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Turkana Aliyeva

PhD Student, Nakhchivan State University,
Nakhchivan city, Nakhchivan AR, Azerbaijan

e-mail: turkanaliyeva1111@gmail.com, <https://orcid.org/0000-0003-2595-6669>

DIRECTIONS OF URBAN SETTLEMENT REGULATION IN NAKHCHIVAN ECONOMIC DISTRICT

The article examines the impact of the transport blockade of the Nakhchivan economic region on the socio-economic development of cities, as well as on demographic development. In addition to weak urbanization in the Nakhchivan economic region, the problem of vertical urbanization caused by harsh climatic and relief conditions has been studied in the economic-geographical aspect. For this purpose, the composition of the population employed in the economy of the economic region was studied, the current state of the manufacturing industry and its impact on urban settlement was determined. The problem of the shortage of urban economic territories is analyzed and the importance of the effective use of natural conditions and natural resources of administrative districts in regulating the settlement system is investigated, as well as the measures necessary to ensure a sustainable settlement have been analyzed.

A multimodal strategy that incorporates industrialization policies, sustainable development plans, and ecological concerns is needed to solve the issues raised by urbanization. Mitigating the environmental impact of cities requires building an ecological infrastructure and promoting a harmonious interaction between urban regions and the surrounding countryside. A vital part of this effort is preserving biodiversity and developing sustainable urban environments. Putting policies in place to limit the geographic growth of cities contributes to the preservation of agricultural land, biodiversity, and ecological integrity. This calls for the creation of efficient urban expansion plans and the deployment of land use regulation instruments.

Keywords: *regulation of settlement, urbanization, farm areas, urban population, economic district.*

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1. Introduction. In the Nakhchivan economic region, the influence of natural and economic factors on the transformation and placement of settlements is varied. Despite the arid continental climate, the socio-economic development measures implemented in our country recently have shown their positive effect in many areas. Developing government initiatives and implementing strategic plans to guarantee sustainable development has been recognized as one of the most effective moves in this area. In addition to the rise in employment, there has been significant work done on the issues surrounding the water supply, as well as improvements to the transportation infrastructure and the quantity of service facilities.

All these measures have created stable trends in demographic development. The increasing role of natural increase in population growth has made the process of migration desirable. These procedures are essential to socioeconomic growth of the Nakhchivan Autonomous Republic, located in an enclave geographical location. The Nakhchivan economic region includes Sharur, Babek, Ordubad, Shahbuz, Kangerli, Julfa and the Nakhchivan administrative-territorial district. There are 6 cities, 9 towns and 203 villages. The area of the region is 5.5 thousand km², the population is 464 thousand people.

The share of the economic region is 6.4% of the country's territory and 4.5% of its population (2023). Nakhchivan is the only city with a population of more than 50 thousand people in the Nakhchivan Region. Currently, 61.9% of the city's total population is concentrated here (2023).

Nakhchivan is one of the weakly urbanized regions of the economic region. 35.4% of the region's population lives in cities, 64.6% lives in villages (2023). Also, the bulk of the urban population lives in small towns. As in many developing countries of the world, there are contradictions in the settlement system in our country. In the Nakhchivan Autonomous Republic, spontaneity arose in the settlement system as a result of the difficulties of the transition period and the ongoing formation of economic independence, as well as the weakening of urban sectors of the economy. The resources available in administrative districts are not fully utilized in the economy, so the functional structure of many small urban settlements has changed. Cities, which occupy a dominant position in comparison with surrounding settlements, differ from rural settlements in their large population and the importance of the functions they perform. Yet, a sizable portion of urban residents is employed in agriculture as a result of the absence of industrial firms.

In the Nakhchivan Autonomous Republic, owing to the difficulties of the transition period and the continuous formation of economic independence, the weakening of the city-forming economic sectors, spontaneity arose in the settlement system. The available resources in the administrative regions are not fully involved in the economy. Therefore, the functional structure of many small urban settlements has been changed. Because of the absence of industrial enterprises, a significant part of the city's population is engaged in agriculture. In this regard, labor resources are also inefficiently used.

2. Methods and Materials. Statistical bulletins and collections of the State Statistics Committee in the field of industry, agriculture, population employment were used as a statistical base in conducting the investigation. With the help of these statistical materials and scientific literature, the effects of socio-economic development problems on urban settlement in the economic region of Nakhchivan were investigated. Mathematical, statistical, comparative analysis and cartographic methods were widely used during the analysis.

3. Findings. Encouragement of settlement in our nation, control and management of their growth, efficient use of labor resources, removal of barriers to human settlement growth and resolution of related issues, and enhancement of the territorial organization of urban settlements within the nation- particularly in its remote areas- are all necessary to promote the growth of these settlements. To be helpful, major cities should be regulated at the same time as small and medium-sized cities are developing. Even though there has been talk about this problem since the latter part of the 20th century, the imbalance that results from big cities' fast expansion is still present today.

Finding the economic-geographical paths for the restoration of the Unified Settlement System in the Nakhchivan economic region is the primary objective of the study, to regulate urban settlement, to develop urban industrial farms taking into consideration consumer potential, and to strategically place the productive forces by efficiently utilizing labor resources. The assignments for this are as follows.

