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CONTENTS

- Tomasz Chaberko, Anna Fedirko, Paweł Kretowicz
Social and spatial dimensions of demographic processes in Beijing municipality at the turn of the 21st century 5
- György Csomós
Analysis of leading cities in Central Europe: control of regional economy 21
- Leszek Kozłowski
The persistence and interaction of multi-ethnic settlement remnants in the cultural landscape 35
- Henryk Maćkowiak
The goods structure of trade between Polish regions and the European Union 57
- Gulnara Nyussupova, Irina Rodionova
Demographic situation and the level of human development of the Republic of Kazakhstan: regional aspects 75
- Jerzy Runge, Franciszek Kłosowski
Changes in population and economy in Śląskie voivodship in the context of the suburbanization process 89
- Alexander Sholudko, Viacheslav Shuper
Thomas Malthus modern sounding 107
- Elżbieta Sojka
Process of ageing of Śląskie voivodship population until 2035 121
- Magdalena Szmytkowska
Polish migrants in urban space of Dublin 139
- Witold J. Wilczyński, Piotr L. Wilczyński
Population of American cities: 1950–2009 153
- Grzegorz Zębik
Typology of suburban communities in Poland 173

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GULNARA NYUSSUPOVA*, IRINA RODIONOVA**

* Al-Farabi Kazakh National University, Kazakhstan;
** Russian Peoples' Friendship University, Russia

DEMOGRAPHIC SITUATION AND THE LEVEL OF HUMAN DEVELOPMENT OF THE REPUBLIC OF KAZAKHSTAN: REGIONAL ASPECTS

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ABSTRACT. The objects of research are indicators of human development in Kazakhstan from the moment of independence acquisition by the republic until today. The subject of scientific research is spatial-existential patterns of socio-demographic processes as a key factor of human potential development in the Republic of Kazakhstan. The importance of scientific work is that the results permit to estimate the level of human development of the Republic of Kazakhstan on the basis of socio-demographic processes. For the first time the basic indicators defining human potential in Kazakhstan have been studied in detail and systematized. The aim of the work is to define the laws of the spatial organization of human potential and its basic spatial analyses of human development of Kazakhstan. The database, created with the help of ArcGIS, allows to monitor the changes of human development level, to analyze, estimate and manage human potential of the Republic of Kazakhstan.

KEY WORDS: Kazakhstan, demographic situation, human development.

INTRODUCTION

The demographic factor is dominant in social and national development of any country. Therefore, without scientific analysis at all regional levels it is impossible to make realistic projections of economic and social development of the country and its regions. The problem of demographic development in Kazakhstan is particularly important.

Kazakhstan – is one of the largest in land area and is an economically developed nation on the Eurasian continent, which has diversified industry and agriculture. The country's economy is greatly influenced by development

in global economy. Kazakhstan has developed a stable political and economic relation with neighbouring countries, of which the greatest importance to the country have links with Russia and China. Moreover, in recent years the attention has been drawn to the more efficient use of the boundary potential of Kazakhstan and Russia, whose boundaries are the longest in the world. The republic belongs to several international organizations, including the EurAsEC and the CSTO, which gives it preferential treatment in economic development.

Population density of the neighbouring states is very high compared with our country. This indicator in Kazakhstan, which is located on the border with overcrowded China, Central Asia, and near the demographic surplus of the Middle East and South Asia, remains the lowest (only 6 people per 1 km^2, as of 2010) in the CIS (Commonwealth of Independent States including Russia, Georgia, Moldova, Ukraine, Belarus). Given the low population growth compared with other Asian countries, Kazakhstan will continue a lack of its human capital because of emigration of European ethnic groups. Therefore, the demographic problem will continue to be the most pressing issue of political and economic development.

The objects of research are indicators of human development in Kazakhstan from the moment of the republic's independence until today. The subject of research are spatial-temporal patterns and regional features of the development of socio-demographic processes, forming the human potential of the country. The estimation of human potential is an important element of socio-economic development, because the account of demographic indicators allows to improve the quality of life of the population in Kazakhstan.

According to the objective of the research the following tasks were performed: (a) spatial analysis and estimation of the level of human development within the framework of national demographic policy of the Republic of Kazakhstan with the use of the international and domestic experience; (b) the study of geo-demographic processes and the definition of the main tendencies of the natural and mechanical movement of the population of the republic; (c) comparative analysis of the features of the human development in different types of settlement and in gender aspect with the help of the geographical information system.

