

ISSN 2518-1467 (Online),
ISSN 1991-3494 (Print)

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

Х А Б А Р Ш Ы С Ы

ВЕСТНИК

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК
РЕСПУБЛИКИ КАЗАХСТАН

THE BULLETIN

OF THE NATIONAL ACADEMY OF SCIENCES
OF THE REPUBLIC OF KAZAKHSTAN

1944 ЖЫЛДАН ШЫҒА БАСТАҒАН
ИЗДАЕТСЯ С 1944 ГОДА
PUBLISHED SINCE 1944

5

АЛМАТЫ
АЛМАТЫ
ALMATY

2018

SEPTEMBER
СЕНТЯБРЬ
ҚЫРКҮЙЕК

NAS RK is pleased to announce that Bulletin of NAS RK scientific journal has been accepted for indexing in the Emerging Sources Citation Index, a new edition of Web of Science. Content in this index is under consideration by Clarivate Analytics to be accepted in the Science Citation Index Expanded, the Social Sciences Citation Index, and the Arts & Humanities Citation Index. The quality and depth of content Web of Science offers to researchers, authors, publishers, and institutions sets it apart from other research databases. The inclusion of Bulletin of NAS RK in the Emerging Sources Citation Index demonstrates our dedication to providing the most relevant and influential multidiscipline content to our community.

Қазақстан Республикасы Ұлттық ғылым академиясы "ҚР ҰҒА Хабаршысы" ғылыми журналының Web of Science-тің жаңаланған нұсқасы Emerging Sources Citation Index-те индекстелуге қабылданғанын хабарлайды. Бұл индекстелу барысында Clarivate Analytics компаниясы журналды одан әрі the Science Citation Index Expanded, the Social Sciences Citation Index және the Arts & Humanities Citation Index-ке қабылдау мәселесін қарастыруда. Web of Science зерттеушілер, авторлар, баспашылар мен мекемелерге контент тереңдігі мен сапасын ұсынады. ҚР ҰҒА Хабаршысының Emerging Sources Citation Index-ке енуі біздің қоғамдастық үшін ең өзекті және беделді мультидисциплинарлы контентке адалдығымызды білдіреді.

НАН РК сообщает, что научный журнал «Вестник НАН РК» был принят для индексирования в Emerging Sources Citation Index, обновленной версии Web of Science. Содержание в этом индексировании находится в стадии рассмотрения компанией Clarivate Analytics для дальнейшего принятия журнала в the Science Citation Index Expanded, the Social Sciences Citation Index и the Arts & Humanities Citation Index. Web of Science предлагает качество и глубину контента для исследователей, авторов, издателей и учреждений. Включение Вестника НАН РК в Emerging Sources Citation Index демонстрирует нашу приверженность к наиболее актуальному и влиятельному мультидисциплинарному контенту для нашего сообщества.

Б а с р е д а к т о р ы

х. ғ. д., проф., ҚР ҰҒА академигі

М. Ж. Жұрынов

Р е д а к ц и я а л қ а с ы:

Абиев Р.Ш. проф. (Ресей)
Абишев М.Е. проф., корр.-мүшесі (Қазақстан)
Аврамов К.В. проф. (Украина)
Аппель Юрген проф. (Германия)
Баймуқанов Д.А. проф., корр.-мүшесі (Қазақстан)
Байпақов К.М. проф., академик (Қазақстан)
Байтулин И.О. проф., академик (Қазақстан)
Банас Иозеф проф. (Польша)
Берсимбаев Р.И. проф., академик (Қазақстан)
Велихов Е.П. проф., РҒА академигі (Ресей)
Гашимзаде Ф. проф., академик (Әзірбайжан)
Гончарук В.В. проф., академик (Украина)
Давлетов А.Е. проф., корр.-мүшесі (Қазақстан)
Джрбашян Р.Т. проф., академик (Армения)
Қалимолдаев М.Н. проф., академик (Қазақстан), бас ред. орынбасары
Лаверов Н.П. проф., академик РАН (Россия)
Лупашку Ф. проф., корр.-мүшесі (Молдова)
Мохд Хасан Селамат проф. (Малайзия)
Мырхалықов Ж.У. проф., академик (Қазақстан)
Новак Изабелла проф. (Польша)
Огарь Н.П. проф., корр.-мүшесі (Қазақстан)
Полещук О.Х. проф. (Ресей)
Поняев А.И. проф. (Ресей)
Сагиян А.С. проф., академик (Армения)
Сатубалдин С.С. проф., академик (Қазақстан)
Таткеева Г.Г. проф., корр.-мүшесі (Қазақстан)
Умбетаев И. проф., академик (Қазақстан)
Хрипунов Г.С. проф. (Украина)
Юлдашбаев Ю.А. проф., РҒА корр.-мүшесі (Ресей)
Якубова М.М. проф., академик (Тәжікстан)

«Қазақстан Республикасы Ұлттық ғылым академиясының Хабаршысы».

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print)

Меншіктенуші: «Қазақстан Республикасының Ұлттық ғылым академиясы»РҚБ (Алматы қ.)

Қазақстан республикасының Мәдениет пен ақпарат министрлігінің Ақпарат және мұрағат комитетінде
01.06.2006 ж. берілген №5551-Ж мерзімдік басылым тіркеуіне қойылу туралы куәлік

Мерзімділігі: жылына 6 рет.

Тиражы: 2000 дана.

