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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

**INVESTIGATION OF ETHNODEMOGRAPHIC PROCESSES
IN THE SHAKI-ZAGATALA ECONOMIC REGION**

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GENERAL CHARACTERISTIC OF THE WORK

The actuality of the topic and level of research on the topic.

Being the creative force of society, human being is the fundamental driver of socio-economic and cultural development. Historically, countries have sought to study the population in order to increase their economic and political power. In later stages, population growth has caused some concern for countries and they have put forward different ideas about preventing population growth or maintaining a stable population. Generally, the number and composition of the population in different regions of the world have been constantly changing under the influence of some factors. Although in certain years the population has decreased sharply due to the spread of mass diseases and wars, in some years it has increased sharply due to the increase in the birth rate. Changes in the dynamics and composition of the population have also led to fluctuations in other demographic indicators, and these processes have occurred under the influence of natural, historical-geographical, socio-economic and political factors.

Population dynamics and trends in its composition affect demographic, socio-economic and environmental factors through changes in population distribution in populated areas, directions and intensity of intra-regional and inter-regional migration, per capita income, consumption volume, use of natural resources and several other indicators. The above-mentioned factors have a negative impact on the size and composition of the population, causing it to change over time. This is the reason why the interest in studying demographic processes and in conducting research in this area in the various regions is ever-growing.

In the numerous countries around the world, studying the changes in the population composition from an ethnodemographic perspective is of particular importance. Thus, in a number of multinational countries of the world, including Azerbaijan, certain steps have been taken to study the ethnodemographic situation and protect multicultural and national values. With the founding of the multiculturalism policy in Azerbaijan by national leader Heydar Aliyev, substantial research has been carried out in this area.

The formation of the Azerbaijani people and its national-ethnic composition has gone through a long historical period. The ancient lands of Azerbaijan, which were once attacked by foreign invaders, became the settlement area of numerous peoples. Historically, a part of the people who migrated and resettled to the territory of Azerbaijan mingled with the local ethnic groups, and in later times, they participated in the formation of a single Azerbaijani nation. In other words, the historical settlement process in Azerbaijan played an important role in the formation of a unified nation. Thus, Azerbaijan has become a multinational country that unites representatives of different ethnic groups under the name of one nation and is their native homeland. Today, the fact that these peoples live within a single territory and preserve their ethnic characteristics is proof that the Republic of Azerbaijan is a sufficiently multicultural and tolerant country.

Studying the changes in the population composition from an ethnodemographic point of view is of particular importance in the regulation of the demographic, including ethnodemographic situation in the country, and in the preservation of multicultural and unified national values. Moreover, the role of conducting these studies is very important in protecting the minority ethnic groups and their ethnic characteristics.

Geographers, economists, and historians have made unparalleled contributions to the study of the historical and modern demographic situation of the population, as well as ethnic minorities, in Azerbaijan. Examples of these scientists are M.H.Baharli (1926), A.M.Hajizade (1965), Z.M.Bunyadov (1989), Sh.Y.Goychaysky (1979, 1987), Y.B.Yusifov (1994), G.A.Geybullayev (1994), G.J.Javadov (1999), F.J.Mammadova (1977, 2003), V.A.Afandiyev (2006), S.G.Naghiyev (2006), Sh.M.Muradov (2013, 2021), N.H.Ayyubov (2016), Z.N.Eminov (2005) and others can be indicated.

Although numerous admirable research works have been carried out in this field, the modern ethnodemographic situation of the country have not been fundamentally studied in various economic regions.

In this regard, the need to systematically study the ethno-demographic situation in the Shaki-Zagatala economic region, which is distinguished by its ethnic diversity, determines the relevance of the dissertation topic.

Object and topic of the research. The object of the study is the Shaki-Zagatala economic region located in the northwestern zone of Azerbaijan, and the subject is the study of ethnodemographic processes and settlement in the economic region.

The purpose and the missions of investigation. The primary purpose of studying ethnodemographic processes in the Shaki-Zagatala economic region is to study the factors affecting population settlement in the study area, to study the situation in the modern settlement system, and to analyze the changes in modern ethnodemographic indicators. To achieve the purpose, the following **missions** must be solved in the research process:

- studying the settlement from a historical-geographical aspect, and studying the process of changing the national-ethnic composition historically;
- investigating the role of the natural-geographical and socioeconomic factors on the human settlement, analysis of the modern state of settlement and its impact on ethnodemographic processes;
- identifying changes in the contemporary ethnodemographic indicators and the factors influencing them;
- analyzing and revealing problems arising in population settlement, identifying techniques to resolve them, studying the role of state programs and multicultural relations in demographic and ethnodemographic issues.

Research methods. Historical method for researching the change in the national-ethnic composition of the population and the historical migration processes in the region; field research and questionnaire methods for determining the impact of natural-geographical and socioeconomic factors on the settlement; statistics, comparative and analysis methods for the study of the processes occurring in the ethno-demographic indicators of the population; geographical modelling method with the help of SWOT analysis for

settlement problems and their elimination; cartographic (with the help of ArcGIS software) method for transferring the obtained data to the map were harnessed.

The main provisions to be defended:

1. The role of historical, natural-geographical and socio-economic factors in the population settlement of the Shaki-Zagatala economic region, their impact on the formation of the modern settlement system and ethnodemographic processes.

2. Modern human settlement areas in the Shaki-Zagatala economic region, the number of people living in settlements, their grouping by altitudinal zonation, and the reasons of emerging differences.

3. The reasons and their consequences for the changes in the ethnodemographic indicators in the Shaki-Zagatala economic region.

4. Problems arising in the human settlement of the Shaki-Zagatala economic regions, their elimination techniques, state programs for the regulation of ethno-demographic development and multicultural relations.

