

Shaping the Population and Labor Resources in the Russian Far East*



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Abstract. The article is devoted to the problems of demographic situation in the Far East of Russia. It considers the formation of the population and labor potential; shows the dynamics of the population in the Far East according to the all-Union (1989) and all-Russian population censuses (2002 and 2010) and the current population accounting for 01.01.2018; reveals the trend of long-term reduction in the number of inhabitants in the macroregion; substantiates the need to implement the objective to secure population. The relevance of the study is due to the need to determine the risks with the emerging parameters of the natural and migration components involved in the demographic indicators of the Far Eastern region, in the implementation of the strategy to achieve the population according to the Concept of demographic policy in the Far East¹ adopted in 2017. The factors contributing to the reduction of natural population

* In the article, the territory of the Far East is considered within the administrative boundaries at the beginning of 2018. The paper is prepared in the framework of the Complex program of fundamental research of Far Eastern Branch of the Russian Academy of Sciences “Far East”, project no. 18-5-045 “Security and sustainable development of the Far East: the transformation of the system of spatial distribution of economic resources amid socio-demographic challenges”.

¹ Hereinafter – the Concept.

For citation: Motrich E.L., Molodkovets L.A. Shaping the population and labor resources in the Russian Far East. *Economic and Social Changes: Facts, Trends, Forecast*, 2019, vol. 12, no. 1, pp. 53-69. DOI: 10.15838/esc.2019.1.61.3

growth are covered. The negative role of migration in the population dynamics in the macroregion is noted. Analysis of the transformation of the population structure by age revealed the situation with the reduction of labor potential, which entails the need to attract labor using interregional and external migration. The issues related to the introduction of new parameters of retirement age are highlighted. The article analyzes the dynamics of life expectancy in the Far East and shows its lagging behind the national average. In conclusion, the article presents proposals that can help attract the population to the Far East and secure it.

Key words: population, natural movement, migration, age structure, life expectancy, retirement age, macroregion, region, Russia, Far East, concept.

Introduction

The development of the Far Eastern macro-region is the most important long-term task of the state policy of Russia. There are at least two good reasons for this policy: on the one hand, the current characteristics of labor and population potential² significantly limit the socio-economic development of the Far East, on the other – generate long-term risks for the country's national security [1]. The works concerning socio-economic and demographic indicators of the Far Eastern macro-region development record a steady decrease in the population [1; 2, pp. 28-37; 3, pp. 154-161]. The article considers demographic and migration processes in the region and analyzes their compliance with the target indicators, fixed in the program documents for the Far Eastern macro-region development.

In accordance with the adopted Far East demographic policy concept³, the population is to increase to 6.5 million people by 2025. The planned indicators are to be achieved due to natural population growth, rise in life expectancy and attraction of citizens from other regions of the country and compatriots living abroad to the region for permanent residence.

² In this study the population potential is understood as a number of population.

³ The Far East demographic policy concept for the period up to 2025: Decree of the RF Government of June 20, 2017, no. 1298-p. Available at: <http://government.ru/docs/28228/>

Researchers in the field of demography differently assess the possibility of sustainable demographic capacity-building in the country as a whole and its regions. However, the cyclical behavior of demographic indicators has always been studied as basic processes depending on the stability of the nature of socio-economic development of the territory [4, 352 p.; 5, pp. 10-17; 6, 214 p.; 7, 76 p.; 8, pp. 57-71; 9, pp. 3-18; 10, 61 p.; 11, 201 p.; 12, 35 1 p.; 13, pp. 67-72; 14, pp. 23-32].

For Russia, as well as for most world countries, there are objective long-term processes of the demographic development of socio-economic subsystems. Russia is a country with clear trends in demographic and migration development, especially in the spatial dimension. The Far East is characterized by a long-term trend of population decline. From this point of view, due to the implementation of various policy documents, it is not clear whether it is possible to influence various aspects of the development of population potential of a macro-region by policy methods. Therefore, the **aim** of the study is to determine possible obstacles to the achievement of the Concept indicators, i.e. population growth. The **tasks** of the study are: 1) analysis of the demographic situation in the Far East of Russia; 2) study of the dynamics of an age structure of the macro-region population and identification of its impact on the regional labor market indicators.

In comparison with the available research, this paper defines the possibilities and limitations of the impact of modern state policy measures on the development of population potential of the Far East regions. This determines the **scientific novelty** of the study. The present work is made by the authors on the basis of the postulates of the Russian scientific school of population, founded by D.I. Valentei. The principles laid down in this school are reflected in the analysis of the formation of population and labor resources of the Far East.