Редакцияның мекенжайы: 050010, Алматы қ., Шевченко көш., 28, 219 бөл., 220, тел.: 272-13-19, 272-13-18,
www: nauka-nanrk.kz, bulletin-science.kz

© Қазақстан Республикасының Ұлттық ғылым академиясы, 2018

Типографияның мекенжайы: «Аруна» ЖК, Алматы қ., Муратбаева көш., 75.

Г л а в н ы й р е д а к т о р
д. х. н., проф. академик НАН РК
М. Ж. Журинов

Р е д а к ц и о н н а я к о л л е г и я:

Абиев Р.Ш. проф. (Россия)
Абишев М.Е. проф., член-корр. (Казахстан)
Аврамов К.В. проф. (Украина)
Апель Юрген проф. (Германия)
Баймуканов Д.А. проф., чл.-корр. (Казахстан)
Байпаков К.М. проф., академик (Казахстан)
Байтулин И.О. проф., академик (Казахстан)
Банас Иозеф проф. (Польша)
Берсимбаев Р.И. проф., академик (Казахстан)
Велихов Е.П. проф., академик РАН (Россия)
Гашимзаде Ф. проф., академик (Азербайджан)
Гончарук В.В. проф., академик (Украина)
Давлетов А.Е. проф., чл.-корр. (Казахстан)
Джрбашян Р.Т. проф., академик (Армения)
Калимолдаев М.Н. академик (Казахстан), зам. гл. ред.
Лаверов Н.П. проф., академик РАН (Россия)
Лупашку Ф. проф., чл.-корр. (Молдова)
Мохд Хасан Селамат проф. (Малайзия)
Мырхалыков Ж.У. проф., академик (Казахстан)
Новак Изабелла проф. (Польша)
Огарь Н.П. проф., чл.-корр. (Казахстан)
Полещук О.Х. проф. (Россия)
Поняев А.И. проф. (Россия)
Сагиян А.С. проф., академик (Армения)
Сатубалдин С.С. проф., академик (Казахстан)
Таткеева Г.Г. проф., чл.-корр. (Казахстан)
Умбетаев И. проф., академик (Казахстан)
Хрипунов Г.С. проф. (Украина)
Юлдашбаев Ю.А. проф., член-корр. РАН (Россия)
Якубова М.М. проф., академик (Таджикистан)

«Вестник Национальной академии наук Республики Казахстан».

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print)

Собственник: РОО «Национальная академия наук Республики Казахстан» (г. Алматы)

Свидетельство о постановке на учет периодического печатного издания в Комитете информации и архивов Министерства культуры и информации Республики Казахстан №5551-Ж, выданное 01.06.2006 г.

Периодичность: 6 раз в год

Тираж: 2000 экземпляров

Адрес редакции: 050010, г. Алматы, ул. Шевченко, 28, ком. 219, 220, тел. 272-13-19, 272-13-18.

www: nauka-nanrk.kz, bulletin-science.kz

© Национальная академия наук Республики Казахстан, 2018

Адрес типографии: ИП «Аруна», г. Алматы, ул. Муратбаева, 75

E d i t o r i n c h i e f

doctor of chemistry, professor, academician of NAS RK

M. Zh. Zhurinov

E d i t o r i a l b o a r d:

Abiyev R.Sh. prof. (Russia)
Abishev M.Ye. prof., corr. member. (Kazakhstan)
Avramov K.V. prof. (Ukraine)
Appel Jurgen, prof. (Germany)
Baimukanov D.A. prof., corr. member. (Kazakhstan)
Baipakov K.M. prof., academician (Kazakhstan)
Baitullin I.O. prof., academician (Kazakhstan)
Joseph Banas, prof. (Poland)
Bersimbayev R.I. prof., academician (Kazakhstan)
Velikhov Ye.P. prof., academician of RAS (Russia)
Gashimzade F. prof., academician (Azerbaijan)
Goncharuk V.V. prof., academician (Ukraine)
Davletov A.Ye. prof., corr. member. (Kazakhstan)
Dzhrbashian R.T. prof., academician (Armenia)
Kalimoldayev M.N. prof., academician (Kazakhstan), deputy editor in chief
Laverov N.P. prof., academician of RAS (Russia)
Lupashku F. prof., corr. member. (Moldova)
Mohd Hassan Selamat, prof. (Malaysia)
Myrkhalykov Zh.U. prof., academician (Kazakhstan)
Nowak Isabella, prof. (Poland)
Ogar N.P. prof., corr. member. (Kazakhstan)
Poleshchuk O.Kh. prof. (Russia)
Ponyaev A.I. prof. (Russia)
Sagiyani A.S. prof., academician (Armenia)
Satubaldin S.S. prof., academician (Kazakhstan)
Tatkeyeva G.G. prof., corr. member. (Kazakhstan)
Umbetayev I. prof., academician (Kazakhstan)
Khripunov G.S. prof. (Ukraine)
Yuldashbayev Y.A., prof. corresponding member of RAS (Russia)
Yakubova M.M. prof., academician (Tadjikistan)

Bulletin of the National Academy of Sciences of the Republic of Kazakhstan.