The scientific innovations of the dissertation:

- Natural and geographical factors have played a significant role in the human settlement of the Shaki-Zagatala economic region, leading to an uneven distribution of the population across the territory. While moving from the foothills to the highlands, the number, area, population and density of villages generally decrease. According to the interpretation of the satellite images of the study area, nuclear-type villages are replaced by linear and, to a lesser extent, scattered-type villages while moving from the lowlands to the highlands. However, scattered-type villages are more widespread in the plain areas of the Shaki-Zagatala economic region, especially in areas up to 200 meters above sea level. The differences that emerged in the settlement system have affected the demographic indicators of the population, as well as ethnic minorities, especially their participation in migration processes;

- There have been serious differences in the distribution of the population by altitudinal zonation and changes in village groups. The number of villages with a population of up to 50 people has

increased in the economic region, and at the same time, an increase in the number of villages with large demographic potential has been observed. This indicates that large villages are growing further in settlement, while small villages are declining. Rapid population concentration has been observed in the plains and foothills up to 500 metres, while rapid population decline has been observed within the altitudinal zones of 500-1000 metres and 1500-2000 metres. Although the favourable natural-geographical conditions and socio-economic situation in the low-mountainous areas have led to the formation of agglomerations by large villages, due to socio-economic difficulties, some villages are facing the threat of abandonment (Galal, Gargay, etc.), and some have already been abandoned (Kusnat);

- From 1999-2019, there was an increase in the number of Azerbaijanis in urban and rural populations, while there was a slight decrease in the number of minority ethnic groups. The main reason for the decrease was the process of cultural consolidation developing on the basis of the principle of mutual respect and coexistence among nations;

- During the study of modern migration processes, it became clear that migration processes have been intensive and this process is still ongoing. In particular, the external migration process was distinguished by its intensity in the remote regions of the country located on the border with neighbouring states. Thus, the presence of comfortable conditions for travel to neighbouring countries, the residence of close relatives or family members of migrants in neighboring countries, and other factors were the main driving force of emigration;

- The share of men in the sex ratio of the general population, as well as of the ethnic minorities, has increased in the economic region, and factors such as the preponderance of men among immigrants, selective abortions, and the preponderance of boys among births have played a special role in this increase. Disproportions in the age structure have increased slightly. In particular, those in the lower age group have decreased, and the share of those of working age and older than that has increased due to the

high birth rate and increase in average life expectancy compared to previous years.

The theoretical and practical significance of the investigation. The results, proposals and recommendations of the research and analysis carried out in the dissertation work can be used as a basis for the regulation and organization of the demographic and ethno-demographic situation not only in the region but also in the country.

Approbation and application of the research. The works on topics containing the main content of the dissertation work and the obtained results were presented at conferences, seminars and forums held both international and at the national level. These include a scientific-practical conference dedicated to the 100th anniversary of the Ministry of Labour and Social Protection of the Republic of Azerbaijan on “Development of social protection system in Azerbaijan: yesterday, today and tomorrow” (Baku, 2018), A scientific-practical conference on “The development of human geography in Azerbaijan and Russia: the main ways of development in the XXI century” (Baku, 2019), International Demographic Forum on “Demography and global calls” (Voronezh, 2021), Republic scientific conference on “Republic of Azerbaijan 1991-2021: Restoration of state independence, economic and socio-cultural development” (Sumgait, 2021), V International scientific-practical conference on “Tourism and recreation in the XXI century: problems and prospects” (Baku, 2021), International Scientific Conference on “Social security in the Eurasian space” (Tyumen, 2022), the 22nd International Scientific and Practical Conference on “Modern aspects of modernization of science: status, problems, development trends” (Ljubljana, 2022), International Scientific Conference on “Multicultural values and problems of tourism development in Caspian littoral countries” (Baku, 2022), Annual All-Russian Scientific Conference with International Participation “Science at the university museum” (Moscow, 2022), Conference dedicated to Naib Shirinov’s 100th Anniversary (Baku, 2022), XVII All-Russian scientific and practical conference with international participation, dedicated to the 85th anniversary of the Department of Geography

and Methods of Teaching Geography and the 90th anniversary of the Faculty of Biology, Geography and Chemistry (Krasnoyarsk, 2022), XXV RepublicaI Scientific Conference of the Doctorate students and young researchers (Baku, 2022), RepublicaI Scientific and Practical Conference on “The role of Heydar Aliyev in the development of science and education in Azerbaijan” (Baku, 2023), International Geoinformation Days (Baku, 2023), II International Scientific and Practical Conference dedicated to Heydar Aliyev’s 100th Anniversary on “Contemporary problems of geography: integration of science and education” (Baku, 2023), I All-Russian Scientific-Practical Conference with International Participation, devoted to the memory of Professor Mikhail Dmitrievich Shargin (Perm, 2023), XXVI RepublicaI Scientific Conference of the Doctorate students and young researchers (Baku, 2022), International Demographic Forum on “Demography and global calls” (Voronezh, 2024) and others.

32 scientific articles and conference materials were published on the content of the dissertation work.

The main results of the research work can be utilized in the research and practical work conducted in the Baku International Multiculturalism Centre, the Ministry of Science and Education of the Republic of Azerbaijan, the Ministry of Culture of the Republic of Azerbaijan and the study of the ethnodemographic situation.

The name of the organisation where the dissertation was implemented. The work was conducted at the Department of “Demography and Population Geography” of the Institute of Geography named after Hasan Aliyev, Ministry of Science and Education of the Republic of Azerbaijan.

The volume, structure, and primary content of the dissertation. The dissertation consists of an introduction – 7 pages, 4 chapters, including I chapter –19 pages, II chapter – 35 pages, III chapter – 35 pages, IV chapter – 30 pages, the conclusion – 3 pages, and 181 references – 16 pages, 19 figures, 17 tables, 1 formula, 5 maps. The volume of the dissertation is 148 computer pages. There are 201151 characters in the dissertation without tables, graphs, figures, and references.

