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## Scientific Analysis of Development Resources and Economic Indicators of Sheki-Zagatala Economic-Geographical Region (On Balakan Region)

### Abstract

The article provides information about the geographical features of the economic and geographical region of the economic and geographical region of the economic and geographical region of Azerbaijan, the characteristics of the existing environmental situation. Zagatala State Nature Reserve, located in the north-western region of our country, was noted about the types of flora and fauna protected in the reserve. In addition, the highlights in the economic and geographical region are recorded and reported on the existing rocks here. These monitoring works serve to analyze the environmental situation in the Sheki-Zagatala economic and geographical region, to reveal a broken balance. Agriculture, especially tobacco growing, nut growing, vegetable growing, grain growing, and cattle breeding are the main directions in the formation of the region's economy. In recent years, reforms in the agricultural sector, increased subsidies and new technological approaches have created conditions for increasing productivity. In the field of industry, Balakan is more specialized in food and processing industry. Hazelnut processing enterprises, flour and bread production, fruit and vegetable canning production are the main components of the added value chain created in the region. The presence of favorable conditions for the development of small and medium enterprises in the region also encourages the expansion of the sector. The share of tourism in the economic development of Balakan region is increasing. Natural-climatic resources, opportunities for ecotourism and rural tourism, as well as the border-geographical position determine the increase in the flow of tourists. Infrastructure projects – renewal of highways, construction of social facilities, expansion of service areas – serve to increase the overall economic potential of the region. In general, the economic indicators of Balakan region show that the region has formed an agrarian-oriented, sustainable, economic structure based on natural resources. The current investment programs and modernization of agricultural production lay the groundwork for the further acceleration of socio-economic development in the region.

**Keywords:** *economic and geographical, ecological, zagatala, reserve, environmental balance*

## Introduction

Sheki-Zagatala economic-geographical region located in the northwest of the Republic of Azerbaijan occupies an important place in the country's economic regionalization system with its natural-geographical conditions, rich natural resources, ancient cultural heritage and specific economic specialization. The region is located between the southern foothills of the Greater Caucasus Mountains and the Alazan-Eyrichay valley, and is characterized by both geomorphological diversity and favorable natural and climatic factors (1). These characteristics created the basis for the historical development of the region's agriculture, especially hazelnut growing, tobacco growing, viticulture and beekeeping. Sheki-Zagatala economic region, being one of the important industrial-agricultural complexes of the republic, is distinguished by agrarian-oriented specialization, extensive development of small and medium-sized enterprises, and the transit-geographical position of the region (Budagov, 2007, pp. 100-104). At the same time, the region is globally recognized for its tourism potential, especially the cultural heritage of the historic city of Sheki, natural landscapes and ecotourism opportunities. The settlement system of the population of the economic region, the structure of labor resources, socio-economic dynamics and intra-regional relations are one of the important analytical directions in its economic geographical study (Gafarbeyli, Garayev, 2025, pp. 1-7). In recent times, the renewal of infrastructure, modernization of the agricultural sector, and the increase in the production of export-oriented products (nuts, honey, tobacco products, etc.) strengthen the economic future of the region. From this point of view, Sheki-Zagatala economic region is of strategic importance both in the regional development strategy of Azerbaijan and in the processes of international economic integration (Garayev, 2023, pp. 21-26).

Sheki-Zagatala economic region also has a strategic position in the country's settlement system, it shows regional identity different from other regions of the republic in terms of demographic potential, structural characteristics of labor resources and level of urbanization. The modernization of the transport and communication infrastructure in the region in recent years, the development of the processing industry, the expansion of the production of export-oriented agricultural products have increased the competitiveness of the economic region, and strengthened its role in the socio-economic development strategy of the country (Garayev, 2023, pp. 41-44).

### Research

During the nine months of 2025, the value of the total product at actual prices was 249,234.5 thousand manats, which decreased by 0.7 percent compared to 2024. Of the 249,234.5 thousand manats produced, 23.0 percent was produced in industry, 0.7 percent in construction, 41.5 percent in agriculture, forestry and fishing, 2.9 percent in transport and storage, 1.2 percent in information and communication, and 30.7 percent in trade and vehicle repair. In the reporting year, the cultivated land in the region reached 14,096.5 hectares, of which 1,431.6 hectares were autumn crops (573.2 ha of wheat, 838.4 ha of barley), and 12,664.9 hectares were spring crops. 1106 ha of vegetables, 287.0 ha of potatoes, 79 ha of beans, 7938.4 ha of corn, 3414 ha of fodder crops and 43.5 ha of tobacco are the summer crops (Garayev, 2025, pp. 38-41). In 2025, the demand for combine harvesters was met in the grain harvesting season, the harvest was completed at the optimal time, and 4586 tons of crops were harvested from the fields. After grain harvesting, re-planting of corn on 229.1 ha area was ensured. Normal agrotechnical care was provided to the fields, pest and weed control measures were implemented, and additional work was done to increase the productivity of the summer and replanting areas (Landscape map of the Republic of Azerbaijan (scale 1:500,000), 2017).