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print)

Owner: RPA "National Academy of Sciences of the Republic of Kazakhstan" (Almaty)

The certificate of registration of a periodic printed publication in the Committee of Information and Archives of the Ministry of Culture and Information of the Republic of Kazakhstan N 5551-Ж, issued 01.06.2006

Periodicity: 6 times a year

Circulation: 2000 copies

Editorial address: 28, Shevchenko str., of. 219, 220, Almaty, 050010, tel. 272-13-19, 272-13-18,

<http://nauka-nanrk.kz/>, <http://bulletin-science.kz>

© National Academy of Sciences of the Republic of Kazakhstan, 2018

Address of printing house: ST "Aruna", 75, Muratbayev str, Almaty

UDC 331.2

M. G. Leshcheva¹, Yu. A. Yuldashbayev²¹Stavropol State Agrarian University SFFEI HE, Stavropol, Russia,²Russian State University – Moscow Agricultural Academy named after K. A. Timiryazev SFFEI HE,
Moscow, Russia**DEMOGRAPHIC ASPECTS OF FORMING
THE HUMAN CAPACITY IN AGRICULTURAL ORGANIZATIONS
OF THE STAVROPOL TERRITORY**

Abstract. The demographic and labor resource situation in the municipal formations of the Stavropol Territory is characterized by a decrease in the number of the rural population due to migration outflow, which is not compensated by natural growth. The demographic dependency ratio between persons of unemployable age and people of working age is increasing. Agricultural organizations feel a labor shortage. The share of young people under 30 in the structure of agricultural organizations in certain areas of the Stavropol Territory is less than five percent. The value of this indicator depends on the migration increase, the amount of investment per hectare of agricultural land and the level of wages. Accounting for these factors is necessary for the interrelated solution of the problems of investment and demographic development in rural areas of the region.

The analysis revealed the demographic features of the formation of the human capacity of agricultural organizations in the Stavropol Territory. The socio-economic situation in the rural areas of the region contributes to the attraction of migrants, but cannot ensure their full securing and retain their own inhabitants, does not contribute to the rise in births, leads to an increase in the demographic burden of the unemployable ages for persons of working ages.

Agricultural organizations have an unmet need for manpower, while the resources of young ages for replenishment are very limited. In these conditions, the investment activity of agricultural producers and the level of material incentives for employees are among the main factors in securing young people in the countryside. Their account is necessary for the justified adoption of strategic decisions on the development of agricultural production in the Stavropol Territory, the definition of targeted measures to improve the current and prospective demographic situation and to prevent its deterrent influence on the development of the rural economy.

Keywords: rural population, migration, natural population movement, age composition, rural youth, factor analysis, economic factors.

Introduction. In the agriculture, the formation of a reliable system of human resources supply, an effective mechanism for its regulation and, on this basis, ensuring sustainable development of the industry is one of the priority and most acute national problems. However, despite the measures taken in recent years to stabilize the personnel situation in the countryside, the demographic aspects of the formation of the human resources capacity hamper its solution.

Many Russian scholars pay attention to this. Bayrushina F.F. notes that the growing processes of rural migration worsen the professional potential of the branch economics. [1] Mindrin A.S. considers the rural population as the most important factor of sustainable development of the territories [2]. The interconnection of the innovative economy and rural employment is studied by E.Yu. Legchilina, G.V. Sapogova, I.A. Pronin in their work [3, 4]. The problems of training and attracting professional personnel for the development of import-substituting industries in the agrarian sphere of the economy are covered in the works of Kovalchuk I.E. [5]. The issues of ensuring food security and competitiveness of agriculture on the basis of advanced training of managers and specialists in the agro-industrial complex are reflected in the works of A.V. Kozlov [6]. Regional features of the demographic foundations of the personnel supply in agriculture are not fully considered.

This imposes the aim of the research: to analyze the demographic aspects of the formation of the human capacity in agriculture of the Stavropol Territory.

Methods of the research. The theoretical and methodological bases of the study were the modern economic theory, the works of domestic and foreign scientists on the formation of human resources capacity. Studies were conducted following the dialectical, abstract-logical, computational-constructive, comparative methods using the analysis of official statistical information. The information and empirical base was provided by the annual statistical reports of the bodies of the Federal State Statistics Service for the Stavropol Territory, monitoring of the social and labor sphere at the regional level; materials of departmental surveys of the personnel of agricultural organizations for 2013-2017. The object of the research is the agriculture of the Stavropol Territory, the subject - the staffing of agricultural organizations.

Results. The Stavropol Territory is a large agro-industrial region of Russia. Almost 90% of the territory is occupied by agricultural lands; of the total population, which is 2,800,100 people as of January 1, 2018, 41.5% (1163.8 thousand people) live in rural areas.

Reproduction of the rural population is the basis for the formation of the human capacity of agricultural organizations, which determines its basic quantitative characteristics - size and composition, as well as qualitative characteristics - health and intellectual abilities. The study of these aspects revealed that the number of rural residents in the Stavropol Territory has a stable tendency to reduce (figure 1).