A BRIEF SUMMARY OF THE DISSERTATION

The introduction provides information about the actuality and research level on the topic, object and topic of the research, the purpose and missions, methods, the main provisions to be defended, scientific novelty, the theoretical and practical significance of the research, approbation, application and others.

The first chapter of the dissertation work is dedicated to **“Scientific-practical significance and theoretical-methodical foundations of studying demographic conditions and settlement”**. The scientific and practical importance of studying demographic conditions is analyzed in this chapter. Demographic conditions are the total of different demographic characteristics, which include variables such as population composition and social status. The study of demographic conditions is of special importance in the systematic collection of information about the population, their analysis, forecasting of future development trends and elimination of demographic problems. Generally, the study of demographic conditions is important from the socio-economic, political-administrative, and ecological point of view. That is, demographic conditions are one of the main factors in planning the socio-economic, demographic and environmental policy of the state. At the same time, demographic data serve to control future changes in the population, natality and mortality, migration, the age of labour, and many other indicators that affect the socio-economic and demographic development of the country.

Ethnodemography or ethnic demography, which is a combination of ethnography and demography, is a field of science that, in addition to studying the reproductive characteristics of ethnic minorities, develops methods for determining the number of ethnic minorities by analyzing the ethnic structure of the population of different countries from a statistical and dynamic point of view¹. Studies on ethnodemography, which is a relatively brand-new field of science, began to expand at the beginning of the 20th century.

¹ Kazmina, O.E., Puchkov, P.I. Fundamentals of Ethnodemography. Textbook. / O.E.Kazmina, P.I.Puchkov – M.: Nauka, – 1994. – 253 p. (In Russ.)

Conducting ethnodemographic studies is very important in terms of changing the national-ethnic composition of the population in the world and its regions and studying the demographic factors influencing this process.

Human settlement is one of the main manifestations of culture and civilization. Settlement, which includes a system of settlements of various types and sizes, is the long-term settlement of people within a certain area². In and around populated areas, people create the necessary technogenic environment for their living and activities, meaning that the settled population changes the natural landscape over time for their own needs. Therefore, in addition to human-society relations, human-environment relations are studied in the settlement system as well.

The study of settlement is of particular importance in the efficient distribution of the population across settlements, the placement of the population and economic areas in settlements, the study of the impact of natural, geographical and socio-economic factors on it, the elimination of demographic problems, and the strengthening and development of the settlement system.

Although the history of information on the study of the population in Azerbaijan is ancient, the first systematic study of the population in the country began at the beginning of the 19th century. The first complete information about the study of the population in Azerbaijan, including the ethnodemographic situation, was provided by M.H.Baharli (1921) in his work entitled “Azerbaijan”.

Starting from the 60s of the 20th century, detailed researches in the field of population geography and demography began to be conducted in the Republic of Azerbaijan. Thus, in 1965 A.M. Hajizade's monograph entitled “Population of the Azerbaijan SSR and its settlement” was published. The work contains extensive information about the general growth of the population, age, gender, national composition, labour resources and their distribution by

² People and economy: Textbook in geography for class XII / N.K.Gupta, S.Uppal, G.Ganguly [et al.] – India: Publication Division by the Secretary, National Council of Educational Research and Training, – 2007. – 159 p. (In Eng.)

economic sectors, urban and rural settlement.

Sh.Y.Goychaysky is one of the main researchers studying settlement issues in Azerbaijan. In 1965, he defended his PhD thesis entitled “Geography of Rural Population Settlement in the Azerbaijan SSR” and studied rural settlement and the factors affecting its formation. In 1987, the well-known scientist defended his doctoral dissertation on “Resettlement of the Rural Population and its Reconstruction”. In the same year, a book of the same name was published based on the dissertation work. The book depicts concrete directions and techniques of reconstruction of rural settlements in Azerbaijan, taking into account agro-industrial integration. In the following years, he continued his research on geographical issues of studying the interactions between society and nature.

Sh.M.Muradov (2013, 2021) and G.J.Javadov (1999, 2000) had unparalleled services in the study of the demographic and ethno-demographic situation of the population of Azerbaijan. Although Sh.M.Muradov conducted economic studies related to demography and ethnodemography, G.J.Javadov studied the population-national ethnic composition from a historical-ethnographic point of view. He conducted extensive research on almost all the ethnic and national minorities living in Azerbaijan. In his works, G.J.Javadov provided information on the ethnogenesis, numerical dynamics, migration, settlement, other characteristics of these peoples.

In the field of demography in Azerbaijan, N.H.Ayyubov (2016), V.A.Afandiyev (2006), S.G.Naghiyev (2006), Z.N.Eminov (2005), R.N.Karimov (2005), H.M.Tahirova (2014), E.S. Badalov (2015) and others has performed important research works.

The second chapter of the dissertation is dedicated to “**A role of the historical, natural-geographical, socioeconomic factors on the human settlement, and the impact of settlement on the ethnodemographic processes in the Shaki-Zagatala economic region**”. In this chapter, firstly, the impact of the historical migration processes in the region on the change of national-ethnic composition in the research area was analyzed. According to the results of the conducted research, the formation of the national-ethnic composition

