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ANALYSIS OF THE GEODEMOGRAPHICAL CONDITION OF THE URZHAR DISTRICT OF THE ABAI OBLAST

This article examines the geodemographic situation in the Urzhar district of the Abai oblast. Geodemography is a geographically oriented branch of demographic science that studies the patterns of demographic processes in geographical space. The aim of the study is to conduct a comprehensive analysis of geodemographic trends in the development of the Urzhar district of the Abai oblast.

The study analysed the population size and density, natural movements, migration processes, age and gender structure, ethno-demographic composition, urbanisation and settlement patterns, and socio-economic characteristics of rural districts in the Urzhar District. A comparative analysis of population growth/decline rates in all districts of the region was conducted. Based on natural growth indicators, migration and their values obtained from the total growth, rural districts of the Urzhar district with a low natural growth rate have been identified. Settlements with a predominance of migration processes have been identified (Altynshoky, Barkytbel, Besterek, Naualy, Eltay, Zhanatilek, Konyrshauly, Karakol, Koldenen, Kokozek, etc.). The economy of the Urzhar district, which is focused on agriculture, has a significant impact on migration processes. Based on statistical data, a map of the total population and natural growth of the rural population in the district has been compiled.

The study showed that, although there was natural growth among rural districts, territorial imbalance was observed due to negative net migration. The results of the study are necessary for planning, managing and forecasting the social and economic development of the region.

Keywords: demography, geodemography, geodemographic processes, migration, urbanisation, socio-demographic development.

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Абай облысы Үржар ауданының геодемографиялық жағдайын талдау

Бұл мақалада Абай облысы Үржар ауданының геодемографиялық жағдайы қарастырылды. Геодемография – географиялық кеңістіктегі демографиялық үрдістердің даму заңдылықтарын зерттейтін демография ғылымының географиялық бағыттағы саласы. Геодемографиялық деректер аудандағы халықтың орналасу тығыздығын көрсетеді, бұл инфрақұрылымды дұрыс жоспарлауға көмектеседі. Зерттеудің мақсаты – Абай облысы Үржар ауданының геодемографиялық даму үрдістеріне кешенді талдау жасау.

Зерттеу барысында Үржар ауданы ауылдық округтерінің халқының саны мен тығыздығы, табиғи қозғалысы, көші-қон үрдістері, жас-жыныстық құрылымы, этнодемографиялық құрамы, урбандалу және қоныстану жүйесі, әлеуметтік-экономикалық сипаттары талданды. Облыстағы барлық аудандардың халқының өсу/кему қарқынына салыстырмалы талдау жасалынды. Табиғи өсім, көші-қон көрсеткіштері және олардың жалпы өсімінен алынған мәні негізінде Үржар ауданының табиғи өсім коэффициенті төмен ауылдық округтер анықталды. Көші-қон үрдісі басым елді мекендер анықталды (Алтыншоқы, Барқытбел, Бестерек, Науалы, Елтай, Жаңатілек, Қоңыршәулі, Қарақол, Көлденен, Көкөзек және т.б.). Үржар ауданының аграрлық бағыттағы

микасы көші-қон үрдістеріне елеулі ықпал етеді. Статистикалық деректер негізінде аудандағы ауылдық округтердің халқының жалпы саны және табиғи өсім картасы құрастырылды.

Зерттеу қорытындысы бойынша ауылдық округтер арасында табиғи өсім оң болғанымен, теріс миграциялық сальдо, аумақтық дисбаланс байқалды. Зерттеу нәтижесі ауданның әлеуметтік және экономикалық дамуын жоспарлауға, басқаруға және болжауға қажет.

Түйін сөздер: демография, геодемография, геодемографиялық үдерістер, миграция, урбанизация, әлеуметтік-демографиялық даму.

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Анализ геодемографического состояния Урджарского района Абайской области

В статье представлено исследование геодемографического состояния Урджарского района Абайской области. Геодемография – географически ориентированная отрасль демографической науки. Анализ геодемографических данных способствует в правильном расселении населения, планировании инфраструктуры, видов хозяйственной деятельности, социальной сферы и др. Цель исследования – комплексный анализ геодемографических тенденций развития Урджарского района Абайской области.

В ходе исследования были проанализированы численность, плотность населения, половозрастная структура населения, этнодемографический состав, системы урбанизации и расселения, естественное движение населения, миграционные процессы, социально-экономические особенности сельских округов Урджарского района. Проведен сравнительный анализ темпов роста и убывания населения районов области. На основе показателей естественного прироста, миграции и их значений, полученные от общего прироста, определены сельские округа Урджарского района с низким коэффициентом естественного прироста. Определены населенные пункты с преобладанием миграционных процессов (Алтыншоқы, Баркытбел, Бестерек, Науалы, Елтай, Жанатилек, Қоныршаулы, Қарақол, қолденен, Қоқозек и др.). Экономика Урджарского района имеет аграрную направленность, что оказывает существенное влияние на миграционные процессы. На основе статистических данных составлена карта общей численности населения и естественного прироста сельского населения района.

Исследование показало, что, хотя среди сельских округов в изучаемые периоды наблюдался естественный рост, территориальный дисбаланс наблюдался из-за отрицательного миграционного сальдо. Результаты исследования необходимы для планирования, управления и прогнозирования социального и экономического развития района.

Ключевые слова: демография, геодемография, геодемографические процессы, миграция, урбанизация, социально-демографическое развитие.

Introduction

Researching the geodemographic situation of the Urzhar District in the Abai oblastis one of the pressing issues in regional development. Geodemographic processes determine a region's socioeconomic potential through factors such as population density, natural movement, migration, and age-sex structure. In recent years, the district has seen changes in its population, increased migration trends, and a demographic imbalance among its rural districts. A comprehensive methodology for geodemographic analysis was used during the study. Through the processing, grouping and comparative analysis of statistical data, the natural movement,

migration, age-sex and ethnic composition of the population were evaluated.