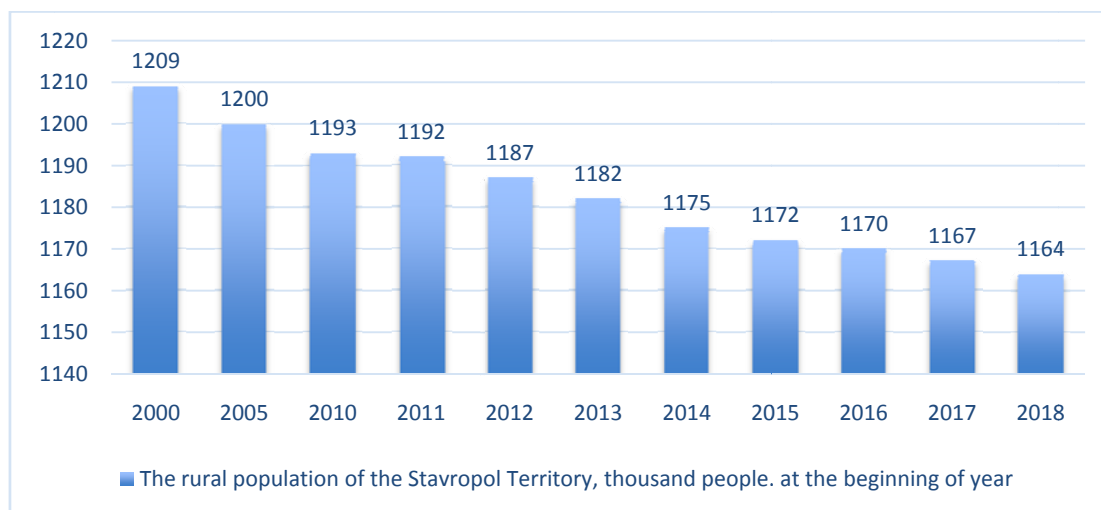


Figure 1 – The rural population of the Stavropol Territory, thousand people

Over the period from 2000 to 2018, it decreased by 45 thousand people. The largest outflow (34 thousand people) took place in 2000-2015. In subsequent years, the rate of rural depopulation decreased significantly, but the trend persisted. Average for 2015-2018 period the number of rural residents annually decreased by 2 thousand people (0.2% compared to the previous year).

The rural depopulation takes place in seventeen of the twenty-six districts of the Territory. The growth occurs in the areas of major cities, primarily the regional centers, the Caucasian Mineral Waters, certain regions bordering the neighboring North Caucasian republics.

The change in the number of rural residents occurs both at the expense of the natural, and the migration movement of the population.

According to the data for 2012-2017, each year about 40 thousand migrants leave the rural settlements of the Territory, and an average of 35 thousand people arrives in the countryside. Thus, over the last six years, the rural population has lost an average of 5 thousand people per year due to migration outflow. The intensity of the total migration loss¹ of the rural population in the region in 2017 decreased slightly and amounted to 13.2 %, while in 2015, the value of this indicator reached 21.3 %.

¹The intensity of migration growth (outflow) is the balance of population migration per 10 thousand people of population.

More than 40% of all migration movements in the Territory account for intra-Territory migration, due to which the greatest outflow of the rural population occurs. At the same time, the priority direction of intraregional migration flow is "village-city".

Within the framework of interregional migration, every third migrant arrives in the countryside of the Territory from the neighboring North Caucasus republics. In this respect, there is a danger of a certain ethnic imbalance in the structure of direct and reverse migration flows, especially in the eastern regions of the Territory. The flow of migrants from other Russian regions does not compensate for the migration loss of their own inhabitants. More than half of the migrants leaving the countryside migrate to the Southern and Central Federal Districts. This means that the situation with the attractiveness of the rural areas of Stavropol is complex, and they have problems fixing their own residents.

The processes of natural movement of the rural population in the Stavropol Territory reflect a consistent decrease in the number of births and deaths, and the rate of decline in births, starting from 2015, is faster than the rate of decline in deaths. The result is a natural decline in the population, which in 2017 reached 972 people (table 1).

Table 1 – Natural movement of the rural population of the Stavropol Territory, people

Indicators	2012	2013	2014	2015	2016	2017	Absolutedeviation 2017 from 2012	2017 % to 2012
Wereborn	16241	16078	16087	14477	14090	12898	-3343	79,4
Died	15268	14911	14963	14482	14479	13870	-1398	90,8
Naturalincrease (- decrease)	973	1167	1124	-5	-389	-972	-1945	x

Birth rates in rural areas in 2015-2017 were lower, and mortality was higher than in urban. For every 1,000 people, an average of 11.9 children are born in rural areas over a three-year period, 12.9 children - in urban areas; 12.2 and 11.0 people respectively die. Observed in 2012-2014 the rate of natural increase in the rural population (0.8) was replaced by the rate of natural decrease (-0.8) (table 2).

The current situation shows the difficulties in solving the tasks of socio-economic development of rural areas of the Territory. The decline in the birth rate worsens the demographic picture and complicates the processes of reproduction of the labor potential of the countrysides in the Territory.

An important factor determining the possibility of a natural increase in the rural population is its age structure. In 2017, out of 1167.6 thousand people living in rural settlements of the Territory, 237.1 thousand people, or 20.3% - are children and adolescents aged 0-15 years old; 653.1 thousand people (55.9%) are persons of working age, including young people aged 18 to 29 years old -180.5 thousand people (15.5%); men and women older than working age - 277.4 thousand people. (23.8%).