There is a need to research such parameters as the quality of life of the population of Kazakhstan in accordance with international standards of human development through the prism of social and demographic processes. In this respect, economic and geographical study and the level of human development estimation based on the analysis of socio-demographic processes in the Republic of Kazakhstan help to develop a set of social measures to improve the demographic situation of the country, which is one of the priority direction of fundamental research in the country for 2010–2030.

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In the methodological and information bases of scientific work the methodology of the geographical science of national and foreign authors has been used. In this work general scientific methods have been used, also modern methods of research, systematic and comparative-geographical analyses, methods of mathematical statistics, correlation-regression analyses, methods of GIS technologies and others.

In foreign economic studies, the most significant methodological contributions to the study of human development and quality of life have had the works of K. Griffin, A. Sen, P. Townsend. Different aspects of human development, such as modern economic welfare theory, the foundations of social development, human capital and quality of life, have been the concern of economists, sociologists and geographers in Russia and the CIS: A.I. Alekseev, E.M. Andreev, A.G. Granberg, A.P. Katrovsky, V.P. Kolesov, SA Kovalev, T.G. Nefedova, E.N. Persik, B.B. Prokhorov, N.M. Rimashevskaya, I.A. Rodionova, R.V. Ryvkina, A.A. Sagradov, A. Saliev, V.S. Tikunov, A.I. Treyvish, A.G. Vishnevsky, T.I. Zaslavskaya, J.A. Zayonchkovskaya, N.V. Zubarevich, and others.

Important contributions to improving the methodology for assessing human development in relation to the conditions of our republic have also been made by scientists and specialists from Kazakhstan, such as U.M. Iskakov, M.B. Kenzheguzin, A.K. Koshanov, N.K. Mamyrov, M.K. Meldahanova, Sh.M. Nadyrov, O.S. Sabden, S.S. Satubaldin, B.A. Tatibekov, M.B. Tatimov, Y.K. Shokamanov, and others. Many of them were authors, experts and consultants in the preparation of national reports on human development.

The information base of research includes laws and legal documents of the Republic of Kazakhstan, official publications of the Agency of Statistics of the Republic of Kazakhstan, materials of the Ministry of Education and Science of the Republic of Kazakhstan, annual reports and national reports on human development of the Programme of Development of the United Nations Organization, the monographic and periodic literature on the investigated problem.

DEMOGRAPHIC SITUATION OF THE REPUBLIC OF KAZAKHSTAN

It should be emphasized that the above-mentioned studies are mainly dedicated to purely economic, sociological or geographical aspects of human development at the global and regional level. In general, modern geographical science has not developed methodology and techniques of complex economic and geographical studies of human development in the globalizing world economy yet.

Significant impact of the outflow from the country has led to the decrease in population (in total more than 1.7 million people has emigrated over the first 10 years of a sovereign state). Those who left were highly skilled and at working age that respectively influenced the change in age, education and employment structure of the population. According to the 1999 Census, the population was 14.95 million people. The latest census (2009) in the country recorded 16.0 million people; over the past 50 years the whole population has grown by 6.7 million people, or rather with in comparison to the previous census has increased by 1.05 million. During the period of the independent state the republic's population declined by 353.4 thousand people, not reaching the 1991 level, and it should be noted that this demographic trend was typical for other countries of the CIS where during the first 10 years after the collapse of the USSR population number declined.

Kazakhstan pursues its economic policies in line with the ideology of human development, proclaimed by the UN. Sustained improvement in the quality and social standards of living of the population defined by the President of the country is among the main priorities to achieve the objective of the 50 most competitive countries in the world. According to the Human Development Report (UNDP), Kazakhstan and other CIS countries are characterized by two stages of human development. In the first stage (1990–1995) there was a sharp worsening of all basic human development indicators, which led to the displacement of Kazakhstan, from 54th to 93rd place in the world Human Development Index (HDI). In the second stage (1995 to present) human development indicators are being restored and it will enable Kazakhstan to move 13 positions higher. However, demographic processes are delayed in relation to socio-economic development for about 9–10 years, forming a demographic lag.