In achieving the goal of the study, the population and density of rural districts, natural movement, directions and volume of migration, age-sex and ethnodemographic composition, settlement system, level of urbanization, as well as the influence of socio-economic factors were studied. Based on a comparative analysis of the region's districts, the rate of population growth or decline was determined, settlements with low natural growth rates and a dominant migration trend were identified, and the causes of territorial imbalance were revealed. The results obtained are a significant contribution to the development of regional

geodemographic science, issues of territorial planning of demographic processes.

The practical significance of the study is that its results can be used to plan, manage, and forecast the district's social and economic development. The identified list of settlements with low natural growth and a predominance of migration processes can serve as the basis for the development of regional personnel policy, programs for the development of social infrastructure, as well as measures to regulate migration processes.

Literature review

Geodemography is a scientific discipline that has developed from the interconnection of social sciences, demography, economics, and socio-economic geography. It comprehensively examines regional characteristics of demographic processes caused by internal (demographic) and external (economic, settlement, social, ethnic, environmental, political) factors. Geodemographic characteristics influence the direction of socio-economic development in a region (Fedorov, 2014). The object of geodemography is geodemographic processes. A geodemographic process is the temporary development of the population in a specific territory, its quantitative and qualitative changes, and its general character. Geodemographic process includes changes in the spatial distribution of the population and settlement trends (Topchiev, 2005).

Alexander D. Singleton and Seth E. Spielman explore the historical development of geodemography in the United States and the United Kingdom. Geodemographics is important not only for commercial purposes, but also for social research and policy planning. Although this industry has developed in different directions in the US and the UK, technological advances and open data are providing new opportunities for geodemographics. Geodemographics can be a useful tool in politics, urban planning, and the study of social inequality (Singleton & Spielman, 2014).

Timms (1971) studied the spatial distribution of urban residents and their social characteristics, and also developed theoretical concepts of geodemography. Rees (1972) established the theoretical and practical basis for spatial differentiation and clustering of social factors. It served as the basis for

the development of quantitative statistical methods used in geodemography.

The demographic development of each region has its own characteristics in terms of geographical location, ethnic composition, age and gender differences, and level of socio-economic development. The document on the demographic situation in the region analyses indicators of population size, birth rate, mortality rate, migration, age and gender structure, and ethnic composition (Shchukina, 2015). Geodemographic studies are conducted using various methods. The main method of geodemographic research is classification. This method is effective because it allows for the adjustment of various indicators characterising the geodemographic status of the territory under study. The main sources of information for geodemographic classifications are census results and current population records, data obtained during research, and survey data (Kuznetsova, 2015).

Geodemography is an essential analytical tool that integrates demographic and spatial data to enable the analysis of consumer behavior patterns and the optimization of marketing strategies. This approach enhances business effectiveness by facilitating the tailoring of products and services to specific consumer segments (Yazgi Walsh, Brunsdon, Charlton, 2021).

In geodemographic research, many scientific challenges remain unresolved. Although the field of geodemography has developed substantially in both theoretical and methodological dimensions, issues related to data quality and the standardization of analytical models persist. These limitations are particularly evident in developing countries, where deficiencies in data infrastructure and shortages of qualified specialists are common, and where spatial technologies-such as AI-based analytics and geolocation tools are not yet fully integrated into research and applied practice. Geodemographic research is well developed in urban areas but remains insufficiently advanced in rural settlements. Despite the scientific significance of geodemography, its full potential has yet to be realized. Addressing these shortcomings requires the development of geodemographic approaches grounded in inclusivity, accuracy, and critical analytical rigor (Gnyawali & Sigdel, 2025).

Geodemography is an effective tool that enables the clustering of spatial units based on socio-

economic data. Research conducted at the Small Areas level in Ireland demonstrates the capacity of this approach to reveal local socio-economic disparities (Yazgi Walsh, Brunsdon & Charlton, 2020). The use of open data and open-source tools enhances the methodological accessibility of research and enables geodemography to be employed more effectively as an analytical instrument aimed at serving public interests and informing policy decisions.

Thus, geodemography represents a critical analytical tool that integrates socio-economic and spatial data to facilitate the examination of local disparities. However, limitations related to data quality and technological resources impede the full realization of the field's potential. Addressing these challenges requires the development of methodologies grounded in inclusivity, precision, and critical analysis, as well as ensuring that data remain open and accessible.

The Abai oblast was part of the East Kazakhstan Oblast of the former Semipalatinsk Oblast from 1997 to 2022. On 8 June 2022, the Abai Oblast was formed on the territory of the former Semipalatinsk Oblast. Therefore, demographic studies in the Abai Oblast until 8 June 2022 were considered jointly with demographic studies in the East Kazakhstan Oblast. A study of the demographic situation in the East Kazakhstan economic region was conducted by domestic and foreign scientists. Among the scholars who have conducted research on the East Kazakhstan economic region, the works of researchers such as Alekseenko A.N., Makhmetova N.A., and Aubakirova Zh. S. Alekseenko N.V. (2007) analyses the historical and demographic aspects of Eastern Kazakhstan in the 20th century: demographic changes in the 1920s and 1930s, industrialisation and migration, the Great Patriotic War and its demographic consequences, urbanisation and ethnic changes in the 1950s-1980s, and demographic trends during the period of independence. Abenova G.A., Ibraemova M.S., Mukataeva Z.K. (2020) analysed the social, economic and political factors influencing demographic processes in Eastern Kazakhstan in 1985-1995. Makhmetova N.A., Aubakirova Zh.S. (2023) conducted research on the dynamics of the ethnic composition of the East Kazakhstan region. An analysis was conducted of the policy of resettling other nationalities in the region, the predominance of Kazakh and Russian

nationalities, and migration as the main reason for the decline in the number of ethnic groups. Shyngysbaeva Sh.K., Saipov A.A. (2022) analyse the factors influencing the demographic situation, considering the dynamics of natural population growth/decline in the East Kazakhstan Oblast.