1. Determination of the economic structure of cities.

2. Identifying natural-geographic conditions and natural resources and assessing their role in the settlement system.

3. Determining ways to restore the balanced development of cities, as well as studying the role of surrounding areas in development.

4. Discussions and Results. As in our country, the geographical landscape of urbanization in the Nakhchivan economic region has different quantitative and qualitative characteristics. The population of small towns migrates due to the problem of unemployment. As a result, labor resources are being reduced. This further weakens the economy of small towns. Solving the problems of settlement and socio-economic differentiation in the economic region of Nakhchivan is possible only by preparing projects for the revival of small towns. Cities have a unique influence on how surrounding areas develop. One of the primary objectives of member states, "Ensuring inclusive, safe, sustainable, and sustainable

cities and human settlements" was one of the seven key subjects discussed at the United Nations Conference on Housing and Sustainable Urban Development (UN-Habitat) on October 17–20, 2016. For this purpose, according to the Decree of the President of the Republic of Azerbaijan dated September 30, 2023, funds were allocated from the 2023 state budget to the UN Habitat Program in order to support the expansion of useful cooperation towards the development of sustainable cities in the world, strengthening peace and security (UN-Habitat, 2023:178). The main priorities for ensuring sustainable urban development and achieving this goal are the development of an effective urban governance structure, the introduction of new technologies in urban planning and the development of urban space, and the creation of reliable financing mechanisms.

The economic region has 6 cities with a population of 137.2 thousand people (2020). These cities include 1 large city and 5 small cities. Nakhchivan is a big city. The proportion of the region's urban population that lives in cities is steadily declining. Thus, the population of Nakhchivan in 1999 was 66.5%, in 2021 - 51.7% (Eminov, 2005:45]. Large, medium, and small cities should be arranged in a hierarchical framework to preserve a balance in the locations of the cities in the region. The likelihood of Nakhchivan's continued growth will also foster the circumstances necessary for it to grow into a major metropolis soon. Urbanization was growing at a faster rate than in other economic zones. Large villages were granted town status and some were combined into cities, which is the reason for the sharp increase in the percentage of the people living in urban areas. Increasing the significance of small towns within the settlement system ought to be the primary strategic objective. The primary requirement is the development of territory. Through the efficient use of local labor and natural resources, the proper territorial organization of productive forces will foster the circumstances necessary for the economic region's complete growth. Big cities can unite the productive forces of small towns. Regional disproportion arises in the settlement system within the autonomous republic. The economic approach to these problems is carried out in two ways. Thus, the process of creating enterprises stops where decentralization is necessary, or the number of production enterprises and labor resources increases in poorly developed and developed territories.

By combining demographic strategy with socioeconomic development considerations, it is feasible to control the quantity and quality of population settlement. Settlement efficiency is carried out extensively and intensively (Eminov, 2005, p. 507). Since Nakhchivan economic region belongs to the group of economic regions with good territorial potential in terms of absorption and prospective settlement, the problem of extensive development in the efficient organization of settlement is eliminated (Mammadov, 2006:158). Extensive development is, however, somewhat hampered by issues including historical shifts in the population's working habits, challenges with irrigation, salinization, widespread badland regions, degradation processes, and a decline in the processing of agricultural goods.

Improvement of economy, urbanization weakens the factors of natural conditions that prevent settlement. Efficient territorial organization of production has a special role in equal distribution of productive forces in the territory. Ecistic (settlement) policy, which is the geoplanning of the settlement, is directed to the efficient use of the territory through the optimal distribution of the settlement in the area along with production and service areas.

Thus, land resources in cities and villages are used economically. Although environmental policy is considered relevant for countries with small territories, it should be considered relevant because it creates conditions for economical use of funds in large countries as well. The current political and geographical situation of the Nakhchivan economic region requires a more attentive approach to the more effective use of the territory and the creation of a settlement system. Prospective resettlement of the population of the Nakhchivan economic district should be limited to the Arazboy plain, especially in the Sharur-Ordubad plain, and should be stimulated in mountainous areas. Also, the lack of distance between the city of Nakhchivan and other administrative districts creates a migration process. Enterprises and social and cultural objects are not developed in administrative district centers. This accelerates population migration to the city of Nakhchivan. As a result, the city of Nakhchivan is expanding at the expense of adjacent territories. Thus, the territorial organization of the social sphere in administrative district centers should be regu-

lated. The main institutions of periodic and episodic service of the population are located here. While this area is being developed in the autonomous republic, one of the primary issues in this economic zone continues to be housing supply, which is needed to improve the standard of living for the populace.

Effectively increasing the economic potential in the cities and towns of the economic region is one of the main regularities of the territorial organization of productive forces (Mammadov vb, 2006:8). However, problems such as the absence of integrated farming in the cities and towns of the Autonomous Republic, the export of refined polymetallic ore, the non-operation of food and light industries, the lack of industrial enterprises, or the inability of the produced products to meet market requirements have led to inefficient use of local labor resources and natural resources. Urban settlements that previously specialized in agricultural areas such as wine, tobacco, cotton or mining now became dependent on agriculture. As a result, the attractiveness of cities has decreased. Therefore, the process of de-urbanization was modest, while the expansion of the urban population is unequal among administrative areas; the percentage of the urban inhabitants in the Ordubad and Sharur districts dropped in respect to the overall population. Between 2000 and 2020, the proportion of the population living in cities in the autonomous republic's districts of Babek, Shahbuz, Kengerli, and Sadarak grew comparatively, while it declined in other districts.