Factors which caused the negative trends in human development in the first stage should include: population decline as a result of emigration, especially in the initial years of the state, reduction in fertility (at least by 25% for Central Asian countries), a sharp decline in life expectancy due to declining demographic investment. According to our calculations demographics – mainly life expectancy at birth – played a major role in the deterioration of human development indicators of the republic at the first stage and is not a weighty factor in the growth of this indicator in the next step. Moreover, its level in Kazakhstan is very low (68.6 years) compared with countries with high rates (78 years). In order to be in a top of 50 countries by HDI (to occupy the 43rd place), a life expectancy in Kazakhstan must be higher than now by 10 years.

The analysis of the dynamics of key components of the HDI in the post-Soviet countries in 1990–2009 suggests that one of the main indicators is a life expectancy. The average in the former Soviet Union is about 74 years. The longest

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life expectancy is in Georgia (in average 76.7 years). The lowest life expectancy is in Tajikistan – 65.3 years. In Kazakhstan, life expectancy in 2009 reached 68.6 years, which corresponded to the 1990 level.

The President's of Kazakhstan 'Kazakhstan-2030' Concept of Transition of Kazakhstan to Sustainable Development for 2007–2024 put forward the objective of increasing the country's population to 18 million people by 2024. This requires an increased rate of natural increase to 15.0 per 1,000 population in 2024, life expectancy – 75 years, birth rate to be maintained at not less than 22 births per 1,000 population. The gap in life expectancy of male and female population should be reduced to 7.5 years from the current 10 years.

Problems of human reproduction attract the attention of both specialists and the general public, thus gaining increasing importance in connection with the implementation of the most important tasks of demographic policy – to achieve optimum rate of population reproduction. Since independence was gained, the social and demographic development of the republic can be divided into three stages. The first stage (1991–1997) is characterized by a complex situation in the economic and social sphere. The population of the republic during this period decreased from 16.4 to 14.0 million people. This is a result of a decrease in birth rate and stable level of migration from Kazakhstan to other countries. Since 1992 the trend of overall population decline was fixed. In the second period (1997–2003) there was a certain stabilization of the socio-economic sphere, which led to a decrease in the dynamics of some negative trends. At that stage, the foundations were laid for further improvement of the socio-demographic indicators. In the third period (2003 – present) due to improved economic development and the objective demographic factors in Kazakhstan the socio-demographic situation is characterized by positive trends and the growth of many indicators.

Social and demographic development of the Republic of Kazakhstan since 1997 is largely defined as an objective process and rapid economic development. As a result of the changes in recent years the socio-demographic situation can be evaluated as favourable: improving fertility rates and life expectancy, reduced overall mortality, a positive balance of migration. Sex and age structure has significant influence on the future trends of population reproduction. This is an important structural component of the population in Kazakhstan and in various age groups. The analysis performed in the research dissertation has shown that the total fertility rate in the country declined from 22 in 1991 to 15‰ in 1999, while fertility decline occurred in all areas. And only in 2009, it increased and reached the 1991 level – 22‰ (Fig. 1). The highest fertility rates were observed in South Kazakhstan and Mangystau (32‰), and the lowest birth rate – in the North Kazakhstan region (14‰).

One of the main problems of the demographic situation in the country is high mortality rate, which in previous years was one of the lowest among the Soviet republics. Death rate more than birth rate depends on the level of socio-economic development, wealth and health care. In 1991–2009 in Kazakhstan 2.9 million people died. In the territorial aspect, high mortality rates were reported in Akmola, Karaganda, Kostanay, East Kazakhstan, and North Kazakhstan regions (oblasts), i.e., 11–12 for 1,000 population (2009). In some of these areas, the number of deaths exceeded the number of births, so depopulation was observed.

The general rate of natural increase over the study period averaged 14 people per 1,000 population (or 14‰) in 1990; 5‰ – in 1999; 13‰ – in 2009 (Fig. 1). The highest rates of up to 2009 registered in Mangystau and South Kazakhstan regions, respectively, amounted to 26 and 23‰, and the lowest ones were noticed in the North Kazakhstan and Kostanay regions – 1 and 2‰. In these areas, in 2007 there was a natural decline in population. Relatively low rates of natural increase are typical for Akmola, Karaganda, Pavlodar, and East Kazakhstan regions (5–6 ‰).