Table 2 – Coefficients of the natural movement of the population in the Stavropol Territory (per 1000 population of the corresponding category)

Indicators	2012	2013	2014	2015	2016	2017
	Birth rate					
TotalintheTerritory	12.6	12.6	13	13	13	11.5
including:						
- inurbanareas	11.7	11.9	12.5	13.4	13.6	11.8
- in rural areas	13.7	13.6	13.7	12.4	12.1	11.1
	Mortalityrate					
TotalintheTerritory	12	11.7	11.7	11.6	11.7	11.2
including:						
- inurbanareas	11.4	11	11	11.1	11.2	10.8
- in rural areas	12.9	12.6	12.7	12.4	12.4	11.9
	Rate of natural increase (- decrease)					
TotalintheTerritory	0.6	0.9	1.3	1.4	1.3	0.3
including:						
- inurbanareas	0.3	0.9	1.5	2.3	2.4	1
- in rural areas	0.8	1.0	1.0	0.0	-0.3	-0.8

The dynamics of the age structure of the rural population reflects the growth in the number of persons of retirement age. The coefficient of demographic burden of disabled people for people of working age is increasing. In 2017, there were 770 unemployables per 1000 persons of working age, which is 11.0% higher than the value of this indicator in urban areas. According to the predictive estimates, the demographic burden on the rural population of working age will continue to grow, and by 2031 it will reach 948 people [8].

In this connection, the consolidation of young people in the village is of fundamental importance. The share of persons from 18 to 30 years old in the municipal districts of the Stavropol Territory declines annually and in 2017 amounted to 15.1% (against 16.3 in 2015). In the Sovetsky, Ipatovsky, Kochubeevsky, Trunovsky districts, this figure does not exceed 13.5%. The share of youth in the structure of workers in the agro-industrial complex is even lower and amounts to an average of 11.9% in the Territory. In some areas, it reached a critical level. Thus, the share of workers under 30 in the agro-industrial complex organizations: Neftekumsky district - 3.25%, Blagodarniy - 5.05%, Budennovskiy - 5.58%, Arzgirsky - 6.37%, Ipatovsky - 7.04, Apanasenkovsky - 7.41 (figure 2).

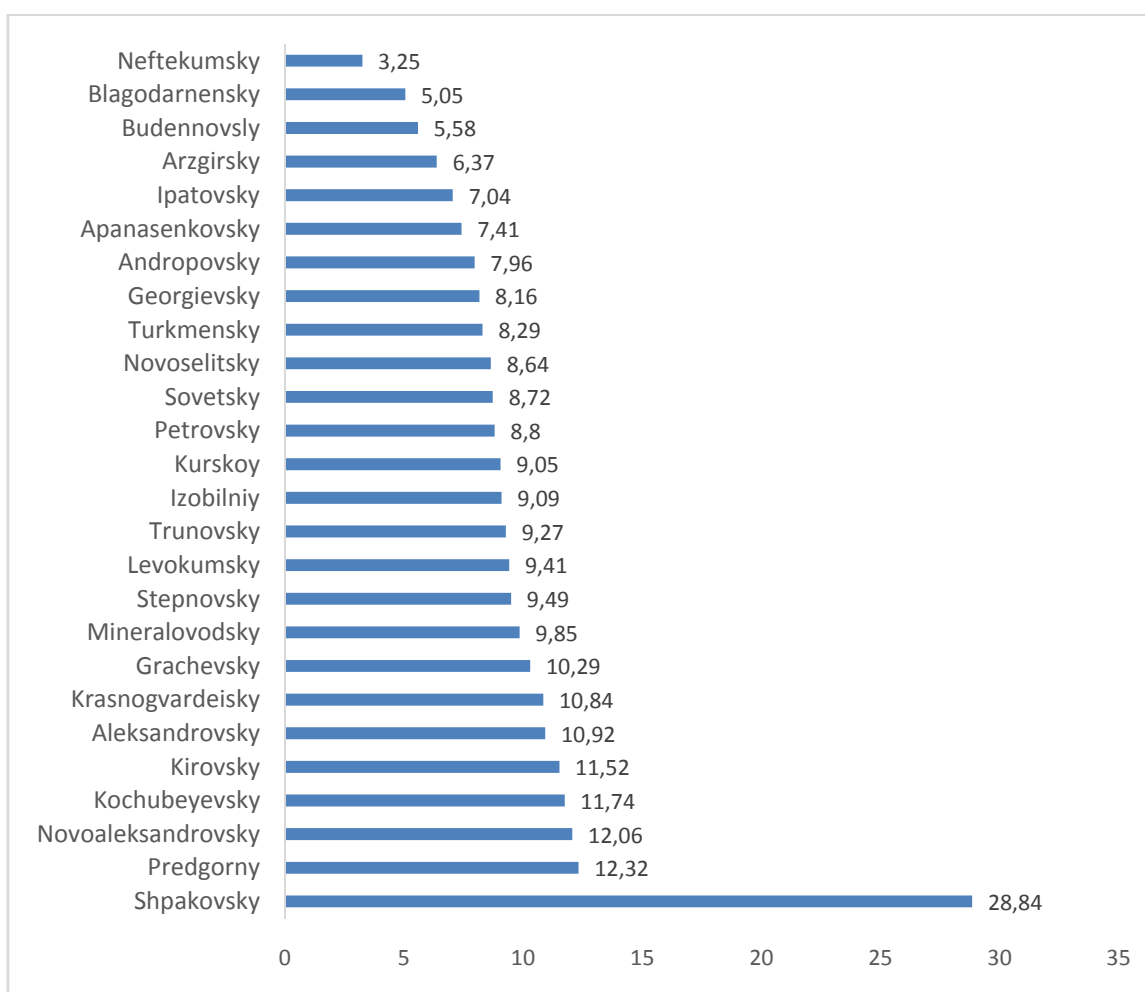


Figure 2 – The proportion of employees of enterprises of the agro-industrial complex in the Stavropol Territory under the age of 30 in 2017 in the context of municipal districts, %

Deepening this situation could have the most negative consequences for agriculture when demographic processes would become an obstacle to economic growth.

