the evaluation of the Lankaran-Masalı tourism region in the South of Azerbaijan, the highest value was the Price and the lowest value was the Cultural Structure criterion. According to the data received from the participants, Nakhchivan tourism region, another tourism region of Azerbaijan, has the highest value in terms of price criteria. The second most effective criterion in this region is Tourism Diversity. The climate criterion has the least share in the evaluation of the tourism potential of Nakhchivan. See Table 2.

Table 2**.** Factors Affecting the Evaluation of Azerbaijan's Tourism Regions

CRITERI A	REGIONS								
	Bak-Absh	Sheki-Zagata	Ganja-Gaza	Sham-Ism.	Guba-Khac	Kara b.	Lankara n-Masalı	Nakh ch.	Rate
Transport	*0.413*	*0.083*	*0.145*	*0.036*	*0.063*	*0.029*	*0.062*	*0.165*	**0.088**
Price	*0.025*	*0.047*	*0.193*	*0.104*	*0.075*	*0.107*	*0.196*	*0.249*	**0.054**
Natural Life	*0.020*	*0.256*	*0.055*	*0.192*	*0.174*	*0.175*	*0.057*	*0.065*	**0.073**
Cultural	*0.304*	*0.132*	*0.034*	*0.092*	*0.033*	*0.230*	*0.035*	*0.136*	**0.042**
Climate	*0.021*	*0.200*	*0.071*	*0.161*	*0.118*	*0.270*	*0.116*	*0.040*	**0.079**
Accomodation Facilities	*0.395*	*0.208*	*0.045*	*0.078*	*0.111*	*0.025*	*0.054*	*0.081*	**0.063**
Tourism	*0.212*	*0.093*	*0.053*	*0.061*	*0.111*	*0.200*	*0.037*	*0.230*	**0.081**

*In all paired comparisons, the inconsistency rate is below 0.1.

Table 3. Factors Affecting the Ranking of the Tourism Potential of the Regions in Azerbaijan

Criteria	Point
Tourism Diversity	0.259
Accomodation Facilities	0.252
Cultural Structure	0.156
Transport	0.145
Natural Life	0.089
Climate	0.057
Price	0.039
Inconsistency Rate: 0.063	

When evaluated in general, the results of the evaluation of the tourism potential of Azerbaijan by regions appear in Table 3. According to these results, Tourism Diversity is the most effective criterion in ranking the tourism potential of Azerbaijan with 0.259 points. In the second place is the Accommodation Facilities criterion with 0.252 points. Cultural Structure (0.156), Transportation (0.145), Natural Life (0.089), Climate (0.057), Price (0.039) are effective in the evaluation of tourism potential, respectively. Accommodation Facilities and Tourism Diversity criteria are very close to each other.

After researching the data collected from the participants, it was concluded that the Baku-Absheron tourism region is the most valuable region of the country in terms of tourism potential in ordering the tourism potential of Azerbaijan according to the tourism regions. According to the table prepared with the help of the AHP program, the Sheki-Zagatala tourism region is in the second place in the ranking. The tourism region with the lowest rate in terms of Azerbaijan's tourism potential was the Lankaran-Masallı region. The ranking obtained after the researches is given in Table 4.

Table 4. Ranking of Regions by Tourism Potential

Tourism Regions	Rate
Baku –Absheron	0.265
Sheki-Zagatala	0.148
Nakhchivan	0.142
Karabakh	0.134
Guba-Hachmaz	0.098
Shamakhi-Ismayilli	0.087
Ganja-Gazah	0.067
Lankaran-Masallı	0.056
Inconsistency Rate: 0.069	

In all of the comparisons, the inconsistency rate is below 0.1. Therefore, all of the judgments obtained as a result of the research were accepted as consistent.

CONCLUSION

Vacation is a time valued with various activities, primarily relaxation, entertainment and sightseeing. Although people's expectations from the holiday are different, the general view is as follows; They try to find attractions that can meet their expectations at the highest level. Although vacation is a set of activities that people prefer for psychological satisfaction, it is considered a luxury item. In this respect, the holiday preference of people is very important for them.

In this study, it is aimed to rank Azerbaijan's tourism potential according to regions with the AHP method. In this direction, the necessary literature review and researches were made and evaluation criteria suitable for the scope of the study were determined. In the AHP method, the tourism regions determined by the Azerbaijan Ministry of Youth and Sports were used to determine the alternatives in the decision-making process. In accordance with the decision making process of the AHP method, a hierarchy model was established in line with the purpose of the study. Experts were consulted in order to obtain robust data in the study. Data were collected after interviews with academic staff, such as the tourism agency employees operating in Azerbaijan and the tourism department of Baku State University. The "Super Decisions" program was used for pairwise comparison of the data with the AHP method. As a result of the analyzes made, it has been seen that the **transport** criterion among the factors affecting the ranking of the tourism potential of the regions in Azerbaijan is the most effective for the Baku-Absheron tourism region. At the same time, it has been determined that **Price** criteria for Ganja-Gazah, Nakhchivan and Lankaran-Masallı tourism regions, **Natural Life** for Sheki-Zagatala, Shamakhi-Ismayilli and Guba-Khachmaz tourism regions, and **Climate** criteria for Karabakh tourism region are more effective for tourism potential. Since the inconsistency rate obtained in pairwise comparisons was below 0.1, a second evaluation was not needed.