As a result of our scientific research in the region, we would like to present the following analyses:

**M Ə H S U L B U R A X I L I Ş I**

**İQTİSADİYYATIN ƏSAS SAHƏLƏRİ ÜZRƏ MƏHSUL BURAXILIŞI**

*min manatla*

İllər	Əsas sahələrdə məhsul buraxılışı	O cümlədən							
		İstehsal sahələrin buraxılışı	ondan			Xidmət sahələrin buraxılışı	ondan		
			Sənaye	K/t, meşə təsərrüfatı və bəhqəliq	Tikinti quraşdırma işləri		Nəqliyyat və anbar təsərrüfatı	İnformasiya və rabitə	Ticarət və xidmətlər
2018	202228,8	123835,4	28914,1	73052,1	21869,2	78393,4	5198,9	723,8	72470,7
2019	225334,6	142633,3	48344,7	79077,3	15211,3	82701,3	5470,2	780,8	76450,3
2020	250381,8	170702,3	53865,3	83197,9	33639,1	79679,5	2947,4	838,6	75893,5
2021	244344,5	158597,8	58333,6	91820,0	8444,2	85746,7	4406,8	987,6	80352,3
2022	297811,3	198465,5	60944,2	115805,7	21715,6	99345,8	5946,9	1061,8	92337,1
2023	317616,4	209306,5	77919,2	128757,8	2629,5	108309,9	6184,3	1331,9	100793,7

**HƏR NƏFƏRƏ DÜŞƏN MƏHSUL BURAXILIŞI**  
*cari qiymətlərlə, manatla*

2018	2019	2020	2021	2022	2023
2065,0	2312,1	2546,5	2466,2	2984,1	3162,1

**Figure 1.** Statistical data of some economic indicators of Balakan region are given

Dynamics of product release in Sheki-Zagatala economic-geographic region (2018-2023):  
Scientific Analysis

Statistical indicators for the years 2018-2023 demonstrate that the economic activity of the Sheki-Zagatala economic-geographical region is moving along the trajectory of sustainable development both in terms of scale and structure. The total volume of product release in six years is 20.2 billion. 31.7 billion manats. Increased to AZN, forming a significant 56-58% increase in the production potential of the economic region. This growth can be assessed as a result of parallel development of industry, agriculture, service sector and trade-infrastructure complex in the region (Mammadov, Imrani, Aghabalayev, Zeynalov, 2025, pp. 581-590).

1. Growth trend of total output

According to the data, the total volume of production in the region has shown a consistent increase for all years:

2018: 20,223.8 million manats

2020: 25,031.8 million manats

2023: 31,761.6 million manats (Mustafabayli, Latifov, Rahimov, Aghabalayev, Suleymanov. 2020, pp. 167-168).

This dynamic shows that economic activity has stabilized, investment attractiveness has increased, and structural renewal has taken place in the regional economy (Mustafabayli, Latifov, 2019, pp. 22-28). Acceleration of growth, especially during 2021-2023, can be associated with the

recovery of economic activity in the region in the post-pandemic period (Mustafabayli, Latifov, Rahimov, Aghabalayev, & Suleymanov, 2019).

## 2. Development of industry and production areas

While the industrial output was 28,914.1 million manats in 2018, it increased to 77,919.2 million manats in 2023.

This means an increase of approximately 2.7 times, which indicates extremely dynamic industrial development for the region (Mustafabayli, Latifov, Rahimov, Aghabalayev, & Suleymanov, 2020).

This increase can be explained by the following factors:

- ❖ Expansion of the activity of processing enterprises in the food industry;
- ❖ Industrialization of the processing of nuts, honey, tobacco and other agricultural products;

Improvement of production infrastructure and logistics capabilities (On improving the activities of libraries in Azerbaijan: Decree of the President of the Republic of Azerbaijan, 2007).

3. The role of the agriculture, forestry and fishing sector The agricultural sector remains one of the leading functional areas of the economic region.

