

**DEMOGRAPHIC AND ECONOMIC DEVELOPMENT OF LARGE CITIES IN AZERBAIJAN****Rovshan Karimov, PhD.**

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**Abstract**

*Azerbaijan, the country in Caucasus region has been known to be a republic with higher ratio of population growth when it was an integral part of the former USSR. Rate of population growth has been considerably decreased here after it gained independence after collapse of Soviet Union. Socio-economic problems negatively impacted on demographic processes, particularly population growth in the large cities of the country. For present, the process of high distribution of people in Absheron area which includes Baku, the capital and largest city of Azerbaijan Republic must be curbed. Because overwhelming majority of the population as well as economic potentiality of the country falls to the share of this small area. This necessitates high-speed development of provincial cities situated in other regions of the country. This would contribute great significance for the country's further progress. Developing industrial areas and infrastructure, creating new labor-consuming enterprises, and increasing employment in the medium and small cities are important socioeconomic issues. In this paper, the author studies up-to-date and perspective demographic development of large provincial cities of Azerbaijan in economic context.*

Looking on history of urban development in Azerbaijan, it should be regretfully noted that overgrowth of Baku, the capital city as well as its overlarge share within general domestic production has been one of key argued socioeconomic issues. This has been being observed within the all 20<sup>th</sup> century in the republic. Share of the city of Baku was very high within the urban population of Azerbaijan. In 1920, 63% of the urban population fell to the share of Baku.

Generally, till the World War II, 50-70% of urban population of Azerbaijan has lived in the territory of peninsula of Absheron where Baku and adjacent urban-type settlements are situated. Since 20es, the cities started to develop with high speed. The development of cities has been going more intensively in 30es. Creation of new heavy industrial enterprises in cities as well as exploitation of raw mineral resources has been playing a role of impetus for the development of urbanization in the postwar years. Mingechevir, Ganja, Shirvan (named Ali Bayramly till 2007) should be particularly noted among the most highly developing provincial cities in this period. Although the cities were highly developing, preventing human migration from provinces of Azerbaijan to Absheron almost was not possible in connection with high improvement of oil- and gas industry in the noted territory. Baku has carried not only economic function but also function of administrative centre. This fact, and also creating a lot of administrative, social, cultural, scientific centers and higher educational schools here have entailed arising mass stream of population from the regions to this city and its suburb territories. Higher development of labor-consuming spheres of industry and infrastructure has been involving people from regions and larger provincial cities to the capital city. More and more migrants from provincial cities were leaving for Baku because of poor structure of large cities' secondary sector, lagging in creating labor-consuming enterprises as well as lower level of urban infrastructure compared to the capital city. Consequently, difference between Baku and other cities for population number has been becoming greater year by year. Population number of large cities, including Ganja, Sheki, Nakhchivan, Lencoran and others were much lower in comparison with Baku. According to official statistics, over ¼ part of Azerbaijan's population and more than half of the urban population are residents of Absheron region which covers just 6% of area of the country. However, in fact, number of people that live in Absheron is over 3.5 million, which makes up 45% of the total and more than 70% of the urban population of Azerbaijan.

The cities-regional centres of Azerbaijan have their distinguishing peculiarities. Shirvan (1938), Mingechevir (1948), Yevlakh (1954) have arisen about 60-80 years ago whereas cities of Ganja, Sheki, Nakhchivan, Lencoran have been founded in the ancient and medieval periods. Demographic development of these urban clusters has happened in accordance with structure and variety of their economy. Unlike other older cities, heavy industrial areas have been developed jointly with light industrial spheres in Ganja during Soviet government.

A lot of labor-consuming industrial enterprises have been commissioned in the city. Ganja has turned to a second city of Azerbaijan and fourth city in the South Caucasus for its population number and level of scientific-cultural development. Production output and profile of the existing industrial enterprises have been improved. Enterprises of non-ferrous metallurgy and engineering, including plants of aluminum and automobile, factories of boot, sugar, winery and etc. have been commissioned in Ganja. Industrial junction of Ganja-Dashkesan, linking many cities and urban settlements, has been formed in connection with exploitation of mineral resources of north-eastern part of the Less Caucasus.