Methodology

To analyze the geodemographic situation of the Urzhar district, official statistical data were utilized, obtained from the dataset provided by the District Administration's Department of Economy and Finance. The study examined the following key indicators: total population, ethnic composition, natural population growth, migration dynamics, age-sex structure, and economic activity of the population. During data processing and analysis, statistical, comparative-geographical, cartographic, geoinformation, and analytical methods were employed. These methodological approaches enabled a comprehensive assessment of the demographic and socio-economic characteristics of the study area.

Results and discussion

The districts of the Abai oblast differ from each other in terms of geography, socio-economic factors and natural resources. The Urzhar District is an administrative-territorial unit located in the south of the Abai Oblast. The Urzhar District borders the Ayagoz and Aksuat districts in the north, the Makanshi districts of the region in the west and north-west, and the Alakol district of the Zhetysu region in the south. The Urzhar District is located on the southern slope of Mount Tarbagatai. The climate of the Urzhar District is continental, with very hot and dry summers and frosty winters. Geomorphological structure: the Sauyr-Tarbagatai Range, uplifted during the Palaeozoic period, semi-arid plains, alluvial plains of the Alakol-Sasykkol Lowland. The rivers belong to the internal basin of Balkhash-Alakol. The population is mainly settled at the foot of Mount Tarbagatai and along the valleys of large rivers (Urzhar, Karakol, Eginsu, Besbakan, Karagaily, Zhetibay, Karasu, Shoshkaly, Kusak, etc.). This is due to the fact that the soils in these regions are fertile, rich in water, and favourable

for the development of crop and livestock farming. The main industry in the region is agriculture. The total land area is 12,000 km². The geographical location of the region influences the population density and demographic structure. The administrative division consists of 35 settlements, grouped into 16 rural districts. The district centre is the village of Urzhar. The population is 41,240. The population density of the Urzhar District is relatively low, averaging 3.44 people per square kilometre.

In order to effectively study and plan the demographic development of the region, a comparative analysis of the population size with other districts of the region was conducted. Since gaining independence, the Republic of Kazakhstan has conducted three population censuses: in 1999, 2009, and 2021. The Abai oblast has two cities of regional significance and ten districts. The analysis of the population by administrative-territorial structure of the Abai oblast for 2009-2021 is presented in the table below.

Table 1
Population growth/decline rates in the Abai oblast

№	Districts and cities of the region	2009	2021	Growth/decline rate (%)	2021 By 2009%
1	Abai District	15258	14240	-6,6	93,3
2	Aksuat District	21276	19916	-6,3	93,6
3	Ayagoz District	74572	66956	-10,2	89,8
4	Beskaragay District	22210	18296	-17,6	82,4
5	Borodulikha District	40167	33647	-16,2	83,8
6	Zhanasemey District	25228	20868	-17,2	82,7
7	Zharma District	44770	37460	-16,3	83,7
8	Kokpekti District	18375	13932	-24,1	75,8
9	Makanshi District	32135	27467	-14,5	85,5
10	Urzhar District	51039	43643	-14,4	85,5
11	The city of Kurchatov	10127	10411	2,8	102,8
12	The city of Semey	299264	303210	1,31	101,3
13	total	629193	589358	-6,5	93,7

**Note. Compiled by the authors based on data from the Bureau of National Statistics*

According to the results of the analysis of the population by administrative-territorial structure of the Abai oblast, there was a decline in population. Between 2009 and 2021, the total population of Kazakhstan increased, but there is a regional imbalance. The overall growth rate is - 6.5, with the population share remaining at 93.7%. Several factors may influence this trend. External migration (emigration), migration of ethnic groups to countries such as Russia and Germany, for example, Russian, German, Ukrainian, etc. Ethnic groups are most populous in the East Kazakhstan economic region. Labour migration, young people leaving for countries such as Russia, South Korea, and Turkey. Internal migration (urbanisation), migration from

rural areas to cities. In cities of regional significance, namely Kurchatov and Semey, positive growth is observed, as stable operations have been established in urban areas. Environmental and radiation factors (Semipalatinsk nuclear test site). The Urzhar District of the study area is also experiencing a decline in population. Nevertheless, the demographic situation has remained relatively stable compared to other regions between 2009 and 2021, with the population share remaining at 85.5% and natural growth increasing. The following table presents an analysis of population changes by rural district in the region under study.

This table shows the population growth rates for rural districts in the Urzhar District between

2015 and 2024. During the COVID-19 pandemic, there was a decline in population, a trend that may be linked to the socio-economic consequences of the pandemic. In addition, migration and urbanisation have contributed to a decline in the region's population. The following map shows the population by rural districts in the Urzhar District.

Figure 1 shows the population by rural districts in the Urzhar District. The rural district of Salkynbel has a population of less than 600 people (585 people) and consists of two settlements: the villages of Karabuyrat (199 people) and Segizbay (386 people). The Urzhar rural district, with a population of over 3,000, includes the villages of Urzhar,

Kyzyltu, and Burgon. The population of the Urzhar rural district is high due to the location of the district centre in the village of Urzhar, which has a population of 17,560. However, there is a regional imbalance in the Urzhar rural district, with low natural growth and low population numbers in the villages of Kyzyltu and Burgon. In general, rural districts in the region show a tendency towards disproportion, i.e. territorial imbalance. For example, the rural districts of Konyrshauly, Karakol, Kusak, etc. The following map shows the natural population growth in the rural districts of the Urzhar District. This indicator was used to assess the rate of population growth or decline.