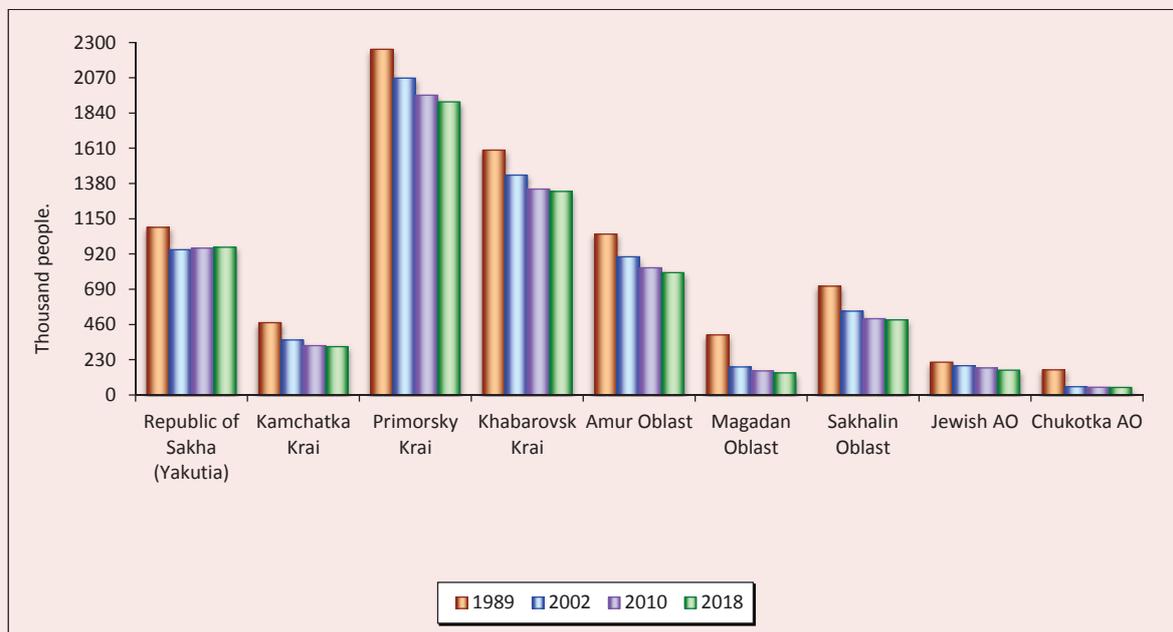
Migration and demographic development of the Far Eastern macro-region: current trends

Despite the fact that the paramount importance of the Far East development is widely discussed, the region is losing its population (*Fig. 1*).

As of January 1, 2018, 6,165,284 people in the Far East lived⁴. For the period from 1991 to 2017, the region lost 1,898.3 thousand people, i.e. 23.5%, including in 2017 – 17.4 thousand persons, or nearly 0.3%.

Will the Far East be able to achieve the expected population in accordance with the adopted Concept? The strategic goal of regional socio-economic development is to stabilize the population at the level of 6.2–6.3 million people by 2020 and to increase it to 6.5 million people by 2025. It is expected to achieve these figures at the expense of natural growth (increase in fertility, decrease in mortality), rise in life expectancy to 76 years and migration – attracting citizens from other regions of the country and compatriots living abroad to the region for permanent residence.

Figure 1. Population in the Far Eastern regions



Note. 1989, 2002 and 2010 – according to the census, 2018 – as of the beginning of the year, thousand people
Sources: compiled by the authors on the basis of the State Statistics Committee of the RSFSR and Russia.

⁴ Estimation of the permanent population as of January 1, 2018 and the average for 2017. Federal State Statistics Service of the Russian Federation. Available at: http://www.gks.ru/free_doc/new_site/population/demo/PrPopul2018.xlsx/

Table 1. Indicators of demographic development of the Far Eastern macro-region

Macro-region, region	Population, thousand people (as of January 1)			Coefficients of natural population growth (per 1,000 people)	
	2017	2018	2018 in % to 2017	2016	2017
Far East	6,182.7	6,165.3	99.7	0.8	0.05
Republic of Sakha (Yakutia)	962.8	964.3	100.2	7.6	6.4
Kamchatka Krai	314.7	315.6	100.3	1.4	0.9
Primorsky Krai	1,923.1	1,913.0	99.5	-1.4	-2.4
Khabarovsk Krai	1,333.3	1,328.3	99.6	0.3	-1.0
Amur Oblast	801.8	798.4	99.6	-0.8	-1.6
Magadan Oblast	145.6	144.1	99.0	-0.2	-0.5
Sakhalin Oblast	487.4	490.2	100.6	1.1	1.0
Jewish Autonomous Oblast	164.2	162.0	98.7	-1.8	-1.6
Chukotka Autonomous Okrug	49.8	49.4	99.2	3.6	3.7