Presently, population of Ganja exceeds 310 thousands people. However, from view of rational demographic development and distribution of population, it would be more efficient if Ganja had developed higher and turned into a city of at least half million people within the past period. This might play more significant role in preventing overgrowth of Baku. Created in the last century, the cities of Mingechevir, Shirvan and also Yevlakh have highly grown due to development of industry and transport juncture.

A water basin and large hydro-electric power station have been being commissioned in Mingechevir in 50es. Engineering, metal processing, construction, light industry enterprises have been put in motion in this city within the further years. Azerbaijan State Region Power Station, the larger power station of Azerbaijan is situated in Mingechevir. Significant industrial buildings, including the first open-type power station in Europe have been commissioned in the city of Shirvan in connection with exploitation of oil- and gas fields in the plain of South-Eastern Shirvan. One of the largest cotton-refinery enterprise of the republic also functions in the city.

In other researched provincial cities (Nakhchivan, Sheki, Yevlakh, Khankendi, Lencoran) main attention was drawn to the development of light- and food industry as well as highway and railway transport. The city of Yevlakh has been formed as a transport- and industry center. Its largest industrial enterprise had been a cotton-refinery plant for decades. Situated on the railway- and highway lines of Baku-Tbilisi, Yevlakh city simultaneously links significant routes such as Yevlakh-Balaken, Yevlakh-Khankendi and Yevlakh-Mingechevir. This factor positively has influenced to its development. To-day, function of transport still positively impacts on development of this city. However, speed of development of Yevlakh as well as other cities like, Nakhchivan, Sumgait, Khankendi and Lencoran within the past period shouldn't be evaluated as high. Among larger enterprises, just fish conservation plant of Lencoran, boot factory, bread- and milk products enterprises of Khankendi, fruit- and vegetable processing plant, silk factory of Sheki worth to be mentioned. All these enterprises were less labor-consuming. Consequently, population number of these cities has been growing with slow rate. Part of working-able people had migrated from these cities where number of created workplaces was less than required. Giving status of "city of republican subordination" to these cities has not entailed expected result in the Soviet period. Residents of these cities and the vicinity areas preferred the capital when seeking job.

Presently, still there is a very large difference between Baku and provincial cities for level of economic development. Elimination of this difference is not easy, and it is very hard to solve this issue within a short time. Newly-created cities have prevailed over most other large- and medium cities for *absolute population growth*. Population number grew by 91% in Mingechevir and Khankendi (or nearly 2 times), by 73% in Nakhchivan and 72% in Shirvan within 1970-1989. Population number of Yevlakh grew by 52% as well as of Ganja by 48% within the noted period whereas corresponding indicator made only 26% in Lencoran. Taking into account that the indicators of population number of the provincial cities were less in 70es and 80es, the last three growths in percent should not be considered as high.

As noted before, after collapse of USSR in 1991, socioeconomic and sociopolitical crises of 90es, and ongoing Karabakh war had hardly affected economic and demographic development of cities in Azerbaijan. As seen from table 1, population of Shirvan, Nakhchivan and Yevlakh has grown more highly within 1990-2011, while population growth has gone slower, for example, in Lencoran. The city of Khankendi should be particularly noted among the researched cities. Armenian military forces have invaded into the territory and consequently, the Azerbaijani residents of 11 administrative regions, including the city of Khankendi, have been obliged to leave their living places in mass. As a result, sharply decrease of population number was observed by the city's population. In fact, Khankendi is being ruled by Armenian military forces within the last 20 years. Industry of the city has experienced regression in this period. Industrial enterprises of local importance illegally function at the expense of support from Armenia.

Table 1: Dynamics of population growth

Name of city	Number of population (thousand people)						Growth (per cent)		
	1990	1996	1999	2002	2005	2011	1990-1999	1999-2011	1990-2011
Ganja	281.0	294.2	298.9	300.9	304.0	315.9	6.4	5.7	12.4
Mingechevir	87.7	94.2	94.0	94.6	95.9	97.8	7.2	4.0	11.5
Nakhchivan	60.1	63.1	63.2	64.3	70.0	72.7	5.2	15.0	21.0
Shirvan	59.4	66.4	67.4	68.7	72.8	73.9	13.5	9.6	24.4
Sheki	56.5	60.7	61.4	61.8	62.2	63.5	8.7	3.4	12.4
Yevlakh	46.5	49.2	52.0	52.5	53.6	58.3	11.8	12.1	25.4
Khankendi <sup>1</sup>	58.3	56.3	52.9	52.9	53.0	53.3	-9.3	0.8	-8.6
Lencoran	45.5	46.6	48.1	48.4	48.4	50.5	5.7	5.0	11.0