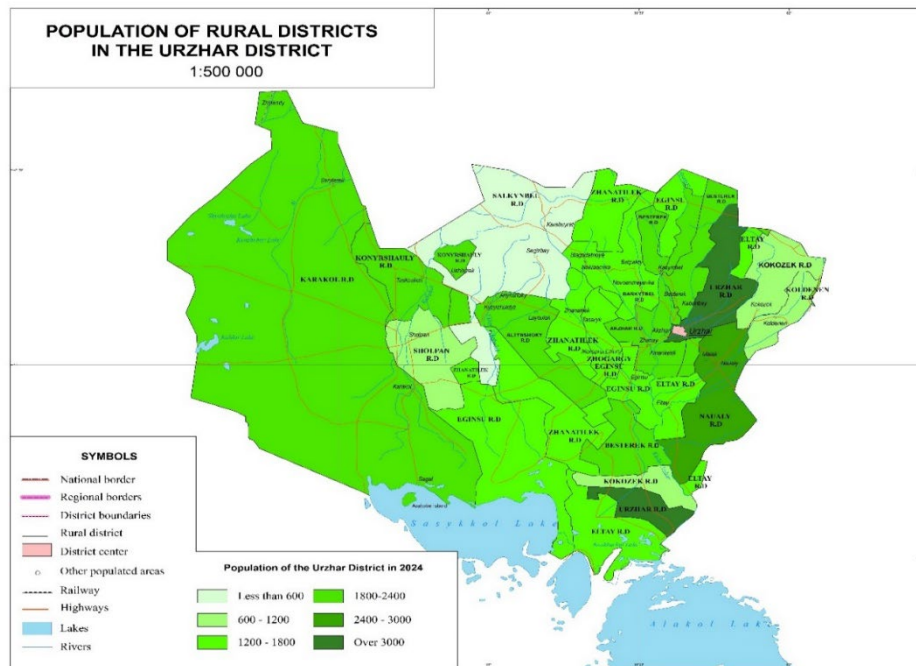
Table 2

Table 2. Rural population of the Urzhar District

№	Names of rural districts	5 years prior to the first five-year period (01.01.2015)	the end of the first five-year period (1.01.2019)	the beginning of the First Five-Year Plan over the past 5 years (01.01.2020)	the end of the first five-year plan in the last five years (01.01.2024)
1	Urzhar	16 252	17 395	18 354	17 709
2	Akzhar	1 948	1 785	1 811	1 794
3	Altynshoky	2 868	2 596	2 363	2 116
4	Barkytbel	2 195	1 975	1 826	1 653
5	Besterek	2 805	2 617	2 486	2 352
6	Eltay	1 694	1 595	1 583	1 503
7	Egynsu	1 668	1 549	1 432	1 325
8	Zhanatilek	1 876	1 793	1 577	1 473
9	Zhogargy Eginsu	1 413	1 357	1 291	1 267
10	Naualy	3 690	3 579	3 052	2 914
11	Salkynbel	1 337	1 080	737	619
12	Karakol	2 277	2 167	2 038	1 892
13	Konyrshauly	2 957	2 913	2 769	2 322
14	Koldenen	1 451	1 295	1 244	1 082
15	Kokozek	1 263	1 164	1 097	1 013
16	Sholpan	1 308	1 211	1 064	1 045
	total	47 002	46 071	44 724	42 079

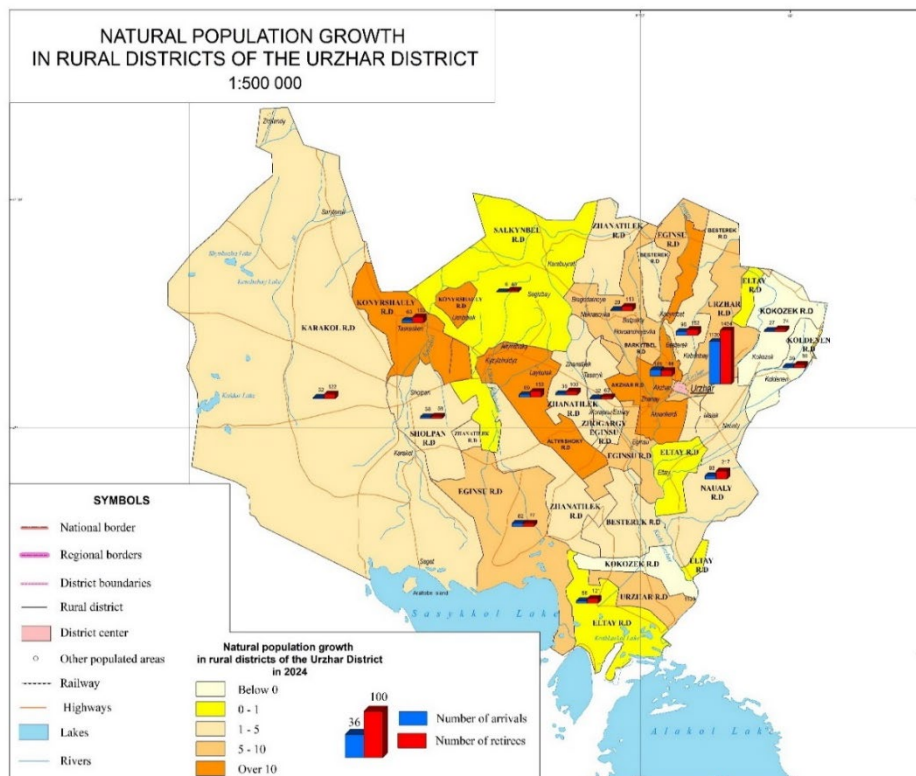
**Note. Compiled based on data from the Department of Economy and Finance of the Urzhar District*

Figure 1
Population by rural districts of the Urzhar District



**Note. Compiled by the authors according to the Department of Economics and Finance of Urzhar District*

Figure 2
Natural population growth by rural districts of the Urzhar District



**Note. Compiled by the authors on data from the Department of Economy and Finance of the Urzhar District*

Figure 2 shows the natural population growth in the rural districts of the Urzhar District. Rural districts with high natural growth rates are Altynshoky, Akzhar, and Konyrshauly. Natural growth is lower in the rural districts of Koldenen, Kokozek, Salkynbel, and Eltay.