Sources: Population and migration of the Russian Federation in 2017. Available at: http://www.gks.ru/bgd/regl/b18_107/Main.htm; Natural movement of the RF population. Available at: http://www.gks.ru/bgd/regl/b17_106/Main/htm/

It is regrettable to recognize that virtually none of these aspects are currently working for population growth in the region. The calculations provided in the Concept contain certain risks. Since 2017 the natural population growth in the Far East has practically become zero (*Tab. 1*). In addition, the region has not been able to achieve a zero migration balance by 2018 due to ongoing migration [15, pp. 37-42].

These data show that the natural movement in the Far Eastern region after a short growth, associated with the entry of a larger generation into the reproductive age and the introduction of maternal capital, again demonstrates its negative impact on population dynamics. However, the positive trend remains in the Republic of Sakha (Yakutia), Kamchatka Krai and the Sakhalin Oblast, but the indicators values are lower than in 2016. Only in ChAO (Chukotka Autonomous Okrug) the positive value of natural growth increased, but its role was offset by migration, as the population number at the beginning of 2018 was less than as of January 1, 2017. We should note that current population forecasts for 2030⁵

⁵ Demographic forecast up to 2030. Available at: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/rustatistics/population/demography/

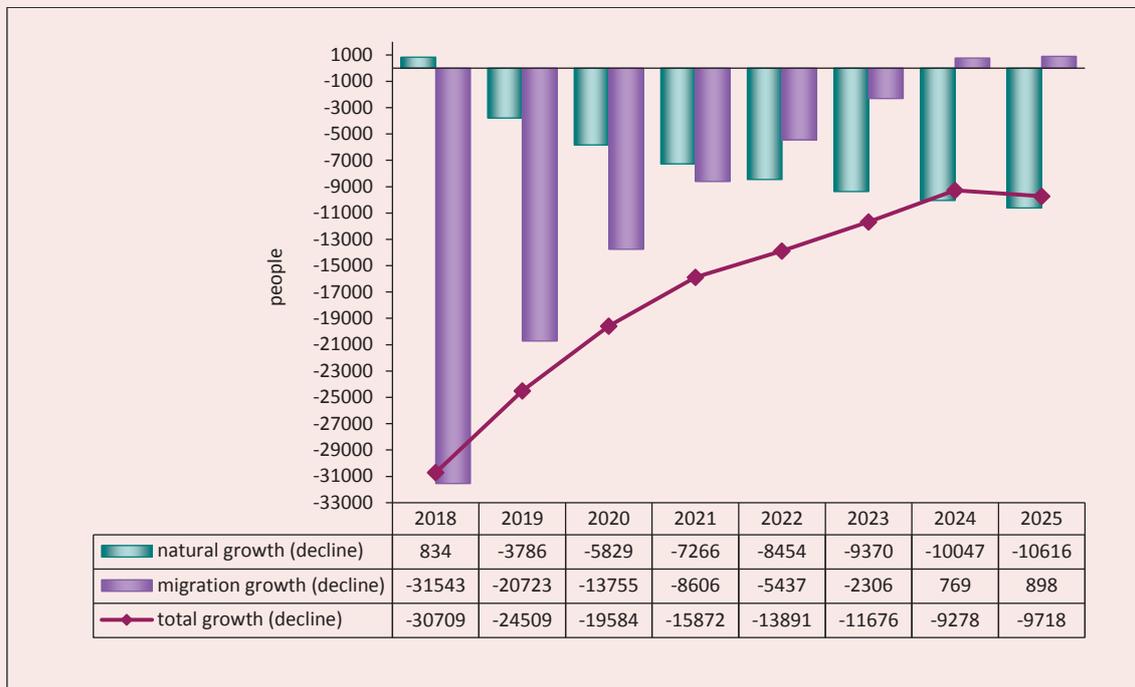
and demographers' studies [16, pp. 192-193] show a reduction in the number of women of reproductive age. Hence, the visible increase in fertility is unlikely despite implemented policies to raise a number of children in the family [17, p. 26; 18, p. 105; 19] and, therefore, it may have a negative impact on the total population in the Far East.

Intensification of the continuing population outflow from the Far Eastern macro-region is the main factor of its number reduction. In 2017 all nine subjects of the region showed a negative migration balance, which amounted to 17.4 thousand people⁶. Its decrease and the appearance of a positive value are to be recorded since 2024. However, the negative value of the population natural movement indicator is growing, and to increase a number of inhabitants in the region is hardly possible. It, of course, is contrary to the accepted Far East demographic policy concept (*Fig. 2*).