In 2018, the output of this field was 7,305.2 million manats, and in 2023 it was 12,875.7 million manats .

This increase:

The expansion of hazelnut farming as an export-oriented field, the increase in the number of beekeeping farms,

It is related to the increase of productivity in seed production and crop production. The region's natural and climatic conditions, land resources and settlement system create a favorable basis for the sustainable development of agriculture. Expansion of service areas and trade. While the volume of products released in service areas was 7,839.4 million manats in 2018, it reached 10,830.9 million manats in 2023. This is in the region:

Revitalization of tourism activity, development of public catering and hotel sector,

Related to the expansion of transport and logistics services. The trade and services sector has also shown consistent growth: 7,247.0 million manats in 2018, and 10,079.3 million manats in 2023 (Regional geographical problems of the Republic of Azerbaijan: Balaken district, 1999). Transport, storage and information-communication sectors. In the years 2018-2023, the production output in transport and storage industry increased from 518.9 million manats to 618.4 million manats, and in information and communication from 723.8 million manats to 1331.9 million manats. If the growth in these areas is related to the increase in economic activity on the one hand, it is explained by the digitalization processes and the application of information technologies on the other hand (Yusifova, Aghabalayev, Babayeva, Vysotskyi, 2025, pp. 3-11).

## 4. Output per capita

In 2018, the output per person was 2065.9 manats, In 2023, this indicator reached 3162.1 manats. This indicator reflects that the economic well-being of the region's population has increased, production efficiency has increased, and the economy has entered the expansion phase (State Program on socio-economic development of the regions of the Republic of Azerbaijan (2004–2008), 2004).



**Figure 2.** *Employees of the Azerbaijan National Academy of Sciences, Sheki Regional Scientific Center, Department of Ecological Geography collecting economic and statistical data in Balakan region (Oktyabr 2025).*



**Figure 3.** *Employees of the Azerbaijan National Academy of Sciences, Sheki Regional Scientific Center, Department of Ecological Geography collecting economic and statistical data in Balakan region (Oktyabr 2025).*

### Conclusion

This study reveals the following results based on the analysis of the socio-economic indicators of Balakan region. The economy of the district is mainly agrarian, based on crop (especially nuts,

tobacco, dates/persimmons, corn) and animal husbandry sectors; The share and structure of agricultural products has been increasing in recent years. The importance of the agricultural sector in the total output of the district is high, and the volume of production has increased in recent years — local executive authorities and statistical sources have recorded an increase in the volume of agriculture and total output in the district (for example, reports on increases in total output and agricultural output). This shows that the natural resource potential of the region (fertile lands, forest resources, water resources) is used to a certain extent. The industrial sector in the region mainly serves the processing of agricultural products — there are hazelnut and other fruit and vegetable processing, canning, tobacco fermentation and small industrial enterprises. However, the industry's value chain is not yet fully verticalized: high value-added processing and export-oriented production volumes are limited, so expansion of processing areas is important to increase both employment and regional profitability potential. As a result of infrastructure and investment policies, socio-economic indicators have improved in recent years; the development of local infrastructure (transportation, irrigation, processing facilities) and state programs of the regions can strengthen the investment flow. However, for sustainable economic development, it is important to target infrastructure projects, improve the investment climate and support small/medium enterprises. Social indicators — population structure and regional employment — play an important role in directing economic sectors. The fact that the majority of the population in Balakand lives in rural areas and the relatively high share of the young generation creates an opportunity for the modernization of agricultural fields, vocational training and increasing business awareness. In this regard, investment in human capital (training, agro-consultation, technical knowledge) should be a priority.

Offers (short and priority directions)

1. Verticalization of agro-processing and strengthening of the value chain: supporting processing enterprises, packaging and branding activities for nuts, dates and other local products.

2. Targeted infrastructure development: reducing crop losses and improving market access through roads, irrigation systems and cold chains.

3. Financial and technical support of small and medium enterprises — formation of cooperatives, credit and insurance mechanisms, agricultural training programs.

4. Integration of tourism and ecotourism opportunities: creation of additional sources of income through mountain-forest resources, festivals and cultural events.

As a result, the economic potential of Balakan region—rich natural resources, traditional specialization in agriculture, and demographic structure—can be translated into higher growth rates through strategic investment and policy measures. The main priorities should be strengthening of agricultural processing, targeted modernization of infrastructure and investments in human capital; these directions will increase the sustainable development of the region and regional competitiveness.

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