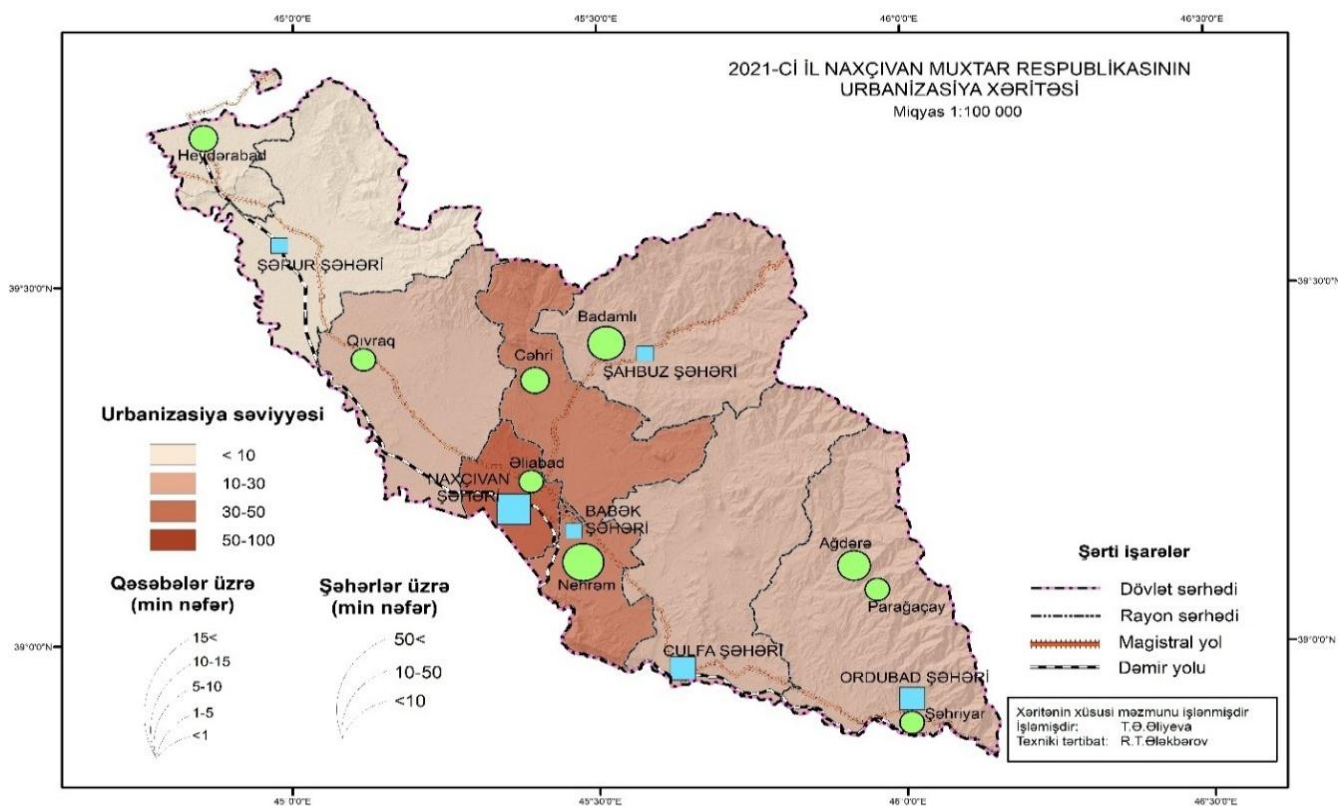


Fig. 1. Urbanization process in Nakhchivan economic district

In Nakhchivan economic region, the rural population forms the bulk of the total population. Also, due to the lack of industrial enterprises in small cities and

towns, a large part of the urban population is also engaged in agriculture. Consequently, when the employed population is broken down by economic sectors, the

proportion of workers in agriculture is the largest at 50%, while the proportion of employees in industry is only 6.2% (Figure 1). The share of employees in the service area and construction is also high in the economic region. As a consequence, when it comes to the employment rate by economic sector, the agricultural sector employs the greatest percentage of people, while the industrial sector employs the smallest. Economic region

(50%) falls on the sphere of agriculture, forestry and fisheries, 21% on the service sector, 7.7% on industry, including 6.2% on the processing industry, 0.3% on the mining industry, 0.75% for electricity, gas and production, distribution and steam supply, 0.6% work in water supply, waste treatment and recycling, 10.4% work in construction, 8.3% work in trade, car repair and 6. 1% work in education (2020).