Agricultural organizations of the Territory are already experiencing a shortage of permanent employees. According to the annual reports of agricultural organizations subordinated to the Ministry of Agriculture of the Stavropol Territory, the supply of labor in 2017 for agricultural organizations is 96.1%,

which does not meet the needs of production. The deficit of workers is 2136 people. At the same time, the supply of managers and specialists fluctuates around 97%, which is 404 people. The supply of workers of mass professions is 96%, which corresponds to the need of 1732 people.

The most pronounced deficit of workers in Predgorniy district is 284 people, Novoaleksandrovsky - 200 people, Trunovsky-163 people, Petrovsky - 163 people, Kirovsky - 155 people.

In order to determine the factors affecting the presence of youth in agricultural organizations, according to the data of 26 districts of the Stavropol Territory for 2016-2017, a multiple correlation-regression analysis was performed. The indicator of the proportion of employees aged 18-29 in the total number of personnel of agricultural organizations was adopted as a dependent variable. Five factor indicators are considered: migration and natural population growth, the average wage level of workers in agricultural organizations, the amount of capital investment per 100 hectares of agricultural lands; the amount of subsidies paid to agricultural organizations from the regional budget. They determine 71% of the dispersion of the effective characteristic

The greatest influence on the fluctuation of the share of youth in the team of workers of agricultural organizations of the Stavropol Territory is provided by the level of wages (regression coefficient - 0.59). The next most important are the amount of investments per 100 hectares of agricultural lands ($K=0.53$) and migration growth ($K=0.39$). The remaining indicators play a less significant role.

The data of the factor analysis are confirmed by the results of the groupings. Investment activity of agricultural organizations has a direct connection with the presence of the youth in the work collectives. In areas with an investment level of up to 10 thousand rubles per hectare of agricultural lands, the share of young people in the structure of the workforce is 7.7%; with an increase in the level of investment from 10 to 40 thousand rubles - 8.8%; more than 40 thousand rubles - 13.8% (table 3).

Table 3 – The proportion of employees of organizations of the agroindustrial complex under the age of 30, depending on the amount of investment per hectare of agricultural lands

Groups of districts by investment level, thousand rubles/ha	Number of districts	The amount of investment, thousand rubles/ha	Proportion of employees under 30, %	Names of the districts
Up to 10	13	5.23	7.7	Turkmensky, Kursksky, Arzgirsky, Stepnovsky, Georgiyevsky, Petrovsky, Levokumsky, Budennovsky, Apanasenkovsky, Sovetsky, Neftkumsky, Aleksandrovsky, Blagodarnensky
From 10 to 40	6	16.3	8.8	Novoselitsky, Trunovsky, Grachevsky, Ipatovsky, Mineralovodsky, Andropovsky
40 and more	7	90.0	13.8	Shpakovsky, Kochubeevsky, Novoaleksandrovsky, Izobilny, Kirovsky, Krasnogvardeysky
Average in the territory	26	31	11.9	x

The implementation of investment projects involves the creation of new working positions, and the use of advanced technologies helps to ensure that vacancies are occupied by young people armed with advanced knowledge.

An important factor in securing young people in the countryside is the offer of a decent level of payment for labor. The grouping of the districts of the Stavropol Territory by salary level revealed that the share of agricultural workers under the age of 30 increases in proportion to the growth of wages (table 4). Thus, in districts with an average level of monthly wages of up to 20 thousand rubles the proportion of young people under the age of 30 is an average of 7.8%, with an increase in wages from 20 to 25 thousand rubles - 9.4%, and in the districts with an average salary of 25 thousand rubles and higher - 15.3%.

Table 4 – The proportion of employees of agricultural organizations under the age of 30, depending on the average monthly salary

Groups of districts by level of wages, rubles	Number of districts	Average monthly salary, rubles/month	Proportion of employees under 30, %	Names of the districts
Up to 20000	8	16551	7.8	Neftekumsky, Kursksky, Stepnovsky, Budennovsky, Andropovsky, Grachevsky, Kirovsky, Levokumsky
From 20000 to 25000	8	2255	9.4	Turkmensky, Izobilny, Apanasenkovsky, Novoaleksandrovsky, Petrovsky, Ipatovsky, Predgorny, Arzgirsky
25000 and more	10	28592	15.3	Novoselitsky, Trunovsky, Kochubeevsky, Shpakovsky, Mineralovodsky, Georgiyevsky, Sovetsky, Aleksandrovsky, Blagodarzensky, Krasnogvardeysky
Average in the territory	26	21384	11.9	x

Conclusion. The analysis revealed the demographic features of the formation of the human capacity of agricultural organizations in the Stavropol Territory. The socio-economic situation in the rural areas of the region contributes to the attraction of migrants, but cannot ensure their full securing and retain their own inhabitants, does not contribute to the rise in births, leads to an increase in the demographic burden of the unemployable ages for persons of working ages.

Agricultural organizations have an unmet need for manpower, while the resources of young ages for replenishment are very limited. In these conditions, the investment activity of agricultural producers and the level of material incentives for employees are among the main factors in securing young people in the countryside. Their account is necessary for the justified adoption of strategic decisions on the development of agricultural production in the Stavropol Territory, the definition of targeted measures to improve the current and prospective demographic situation and to prevent its deterrent influence on the development of the rural economy.