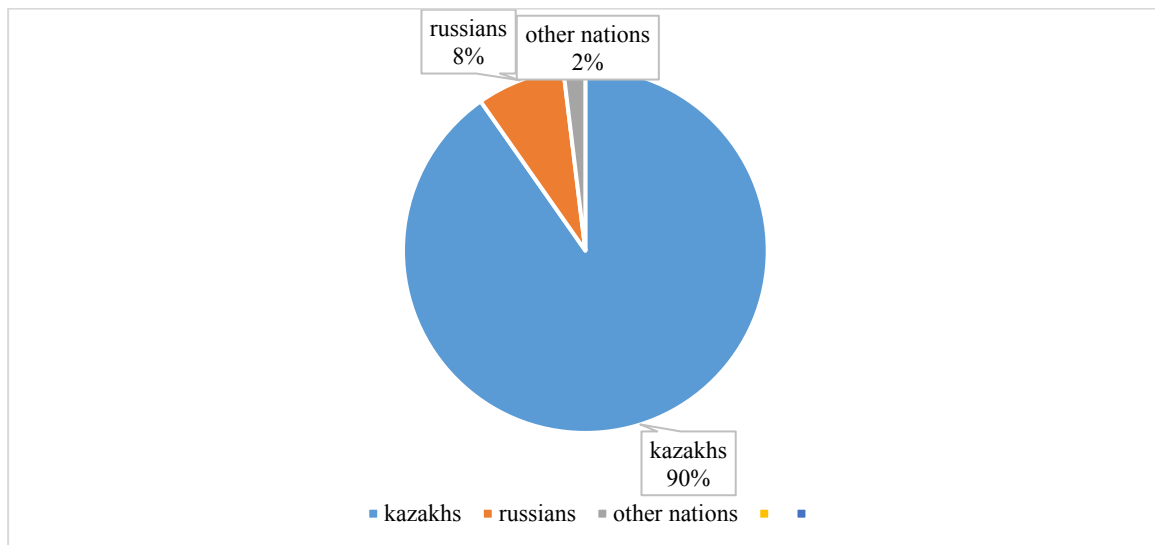
In the Urzhar district, population decline was observed in the 1990s, i.e. during the years of independence, when representatives of other nationalities returned to their homeland and the republic transitioned to a market economy. More and more people began to migrate from the countryside to the city. The ethnic composition of the population of the Urzhar District is shown in the following diagram.

The population of the Urzhar District is 41,240 thousand people, 90% of whom are Kazakhs (38,039 thousand people), 8% are Russians (3,289 thousand people), and 2% are other nationalities. Among other nationalities, the most common are Germans (354), Tatars (161), Chechens (83),

Koreans (53), Uzbeks (40), Bulgarians (30), Belarusians (18), Tajiks (12), and others. Migration has had a significant impact on the ethnic structure of the region's population. The migration process was particularly intense after the Republic of Kazakhstan gained independence in 1991. Over the years of independence, political and economic changes in the state, ethnic tensions, historical ties and government programmes in Germany and Russia have influenced the migration process. On the contrary, the policies and programmes of the Government of Kazakhstan aimed at supporting compatriots have contributed to the migration of ethnic Kazakhs. As a result, more and more ethnic Kazakhs have begun to settle in the region. During those years, there was a trend of mass emigration of Russian and German nationals returning to their homelands. Migration is a pressing issue in rural areas of Kazakhstan. In recent decades, rural areas in the region have seen a decline in population and an increase in internal and external migration rates.

Figure 3

Ethnic composition of the Urzhar District



**Note. Compiled by the authors based on data from the Bureau of National Statistics*

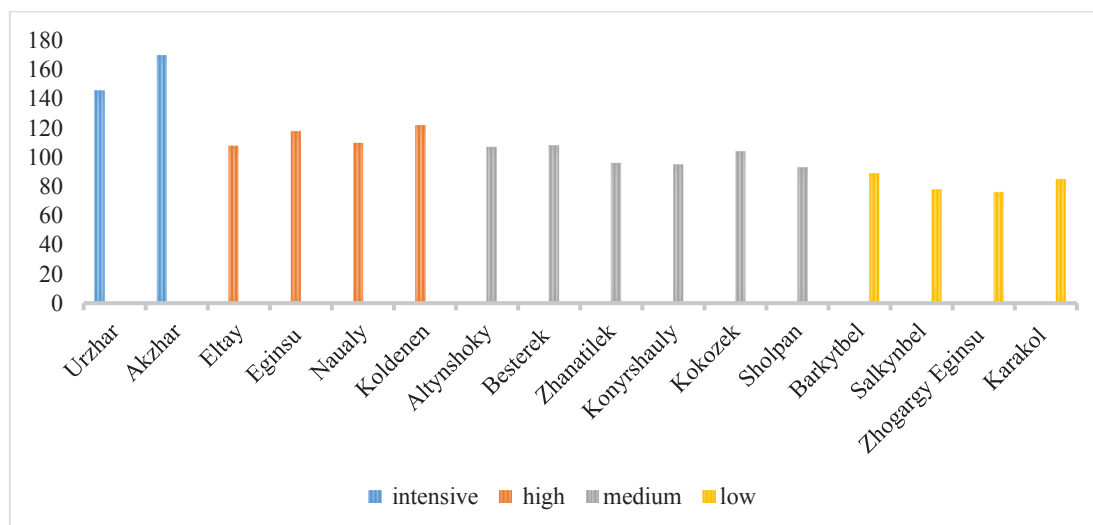
Table 3*Migration of rural districts in the Urzhar District*

№	Names of rural districts	Number of births	Number of fatalities	number of migrants	number of immigrants	migration balance (+, -)
1	Urzhar	285	130	1 130	1 434	-304
2	Akzhar	48	29	169	144	25
3	Altynshoky	48	27	69	153	-84
4	Barkytbel	25	13	29	113	-84
5	Besterek	29	22	96	153	-57
6	Eltay	17	16	58	121	-63
7	Eginsu	23	15	82	77	5
8	Zhanatilek	13	9	36	100	-64
9	Zhogargy Eginsu	15	11	32	63	-31
10	Naualy	39	28	93	217	-124
11	Salkynbel	3	3	6	40	-34
12	Karakol	18	16	32	122	-90
13	Konyrshauly	54	24	63	153	-90
14	Koldenen	2	15	39	86	-47
15	Kokozek	6	8	27	74	-47
16	Sholpan	12	7	38	58	-20
total		637	373	1 999	3 108	-1 109