Table 1

In 2020, the share of the employed population in the distribution of types of economic activity by economic regions, in percentage

	Azerbaijan Rep	Baku	Nakhchivan	Absheron - Khizi	Upper Shirvan	Ganja - Dashkesen	Garabagh	Gazakh - Tovuz	Guba - Khachmaz	Lankaran - Astara	Central Aran	Mil - Mughan	Shaki Zagatala	Eastern Zangazur	Shirvan Salyan
Agriculture, forestry and fishing	36,3	6,1	50	13,8	48,8	30,1	48,7	53,6	54,5	58,5	42,9	52,5	52,5	43,8	41,7
Industry	7,3	11,1	7,7	13,1	3,8	9,4	3,7	4,8	4,7	3,4	5,9	5,1	4,9	3,2	8,6
Mining industry	0,8	2,3	0,3	0,4	0	0,7	0,1	0,4	0,5	0,1	0,2	0,3	0,2	0	1,5
Processing industry	5,3	6,5	6,2	11,9	2,9	7,8	3,2	3,8	3,5	3,4	4,6	4,1	3,9	3,1	5,7
Electricity, gas and steam production; distribution and supply	0,6	0,9	0,7	0,7	0,5	0,6	0,3	0,4	0,6	0,3	0,7	0,4	0,5	0	0,8
Water supply, waste treatment and processing	0,6	1,4	0,6	0,8	0,4	0,4	0,2	0,2	0,2	0,2	0,4	0,3	0,3	0,2	0,6
Construction	7,3	9,3	10,4	10,7	6,6	5,5	7,5	4,8	5,2	4,7	7,1	7,4	4,4	8,7	7,1
Transport, communication and warehousing	5,4	10,8	4,2	7,3	3,3	6,3	2,6	2,3	3,1	2,9	4,1	3,3	2,9	1,8	4,4
Education	8	8,5	6,1	6,4	7,8	8	8,4	7,1	7,1	7,2	8,3	6,9	9,1	10,8	6,3
Trade; vehicle repair	14,1	15,6	8,3	25,9	13,4	21,3	13,6	11,2	11,3	10,6	12,4	9,6	11	17,8	13,8
Service sectors	21,6	38,8	21,7	22,3	43,9	19,3	15,5	16,2	14,3	12,1	18,4	15,2	15,3	14,1	18,1

Source: SSC of the Republic of Azerbaijan

In the context of the "Regional Socio-Economic Development State Programs" (Table 1) implemented during the years of independence, the share of industrial workers in the economic region is higher than the national indicator (7.7%), only Baku (11.1%), Absheron-Khizi (13.1%), Ganja -Dashkasan (9.4%) is lagging behind in its economic regions. The economic region is home to 5.5% of the industry's workforce and 6% of the processing industry's workforce (Eminov, 2022:16). The proportion of workers in the nation's processing sector of the industry is similarly high, rising in tandem with the nation's industrial production volume. However, the concentration of the main part of the workers in the industry in the Nakhchivan urban agglomeration is another factor that leads to the change of the demographic characteristics of the small urban settlements and the inefficient use of labor resources.

The increase in investment attractiveness creates the prospect of using natural resources in the economic district of Nakhchivan. In 2020, Nakhchivan economic

region was behind only Baku and Absheron-Khizi economic regions in terms of investment attractiveness. However, uneven distribution of investments across administrative regions also creates disorder in the settlement system. The attraction of labor resources in the administrative regions by efficient use of existing natural resources in accordance with natural conditions will create conditions for the elimination of this problem. The centers of the administrative districts manage the surrounding areas according to the functions they perform. When these centers do not meet the social needs of the population and cannot solve economic problems, the population of the villages under administrative management also decreases. In this regard, it is more important to improve the socio-economic development of small towns in the Autonomous Republic. The population of the Nakhchivan economic area is concentrated in the large cities along the Araz River due to the non-operation of the majority of labor-intensive enterprises established in minor towns. Planned farming requires

more attention even though governmental initiatives are directed on the socioeconomic development of areas at the national level.

In order to improve population settlement, the radius-distance between the economic district center and other administrative district centers should be specified, and if necessary, a secondary district center should be formed. When preparing the plan of the cities, attention should be paid to their location in an accessible position for the administrative region.

Population, labor resources, social infrastructure, industry, natural resources, transport and other factors influence the development of urban settlements. Since urban settlements in an economic region perform different functions depending on local natural resources and demographic development, their development also depends on the level of performance of these functions. The fact that natural population growth and has the main influences on the evolution of demographic processes is migration once again needs to be kept under control. (Huseynova, 2017:473).

Improvement of farm areas and their equal distribution in the territory of the Autonomous Republic are the main conditions for regulating settlement in the Nakhchivan economic region. The basis of the economic base of urban settlements is small food industries based on agricultural products and mining and production based on mineral resources. Winery, tobacco, sugar beet, and cotton processing factories built on the basis of agricultural products such as viticulture, cotton, tobacco, and sugar beet cultivation changed periodically or were not cultivated at all. The difficulties of the transition period have weakened the economic base of the cities. During the years 1991-1995, the Nakhchivan Autonomous Republic lost 55% of its agricultural output (Ahmadov, 2008:126). Owing to the production's regression, which undermined the material and technological foundation of the city, tobacco production in all economic sectors from 1990 to 1995, tobacco production was 78.7%, grape production was 70.0%, grain production was 22.0%, fruit production was 86.5% %, meat production decreased by 60.8%, milk production by 61.0% (Abbasov, 2018:40).