REFERENCES

- [1] Bayrushina F.F. Influence of migration processes on the regional economy of the Republic of Bashkortostan // Bulletin of the UGNTU. Science, education, economics. 2017. . 2(20). P. 121-125 (in Russ.).
- [2] Mindrin A.S. Employment of the rural population is the main factor of sustainable development of rural areas [Text] // AIC: Economics, management. 2005. N 7. P. 12-17 (in Russ.).
- [3] Legchilina E.Yu. Employment of the rural population in the conditions of innovative economy: problems and solutions [Text] // "Green Economy": Risks, Benefits and Perspectives from the point of view of Sustainable Development / III Manyakin Readings. Proceedings of the international scientific-practical conference. 2014. P. 38-42 (in Russ.).
- [4] Sapogova G.V., Pronin, I.A. Conditions and directions of increasing effective employment of rural population in the conditions of transition to an innovative development path [Text] // In the collection: Directions of import substitution in the food market. 2016. P. 139-143 (in Russ.).
- [5] Kovalchuk I.E. The processes of import substitution in agriculture in Russia: the problem of training and attracting professional personnel [Text] // Science of the 21st Century: Actual Directions of Development. 2017. N 1-2. P. 129-132 (in Russ.).
- [6] Kozlov A.V. Agriculture and food security [Text] // Problems of security management of complex systems. Proceedings of the XVI International Conference. 2008. P. 115-120 (in Russ.).
- [7] Report on the state and forecasts of the situation in the labor market of the Stavropol Territory. Stavropol: Stavropol publishing house "Paragraph", 2017. 40 p.(in Russ.).

М. Г. Лещева¹, Ю. А. Юлдашабаев²

¹ФМБОУ ЖБ «Ставрополь мемлекеттік аграрлық университеті», Ставрополь, Ресей,

²ФМБОУ ЖБ «К. А. Тимирязев атындағы Мәскеу ауыл шаруашылығы академиясы – Ресей мемлекеттік университеті», Москва, Ресей

СТАВРОПОЛЬ АЙМАҒЫНДАҒЫ АУЫЛШАРУАШЫЛЫҚ ҰЙЫМДАРЫНЫҢ МАМАНДАР ӘЛЕУЕТІН ҚАЛЫПТАСТЫРУДЫҢ ДЕМОГРАФИЯЛЫҚ МӘСЕЛЕЛЕРІ

Аннотация. Ставрополь өлкесіндегі муниципалдық құрылымдардағы муниципалдық және еңбек ресурстары ахуалы табиғи өсіммен өтелмейтін көші-қон ағымының салдарынан ауыл халқының санын азайуымен сипатталады. Еңбекке жарамды жастағы адамдарға мүгедектердің демографиялық жүктемесінің коэффициенті ұлғаяды. Ауылшаруашылық

ұйымдарында жұмыс күшінің жетіспеушілігі сезіледі. Ставрополь өлкесінің кейбір аудандарында ауыл шаруашылығы ұйымдарының қызметкерлері құрамында 30 жасқа дейінгі жастардың үлесі бес пайыздан аспайды. Бұл индикатордың құны көші-қонның өсуіне, ауылшаруашылық жерлерінің гектарына салынатын инвестиция көлеміне және қызметкерлердің жалақыларының деңгейіне байланысты. Бұл факторларды есепке алу облыстың ауылдық жерлеріндегі инвестициялар мен демографиялық даму проблемаларымен өзара байланысты.

Талдау барысында Ставрополь өлкесі ауылшаруашылық ұйымдарының кадрлық әлеуетін қалыптастырудың демографиялық ерекшеліктері анықталды.

Облыстағы ауылдық жерлердегі әлеуметтік-экономикалық жағдай жалдамалы қоныс аударушыларды тартуға ықпал етеді, бірақ олардың толықтай топтасуы мен өздерінің тұрғындарын сақтап қалуы, туудың өсуіне ықпал етпейді, еңбекке қабілетті жастағы адамдар үшін мүгедектердің демографиялық жүктемесінің өсуіне алып келеді. Ауылшаруашылық ұйымдарында жұмыс күшінің қажеті жоқ, ал толтыру үшін жас мамандардың ресурстары өте шектеулі.

Мұндай жағдайларда ауыл шаруашылығы өндірушілерінің инвестициялық белсенділігі және қызметкерлерге материалдық ынталандыру деңгейі ауылдағы жастарды қамтамасыз етудің негізгі факторларының бірі болып табылады. Олардың есебі Ставрополь өлкесі аумағында ауыл шаруашылығы өндірісін дамыту бойынша стратегиялық шешімдерді негіздеу үшін, ағымдағы және болашақтағы демографиялық ахуалды жақсарту бойынша мақсатты шараларды анықтау және ауыл шаруашылығының дамуына кедергі келтіретін әсерін болдырмау үшін қажет.

Түйін сөздер: ауыл тұрғындары, көші-қон, табиғи халықтың қозғалысы, жас құрамы, ауыл жастары, факторлық талдау, экономикалық факторлар.