**Note. Compiled based on data from the Department of Economy and Finance of the Urzhar District*

According to data for 2024, the total population of the district is 41,240 people. The main factors recorded this year, such as demographic indicators – birth rate, death rate, migration – contributed to changes in the population size. In 2024, 637 children were born in the district and 373 people died. Based on these figures, the natural increase is 264 people ($637 - 373 = 264$). The positive natural growth trend indicates that the birth rate in the region is higher than the death rate, suggesting that conditions are favourable for internal population growth. In the same year, 1,999 people moved to the district, while 3,108 people emigrated from it. The migration balance is -1,109 people ($1,999 - 3,108 = -1,109$), which indicates a negative impact on population decline. A negative migration balance indicates a high tendency for the population to migrate to other

regions or countries. Taking into account natural growth and net migration, the overall demographic growth of the region's population is negative. The migration balance in the Akzhar and Eginsu rural districts is positive. Overall, the migration balance is low in all rural districts, especially in the rural districts of Altynshoky, Barkytbel, Besterek, Naualy, Eltay, Zhanatilek, Konyrshauly, Karakol, Koldenen, and Kokozek. This trend shows that there are fewer migrants than those who have left. The main reasons are the lack of jobs associated with seasonal agriculture, with young people leaving for the city to find a stable source of income. In the rural districts of Koldenen, Kokozek, and Salkynbel, there is an ageing population and a decline in natural growth. The following diagram shows the migration activity coefficient for rural districts in the Urzhar District.

Figure 4*Migration activity coefficient for rural districts in the Urzhar District (%)*

**Note. Compiled based on data from the Department of Economy and Finance of the Urzhar District*

The settlements of Urzhar and Akzhar have very high migration rates. This indicates active population movement, i.e. an intense level of inflow and outflow. In these rural districts, there is a high level of migration, and the demographic movement of the active population is proceeding at a rapid pace. Migration activity in these villages is at an average level: Altynshoky, Besterek, Zhanatilek, Konyrshauly, Kokozek, Sholpan. Movement is stable, but there is no clear pace. In the villages of Barkytbel, Salkynbel, Zhogargy Eginsu, and Karakol, migration rates are low. Here, the population movement is rare and stable. Overall, migration activity in some villages in the Urzhar District is high, while in others it is somewhat low. The age and gender structure of the population in the Urzhar District is one of the most important indicators of the demographic situation in the region. The following table shows the age and gender composition of the district's population.

If we analyse the gender and age characteristics of the population of rural districts in the Urzhar District, the total population of the district is 41,240 people. Of these, 20,834 (50.5%) are men and 20,400 (49.5%) are women. In terms of gender composition, the population is close to equilibrium. There are remote settlements located more than 50 km from the district centre: Farm 1, Abai village, Sagat, Karakol (Karakol rural district), Sholpan (Sholpan aul district), Taskesken, Ushbulak (Konyrshauly), Karabuyrat,

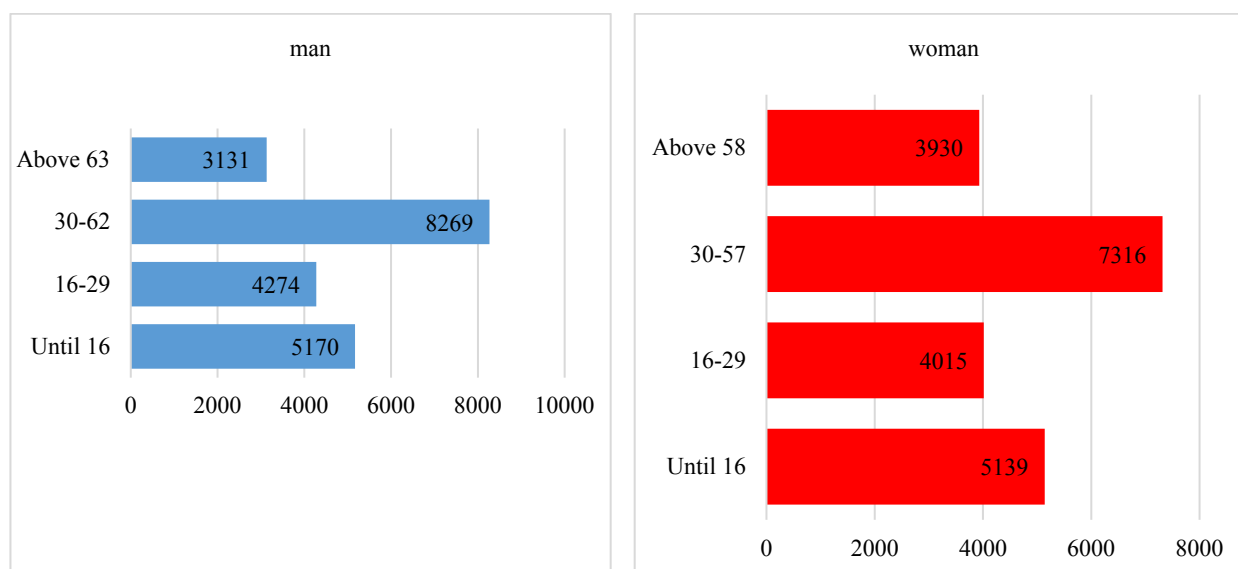
Segizbay (Salkynbel). The migration of young people and those of working age from remote villages is a common phenomenon. In accordance with the Social Code of the Republic of Kazakhstan dated 20 April 2023, pension provision is implemented in the republic. The retirement age for men is 63 years, and for women, 61 years (until 2028). The age and gender composition of the population of the Urzhar District is presented in the form of a diagram.