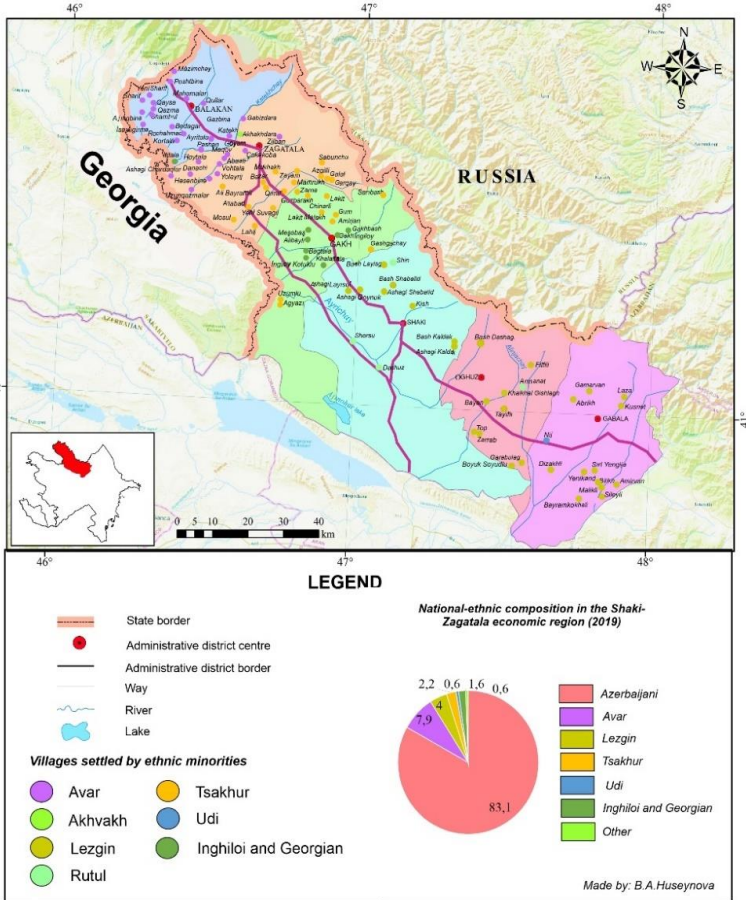
in Azerbaijan can be divided into 4 main stages, the initial phase of this stage, the primary ethnic groups living in the region were the Turkic-speaking and Caucasian-speaking peoples who settled in Caucasian Albania³. In the second stage (III-XVIII centuries), as a result of the invasion of the lands of Azerbaijan by the Sassanids, many Persian tribes were moved to the northern territories of Azerbaijan. In the next period of this stage, the ethnic composition of the region became more complicated as a result of the invasion of the Arab caliphate, the creation of the Seljuk state, and the Mongol invasions. One of the main migrations at this stage was the massive immigration of the Avars, the ancient inhabitants of the Caucasus in the 15th century, the Tsakhurs in the 17th-18th centuries, and a part of the Lezgins in the 15th century. This also played a significant role in the change of the ethnic composition in Azerbaijan, especially in its northern region⁴. The new era covers the period from the 18th century to the collapse of the USSR. One of the main events at this stage is the resettlement of Russians and Armenians to Azerbaijan, especially to the remote areas of the region, as a result of the invasion of the South Caucasus by Russia. During the formation phase of the newest period, i.e. from the collapse of the USSR to the present day, a significant increase in the share of Azerbaijanis in the total population of the country was observed due to the massive migration of Russians, Ukrainians, Armenians and people from other states that were part of the territory of the former USSR, during the years of the disintegration of the Soviet Union and the First Karabakh War.

Turning to the current situation of the settlement of ethnic minorities, the Avars populate currently in the Zagatala and Balakan districts, Akhvakhs in the Zagatala district, Lezgins in the Gabala, Shaki and Oghuz districts, Tsakhurs in the Zagatala and Gakh districts, Inghilois in the Balakan, Gakh and Zagatala districts, Udi

³ History of Azerbaijan: [In 7 Vol.] / Res.Ed. I.H.Aliyev – Baku: Elm, – Vol.1. – 1998. – 476 p. (In Aze.)

⁴ Huseynova B.A. Participation of ethnic minorities living in the north-western regions of the Republic of Azerbaijan in the migration process // – Perm: Geographical bulletin, – 2022. №3(62), – pp. 45–57. (In Eng.)

people in the Oghuz and Gabala districts^{5;6} (Figure 1).



Source: The diagram given in the map was compiled based on the XXI volume of the 2019 census materials.

Figure 1. Map of the settlements inhabited by ethnic minorities in the Shaki-Zagatala economic region

⁵ Javadov, G.J. National and ethnic minorities of Azerbaijan / G.J.Javadov. – Baku: Elm, – 2000. – 436 p. (In Aze.)

⁶ Huseynova B.A. The tendency and improvement of settlements of ethnic minorities on altitude zones in the rural areas of Shaki–Zagatala economic–geographical region // – Baku: Journal of Young Scientists, – 2021. №2, – pp.106–114. (In Eng.)

The second section of this chapter analyzes the role of natural-geographical and socio-economic factors in human settlement. In this section, first of all, the natural conditions of the territory, the number of settlements and the population in each altitude zone were studied. The impact of natural conditions and socio-economic conditions on the distribution of the population across altitude zones and the reasons for the differences that arise were studied. It was revealed that the majority of the population (61,6%) and settlements (231 villages, 6 urban settlements) in the Shaki-Zagatala economic region are located within the 201-500 metre altitude zone. In this zone, which covers the foothills and plains, the river basins along the Ganikh-Ayrichay valley create ample opportunities for the development of various agricultural sectors, making the area suitable for settlement, which is why large villages and rural agglomerations have formed in the area.

The last section of this chapter examines the current state of population settlement and its impact on ethnodemographic processes.

From 1999-2019, the number of tiny villages, a population of up to 50 people, increased in the Shaki-Zagatala economic region, and their number still constitutes the majority in the modern rural settlement system of the region.

Both the number and population of village groups with a population of 51-100 decreased. These villages were mainly established in lowland and mid-mountain areas. The main occupation of the population is gardening and animal husbandry. The state of social infrastructure in this group of villages is not at an adequate level.

Villages with a population of 101-200 were mainly established in lowland and mid-mountain areas. The main occupation of the population is tobacco growing, grain growing, hazelnut growing, gardening and animal husbandry. The population of these villages increased from 1999-2019.