М. Г. Лещева¹, Ю. А. Юлдашабаев²

¹ФГБОУ ВО «Ставропольский государственный аграрный университет», Ставрополь, Россия,

²ФГБОУ ВО «Российский государственный университет – Московская сельскохозяйственная академия им. К. А. Тимирязева», Москва, Россия

ДЕМОГРАФИЧЕСКИЕ АСПЕКТЫ ФОРМИРОВАНИЯ КАДРОВОГО ПОТЕНЦИАЛА СЕЛЬСКОХОЗЯЙСТВЕННЫХ ОРГАНИЗАЦИЙ СТАВРОПОЛЬСКОГО КРАЯ

Аннотация. Демографическая и трудовые ресурсы ситуация, сложившаяся в муниципальных образованиях Ставропольского края характеризуется снижением численности сельского населения за счет миграционного оттока, некомпенсируемого естественным приростом. Растет коэффициент демографической нагрузки нетрудоспособных возрастов на лиц трудоспособного возраста. Сельскохозяйственные организации ощущают дефицит рабочей силы. Доля молодежи в возрасте до 30 лет в структуре работников сельскохозяйственных организаций в отдельных районах Ставропольского края составляет менее пяти процентов. Значение этого показателя зависит от миграционного прироста, величины инвестиций в расчете на гектар сельскохозяйственных угодий и уровня заработной платы работников. Учет этих факторов необходим для взаимосвязанного решения проблем инвестиционного и демографического развития сельских районов региона.

Анализ выявил демографические особенности формирования кадрового потенциала сельскохозяйственных организаций Ставропольского края. Социально-экономическая обстановка сельских районов региона способствует привлечению мигрантов, но не может обеспечить их полную закрепляемость и удержать собственных жителей, не способствует росту рождаемости, приводит к увеличению демографической нагрузки нетрудоспособных возрастов на лиц трудоспособного возраста.

Сельскохозяйственные организации испытывают неудовлетворенную потребность в рабочей силе, при этом ресурсы молодых возрастов для ее восполнения весьма ограничены. В этих условиях инвестиционная активность сельхозтоваропроизводителей и уровень материальной заинтересованности работников являются одними из основных факторов, закрепления молодежи на селе. Их учет необходим для обоснованного принятия стратегических решений о развитии сельскохозяйственного производства на территории Ставропольского края, определения мер целенаправленного воздействия в целях улучшения текущей и перспективной демографической ситуации, предотвращения ее сдерживающего влияния на развитие сельской экономики.

Ключевые слова: сельское население, миграция, естественное движение населения, возрастной состав, сельская молодежь, факторный анализ, экономические факторы.

Information about authors:

Leshcheva Marina Genrikhovna – Doctor of Economics, Professor, Head of the Department of Economic Analysis and Audit of the State Federal-Funded Educational Institution of Higher Education "Stavropol State Agrarian University", Stavropol, Russia; marina_lesheva60@mail.ru; <https://orcid.org/0000-0001-8087-2279>

Yuldashbayev Yusupzhan Artykovych – Doctor of Agricultural Sciences, Professor, Corresponding Member of the Russian Academy of Sciences, Dean of the Faculty of Zootechnology and Biology of the State Federal-Funded Educational Institution of Higher Education "Russian State University – Moscow Agricultural Academy named after K. A. Timiryazev", Moscow, Russia; zoo@rgau-msha.ru

Publication Ethics and Publication Malpractice in the journals of the National Academy of Sciences of the Republic of Kazakhstan

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

Submission of an article to the National Academy of Sciences of the Republic of Kazakhstan implies that the described work has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <http://www.elsevier.com/postingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. In particular, translations into English of papers already published in another language are not accepted.

No other forms of scientific misconduct are allowed, such as plagiarism, falsification, fraudulent data, incorrect interpretation of other works, incorrect citations, etc. The National Academy of Sciences of the Republic of Kazakhstan follows the Code of Conduct of the Committee on Publication Ethics (COPE), and follows the COPE Flowcharts for Resolving Cases of Suspected Misconduct (http://publicationethics.org/files/u2/New_Code.pdf). To verify originality, your article may be checked by the Cross Check originality detection service <http://www.elsevier.com/editors/plagdetect>.

The authors are obliged to participate in peer review process and be ready to provide corrections, clarifications, retractions and apologies when needed. All authors of a paper should have significantly contributed to the research.

The reviewers should provide objective judgments and should point out relevant published works which are not yet cited. Reviewed articles should be treated confidentially. The reviewers will be chosen in such a way that there is no conflict of interests with respect to the research, the authors and/or the research funders.

The editors have complete responsibility and authority to reject or accept a paper, and they will only accept a paper when reasonably certain. They will preserve anonymity of reviewers and promote publication of corrections, clarifications, retractions and apologies when needed. The acceptance of a paper automatically implies the copyright transfer to the National Academy of Sciences of the Republic of Kazakhstan.

The Editorial Board of the National Academy of Sciences of the Republic of Kazakhstan will monitor and safeguard publishing ethics.

Правила оформления статьи для публикации в журнале смотреть на сайте:

www.nauka-nanrk.kz

ISSN 2518-1467 (Online), ISSN 1991-3494 (Print)

<http://www.bulletin-science.kz/index.php/ru/>

Редакторы *М. С. Ахметова, Т. М. Апендиев, Д. С. Аленов*
Верстка на компьютере *Д. Н. Калкабековой*

Подписано в печать 10.10.2018.
Формат 60x881/8. Бумага офсетная. Печать – ризограф.
11,2 п.л. Тираж 500. Заказ 5.