Migration losses of the Far East are mainly due to interregional migration flows, which show a disappointing fact: the total losses of the population from migration as a whole

⁶ Population and migration of the Russian Federation in 2017. Federal State Statistics Service of the Russian Federation. Available at: http://www.gks.ru/bgd/regl/b18_107/Main.htm

Figure 2. Forecasted values of the Far Eastern macro-region population by components



Sources: a medium version of the forecast of natural, migration and total population growth by RF subjects. Available at: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/demography/

exceed in the interregional flows, [20]. It should be noted that in the migration process studies the inter-country research prevails in countries of the world, [21; 22; 23], and the intra-regional migrations are studied mainly in terms of developing countries [24; 25; 26; 27].

For Russia, including the Far East, as a territory extended in geographical space, interregional migration is of greater importance, which, in turn, is determined by structural and institutional features of the Russian economy [28]. But we have to admit that the problems of long-term migration outflow from the Far East to central regions of the country have not found proper attention among the management structures [14, pp. 23-32]. It is likely due to the fact that for many years the population in Russia’s Eastern regions has steadily increased because of migration. We can not but agree

that “the causes of migration are not that other, as person’s reaction (his/her needs, attitudes, value orientations) to the factors that interact with this phenomenon” [29, pp. 51-61]. In inter-regional migration the centers of attraction are the city of Moscow and the Moscow Oblast, the city of Saint Petersburg and the Leningrad Oblast, Krasnodar Krai. Migration relations with the mentioned region even tend to increase. In the 2016 – 2017 negative migration flow they included more than 60% of the migrants from the Far East [15, pp. 37-42]. This is no accident. The Far East regions lag behind many subjects of the European part of Russia significantly in terms of per capita real income. This is the result of apparent divergence between population’s incomes and general economic indicators due to the specifics of income distribution. The

Table 2. Rating of the Far East regions according to the data on the distribution of a number of employees by wages, April 2017

Macro-region, region	Share of workers with wage above 100 thousand rubles / month, %	Share of workers with wage below 9 thousand rubles / month, %	Median wage value, rubles	Ratio of median wage to subsistence minimum of working population
Republic of Sakha (Yakutia)	11.6	0.6	46,028	2.6
Kamchatka Krai	12.0	1.4	50,464	2.5
Primorsky Krai	4.0	1.3	32,720	2.5
Khabarovsk Krai	5.0	0.8	35,470	2.6
Amur Oblast	4.1	3.8	31,640	2.6
Magadan Oblast	16.2	0.1	53,729	2.8
Sakhalin Oblast	13.4	-	48,792	3.4
Jewish Autonomous Oblast	1.9	2.3	28,711	2.1
Chukotka Autonomous Okrug	23.0	0.3	65,696	3.1
For reference:				
Moscow	18.6	0.7	55,434	3.0
Saint Petersburg	8.5	0.8	43,136	3.6

Source: Information on the distribution of an employee number by a wage size. Available at: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/11c4980041c1bcbf9ee9fe27f9898572 (tab10, tab32).

growth of real per capita income in the macro-region is unstable due to the features of the Far East economy functioning in the framework of the domestic economic space and transport remoteness from the Western regions [30, pp. 799-813]. Let us consider a factor, significant for the population, such as a real average monthly wage, which in 2017 amounted to 103.9% in the Central Federal District, compared to the previous year, 103.7% in the Northwestern Federal District and 102.9% in the Far Eastern Federal District⁷ [31, pp. 30-32] (*Tab. 2*).

The indicators given in Table 2 do not accidentally lead to the understanding that in the Far Eastern macro-region there has been and will always be a certain part of the population, focused on moving to the Center, where life is more comfortable in many ways.

⁷ Social and economic situation of Federal districts in 2017. Federal State Statistics Service of the Russian Federation. Available at: http://www.gks.ru/bgd/regl/b17_20/Main.html

Mostly it is Moscow, Saint Petersburg and the Moscow Oblast that attract the population and labor resources. This trio has been at the rating top for many years, as it has high rating points, yet unattainable for other regions. Most likely, this situation will not change in the coming years. Development of infrastructure, a high level of economic and social development, high potential for further development allow these regions to gain a foothold in the top of the rating for a long time [32, pp.26-30]. It has been repeatedly stressed that it is very difficult to change a current situation in the interregional exchange of the Far East with other Russian regions in the conditions of socio-economic differentiation: quality of life is relatively lower here, and modern benefits are no longer an effective tool for consolidating the population [33, pp. 10-12].