<sup>1</sup>The data may be non-exact as the city is occupied by Armenia since the beginning of 90es

As of 2011, total population number of 8 larger cities which are not integral part of urban area of Baku-Sumgait, is 786 thousand people or 16% of urban population of Azerbaijan. Not including the residents of urban area of Baku-Sumgait, the respective indicator is 32%. Relatively higher *birth rate* and *lower death rate* and consequently higher *natural increase rate* of population are features of demographic development of Azerbaijan as well as its cities. *Birth rate* and *natural increase rate* have been decreased within the last about 50 years in Azerbaijan and its cities. Presently, the average number of birth rate is approximately as less as 2 times than the respective indicator of 60es. Natural increase rate decreased within 60-90es by 2.1-2.8 times. Decrease of the birth rate has happened in connection with rising health care as well as literacy rate of the people. Beside this, decrease of birth rate has gone also as a result of social-economic crisis of 90es. Birth rate decreased 1.6-1.9 times within this period.

Table 2: Crude rates of birth, death and natural increase (per 1000 people)

Name of territory or city	Birth				Death				Natural increase			
	1989	1999	2003	2009	1989	1999	2003	2009	1989	1999	2003	2009
Azerbaijan	26.4	14.9	14.0	17.2	6.4	5.9	6.0	5.9	20.0	9.0	8.0	11.3
All cities and urban settlements	23.1	12.5	12.2	15.6	6.2	5.7	6.0	5.8	16.9	6.8	6.2	9.8
Ganja	20.5	9.8	9.9	12.6	5.5	5.3	5.8	6.3	15.0	4.5	4.1	6.3
Mingechevir	29.2	10.5	11.1	15.6	4.3	4.5	5.4	5.4	24.9	6.0	5.7	10.2
Nakhchivan	22.6	12.0	10.9	20.8	3.9	5.1	5.0	5.2	18.7	6.9	5.9	15.6
Shirvan	29.0	11.7	10.8	17.3	4.1	4.8	4.7	5.5	24.9	6.9	6.1	11.8
Sheki	22.4	12.4	12.6	14.6 <sup>1</sup>	7.4	8.0	8.6	7.8 <sup>1</sup>	15.0	4.4	4.0	6.8 <sup>1</sup>
Yevlakh	26.6	11.9	13.8	14.9 <sup>1</sup>	3.7	5.6	5.9	6.5 <sup>1</sup>	22.9	6.3	7.9	8.4 <sup>1</sup>
Khankendi <sup>2</sup>	...	0.4	0.6	1.7	...	0.2	0.2	0.4	...	0.2	0.4	1.3
Lencoran	22.3	13.7	12.0	19.2 <sup>1</sup>	5.8	7.7	7.9	6.2 <sup>1</sup>	16.5	6.0	4.1	13.0 <sup>1</sup>

<sup>1</sup>Taking into account the adjacent urban settlements

<sup>2</sup>Only by Azerbaijanis (indicators by Armenian residents are unavailable)

In 70es and 80es, ratios of birth and natural increase in some cities were chiefly more than the average figure. This feature was characteristic particularly for new cities. Newly-arisen cities such as Shirvan, Minghachevir, Yevlakh even surpassed rural areas them for birth- and natural increase rates.

Ganja, Lencoran, Sheki and other previously-arisen cities had lower rate of birth related to problem of apartment provision. Sociopolitical tension and economic crises arisen in the beginning of 90es have caused considerable changes to go also by birth rate. Unemployment and heavy social condition have entailed arising migration of the young from these cities. Consequently, reduction of birth was fixed within the last 15 years. Birth rate has reduced as less as 87% in Mingechevir; 68% in Shirvan, and 63% in Ganja. Shirvan, Mingechevir, Yevlakh continue to occupy higher places for natural increase rate. As seen from the table 2, the city of Nakhchivan surpasses over other cities for natural growth even for 2 times. Presently, the city of Yevlakh also can be mentioned for comparative higher indicator of natural growth. As the city of Khankendi has been occupied by Armenia, real indicators of birth, death and natural growth by its overall population are not available for the last 20 years.