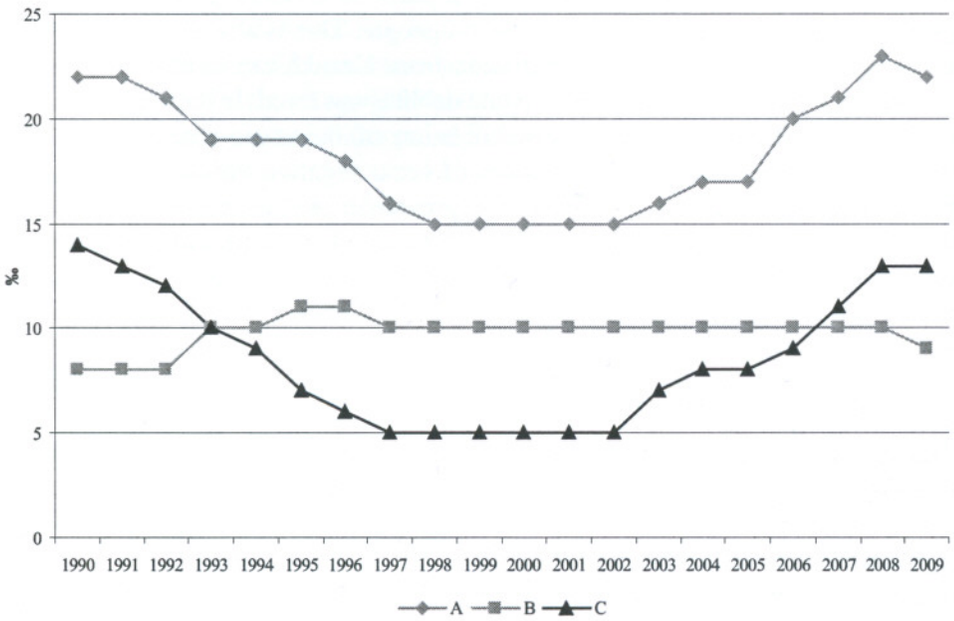

Fig. 1. Birth rate, death rate and natural growth rate in the Republic of Kazakhstan in 1990–2009
Explanation: A – birth rate; B – death rate; C – natural growth rate

Source: Agency of Statistics of the Republic of Kazakhstan

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The acquisition of independence by Kazakhstan in 1991 connected with the beginning of transformation processes in the space of the former Soviet Union and the return of some ethnic groups to their historical native land (homeland) caused in Kazakhstan and in many other CIS countries the trend of the growth of negative migration balance. So, for the first 10 years of independence, migration balance not only completely absorbed natural population growth of this period, but exceeded it by more than two times. Negative balance for 1991–2003 totalled 2.2 million people as a whole in 1991–2009. The number of emigrants from Kazakhstan reached 3.4 million people. And only since 2004 in the republic there has been positive net migration.

Migration decline in 1994 was the highest and exceeded 400 thousand, net migration rate was minus 25 people per 1,000 population. In this case, the largest decline in population occurred in industrial areas – Karaganda, East Kazakhstan, Akmola, Kostanay, North Kazakhstan. The main flow of emigration from Kazakhstan was to the CIS countries, about 2/3 of which came from Russia. Among the CIS countries the greatest flow of emigrants was to Germany, i.e., 90–95% of all emigrants.

Over the last decade, i.e., in the intercensal period of 1999–2009, life expectancy increased for the whole country by 3 years (for men – by 3 years, for women – by 2.6 years). Respectively, in 2009 average life expectancy was 68.6 years; for male – 63.6 years; for women – 73.5 years. The difference in life expectancy between men and women at birth was 9.3 in 1989 and 9.9 years in 2009, exceeding the highest values of life expectancy of women which were observed in the republic in 1996 (11.7 years) and 2007 (11.9 years). In countries with high life expectancy, which are in the best conditions and are characterized by slowly ageing and dying population, this difference is not more than 7–8 years. For example, in Japan the life expectancy of women has reached 84 years, and of men – 77 years. In Sweden and France life expectancy for women was 83 years in 2009 (for men – 77 and 75 years respectively).

Spatial analysis of life expectancy by gender shows the high life expectancy of the rural population compared with urban population. Thus, the highest life expectancy of the male population of the village in Mangistau and South Kazakhstan regions equals above 67 years, and for the rural female population in Mangistau region this figure reaches 77 years. In urban areas the maximum life expectancy is lower than in rural ones (for men – about 63 years, for women – 74 years). All these socio-demographic characteristics of the population have a significant impact on human development indicators. We have conducted a multivariate demographic forecast for the Republic of Kazakhstan, which is based on dynamic historical series of population taken for 1990–2010 years.