It is difficult to agree that 50%, that is every second of the respondents participated in the VTsIOM survey in 2018, is ready to move to the Far East if they are provided with one-time

payments in the amount of up to 1 million rubles. At the conference “Demographic development of the Far East” held on Sakhalin March 27–28, 2018, the optimistic data were announced following the results of the survey, conducted by VCIOM: if such a measure is proposed, then every fifth – 19% of the respondents will think about moving to the Far East⁸. Surely, in general, it would seem positive for the region. But it seems that neither one nor the other indicator is real for the Far East. The total number of the Far Eastern Federal District residents thinking about changing their place of residence remains high – 38%⁹.

Positive migration cooperation with the CIS countries has decreased. This is clearly illustrated by the data even for the last two years: in 2016 the share of departures to the CIS countries was 62.4% of the number of arrivals, in 2017 this figure rose to 69.6%. This situation is developing contrary to the previous assumption that migration from the CIS countries can play a positive role in the dynamics of the Far East population. First high expectations were associated with the Russian-speaking population of the former Soviet republics. Now it should be recognized that this reserve is almost exhausted, and those who still intend to decide to change their place of residence in favor of the Russian Federation are unlikely to choose the Far East.

Foreign countries have reduced their presence in the Far East: the positive migration balance in 2015 amounted to only 15.6% of the 2011 level (2,860 people in 2011 and 445 people

in 2015), and in 2016 and 2017 these countries gave a negative migration balance¹⁰.

Perhaps, here we can agree that the level of life expectancy of the population in the Far East plays a certain role in determining migration behavior. According to the Center for Regional Economic Studies, the Far East of Russia occupies the worst position in the ranking of life expectancy. The Republic of Sakha (Yakutia) ranks 44th, Primorye – 64th, Khabarovsk Krai – 72nd. The rest of the subjects occupy the lowest lines of the rating: Kolyma – 73d, Sakhalin – 75th, Kamchatka – 76th, the Amur Oblast – 78th, Jewish Autonomous Oblast – 80th, Chukotka – 81st (ChAO). Only the Tuva Republic population lives less, than in ChAO. Thus, it can be figuratively said that the Far East has fallen down in the life expectancy ranking [34].

Let us note that in Russia in 2017 life expectancy at birth, according to the Federal State Statistics Service of the Russian Federation, amounted to 72.7 years, including 67.5 years for men and 77.6 years for women.

What about the life expectancy indicator in the Far East of Russia? (*Tab. 3*).

According to the latest forecast estimates, provided by the Federal State Statistics Service of the Russian Federation (the average forecast), life expectancy at birth in Russia will be 72.9 years in 2018, and 70.4 years in the Far East (see *tab. 4*) – lagging behind the all-Russian indicator will continue and will amount to 2.5 years.

⁸ Survey mark. *Young Resident of the Far East*, April 4–11, 2018.

⁹ Kornienko E. And again outside. Why almost 40% of the Far East residents want to leave the region. *News*, April 10, 2018. Available at: <https://iz.ru/729123/ekaterina-korinenko/i-snova-krainie/>

¹⁰ Population and migration of the Russian Federation in 2017. Federal State Statistics Service of the Russian Federation. Available at: http://www.gks.ru/bgd/regl/b18_107/Main.htm/; Population and migration of the Russian Federation in 2016. Federal State Statistics Service of the Russian Federation. Available at: http://www.gks.ru/bgd/regl/b17_107/Main.htm/

Table 3. Life expectancy at birth in 2017, years

Macro-region, region	Total population			Urban population			Rural population		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Far East	70.09	64.80	75.53	70.64	65.21	76.02	68.34	63.53	73.84
Republic of Sakha (Yakutia)	71.68	66.39	77.07	72.27	66.98	77.39	70.42	65.04	76.37
Kamchatka Krai	70.06	65.21	75.25	70.83	65.71	76.00	67.21	62.77	71.93
Primorsky Krai	70.36	65.34	75.50	71.01	65.82	76.13	68.22	63.81	73.29
Khabarovsk Krai	69.74	64.23	75.30	70.02	64.39	75.54	68.31	63.41	73.82
Amur Oblast	69.06	63.66	74.61	69.64	63.91	75.20	67.80	63.06	73.28
Magadan Oblast	69.37	63.41	75.49	69.74	63.70	75.82	61.76	55.73	68.36
Sakhalin Oblast	70.19	64.59	76.09	70.57	64.79	76.38	68.30	63.01	74.57
Jewish Autonomous Oblast	68.83	63.35	74.35	69.69	63.89	75.32	66.93	62.11	72.07
Chukotka Autonomous Okrug	66.10	60.33	71.66	69.11	66.34	76.01	55.65	49.58	61.63

Source: Main Interregional Center for Processing and Dissemination of Information of the Federal State Statistics Service of the Russian Federation (Table 3TCE).