*Death rate* has not considerably changed in the last up to 40 years in the cities of Azerbaijan. Improving health care and education, achievements in medicine, prohibiting a number of hard and infection deceases have contributed decrease of death coefficient. On the other hand, low quality of atmospheric air and drinking water has negatively impacted on the average life expectancy in the urban areas. However, death rate, including infant mortality has been lower in the second half part of the last century in Azerbaijan. It should be also noted that in 1992-1994, the years when military operations were conducted most hardly in the front of Karabakh, the average number of deaths were 7,2 persons per 1000 people in Azerbaijan. This was highest indicator since the beginning of 60es of the 20<sup>th</sup> century.

In general, the death coefficient by urban residents was high in the middle of 60es, and gradually become lower in the next years, and was relatively constant further for a long time. Death rate has been lower in most provincial cities compared to rural population of Azerbaijan for a long period. The cities of Sheki and Lencoran have been differed from the others for higher death rate. This was connected with age composition of their population. Presently, comparative higher level of birth is observed in Lencoran and Sheki. Death rate is lower than that of the beginnings of 80es in Ganja.

*Human migration* plays significant role in development and enlargement of the cities of Azerbaijan. Industrial cities, including new urban areas (Yevlakh, Shirvan, Mingechevir) have become larger for a long period thanks to migrants coming here from various places of the republic and sometimes even from other republics because of demand for manpower. But negative migratory balance has been observed in many provincial cities, particularly Sheki, Lencoran, Yevlakh. People that left these cities were more than those who came here from outside. Positive migratory balance was fixed till 80es in Mingechevir, Ganja, Shirvan. As for the other provincial cities, many residents of them have migrated to agglomeration of Baku-Sumgait. This negatively impacted on population growth in these cities. Some part of population of larger cities such as Ganja and Mingechevir also preferred to migrate to Baku. Number of “people that went” were more than “people which came” in 80es in most provincial cities. Regression in secondary sector as well as decrease of vacations here took place whereas manpower resources had highly grown in this period. Economic crisis had covered the whole country. Consequently, migration processes became chaotic.

One more point should be noted. One of factors that had been entailing non-regulated migration processes was related to shortcoming in organization of higher educational schools in the territory of Azerbaijan. Only 3 higher educational schools out of 16 were functioning in the provincial cities during Soviet government. The rest were in Absheron (12 higher schools in Baku and 1 in Sumgait). Consequently, thousands of young men were coming to the capital city for taking higher education. Part of them has stayed in Baku where possibility of finding respective job was higher. Conflict between Armenia and Azerbaijan should be noted one more time here. Obligated to leave their living places, Azeris from Armenia, the total number of which is 211 thousand people, have been allocated in Ganja, Mingechevir, Shirvan and other cities. As of 2002, 4.1% of all refugees and people who were obliged to leave their native area, including former dwellers of the territory of Karabakh have been allocated in Ganja as well as 2.7% in Mingechevir, and 0.6% in Shirvan.

Part of population of the researched cities has migrated to other countries to provide themselves with work in 90es. According to State Statistical Committee, 178.7 thousand people have migrated from other urban-type settlements of the republic to abroad on the basis of the official registration within 1990-2007. 94% of people that migrated from Azerbaijan to abroad preferred CIS countries (mainly Russia, Ukraine and Kazakhstan) in 1995-2007. The number of people that temporarily have migrated from Azerbaijan to foreign countries is very more.

*Influence of natural disasters* on development is another problem in development of cities of Azerbaijan. Natural disasters are seen as a negative factor, increasing charges for security measurements and development of urban areas. There are specific problems related to influential risk of natural disasters. These show itself by demographic data by each city.