A serious decrease in the population was recorded in the village group with a population of 201-500 people. This was due to the fact that some villages in Oghuz, Gabala, and Shaki districts entered the group of 500-1000 people as a result of the increase in population

due to natural growth. The main occupation of the population living in this village group was grain growing, gardening, hazelnut growing, vegetable growing, and cattle breeding.

The number of villages and village population included in the village group of 500-1000 people, which unites the largest number of rural settlements, has increased. Compared to small villages, these types of villages perform administrative-management functions and the state of social infrastructure is relatively developed. The main part of the population works in gardening, fruit growing, agriculture, and other fields.

According to the number of rural population of the region, the group of villages with 1000-2000 people, mainly located in lowland and mid-mountainous areas, stands out. The number of villages belonging to this category, as well as their population, has decreased. The population in these villages is mainly engaged in agriculture, animal husbandry, nut growing, etc. economic sectors. The social infrastructure in such villages, which are economic and organizational centers, is quite satisfactory. In general, as in the republic, the majority of rural settlements in the region fall into groups with a population of 200-2000 people.

In the village group with a population of 2000-3000, there has been a significant increase in both the number of villages and the population. These villages, which are distinguished by their favourable natural conditions and socio-economic indicators, have relatively wide opportunities for employment of the population. In such villages, 1, sometimes two schools, hospitals, administrative centres, shops and other social service areas operate.

In the rural settlement system of the region, the number of villages with a population of 3000-5000 and the population living there has increased. These villages, which mainly cover plains and foothills, are intensively populated areas and are the backbone of settlement. Some of these villages form large rural agglomerations. The main occupation of the population in such villages is vegetable growing, tobacco growing, gardening, cattle breeding, beekeeping, nut growing, etc.

The population of 16 villages in the economic region exceeds 5000 people. The number of villages included in this category and the population living in them has increased.

In the third chapter of the dissertation, **“The formation of the ethno-demographic situation in the Shaki-Zagatala economic region in contemporary period”** was scrutinised. Shaki-Zagatala economic region is one of the regions distinguished by its polyethnicity in the country. 99,6% of Tsakhurs, 99,7% of Avars, 99,2% of Udis, 14,7% of Lezgins, 94,8% of Inghilois and Georgians, 1,2% of other ethnic and national minorities are concentrated in this economic region (2019)⁷. In 1999, 22,3% of the population of the region was made up of ethnic and national minorities, but in 2009, this number decreased to 18,6%, and in 2019, it decreased to 16,9%. The main reason for this decrease was related to the process of cultural consolidation developing on the basis of the principle of mutual respect and coexistence between nations.

In the second section of this chapter, the participation of minority ethnic groups in migration processes was analyzed.

Migration processes in the study region are distinguished by their specificity. The fact that the region is ethnically diverse has played a special role in the direction and course of migration processes. The natural and geographical conditions and socio-economic situation of the territory also have a serious role in the course of migration processes. Thus, historical factors such as the location of the economic region on the border with the states of Russia and Georgia, the favourable conditions for movement, the absence of visa requirements for entry to these countries, and the historically settlement of minority ethnic groups such as Lezgins, Avars and Tsakhurs in the territory of Dagestan have also influenced this process.

Azerbaijanis, Lezgins, Avars, Tsakhurs, Muslim Inghilois and Udis who live in the region prefer to go to Russia, the Christian Inghilois and Georgians mainly go to Georgia. This is due to the

⁷ Results of the 2019 census of the population of the Republic of Azerbaijan - National (ethnic) composition of the population. [In 28 Vol.] / – Baku: SSC, – Vol.21, – 2022. – 810 p. (In Aze.)

migrants having relatives living in those areas, job opportunities, etc. Migrants work mainly in large markets, in the construction sector, trade and other fields in the areas they migrate. Among Christian Inghilois and Georgians, women prefer to go to Germany. In internal migration, the vast majority of the population settled in the region migrates to Baku.

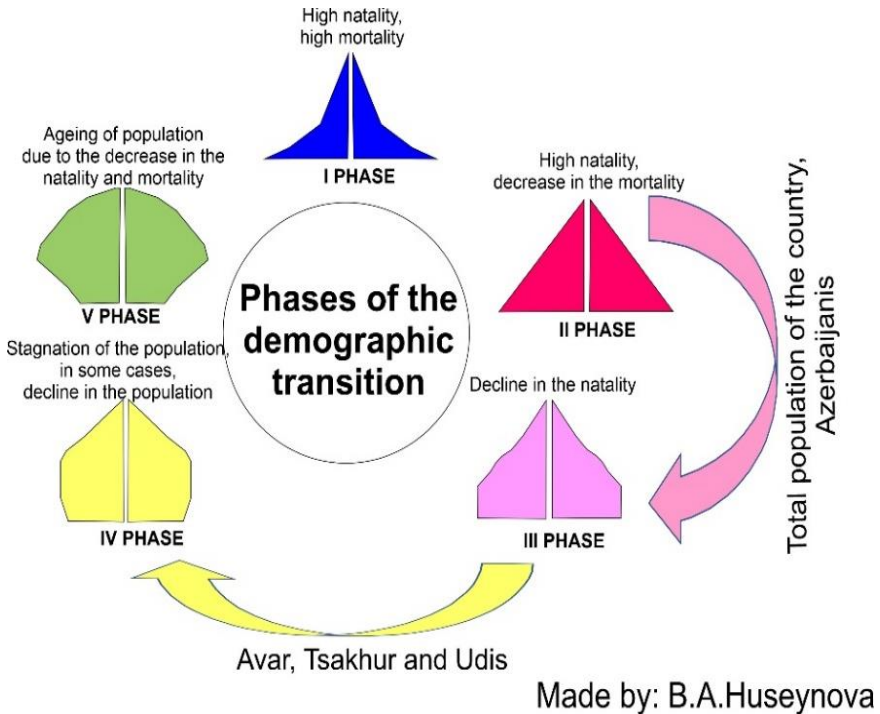


Figure 2. The model of changes in demographic transition phases based on the sex-age pyramid for the country’s total population and minority ethnic groups

Looking at the change in the gender composition in the Shaki-Zagatala economic region, for Azerbaijanis and the ethnic minorities, in 2019, the gender ratio was equal for the region. From 1999-2019, the percentage of men in various administrative districts (except for Gakh district) increased relatively, and this increase was most evident in the Oghuz district (51,7%). Although the ratio between

men and women in the Gabala district was equal in 1999, in 2019, this ratio was violated due to the preponderance of male children, selective abortion and the arrival of men from outside the region.