Table 4. Life expectancy of the Far Eastern population (average forecast), years

Macro-region, region	2018	2019	2020	2025
Far East	70.39	70.85	71.29	73.41
Republic of Sakha (Yakutia)	71.69	72.07	72.46	74.32
Kamchatka Krai	70.12	70.56	71.00	73.11
Primorsky Krai	70.91	71.36	71.79	73.88
Khabarovsk Krai	70.35	70.81	71.27	73.45
Amur Oblast	69.16	69.62	70.08	72.27
Magadan Oblast	69.88	70.35	70.81	73.03
Sakhalin Oblast	70.02	70.49	70.96	73.18
Jewish Autonomous Oblast	67.47	67.99	68.49	70.91
Chukotka Autonomous Okrug	66.28	66.87	67.45	70.19

Source: Life expectancy in the RF regions (average forecast). Available at: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/demography/

On October 3, 2018, the Law of the Russian Federation No. 350-FZ “On raising the retirement age in Russia” was signed. The main change proposed by the law is to increase the retirement age for Russians by 5 years – that is, from 60 to 65 years for men and from 55 to 60 years for women. The transition to the new values is proposed to be carried out gradually, starting from January 1, 2019¹¹. The adopted law stipulates a “step-by-step

¹¹ On raising the retirement age in Russia: Law No. 350-FZ. Available at: <https://pensija.molodaja-semja.ru/reforma/zakon-o-pensionnom-voznaste-2018>.

transition” of retirement – until 2028. Taking into account the difference in life expectancy of the average Russian and Far Eastern indicators, we note that the introduced retirement order may boost the population outflow from the Far East (to the places where living is more comfortable and life expectancy is higher). According to the calculations of life expectancy of the Far East population, it is possible to imagine and compare survival probability in the region, taking into account the difference in its duration with Russian indicators (Tab. 4).

Figure 3. Forecasted values of life expectancy in the Far East by gender, years



Source: Life expectancy in the RF regions (average forecast). Available at: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/demography/

Table 5. Far Eastern Federal District subjects in the rating of regions by quality of life

Region	Position in the rating in 2016	Position in the rating in 2017
Khabarovsk Krai	36	30
Kamchatka Krai	32	35
Amur Oblast	47	41
Magadan Oblast	39	44
Primorsky Krai	51	48
Sakhalin Oblast	53	53
Republic of Sakha (Yakutia)	71	71
Chukotka Autonomous Okrug	77	78
Jewish Autonomous Oblast	81	80

Source: Zubritskii A. Statistics does not give a correct idea of the outflow scale. *Far Eastern Capital*, 2018, no. 6 (214), pp. 26-30.

The data given in tables 3 and 4 raise some doubts about the achievement of the estimated life expectancy of 73.41 years in the Far East by 2025. Moreover, it should be noted that in this case (see tab. 3) the average life expectancy for the entire population is shown and this indicator is lower for men (Fig. 3).

Life expectancy is a mirror of the level and quality of life. Meanwhile, as the researchers note, the level of life of Russians is declining for a number of years [32, pp. 26-30; 35, pp. 127-142] (Tab. 5). It is no accident that the Far Eastern subjects do not occupy the best positions in the Russian regions ranking in terms of life quality.

Dynamics of the age structure of the Far Eastern population and its impact on the regional labor market.

Many-year natural decline together with the migration outflow contributed to the transformation of the population age structure in the Far Eastern macro-region – a reduction in the working-age population and an increase in the number of older people (*Tab. 6*).

These data indicate that in 2018, compared to 2010, the following changes in the population age structure were observed: the proportion of persons younger than the working age went

up by 2.4 percentage points and the share of persons older than the working age – by 3.3 percentage points, the proportion of working age population went down by 5.7 percentage points. These transformations in the age structure are comparable with the national ones [36, pp. 215-223]. According to the calculations made on the basis of current trends in demographic development, the ratio of age groups in 2025 can be the following: younger than the working age is 17.2%, of the working age – 57.3% and older than the working age – 25.5% [3, p. 157]. The forecast estimates

Table 6. Distribution of the Far Eastern population by age (as of the beginning of the year), in %