State programs implemented for the development of agriculture have yielded certain results in the field of tobacco cultivation. The growth of this region is facilitated by the working habits of the populace and the natural circumstances of the Autonomous Republic. In the 70s of the last century, 32.1% of food industry products produced in the Autonomous Republic came from the tobacco industry (Ahmadov, 2015:80). More than 90 tons of dried tobacco were supplied from Sharur, Babek and Kengerli regions. Due to the existing natural conditions, the main branch of agriculture in the flat territory of Nakhchivan is farming, and in the mountainous areas - cattle breeding. The population of both farms has formed a nomadic cow breeding community as a result of the paucity of grasslands in the highlands. Through the effective use of pastures in the territories of the Ordubad, Shahbuz and Julfa regions, the rise of animal farming is conceivable, as has historically been the case, by creating conditions for the population of the plain and mountain zones to change their products and satisfy

internal needs. demand through local products. The block of functional activities of production and non-production spheres of public service increases the position of the center in the sectoral, production-territorial structure, increases its role in the geographical division of labor, plays the role of a socio-political, cultural, scientifically and historically established center of differentiation of food additives. According to this perspective, the center's entire range of activities is designed to control how urbanization, settlement, and the territorial production system interact with economic, social, and demographic processes. Additionally, it should be remembered that a city performs more functions the larger it is. Because as the population increases, the production of consumer goods is also required.

The primary point that chooses the course of the economic region's growth is the city of Nakhchivan. Its location in a favorable economic and geographical position ensures its active participation in economic relations, as well as the social division of labor. Because of the geographic division of labor, production, environment, and demographic system, as well as the ongoing increase in worker productivity, the city of Nakhchivan operates both horizontally and vertically. The development of material production and the wide scope of urbanization increase the expansion of the non-productive sphere, the population's needs for various goods, recreational and resort services. The city of Nakhchivan is another example of a typological feature that reflects the primary attributes of the capital together with other public and private organizations. The city serves as a political hub and integrates the management and organizational functions of the national economy. From a socioeconomic perspective, the city has grown significantly as an industrial center. The population's improved living standards have led to more attention being paid to the utilization of labor resources, an increase in the number of permanent positions being opened, and a very varied production industry. Food, light, machinery, furniture, chemicals, etc. industrial areas are available. In the 50s and 60s of the last century, the largest of the 3 winemaking enterprises of the Autonomous Republic was located in the city of Nakhchivan. Based on local processing of grapes, wines called "Nakhchivan" and "Nakhchivan Kagoru" are produced here. The existing demographic potential of the city of Nakhchivan allows the formation of a territorial production complex among other administrative districts, where there are enterprises that carry out all technological processes for the production of some finished products. More promising in this regard is the creation of an agro-industrial complex. There was also a winery in the settlement of Hyderabad, where 14.3% of the region's population lives. Hyderabad village is the administrative center of Sadarak district. The strategic position of the city in terms of settlement ought to be considered and the potential opportunities for its expansion should be mobilized. The fact that the city of Hyderabad is located on the border with Turkey creates favorable conditions for the creation of free economic zones. , as this increases its logistics and transit capabilities. With an increase in the transport function of the village, it is expected. Another favorable environment for the creation of free and liberal trade zones historical-

ly existed in Julfa. The border position with the Islamic Republic of Iran and the new transport projects being implemented create prospects for increasing the demographic potential of Julfa.

In the 70s of the last century, 32.1% of the food industry produced in the Autonomous Republic was given by the tobacco processing industry (Huseynova, 2017:80). Tobacco and wine growing are economically profitable fields. The natural conditions and labor resources of the Autonomous Republic can create conditions for this. A plant for canning was founded in 1929 and was one of the primary sectors of the food industry in the city of Ordubad. Over 70 areas of the nation received the plant's output (Ahmadov, 2015:49). Because of their superior quality, Ordubad items are in high demand throughout most of the nation. From this point of view, enterprises suitable for areas such as fruit growing and horticulture should be created. The establishment of a company that produces tar for packaging of canned goods in the city can be a perspective for strengthening the economic base. Also, Ordubad city has more than 11 world and country important historical monuments, more than 25 locally important historical monuments. This increases the resort-tourism importance of the city.

The demographic potential of existing settlements in Ordubad administrative region is very low. In the middle of the 20th century, the stoppage of the activity of the enterprise in the workers' settlements developed in light of the refining enterprise also hindered the continuous demographic development. The population is currently only engaged in agriculture. Although the Autonomous Republic has a diverse base of raw materials that will develop the metal industry, it is currently considered a potential resource because it is not economically viable.

There are significant variations in the sectoral structure of the industry within the economic zone, as can be seen from the examination of the economic growth of the cities.

In small towns of an economic region, the creation of light industry within industrial areas, especially textile, clothing, carpet, and shoe production, can become the basis for their future development. Another advantage of light industry is that it is a profitable industry and achieve results faster. In the Autonomous Republic, the population's demand for these products is satisfied mainly by products imported from Turkey, Iran, China and the capital of the republic. Manufacturing enterprises need to produce products based on new technologies in accordance with market requirements.