By use of the software ArcGIS 9.3 we have compiled a series of maps of demographic, socio-economic and other indicators for the Republic of Kazakhstan in the context of urban and rural areas from a gender perspective. Formed geodatabase is a model that reveals the spatial-temporal changes in human development indicators in Kazakhstan. The GIS database was formed on a reported and stock research materials. In the geodatabase 'Geodemography of Kazakhstan' all the spatial objects are represented in the real geographic coordinates, as objects with attributes that are combined into classes (feature class) with similar geometry: point, line or polygon on the subtype (subtype). Classes of spatial objects, in turn, are combined into sets of classes of objects (feature dataset), e.g., 'Demography', 'Geographical Basis', 'Education', etc. The vector map layers were connected to a relational database in Access and were recorded on a structured hierarchy of the data.

Creating GIS 'Socio-demographic processes in the Republic of Kazakhstan' with the use of ArcGIS technology programme allowed for the spatial-temporal monitoring of evolving geo-demographic situation of Kazakhstan's regions. As a result, provided analytical support for management decisions for the development of measures aimed at regulating social and economic processes. Thus, for contemporary scientific and practical tasks the required data on the population does not refer to large administrative units, but small territorial entities. Based on studies of small groups, aimed at identifying the factors of human behaviour, one can restore the social detail of all statistical aggregates, which experts used in their work so far, i.e., country, region, many human contributors.

This new research paradigm designed to study relatively small human communities, in contrast to Kazakhstan, is already explained at least two decades by demographers, economists, sociologists from foreign universities. There is a need for a statistical study of patterns of demographic processes in Kazakhstan at the municipal level that can be done with the help of GIS database. Without such an organization statistics it is impossible to conduct not only qualitative socio-economic studies, but, in particular, to achieve appropriate development level of local (municipal) governments.

THE LEVEL OF HUMAN DEVELOPMENT OF THE REPUBLIC OF KAZAKHSTAN

It is performed multivariate demographic forecast of the Republic of Kazakhstan, which is based on the analysis of the trends of human development in 1990–2010. The analysis of the regional features of human development formation reveals that the level of the HDI and income is highest in Atyrau (0.939