Macro-region, region	Older than the working age		Of the working age		Younger than the working age	
	2010	2018	2010	2018	2010	2018
Far East	19.1	22.4	63.5	57.8	17.4	19.8
Republic of Sakha (Yakutia)	12.7	17.0	64.0	58.1	23.3	24.9
Kamchatka Krai	17.3	20.6	65.6	60.6	17.1	18.8
Primorsky Krai	21.6	24.7	63.1	57.5	15.4	17.8
Khabarovsk Krai	20.7	23.0	63.7	58.2	15.6	18.8
Amur Oblast	19.5	23.0	62.4	56.6	18.1	20.4
Magadan Oblast	16.7	21.4	66.5	59.7	16.8	18.9
Sakhalin Oblast	19.6	23.4	63.7	57.1	16.7	19.5
Jewish Autonomous Oblast	19.3	22.9	62.2	56.0	18.5	21.1
Chukotka Autonomous Okrug	10.3	14.7	67.7	62.3	22.4	23.0

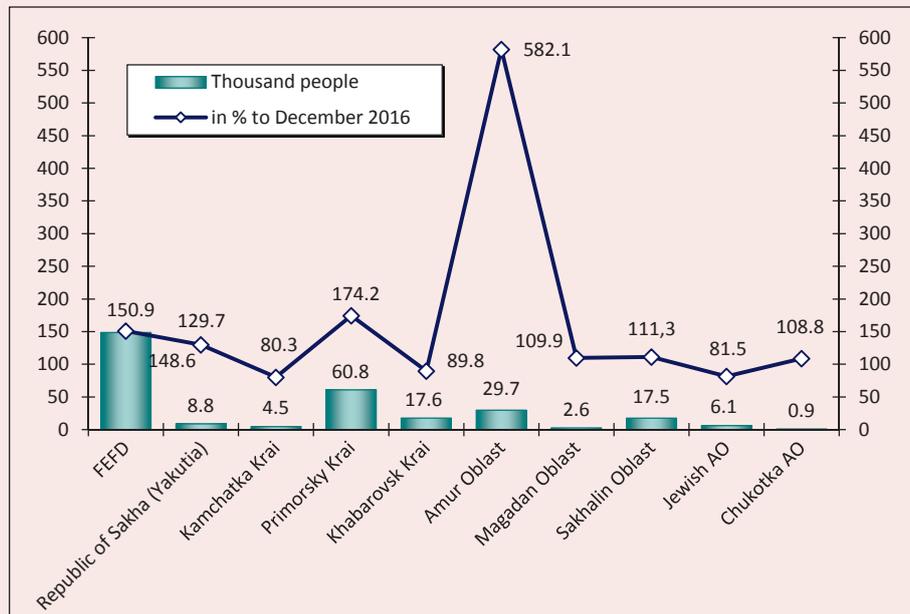
Sources: compiled by the authors on the basis of the data provided by the Federal State Statistics Service of the Russian Federation.

Table 7. Need for workers declared by employers to the employment service, and a number of foreign citizens with a valid work permit (as of the end of the year)

Macro-region, region	Need for workers declared by employers to the employment service, persons			Foreign citizens with a valid work permit, persons		
	2012	2016	2017	2012	2016	2017
Far East	112,119	98,426	148,563	81,786	30,135	24,583
Republic of Sakha (Yakutia)	10,706	6,822	8,849	9,003	440	318
Kamchatka Krai	4,739	5,564	4,469	4,296	227	183
Primorsky Krai	44,927	34,893	60,790	26,592	11,458	10,148
Khabarovsk Krai	18,677	19,602	17,610	18,052	7,588	5,986
Amur Oblast	13,477	5,104	29,710	8,430	3,582	3,327
Magadan Oblast	4,790	2,344	2,575	497	588	510
Sakhalin Oblast	8,746	15,767	17,548	9,790	3,672	2,988
Jewish Autonomous Oblast	5,076	7,524	6,135	3,862	2,545	1,084
Chukotka Autonomous Okrug	981	806	877	1,264	35	39

Source: Socio-economic situation of federal districts – 2017. Available at: http://www.gks.ru/bgd/regl/b17_20/Main.htm/

Figure 4. Need for workers declared by employers to the employment service by subjects of the Far East (as of the end of December 2017)



Source: Socio-economic situation of the federal districts – 2017. Available at: http://www.gks.ru/bgd/regl/b17_20/Main.htm/

predict deterioration of the situation with the age population structure in the future, a decline in economic complex’s need for labor force and a rise in the demographic burden of older people on the working age population¹². Therefore, despite the fact that the Far East is characterized by a low and recently declining level of total unemployment (6.4% in 2014 and 5.6% in 2017), the region is interested in attracting labor resources, as employers feel the need for labor resources. However, it should be noted that due to changes in the employment specifics, the indicators of the need for foreign workers tend to decrease. In this regard, the number of foreign citizens with a valid work permit is going down (Tab. 7).