The working-age population of the district is 23,864, of which 4,274 are men aged 16-29 and 8,259 are aged 30-62. The number of women aged 16-29 is 4,015, and aged 30-57 is 7,316. In the Urzhar district, the number of women of retirement age (3,930) exceeds that of men (3,131). Overall, the age and gender structure of the Urzhar District is stable and demographic equality is maintained. This situation has a positive impact on the effective organisation of social policy, education and healthcare in the region. 57.9% of the district's population is of working age, with men accounting for 30.4% and women for 27.5%. Young people make up 27.1% of the total population, while pensioners account for 17.1%. There is no trend towards ageing in the region; on the contrary, the population structure has a high proportion of young people. This is considered a positive demographic trend. Such a structure is favourable for the country's future labour force. The following table shows the economic activity of the district's population.

Table 4
Age and gender composition of the population in rural districts of the Urzhar District

№	Names of rural districts	male				Woman			
		age				age			
		Up to 16 years old	16-29	30-62	Over 65 years old	Up to 16 years old	16-29	30-57	Over 58 years old
1	Urzhar	2163	1653	3443	1396	2240	1628	3375	1662
2	Akzhar	363	163	295	146	871	342	149	234
3	Altynshoky	260	225	401	143	1 024	273	214	354
4	Barkytbel	180	175	366	124	736	188	164	230
5	Besterek	265	218	471	181	1 167	264	198	458
6	Eltay	165	158	304	93	721	155	149	281
7	Eginsu	164	120	304	90	660	169	123	228
8	Zhanatilek	122	189	318	106	678	139	155	235
9	Zhogargy Eginsu	140	157	286	64	593	148	128	196
10	Naualy	297	406	501	220	1 377	296	378	435
11	Salkynbel	59	56	129	48	293	53	56	114
12	Karakol	244	203	400	104	853	225	160	285
13	Konyrshauly	337	268	375	187	1 095	309	251	338
14	Koldenen	126	96	223	101	476	100	76	181
15	Kokozek	134	89	214	65	462	111	93	178
16	Sholpan	151	98	229	63	489	127	93	194
total		5170	4274	8259	3131	5139	4015	7316	3930

**Note. Compiled based on data from the Department of Economy and Finance of the Urzhar District*

Figure 5
Age and gender composition of the population of the Urzhar District


**Note. Compiled by the authors based on data from the Bureau of National Statistics*

Table 5*Economic activity of the population in rural districts of the Urzhar District*

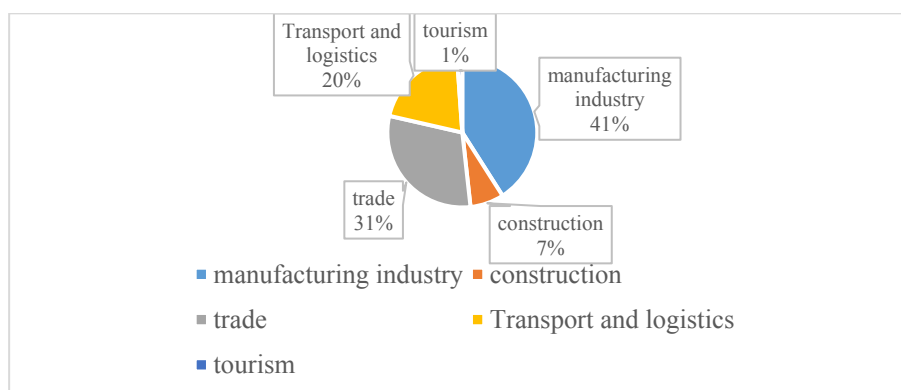
№	Names of rural districts	manufacturing industry	Construction	trade	Transport and logistics	tourism	another	Including		Unemployed
								mercenary	Cself-sufficiency	
1	Urzhar	426	47	1128	437	11	7636	3245	6440	414
2	Akzhar	136	35	75	60	6	484	346	450	45
3	Altynshoky	78	18	63	80	0	906	381	764	49
4	Barkytbel	129	30	33	45	2	654	304	589	42
5	Besterek	199	37	77	64	16	899	427	865	53
6	Eltay	89	19	25	35	0	696	272	592	28
7	Eginsu	77	22	43	51	0	549	246	496	33
8	Zhanatilek	165	19	42	59	4	573	263	599	35
9	Zhogargy Eginsu	111	10	21	32	0	563	230	507	30
10	Naualy	241	53	46	61	5	1246	517	1135	68
11	Salkynbel	28	5	20	29	0	247	108	221	26
12	Karakol	148	42	30	46	0	729	326	669	53
13	Konyrshauly	211	26	38	47	11	833	414	752	66
14	Koldenen	138	12	23	37	4	338	189	363	24
15	Kokozek	110	11	20	27	4	379	178	373	23
16	Sholpan	17	23	21	31	0	498	191	399	24
total		2303	409	1705	1 141	63	17230	7637	15214	1013

**Note. Compiled based on data from the Department of Economy and Finance of the Urzhar District*

Economic activity and employment in the Urzhar District have undergone changes in recent years. Agriculture and infrastructure projects are among the main pillars of the region's economy. In the Urzhar district, women's economic activity plays an important role in the socio-economic development of the district. Women account for approximately 49.5% of the total population. This figure means that they can participate widely in all areas of society, especially in the labour market. In recent years, women's economic activity has been growing as a result of government programmes, including initiatives aimed at supporting entrepreneurship and employment among women. This trend is also observed in the Urzhar district. Women have started to engage in individual entrepreneurship and are finding their place in small

and medium-sized businesses. Women are actively working in all sectors of the district's economy. Women predominate in certain types of activities. Systematic work is being done to promote the political advancement of women. The following figure shows the economic activity of the population of Urzhar district.

The results of the analysis clearly indicate that the economic activity of the population in the Urzhar district is unevenly distributed across sectors. According to the diagram data, the manufacturing sector holds a leading position, accounting for the largest share of the economically active population (41%). This demonstrates that the district's economy is predominantly oriented toward industrial production and that there is a well-established tendency toward processing local raw material resources.

Figure 6*Economic activity of the population of the Urzhar District*

**Note. Compiled by the authors based on data from the Bureau of National Statistics*

The trade sector emerges as the second most significant area of economic activity, accounting for 1,705 individuals. This sector not only meets the population's daily consumer needs but also reflects the active flow of goods within the district and between the region and surrounding areas. The indicator for the transport and logistics sector (31%) highlights the relatively developed state of infrastructural connections and underscores its role in ensuring the continuity of economic activity.