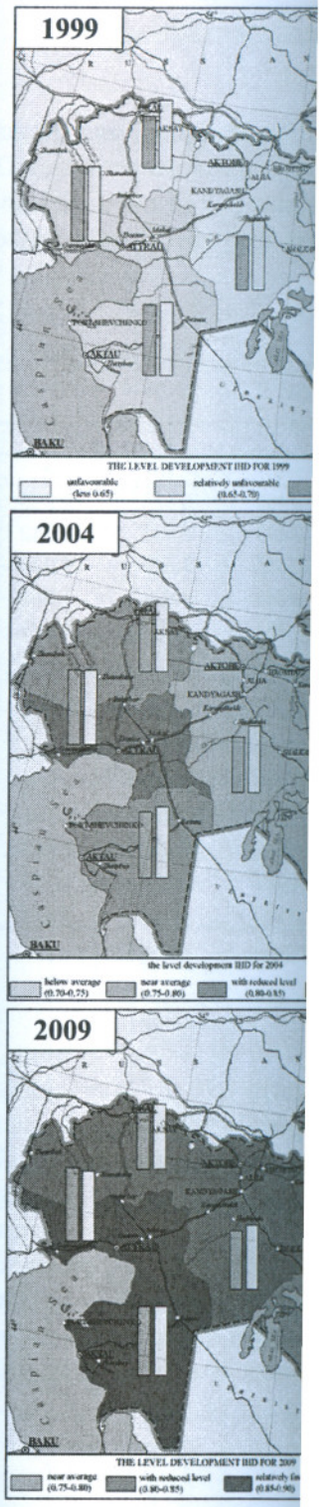

Fig. 2. Typology of regions development

Source: Calculated and formed

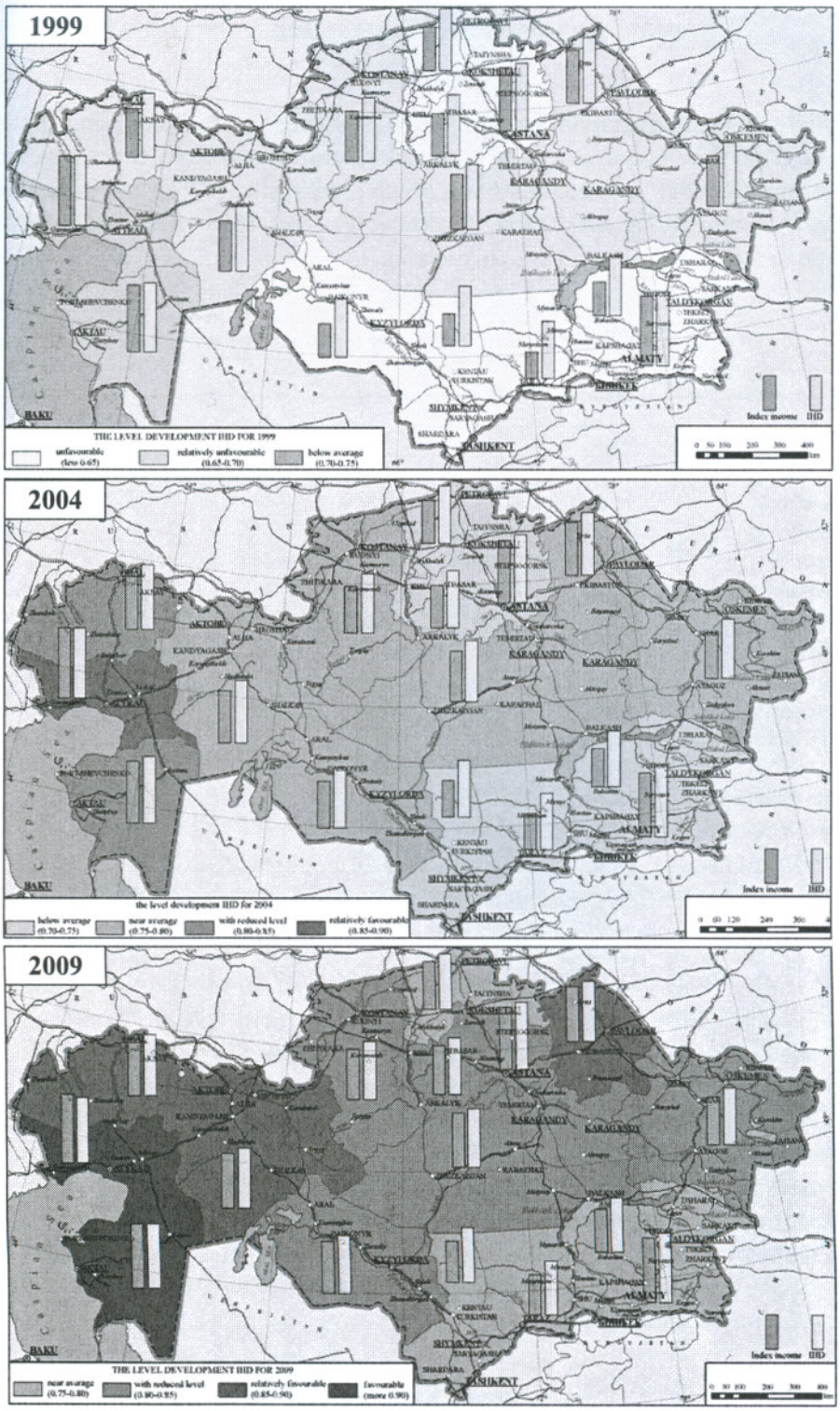

Fig. 2. Typology of regions of the Republic of Kazakhstan by the level of human dévelopment

Source: Calculated and formed by Agency of Statistics of the Republic of Kazakhstan

and 1.186), Mangystau (0.909 and 1.096, respectively) and in Almaty and Astana. These regions belong to a type of human development called 'prosperous'. HDI is low in Zhambyl (0.770 and 0.686), South Kazakhstan (0.779 and 0.699) and Almaty region (0.775 and 0.737, respectively). This type of regions is called 'close to the average level' (Fig. 2, Table 1).