Table 3: Human migration in official statistics (thousand people) <sup>1</sup>

Years	1990	1995	1999	2001	2003	2007
Name of city						
Ganja	+1.8	-1.4	-0.2	-0.7	-0.3	-0.4
Mingechevir	+1.2	-0.6	-0.1	-0.6	-0.3	-0.3
Nakhichevan	...	...	...	...	...	-0.3
Shirvan	+0.7	-0.3	0.0	-0.2	+0.3	+0.1
Sheki	+0.2	-0.2	-0.1	-0.2	-0.2	...
Yevlakh	-0.3	-0.3	0.0	-0.3	-0.1	...
Khankendi	...	...	...	0.0	0.0	0.0
Lencoran	-0.3	-0.3	-0.1	-0.1	-0.3	...

<sup>1</sup>This table reflects data of Azerbaijan State Statistical Committee

Thus, for instance, 53 thousand people or 18% of the overall population of Ganja city are settled in the buildings with high risk. In Ganja, construction works have been carried out not properly taking into account seismic ability (8 point and more) of the territory as well as city's historical experience. Sustainability indicator from earthquake is about 8-9 points in the one- or two-storey buildings and private houses of the city which are constructed both in 30-40s of the 20<sup>th</sup> century and the recent years. However, some buildings with less sustainability don't answer requirement.

Threat of natural disasters wasn't properly taken into consideration also in Mingechevir city. Construction of water storage of Mingechevir has been carried out with the purpose of developing urban economy as well as enhancing urban residents' living. However, construction of this water basin turned to be origin of threat for Mingechevir's residents. Landslips took place in 1993, 1997, 2003 and 2006 at the foot of Bozdagh-mountain, near Mingechevir water storage. Creation of sand- and gravel pit is responsible for arising deterioration of lower arts of territory of this water storage. To-day, this water basin is a real origin of threat for Mingechevir's dwellers and economic spheres. It should be taken into account that energy security of Azerbaijan Republic considerably depends on the three electric power stations that are located near the Kur-river. From this view, measures on preventing natural disasters such as landslip and inundation should be systematically taken in the area.

Economy and infrastructure of Lencoran city also experience negative influence of natural disasters. Natural disasters, including heavy winds and level hesitations of the Caspian Sea cause economic damage. Coastal cities and urban settlements such as Lencoran, Liman, Hirkan, Narimanabad, Baligchilar and others suffer from natural disasters. 82.7 thousand people or about 30% of dwellers of administrative region of Lencoran live under threat of risk of natural disaster.

Shirvan and Yevlakh are included into the group of clusters, residents and economy of which suffer from inundation and overflow. Urban settlements of Hajigahramanly and Bayramly included into administrative area of Shirvan suffer from flood. Presently, 17 thousand people or 22.1% of residents of Shirvan city as well as 12.6 thousand people or 20% of residents of Yevlakh city live under threat of natural disasters. The cities of Sheki and Nakhchivan have changed their places of location within the last 100 years. Historically, structure of their economy also has changed as a result of stream, earthquake, heavy wind and other natural disasters that were occurred over and over. Up to now, Sheki city was destroyed for 14 times by stream and was rebuilt again and again in different places. Presently, 47 thousand people or about 72% of total population of Sheki city as well as 27 thousand people or about 39% of population of Nakhchivan city live under threat of stream. It is advisable to take fundamental measures on preventing natural disasters in the clusters, including cities we research. For this purpose, extent of threat of natural disasters must be defined. Beside, needed measurements and mapping works must be carried out. Some *economic advancement* has taken place in development of the provincial cities-regional centers in recent years. A number of measurements have been carried out on providing employment.

The realization of “State Program on Socioeconomic Development of the Regions in 2004-2008” has played more significant role for cities. Creating or improving enterprises producing aluminum oxide, metal-, plastic- and domestic products, construction materials, electric energy, wood products, construction materials, electricity, wood products, confectionary, butter, fat, textile, fruit, juice, sausage, flour, mix fodder, other food commodities has played considerable role in social-economic development of Ganja. In the meantime, many higher and secondary non-state schools, health care buildings have been developed. Infrastructure and transport ways also have been rebuilt.

Functioning of public corporation of “Azercabel”, enterprises of processing cotton and cotton fabric, rubber board, flour products, fruit juice have been improved in Mingechevir. In the meantime, electrical machinery enterprise of “Kur”, enterprise of electrical concrete fulcrums of “Interenergy”, public corporation of “Azyolneftmash” have been commissioned in the city. Textile factory have started to function more effectively in Yevlakh city. Beside, brick plant and furniture factory have been commissioned as well as enterprises of production of beverages, beer and tobacco have been put in motion. One of significant issue is related to privatization and modernization of the wool factory. Production of meat products is also planned to be improved in the city.