Economic activity in the construction sector is moderate, accounting for 409 individuals (7%). This is explained by the relatively limited volume of new construction projects and insufficient investment activity. In contrast, the tourism sector registers the

lowest level of economic activity (1%), indicating that the tourism potential of the Urzhar district has not been fully realized.

Overall, the diagram indicates that the economy of the Urzhar district is strongly oriented toward the manufacturing and trade sectors. At the same time, the relatively low shares of the construction and tourism sectors highlight the need for economic diversification. In this context, comprehensive measures aimed at developing infrastructure, enhancing investment attractiveness, and effectively utilizing tourism resources should be considered key factors for increasing the economic activity of the district's population.

Table 6*Number of women by broad service groups*

Name of service groups	Number (people)
Government officials and civil servants	228
Professionals	1253
Technical specialists and other professional support staff	467
Employees in the field of administration	53
Service sector and trade	42
Farmers and workers in agriculture, forestry, fishing and fisheries	35
Workers in industry, construction, transport and other activities	-
Operators, assemblers and drivers of production equipment	7
Unskilled workers	686
Number of women	2771

**Note. Compiled by the authors based on data from the Bureau of National Statistics*

According to labour and employment statistics, the total number of employees in the Urzhar District's consolidated service groups is 4,642, including 2,771 women. The share of managers and civil servants is 8.2%, the share of professionals is 45.2%, the share of technical specialists and other professional support staff is 17%, the share of administrative staff is 1.9%, the share of service and trade workers is 1.5%, farmers and workers in agriculture, forestry, fishing and fisheries account for 1.2%, 0% are workers in industry, construction, transport and other activities, operators, assemblers and drivers of production equipment account for 0.2%, and unskilled workers account for 24.7%. 45.2% of working women are professionals, and there is a significant proportion of women in the

district's labour market, especially in areas requiring qualifications and professional training.

The population of the district provides employment for 15,214 people, 7,637 of whom are salaried employees, 2,303 work in manufacturing, and 1,013 are unemployed. The population is engaged in livestock farming, agriculture and poultry farming. The Urzhar rural district is a regional centre with a large population and economic activity. It should be noted that tourism is not very developed in the region, especially in the Altynshoky, Eltay, Zhogargy Eginu, Salkynbel, and Karakol districts. The unemployment rate in the district in 2023 was 5.3%, and in 2024 it was 4.5%. The following table provides information about social institutions in the district.

Table 7
Social institutions in the Urzhar district

Healthcare institutions		Educational institutions		Cultural institutions		Sports facilities	
Number of district hospitals	1	Number of educational institutions	90	Number of cultural institutions	18	Number of sports facilities	34
		State - owned	89				
		private property	1				
Number of medical clinics	16	General education schools	33	Cultural centres	2	School sports halls	29
Number of paramedic and midwifery stations	6	Pre-school preparatory institutions	29	Clubs	9	Sports modules	3
				Libraries	5	Swimming pools	1
Number of medical centres	15	Mini-centres	28	Museum	1	Youth sports school	1
				Archive	1		

**Note. Compiled based on data from the Department of Economy and Finance of the Urzhar District*

Number of employees in healthcare institutions in the district: 89 doctors, 316 nursing staff, 98 junior staff, staff shortage – 2 units. Number of employees in educational institutions: total number of employees – 1,281, general education schools – 1,133, students – 6,651 children. Number of employees in preschool preparatory institutions – 120. Number of employees in mini-centres – 28 people. Number of children – 1,151 children. Number of all employees of cultural institutions – 160.5 units. In 2024, a total of 82 families were provided with new housing in 12 settlements as part of the state programme for purchased residential buildings. There is a shortage of personnel in the district. There is a lack of social institutions in the

district, especially cultural institutions, and reconstruction is required.

Conclusion

In the course of the study, the authors conducted a comprehensive analysis of the geodemographic situation regarding the population in the rural areas of the Urzhar District. The demographic situation in the Urzhar District was examined through a comparative analysis of population growth and decline rates in the district's rural areas. A cartographic model of the total population and natural increase in the rural districts of the Urzhar District was created. This spatial representation

allows for an assessment of the territorial differentiation of the demographic situation.

The geodemographic situation in the Urzhar District is one of the most important factors influencing its socio-economic development. According to the results of the study, the gender and age structure of the district's population is fairly balanced, which is considered an important indicator of demographic stability. In addition, the region has a high proportion of working-age population, which indicates sufficient labour resources. It should be noted that the economic activity of women is also growing. According to the results of the study, despite the fact that natural growth was positive, negative net migration led to an overall decline in population. This phenomenon may be linked to factors such as a limited labour market, inadequate social infrastructure or a higher quality of life in another region. Local authorities should therefore take socio-economic measures aimed at reducing negative migration trends. There is a particular tendency among young people to move to large cities (Almaty, Astana, Semey), which will lead to a reduction in the labour force in the future. The study revealed a tendency towards territorial imbalance between settlements in rural districts. Territorial imbalance is the cumulative result of not only demographic factors, but also socio-economic, infrastructural and political factors. A comprehensive regional development strategy is needed to reduce it. To address these issues, support is being provided to rural entrepreneurship, infrastructure is being modernised, and youth support programmes are being implemented. These programmes contribute to the stabilisation of the region's demographics. However, these measures need to be improved. For sustainable socio-economic development of the region, the following factors must be taken into account:

- increasing microcredit for small businesses (cheap credit, unsecured initiative);

- diversification of the labour market (brand creation and marketing of local products);
- improving the 'Diplommen auylga' programme (housing, transport, high wages);
- developing social infrastructure (healthcare, education, culture, sport);
- rational use of natural resources (water, land, minerals, biological, recreational);
- adaptation of education and training to local needs;
- to eliminate territorial imbalances, it is necessary to provide socio-economic support to small villages.

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