Table 1. IHD indicators and indices of revenue by regions of the Republic of Kazakhstan, for 1999–2009

Region	A			B		
	a	b	c	a	b	c
Akmola	0.647	0.728	0.802	0.406	0.634	0.836
Aktobe	0.683	0.797	0.859	0.479	0.781	0.942
Almaty	**0.625**	**0.713**	**0.775**	**0.316**	**0.567**	**0.737**
Atyrau	0.736	0.884	0.939	0.662	1.032	1.186
East Kazakhstan	0.675	0.753	0.812	0.481	0.677	0.821
Karagandy	0.685	0.776	0.839	0.522	0.752	0.935
Kostanay	0.671	0.758	0.825	0.477	0.698	0.863
Kyzylorda	0.623	0.769	0.844	0.317	0.695	0.891
Mangystau	0.728	0.849	0.909	0.630	0.920	1.096
North Kazakhstan	0.651	0.732	0.798	0.413	0.638	0.829
Pavlodar	0.684	0.798	0.852	0.500	0.787	0.940
South Kazakhstan	0.627	0.723	0.779	0.302	0.538	0.699
West Kazakhstan	0.675	0.822	0.864	0.464	0.846	0.955
Zhambyl	0.603	0.711	0.770	0.253	0.532	0.686

Explanation: A – IHD; B – index of income; a – 1999; b – 2004; c – 2009

Source: Calculated and formed by Agency of Statistics of the Republic of Kazakhstan

The level of life expectancy with an index of longevity 0.70–0.75 (type below average) is 75% of the total population of the republic, while the indices of income and education of the vast majority of regions belong to the levels of relatively safe and prosperous, that is, with an index of more than 0.85.The typology (Table 2, 3) helps to formulate strategic mission priorities in the limited human resources: to 'pull' the weakest regions, financing least prosperous regions, or allocate resources more equitably, ensuring thus noticeable increase in human development level in less critical regions where the depth of problem is not so significant. It seems that the second way is more efficient in terms of raising the level of human development.

Table 2. The main indicators of socio-economic development and index of human development by regions of Kazakhstan in 1999–2009

Regions	A		B		C		D		E		F		G	
	a	b	a	b	a	b	a	b	a	b	a	b	a	b
Kazakhstan	65.63	68.60	99.4	99.6	886.9	6,893.9	0.677	0.726	0.883	0.911	0.474	0.919	0.678	0.852
Akmola	64.38	66.21	99.4	99.6	647.4	4,700.7	0.656	0.687	0.878	0.883	0.406	0.836	0.647	0.802
Aktobe	65.25	68.21	99.6	99.8	907.3	7,643.5	0.671	0.720	0.899	0.914	0.479	0.942	0.683	0.859
Almaty	66.74	68.57	99.7	99.5	428.5	2,973.5	0.696	0.726	0.864	0.863	0.316	0.737	0.625	0.775

Table 2. The main indicators of socio-economic development and index of human development by regions of Kazakhstan in 1999–2009

Regions	A		B		C		D		E		F		G	
	a	b	a	b	a	b	a	b	a	b	a	b	a	b
Kazakhstan	65.63	68.60	99.4	99.6	886.9	6,893.9	0.677	0.726	0.883	0.911	0.474	0.919	0.678	0.852
Akmola	64.38	66.21	99.4	99.6	647.4	4,700.7	0.656	0.687	0.878	0.883	0.406	0.836	0.647	0.802
Aktobe	65.25	68.21	99.6	99.8	907.3	7,643.5	0.671	0.720	0.899	0.914	0.479	0.942	0.683	0.859
Almaty	66.74	68.57	99.7	99.5	428.5	2,973.5	0.696	0.726	0.864	0.863	0.316	0.737	0.625	0.775
Almaty city	67.98	72.24	99.8	99.8	2,071.5	15,159.2	0.716	0.787	0.954	1.084	0.658	1.090	0.776	0.987
Astana city	67.60	75.74	99.7	99.7	1,606.6	13,383.7	0.715	0.846	0.848	0.962	0.603	1.063	0.725	0.957
Atyrau	63.86	68.21	99.5	99.7	2,109.5	23,572.8	0.648	0.720	0.898	0.911	0.662	1.186	0.736	0.939
East Kazakhstan	64.93	67.22	99.5	99.5	916.8	4,386.4	0.666	0.704	0.878	0.911	0.481	0.821	0.675	0.812
Karagandy	63.90	66.87	99.5	99.5	1,105.1	7,399.3	0.648	0.698	0.884	0.883	0.522	0.935	0.685	0.839
Kazakhstan	65.63	68.60	99.4	99.6	886.9	6,893.9	0.677	0.726	0.883	0.911	0.474	0.919	0.678	0.852
Kostanay	64.99	67.75	99.5	99.6	898.5	5,321.1	0.667	0.713	0.870	0.898	0.477	0.863	0.671	0.825
Kyzylorda	65.43	67.45	99.6	99.5	430.7	6,061.2	0.674	0.708	0.879	0.933	0.317	0.891	0.623	0.844
Mangystau	64.35	68.33	99.7	99.6	1,821.2	15,588.4	0.656	0.722	0.899	0.908	0.630	1.096	0.728	0.909
North Kazakhstan	65.14	67.32	99.3	99.2	668.6	4,539.5	0.669	0.705	0.872	0.862	0.413	0.829	0.651	0.798
Pavlodar	65.14	67.95	99.4	99.4	998.5	7,584.4	0.669	0.716	0.882	0.899	0.500	0.940	0.684	0.852
South Kazakhstan	67.13	69.49	99.8	99.9	401.5	2,494.6	0.702	0.742	0.877	0.895	0.302	0.699	0.627	0.779
West Kazakhstan	65.23	68.61	99.4	99.4	847.4	8,136.7	0.671	0.727	0.891	0.909	0.464	0.955	0.675	0.864