Under the influence of active factors, permanent processes are created in the urban structure, and the influence of the city on the regions of attraction also changes. The city of Babek was formed as a satellite city of the Nakhchivan urban agglomeration. With the creation of the settlements of Nehram and Jahri, the core of peculiar new satellite cities of the city is formed. In the future, we can expect the emergence of an agglomeration consisting of several equally powerful central cities. Babak region also ranks second in agricultural development in the Nakhchivan Autonomous Republic. This is due to the created reservoirs, a network of canals, as well as the passage of the Nakhchivan River through the

territory of the Babek region. Developed agriculture provides jobs for more than half of the employed population. Therefore, in the center of the region it is advisable to revive traditional industries such as cotton growing, viticulture, sugar beets and viticulture. The territory of the Babek district is rich in building materials. Lime factories can be built here using waste from a marble factory. Only 9.7% of the employed population works in industry in the Babek region (2009). The population of the city mainly works in the fields of construction and the food industry, especially in small enterprises in neighboring villages. The demographic potential of the administrative centers of the Babek region is higher. Also, the flat terrain and favorable lands of the village of Nerem, and the proximity to the cities of Babek and Nakhchivan are very favorable for the creation of an agro-industrial complex. Various industries can be created, preparation of pharmaceuticals for agriculture, enterprises for the production of chaff.

The territory of Babek region is rich in construction materials. The population of the city works mainly in construction and food industries, especially in small enterprises in neighboring villages. Here, lime plants can be built on the basis of waste from the marble plant. The territory of the district has favorable natural conditions for the development of viticulture. It is appropriate to revive the traditional areas of the city, such as cotton growing, grape growing, sugar beet and wine growing. The Sharur region is the main agricultural base of the autonomous republic, so half of the employed population works in this area. Only 11.2% of Sharur's employed population works in industry (2009). In 1955, a maximum of 7.9 thousand tons of cotton fiber was produced at Sharur Cotton Cleaning Plant (Huseynov, 1984:49). Later, the plant could not be supplied with raw materials due to the problem caused by the Armenians in the water supply. The restoration of the plant can also enrich the fodder base of livestock. "Sharur Industrial District" can stimulate the efficient placement of productive forces through the formation of complex farming. Creation of industrial districts in other cities will create conditions for efficient use of labor resources and efficient organization of productive forces. The city of Shahbuz is also a reference center for settlement in the mountainous area in the Autonomous Republic. 18.2% of the population of the administrative district lives in this city (Allahverdiyev, 2021:80). The winter tourism potential of Shahbuz administrative region is wide. The city of Shahbuz is also a support center for settlement in the mountainous areas of the Autonomous Republic. The development of enormous summer pastures, hayfields, a cannery in the middle of the gardens, and businesses producing meat and dairy products are all part of the plans to build the agro-industrial complex in the area. The "2018-2022 State Program for the Development of Tourism in the Autonomous Republic of Nakhchivan" allows for the development of a number of light industry sectors in 2018 that support the growth of Agbulag village and mountain-ski tourism. The city has natural potential and labor resources for the establishment of a canning plant and meat and dairy products production enterprises. Although the mineral water resources of the Badamly village determine its function, it is necessary to

evaluate other potential resources with the intention to depart from the monofunctionality of this village. When combined with the city's advantageous features and mineral water, leisure activities have the potential to foster the growth of the travel industry as a recreation resource. The autonomous republic is now regarded as a prospective resource since it is not economically feasible, despite having a varied resource base that will aid in the growth of the metallurgical sector.

The villages of Paragachay and Agdara, the only urban villages of the Autonomous Republic, located above 2000 meters, most of the youth left this small working village after the closure of the mining and processing plant. Here, although ore reserves in the upper layers have decreased, there are still many reserves in the lower layers. This increases the future prospects of the industry. The rest of the elderly population is employed in agriculture. Examining the current prospects is vital because of Paragachay's strategic significance as well as its role as a reference point for neighboring settlements. It should be mentioned that the village's stunning surroundings might make it into a resort and medical facility. As stated in the "State Program for Increasing Employment in the Nakhchivan Autonomous Republic for 2014-2015", 713 new jobs were opened, as to "State Program for Increasing Employment in the Nakhchivan Autonomous Republic for 2016-2020" (<http://www.stat.gov.az>). On June 5, 2023, the President of the Republic of Azerbaijan signed a Decree approving the "State Program for Socio-Economic Development of the Nakhchivan Autonomous Republic for 2023-2027" (State program, 2023), aimed at opening jobs, development of entrepreneurship, increasing the guaranteed

level of communal and social infrastructure. Concurrently, consideration was given to increasing our energy security through alternative sources and improving the business environment. By opening new jobs, it creates conditions for increasing employment in other regions and creates the basis for the effective deployment of productive forces. Even so, almost 50% of the new positions were opened in the city of Nakhchivan in 2009-2012. in 2013-2016, the share of the city of Nakhchivan decreased by more than half; in Sharur, Julfa, and Ordubad the figure was high. In 2017-2018, the share of Nakhchivan city was 31.8%. The share of Sharur was 18.3%, Babek 16.5%, Julfa region 11.8%. Over the last period covering 2019-2022, regarding the percentage of recently created jobs, Nakhchivan city 56.3%, Sharur 12.8%, Babek 9.8%, Ordubad 6.7%, and the share of other regions was less than 5% (<http://www.stat.gov.az>). In such urban settlements as Shahbuz, Badamli, Paragachay, Agdara, which serve as the primary supporting frame of urban settlement in the mountainous region of the Autonomous Republic, and in the settlement of Hyderabad, located in a strategically important area, the prospect of sustainable demographic development may be the creation of new jobs for the placement of productive forces and restoration of outdated enterprises based on modern technologies. It is equally important to remember that there are steps being done to raise the employment rate, meet the demand for labor, and also that the new jobs that will be created cover promising sectors of the economy. In the economic region of Nakhchivan, poor exploitation of existing natural resources reduces the share of the mining industry (0.1%).