In the age composition, serious differences have emerged over the past 20 years. Thus, the share of those in the 0-9 age group has decreased both among Azerbaijanis and minority ethnic groups, and the largest percentage of decrease was recorded among Udis. At the same time, it is possible to see that the length of the average life expectancy has increased for both Azerbaijanis and ethnic minorities. As a result, it can be said that, unlike other minority ethnic groups and Azerbaijanis, the process of ageing of the population from below is faster among Udis, which indicates that the demographic development phase of Udis is approaching from 3 to 4 (Figure 2).

One of the main issues in the study of age composition is the study of the process of population aging. Population aging refers to the decrease in the share of those in younger age groups in the total population and the increase in the share of the elderly due to the increase in average life expectancy. It is possible to clearly see the emerging difference when calculating the population ageing index. The ageing index formula is as follows⁸(Formula):

$$Q_i = \frac{\Theta_{65}}{\Theta_{14}} \times 100$$

There Q_i – is ageing index;

Θ_{65} – is the share of the population over 65;

Θ_{14} – is the share of the population under 14.

From 1999-2019, the ageing index for Avars increased from 19 to 37,3, for Tsakhurs from 23 to 35,9, for Udis from 34,5 to 63,9, and for Azerbaijanis from 14,5 to 28,4. This also indicates how many people are elderly for every 100 people of different ethnic groups.

⁸ National Research Council (US) Panel on a Research Agenda and New Data for an Aging World. Preparing for an Aging World: The Case for Cross-National Research. – Washington (DC): National Academies Press (US); 2001. URL: <https://www.ncbi.nlm.nih.gov/books/NBK98379/> doi: 10.17226/10120 (In Eng.)

In the economic region, there have been serious changes in the indicators of the marital status of the minority ethnic groups.

Table

Changes in marital status indicators for various ethnoses in the economic region

Ethnoses	Married				Unmarried				Divorced			
	1999	2009	2019	Increase or decrease (%)	1999	2009	2019	Increase or decrease (%)	1999	2009	2019	Increase or decrease (%)
Avar	22091	22353	23368	5,8	9105	13979	12245	34,5	434	577	1138	32,9
Tsakhur	7194	6002	6957	-3,3	2760	2767	2944	6,7	69	83	153	20,3
Udi	2116	2005	1801	-14,9	457	815	807	76,6	30	43	67	43,3
Azerbaijani	3077700	3772751	4398313	42,9	1257757	1972280	2141568	70,3	64650	105215	194838	301,4

Source: The table was compiled based on population census materials in the Republic of Azerbaijan - 1999 IV volume, 2009 XX volume and 2019 XXI volume.

During the last period, the share of married people among Azerbaijanis and Avars increased. This was also related to the increase in the number of them in the area for 20 years. However, this indicator decreased for Tsakhurs and Udis and even reached the lowest level among Udis, which was -14,9% (Table). On the other hand, the share of unmarried people has increased among both Azerbaijanis and ethnic minorities. One of the main factors

influencing this growth is the increase in the marriageable age and the number of civil marriages among the population compared to previous years. Similarly, the share of divorced people among the population has also increased (Table).

The last section of this chapter analyzed the changes in household indicators of ethnic minorities and found that the number of households with 1, 2, 3, and 4 members increased between 1999 and 2019, both for all ethnic minority groups and Azerbaijanis. This was due to the process of replacing extended families with nuclear ones.

The fourth chapter of the dissertation is devoted to **“Priority directions of settlement and ethnodemographic development of minority ethnic groups”**. The presence of favourable natural and geographical conditions in the economic region has led to the establishment of new rural settlements in the area, and the growth of existing ones, and some of them have merged to create large rural agglomerations. Unambiguously, villages from this group are mostly located close to the district centre and each other and form large rural agglomerations. These rural agglomerations located in the region can be grouped into the following groups (Figure 3): Adjacent to the Balakan city village agglomeration, Sharif-Shambul village agglomeration, Katekh-Mazikh village agglomeration, Ititala-Ashaghi Chardaglar-Danachi triangle, adjacent to the Gakh city village agglomeration, Tuntul-Nohurgishlag village agglomeration, Boyuk Pirali-Dashja village agglomeration, Kotuklu-Uludash village agglomeration, Karimli-Padar village agglomeration, Bash Layisgi-Bash Goynuk village agglomeration, adjacent to the Shaki city village agglomeration, Zayzid village agglomeration, Dahna village agglomeration and Ashaghi Tala-Yukhari Tala village agglomeration.

However, serious problems still remain in the settlement system of the region. The most important of these problems is population decline in some villages, population growth in some villages at a slow pace, and lack of population in some villages. Currently, 6 villages in the region have no permanent population.