Reconstruction works have been carried out in the enterprises of Shirvan city, including enterprises of electric energy, exploitation of crude oil and natural gas, seedless raw cotton and its oil, laundry soap, brick, textile industry, construction, reinforce concrete products. Functioning of enterprises of production of silk carpet, cotton fabric, energy, construction, tobacco, laundry soap, structures of door and windows has played a positive role in socioeconomic development of Sheki. Works on creating broiler- and tin plants, sugar beet processing enterprise, scientific-research center on agriculture are being carried out. Recently, activity of tourism companies has been improving in the region. Improvement of activity of gas- and energy supply; commissioning diagnostics- and treatment center; launching construction of car, and commissioning enterprises of plastic products are part of works conducted in Nakhchivan city in recent years. Beside, commissioning asphalt- and concrete plant, numerous enterprises of bread production, plant of beer and brick, furniture factory and others should be noted. In the meantime, a number of administrative, cultural buildings have been commissioned and reconstructed in the city.

Fish processing- and tin plants, enterprises of construction of brick and flour products have been reconstructed in the city of Lencoran. Seaport of Lencoran also has been constructed. Sphere of tourism is developing in the region. Up-to-date treatment- and diagnostics centers have been commissioned in the city. Conducting social-economic measurements by Azerbaijani government has not been possible in Khankendi as this city is under occupation by Armenia.

### ***Perspectives***

Study on socioeconomic problems as well as geographic distribution of population within the territory of Azerbaijan shows that development of large provincial cities of the country needs to be speeded up. However, actually, the cities have more great possibilities for further demographic and economic development.

In my view, the city of Ganja is needed to be developed more highly to enfeeble overgrowth of urban area of Baku further. Ganja should turn to the larger city and considerably impact on demographic development of Western zone of the country. Development of Ganja is very necessary from view of elimination of economic difference between the capital and the regions. Undoubtedly, development of other regional centers also should be taken into consideration. Branches of Baku-based industry as well as infrastructure enterprises of large- and medium size should be opened in cities like Mingechevir, Nakhchivan, Shirvan further. In addition, developing metallurgy, machinery, including production of manufacture instruments, electrical machinery, domestic appliances in cities with less developed secondary sector (Ganja, Mingechevir, Shirvan, Nakhchivan and Yevlakh) is especially actual issue to-day. It would be rational to create enterprises of non-ferrous metallurgy on the basis of exploitation of raw materials in Nakhchivan area.

In the meantime, it is advisable to create enterprises of science-consuming machinery and agriculture equipments as well as to develop soft drinks production on the basis of local subtropics in Lencoran. Sphere of production of mineral water also should be improved here. Advantages of increasing share of workers of social service among engaged population in cities, particularly Sheki, Lencoran, Yevlakh should be considered.

Apartment supply of the young should be enhanced for elevating level of marriage and birth, mainly in the cities of Mingechevir, Lencoran, Nakhchivan, Shirvan, Ganja, and Yevlakh. Special attention should be drawn to development of spheres, such as light industry, sphere of non-production etc. where working abilities of females are larger.

**References**

1. Statistic data on population of Azerbaijan Republic within 1960-2010.
2. Population of Azerbaijan in 2000-2010. Annual bulletins of Azerbaijan State Statistic Committee. Baku.
3. Karimov R.N. The population migration towards the urban settlements in Azerbaijan. 2002. Scientific proceedings of Azerbaijan University of Languages, №3, p.183-186. Baku.
4. Karimov R.N. Some issues of social-demographic development of a region (on example of family relations in Azerbaijan). 2011. «Социально-экономические проблемы региона в условиях инновационного развития территорий». Международная научно-практическая конференция. Нижневартовск (Россия), с.148-152.
5. R.N.Karimov, Z.T.Imrani. 2010. Comparative analysis of economic and demographic development and pollution of environment in cities of Azerbaijan. VI Международная конференция «Стратегия качества в промышленности и образования». Варна, Болгария. Том 1 (1), с. 248-250.