Table 2

The structure of industrial products production in Nakhchivan MR, (%)

Areas of activity	2010	2015	2019	2021
Total	100	100	100	100
Mining industry	0,1	0,1	0,1	0,1
Processing industry	87,3	95,5	94,2	92,5
Production of food products including drinks and tobacco	53,9	58,4	56,7	56,1
Textile and sewing industry	4,4	4,5	4,8	4,6
Manufacture of leather, leather goods and footwear	0,1	0,1	0,1	0,1
Processing of firewood and preparation of wood products	5,0	4,7	4,5	4,4
Pulp-paper production and publishing	0,6	1,1	1,0	1,0
Chemical industry and production of pharmaceutical products	1,0	0,1	0,1	0,1
Rubber and plastic mass products	6,8	8,5	8,0	7,8
Manufacturing of additional non-metallic mineral materials	7,9	10,5	10,6	10,7
Production of finished metal goods and the metallurgical industry	-	4,2	4,2	4,5
Manufacturing of automobiles, semi-trucks, and trucks	3,2	4,0	-	0,0
Other areas of processing industry	4,1	4,6	4,3	3,5
Gas, steam, power, and conditioned air providers	11,5	4,2	5,4	7,1
Water supply, wastewater and waste treatment	1,1	0,5	0,4	0,5

Source: (<http://www.stat.gov.az>)

The food industry accounts for 56.1% of the manufacturing industry, light industry - 4.7% (2020) (Table 2). Although the share of manufacturing production is high, after 2015 there have been trends in the share of total industrial production. The cities of the Nakhchivan economic region get their economic foundation from the agricultural goods produced in the nearby

villages. A huge region of gray soils, a low groundwater table, and a scarcity of water all have an adverse effect on yield. agriculture goods. As part of the State Program, reclamation measures were carried out to increase soil fertility. The establishment of a closed irrigation network in the Kengarli and Shahbuz districts is part of the State Program "Socio-economic Development of

Regions," which runs from 2019 to 2023. This will foster the effective use of water resources. (Statistical Bulletin, 2020:689). Hectares of fields need such measures. In wine regions such as Sadarak, Sharur and Babek, increasing plantings of low-water grapes and building new wineries can revitalize the economic base of cities.

Land acquisition is also important for Paragachay and Aghdara settlements of the Autonomous Republic, which are located at a height of 2000 meters. Because these are the only urban settlements of the Autonomous Republic located above 2000 meters. Since the establishment of the Paragachay labor settlement in 1954 was related to ore refining, the restoration of the enterprise can increase the number of labor resources.

- The development of productive forces in strategically important areas is the main condition for the regulation of the modern settlement system. The correct territorial organization of productive forces will create conditions for the comprehensive development of the economic region through the efficient use of local natural resources and labor resources. Regional disproportion arises in the settlement system within the Autonomous Republic. The economic approach to these problems is carried out in two ways. Thus, the process of building enterprises is stopped in places where decentralization is needed, or the number of production enterprises and labor resources is increased in poorly developed and appropriated areas (Mahmudov vb, 2011:183).

- Creation of new workplaces for the placement of productive forces in urban settlements such as Shahbuz, Badamli, Paragachay, Aghdara, which play the role of the main supporting framework of urban settlement in the mountainous area of the Autonomous Republic, and in the strategically important area of Hyderabad settlement, and the restoration of outdated enterprises based on modern technologies for sustainable demographic development may be perspective.

Poor utilization of available natural resources in Nakhchivan economic region lowers the share of extractive industry.

Food industry accounts for 56.1% of processing industry, and light industry accounts for 4.7% (table 2). Although the share of production of processing industry products is high, after 2015, trends of decrease in the share of total industrial product production were observed (table 2). More than half of the processing industry is accounted for by the food industry. Therefore, there is a need for restructuring of light industrial enterprises.

The city is a special and most destructive case of anthropogenic impact on nature, a political and legal institution. As cities expand or increase in number, their impact on the environment increases and natural resources are unsustainably used, therefore, to create an ecological urban environment, certain ecological footprints needs to be considered. In order to do this, an ecological infrastructure must be established, create an environmentally sound relationship between the countryside and the city, take into account the current state of nature when determining the urban area, preserve biodiversity and create a sustainable urban landscape. be created and expands its territory beyond its borders. As a result, land suitable for agriculture is occupied, biodiversity

is threatened and the ecosystem is altered. In order to achieve this, steps to control the city's spatial growth must be taken. Finding land use regulatory tools is therefore the aim in order to decide on an effective urban growth plan and safeguard public space. Urban settlements must be expanded based on a long-term strategy to accommodate the economic region's population increase. Utilizing global best practices is essential to enhancing the urbanization process. In this regard, an effective model of state regulation and management of integrated development should be developed (Mammadov vb, 2006:317). In addition to the resettlement concept, an urbanization development concept should be developed, as well as a "Road Map" to ensure regulation of urbanization and action directions should be determined. In the neighboring state of Turkey, the policy of industrialization is to create "Organized Industrial Zones". The role of industrialization in the revitalization of cities is undeniable. In the Republic of Turkey, "OIZ" (Organized Industrial Zones) are created to revitalize underdeveloped cities and ensure balanced development of the region. In this regard, it is necessary to clarify the prospects for creating organized industrial zones within the economic region.