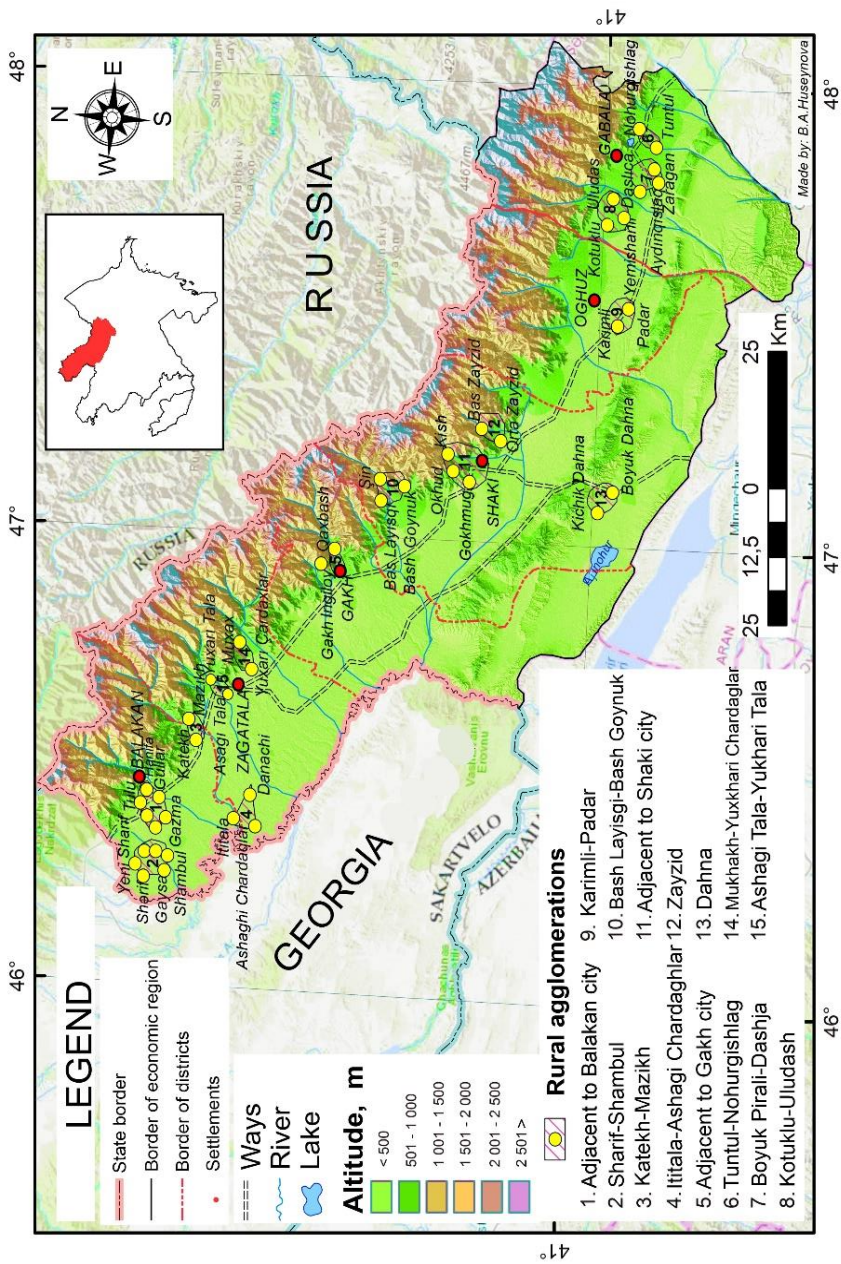
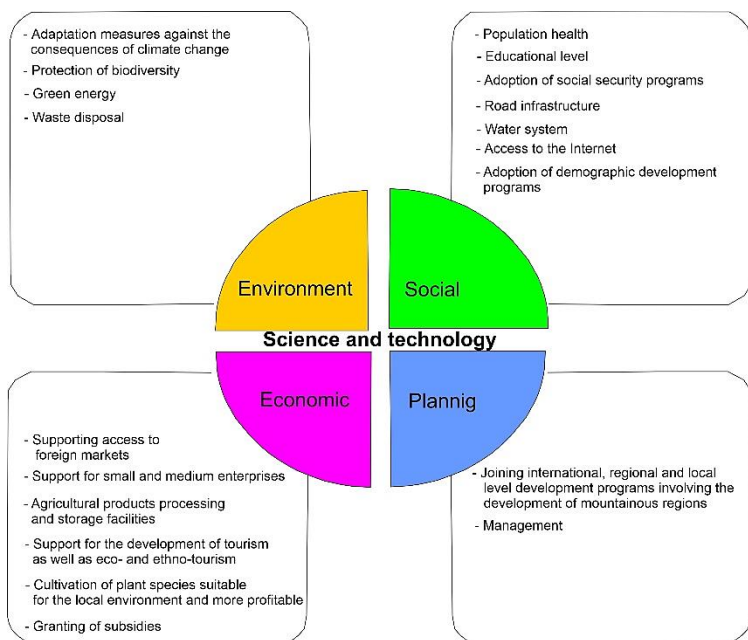


Figure 3. Map of the rural agglomerations



Source: The graph was compiled by B. A. Huseynova.

Figure 4. Geographic modelling for sustainable rural development

Based on the results of the analysis, it was recorded that there was a population decrease in 58 rural settlements in the economic region from 1999-2019. This is equal to approximately 17,3% of the total villages (336 villages) of the region. The population of 30 of those villages is made up of minority ethnic groups.

In the Shaki-Zagatala economic region, a suitable rural development model for the economic region has been established to keep the population in place and prevent the depopulation of the villages (Figure 4).

In this chapter of the dissertation, the role of State Programs in the regulation of ethnodemographic development was also analyzed. The primary goal of the state programs implemented in Azerbaijan was to improve the welfare of the population in the country, increase the share of the non-oil sector in the country's economy, and improve the living standards of the population by ensuring

sustainable development in the country's villages. Undoubtedly, the fact that the measures taken cover the entire territory of the country has influenced the improvement of the socio-economic situation of the population in the Shaki-Zagatala economic region.

The role of multicultural relations in the regulation of ethnodemographic development is also great. The Republic of Azerbaijan, which is one of the multinational countries of the world, is particularly distinguished among the countries of the world in terms of strengthening multicultural relations and promoting tolerance.