According to the results obtained in the evaluation of the tourism potential of Azerbaijan according to the regions, **Tourism Diversity** is the most effective criterion in ranking the tourism potential of Azerbaijan with 0.259 points. In the second place, **Accommodation Facilities** criterion takes place with 0.252 points. **Cultural Structure** (0.156), **Transport** (0.145), **Natural Life** (0.089), **Climate** (0.057), Price (0.039) are effective in the evaluation of tourism potential, respectively. At the same time, Accommodation Facilities and Tourism Diversity criteria have gained value very close to each other. In ordering Azerbaijan's tourism potential according to tourism regions, it has been concluded that the Baku-Absheron tourism region is the most valuable region of the country in terms of tourism potential. According to the results obtained with the help of the AHP program, the Sheki-Zagatala tourism region is located in the second place. The tourism region with the lowest rate in terms of Azerbaijan's tourism potential was the Lankaran-Masallı region.

REFERENCES

Akgöz, E., Ağgün, K., Eraslan, D. U., & Korkmaz, A. (2020). Kırgızistan'da Sosyal Değişimi Etkileyen Faktörler. *Türk Yurdu, 40*(394), 49-58.

Alimuradova, F. (2015). Turizmin inkişafının əsas istiqamətləri. *Azerbaycan Devlet İktisat Üniversitesi*.

Aslam, A. (2008). Türkiye'de Ekonomik Büyüme ve Turizm İlişkisi Üzerine Ekonometrik Analiz. *Munich Personal RePEc Archive, Paper No: 11611*, 1-11.

Bahar, O., & Bozkuer, K. (2010). Gelişmekte Olan Ülkelerde Turizm-Ekonomik Büyüme İlişkisi: Dinamik Panel Veri Analizi. *Anatolia: Turizm Araştırmaları Dergisi,, 21*(2), 255-265.

Bilalov, B. (2005). *Turizmin menecmenti.* Bakü: Mütergim.

Bodin, L., & Gass, S. İ. (2003). On Teaching the Analytic Hierarchy Process. *Computers & Operations Research, 30*(10), 1487-1497.

Huseynov, İ., & Afandiyeva, N. (2007). *Turizmin Esasları.* Bakü: Bakı Neşriyatı.

İslamzade, İ. (2021). *Azerbaycan'da Alternatif Turizm Çeşitlerinin Turizm Potansiyeline Ekonomik Etkileri Üzerine Bir Araştırma.* Konya: Selçuk Üniversitesi Sosyal Bilimler Enistitüsü.

Özdemir, A., & Demirer, B. (2015). Analitik Hiyerarşi Süreci ile Ağırlıklandırılmış Dinamik Programlama Modelinin Satın Alma Sürecine Uygulanması. *AKÜ İİBF Dergisi, 17*(1), 61-69.

Özen , F. (2017). Türkiye'de Turizm Sektörünün İktisadi Büyüme Üzerindeki Etkisi. *ECONDER International Academic Journal, 1*(2), 96-110.

Rahimov, S. (2007). Turizm makalesi. *Azerbaycan Milli Enisklopedisi*, 832-842.

Serkan, D., & Kesgingöz, H. (2016). SWOT Analysis of Safranbolu City in Terms of Tourism. *International Journal of Research in Business and Social Science, 5*(1), 54-64.

Sonel , E., Gür, Ş., & Eren , T. (2019). Çok Ölçütlü Karar Verme İle Sağlık Turizminde Şehir Seçimi ve Analizi. *Uluslararası Global Turizm Araştırmaları Dergisi, 3*(1), 27-39.

Uğur, U., & Sarıoğlu Uğur, S. (2019). Tatilde Nereye Gitsek? Turizmde Analitik Hiyerarşi Süreci Yöntemi ile Destinasyon Seçimi. *Türk Turizm Araştırmaları Dergisi, 3*(3), 261-270.

Internet Resources

http://www.anl.az/down/meqale/azerbaycan/2013/dekabr/340586.htm. Retrieved Date: 06
        28, 2022

http://www.anl.az/down/meqale/medeniyyet/2010/aprel/116654.htm. Retrieved Date: 06
        28, 2022

https://kafkazh.com/azerbaycan-iqtisadiyyatinda-turizm. Retrieved Date: 06 28, 2022

https://www.stat.gov.az. Retrieved Date: 06 28, 2022