- There are significant variations in the sectoral organization of industry within the economic zone, as can be shown from the examination of the economic growth of cities. This is the primary obstacle impeding the appropriate administration of SMS; hence, an industrialization program must be pursued, with long-term goals and phases planned.

- The demographic capabilities of cities and the demand for labor must be determined.

- The system of administrative regulation of the migration process should be improved taking into account the growth poles.

- Expanding the network of satellite cities, reducing the area of industrial and other zones in the center of large cities, expanding the area of social and business zones.

- Programs should be prepared showing the gradual growth of cities as the population grows.

- Increasing the number of technology parks and research institutes on the basis of higher educational institutions.

- It is more expedient to qualitatively update the economic functions of small towns. This requires a comprehensive study of the patterns of urban development.

Conclusion. In conclusion, a multimodal strategy that incorporates industrialization policies, sustainable development plans, and ecological concerns is needed to solve the issues raised by urbanization. Mitigating the environmental impact of cities requires building an ecological infrastructure and promoting a harmonious interaction between urban regions and the surrounding countryside. A vital part of this effort is preserving biodiversity and developing sustainable urban environments. Putting policies in place to limit the geographic growth of cities contributes to the preservation of agricultural land, biodiversity, and ecological integrity. This calls for the creation of efficient urban expansion plans and the deployment of land use regulation instruments. Urban settlements have to grow in accordance with a long-term

plan that takes regional economic dynamics and population expansion into account. Regulatory frameworks and integrated development models can be developed with input from worldwide best practices. Industrialization is essential for promoting balanced regional development and rejuvenating disadvantaged cities, especially when it is implemented through the establishment of Organized Industrial Zones (OIZs). To make sure that industrialization plans are successful, sectoral organization, demographic capacity, and labor demand must be carefully considered. To manage population fluctuations and optimize resource allocation, migratory patterns, especially around growth poles, need to be more administratively regulated. This entails developing social and commercial infrastructure, reorganizing industrial zones, and grow-

ing satellite cities. The expansion of research facilities, technological parks, and universities promotes innovation and the development of human capital, which propels economic growth and diversity. By conducting thorough urban studies and making deliberate interventions, it is possible to update small towns' economic roles in a qualitative manner, promote more balanced regional growth, and lessen the burden on larger metropolitan centers.

By pursuing these strategies in a coordinated manner, policymakers can work towards creating sustainable, resilient, and inclusive urban environments that enhance the quality of life for residents while minimizing negative impacts on nature and society.

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Туркана Алієва

аспірантка Нахічеванського державного університету,

м. Нахічевань, Нахічеванська Автономна Республіка, Азербайджан

e-mail: turkanaliyeva1111@gmail.com, <https://orcid.org/0000-0003-2595-6669>

НАПРЯМИ РЕГУЛЮВАННЯ МІСЬКОГО РОЗСЕЛЕННЯ В НАХІЧЕВАНЬСЬКОМУ ЕКОНОМІЧНОМУ РАЙОНІ

У статті досліджено вплив транспортної блокади Нахічеванського економічного району на соціально-економічний розвиток міст, а також на демографічний розвиток. Крім слабкої урбанізації, в Нахічеванському економічному районі в економіко-географічному аспекті досліджена проблема вертикальної урбанізації, викликана суворими кліматичними і рельєфними умовами. З цією метою досліджено склад населення, зайнятого в економіці економічного району, визначено сучасний стан обробної промисловості та її вплив на міське розселення. Проаналізовано проблему дефіциту міських господарських територій та досліджено значення ефективного використання природних умов і природних ресурсів адміністративних районів у регулюванні системи розселення, а також проаналізовано заходи, необхідні для забезпечення сталого розселення.

Мультимодальна стратегія, яка включає політику індустріалізації, плани сталого розвитку та екологічні проблеми, необхідна для вирішення проблем, які породжує урбанізація. Пом'якшення впливу міст на навколишнє середовище вимагає побудови екологічної інфраструктури та сприяння гармонійній взаємодії між міськими регіонами та навколишньою сільською місцевістю. Важливою частиною цих зусиль є збереження біорізноманіття та розвиток сталого міського середовища. Запровадження політики обмеження географічного зростання міст сприяє збереженню сільськогосподарських угідь, біорізноманіття та екологічної цілісності. Це вимагає створення ефективних планів розширення міст та застосування інструментів регулювання землекористування.

Ключові слова: *регулювання розселення, урбанізація, фермерські території, міське населення, економічний район.*

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