Explanation: A – life expectancy; B – literacy rate; C – income per capita; D – index of longevity; E – index of education; F – index of income; G – HDI; a – 1999; b – 2009

Source: Agency of Statistics of the Republic of Kazakhstan, Human Development Report 1999–2010 – published for the United Nations Development Programme (UNDP), New York, USA

Table 3. Type of regions by human development level and index of income of Kazakhstan in 2009

Types and numbers of regions	I	II	III	IV
Unfriendly (0.60–0.65)	–	–	–	–
Average to unfriendly (0.65–0.70)	–	2	2	–
Below medium level (0.70–0.75)	–	12	1	–
Average level (0.75–0.80)	4	1	–	–
With a reduced level (0.80–0.85)	5	1	3	–
Relatively-prosperous (0.85–0.90)	3	–	2	8
Prosperous (0.90–0.95)	4	–	4	7
Most prosperous	–	–	4	1

Explanation: I – HDI; II – index of life expectancy; III – index of income; IV – index of education

Source: Formed by the authors

Kazakhstan requires a national strategy for the development of human capacity for managing regional differences of conditions and factors of socio-economic development. Mechanisms that are suitable for some regions may be insufficient and even inefficient for others. We can identify priority areas for socio-demographic policy: targeting social protection, employment growth, increasing real incomes, reducing mortality and increasing life expectancy, increasing the birth rate and natural population growth. All these will help to improve the level and quality of life in the 'depressed' regions.

CONCLUSIONS

Summarizing the results of the study, it is possible to identify the following. The spatial analysis and estimation of human development in the context of the national population policy have shown regional differences in the indicators that determine human development in the country and the lag of the demographic processes' rates in comparison with the rates of socio-economic processes.

Territorial differences in geo-demographic processes are fixed across the whole country. The regions with the positive dynamics of the natural reproduction of the population are primarily the regions of Southern Kazakhstan. While in other parts, especially in East Kazakhstan there is a demographically complicated situation.

Indicators of reproductive population of the republic, such as fertility, mortality and natural increase in 1991 were exceeded only in 2009 with the beginning

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of transformation processes of the former Soviet Union and the return of some ethnic groups to their historical homeland in Kazakhstan; a negative migration balance, not only completely absorbed the natural increase of population, but also exceeded it by more than two times. It is especially worth noting that in the external migration the republic lost the most qualified personnel, which could not but affect the quality of human potential. Under modern conditions of economic modernization in Kazakhstan, the ultimate objectives of socio-demographic development should be the increase in the level and quality of life and socio-economic development of all areas of the country. It is necessary to study the processes, using the integration capabilities and sociological traditional economic geography, which is of great importance for further development of the theory and practice.

An analysis of socio-demographic processes as the foundation of human development must be conducted at a more detailed local (municipal) level. It is impossible to pursue social and demographic policies without taking into account regional aspects. Therefore, the database must be created with the use of GIS for the whole territory of Kazakhstan to monitor and manage human development

While working at and implementing state purpose-oriented programmes for improvement the level of human development, it is necessary to make a complex analysis of regional differentiation of social and demographic processes in the republic.

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