A lot of work has been done to strengthen multicultural relations in Azerbaijan. The most important of them is the establishment of the Baku International Multiculturalism Centre (BIMC) in 2014 according to the decree of the President of the Republic of Azerbaijan. The main goal of the centre is to ensure the protection of cultural and ethnic diversity in the country and to achieve recognition of the country as a centre of multiculturalism in the world.

CONCLUSION AND SUGGESTIONS

As a result of the investigation of ethnodemographic processes in the Shaki-Zagatala economic region, the following conclusions were obtained:

1. Natural-geographical and socio-economic factors have played a significant role in the formation of the modern settlement system of the population in the Shaki-Zagatala economic region, leading to an uneven distribution of the population across the territory, changes in the number of people in settlements, and changes in the area of settlements. While moving from the foothills to the highlands, the number, area, population and density of villages generally decrease. According to the interpretation of the satellite images of the study area, nuclear-type villages are replaced by linear and, to a lesser extent, scattered-type villages while moving from the lowlands to the highlands. However, scattered-type villages are more widespread in the plain areas of the Shaki-Zagatala economic region, especially in areas up to 200 meters. The differences that emerged in the settlement system have affected the

demographic indicators of the population, as well as ethnic minorities, especially their participation in migration processes [32].

2. The majority of the population (61.6%) and settlements (231 villages, 6 urban settlements) in the Shaki-Zagatala economic region are located within the 201-500 metre altitude zone. In this zone, which covers the foothills and plains, the river basins along the Ganikh-Ayrichay valley create ample opportunities for the development of various agricultural sectors, making the area suitable for settlement, which is why large villages and rural agglomerations have formed in the area. Agriculture within this zone is also distinguished by its versatility. Within the zone, villages are located close to each other, and nuclear-type villages are distinguished by numerical dominance [32].

3. The number of villages with a population of up to 50 people in the economic region has increased, and at the same time, an increase in the number of villages with large demographic potential has been observed. This indicates that large villages are growing further in population, while small villages are declining. The main part of rural settlements in the area, as well as villages inhabited by minority ethnic groups, was built in the 200-500 metre altitude zone. The majority of villages with different national and ethnic composition within this altitude zone of Balakan and Zagatala districts indicate that minority peoples mainly settled in this zonation. Although the population is rapidly increasing in the plains and foothills of the region up to 500 metres, the population, as well as minority ethnic groups, is rapidly decreasing within the 500-1000 and 1500-2000 metre altitude zones. This has also led to the polarization of population [6].

4. From 1999-2019, the share of minority ethnic groups in the study area decreased from 22,3% to 16,9%. If we look at each minority ethnic group, the share of Avars among the total population of the region decreased by 1,8%, Tsakhurs by 0,8%, Lezgins by 1,3%, Udis by 0,2%, Inghilois and Georgians by 0,8%, and the share of other ethnic and national minorities by 0,5%, while the share of Azerbaijanis increased by 5,4%. The main reason for this decrease was related to the process of cultural consolidation developing on the basis of the principle of mutual respect and coexistence between nations [16; 17; 19; 20; 31].

5. In the years 1999-2023, the balance of migration was negative in all administrative districts except the Gakh district. According to survey materials, the main migration region of Azerbaijanis, Avars, Tsakhurs, Muslim Inghiloi and Lezgins is the Russian Federation. In Russia, to work and study there, the migrants visit mainly the Republic of Dagestan, Voronezh, Saratov, Samara, Tyumen, Stavropol, Astrakhan, Rostov, and other provinces. Udis also migrate to Russia to work and study. Christian Inghiloi and Georgians migrate mainly to Georgia, Russia, and Germany. The majority of migrants in internal migration processes preferred Baku [13; 14; 30].

6. In the sex ratio, there was a slight increase in the share of men from 1999-2019, which was due to factors such as the higher number of men among immigrants to the territory, selective abortions, and the higher number of boys among births. In the age ratio, a significant percentage difference was observed for various age groups. In the lower age groups (0-9 age group), there was a 1,5-2-fold decrease for both Azerbaijanis and each minority ethnic group. The decrease in the number of those in the lower age groups was due to factors such as the increase in the age of marriage and divorce, the increase in the tendency to have fewer children, and the active participation of young people in migration processes. This led to an increase in the share of those in the upper age group among the general population. The increase in the share of those in the upper age group and the increase in the average life expectancy led to an increase in the level of aging. Thus, the aging index for Avars increased from 19 to 37,3, for Tsakhurs from 23 to 35,9, for Udis from 34,5 to 63,9, and for Azerbaijanis from 14,5 to 28,4 [7; 18].

7. It has been revealed that there is a process of polarization in the settlement system of the region. This process has shown itself in the example of both plain and mountain villages. Although some villages formed large agglomerations (Gakhbash, Gakh Inghiloi, Boyuk Dahna, etc.), some villages either had no population (Abjit, Kusnat, Darvazbina, etc.) or their population decreased (Saribash, Baghtala, Dizakhli, etc.). From 1999-2019, it was recorded that there was a population decrease in 58 rural settlements in the economic region. The population of 30 of those villages consists of minority ethnic groups. 7 of these villages

belong to the Balakan, 12 to the Gakh, 2 to the Gabala, 3 to the Shaki, and 6 to the Zagatala districts. Generally, the problem of depopulation of mountain villages, as well as some lowland villages, has been registered at the national level [12; 21; 22; 24].

8. In order to eliminate such problems arising in the settlement system of the region, a rural development model based on the concept of sustainable development has been established in the region, and on the basis of the established development model, it has been found that a development plan based on a multisectoral approach should be established to eliminate serious differences in rural settlement, demographic and ethnodemographic development in the economic region. A multisectoral approach to rural development is an approach in which the rural economy is based not only on agriculture, but also on other additional sectors, namely tourism, industry, transport, etc. [32].

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