Attention is drawn to the change in the need for workers in 2017 in certain subjects of the Far Eastern region relative to 2016, caused not only

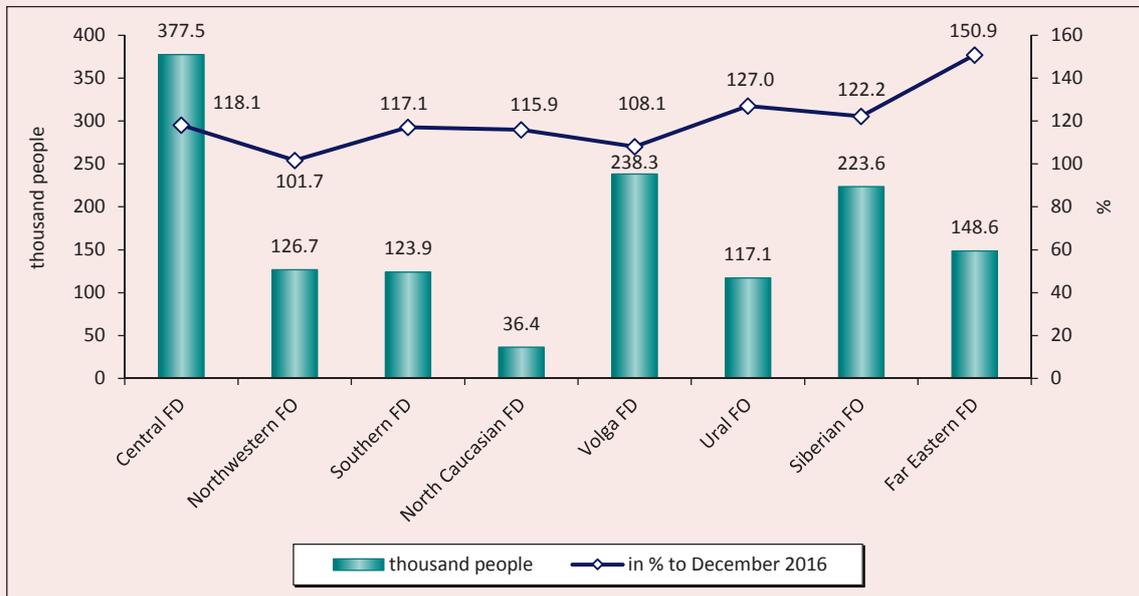
by the specifics of economic development, but also by the change in the working age population share (Fig. 4).

At first glance, it would be advisable to meet the need for workers by increasing labor mobility and attracting people to the Far East from other Russian regions. However, at present the Far Eastern region itself is a donor of population and labor resources for other RF subjects that experience limitations or lack of labor resources (Fig. 5).

Migration is a major factor in population ageing in the conditions when a number of working age people who have left the region prevails over those who have arrived. In 2017, 70.5 thousand of the working-age population arrived in the Far East from other Russian regions, and 84.7 thousand people left in the opposite direction. Hence, the prevalence of the first group of people exceeds 20% (Tab. 8).

¹² Lisitsyn Yu.P. Public health and healthcare: textbook. Edition 2. Moscow: GEOTAR-media, 2010. 512 p.

Figure 5. Need for workers declared by employers to the employment service bodies by federal districts (as of the end of December 2017.)



Source: Socio-economic situation of the Federal districts-2017. URL: http://www.gks.ru/bgd/regl/b17_20/Main.htm/

Table 8. Arrived and left working age population in subjects of the Far East in 2016–2017, persons

Macro-region, region	2016			2017		
	Arrived	Left	Left, in % to the arrived	Arrived	Left	Left, in % to the arrived
Far East	70,432	85,335	+21.2	70,508	84,719	+20.2
Republic of Sakha (Yakutia)	9,883	12,952	+31.1	9,666	12,703	+31.4
Kamchatka Krai	5,040	6,430	+27.6	4,829	6,284	+30.1
Primorsky Krai	16,180	18,822	+16.3	16,036	18,900	+17.9
Khabarovsk Krai	16,854	19,420	+15.2	16,436	18,919	+15.1
Amur Oblast	7,234	9,387	+29.8	7,258	9,364	+29.0
Magadan Oblast	2,880	3,760	+30.6	2,983	3,802	+27.5
Sakhalin Oblast	7,566	8,285	+9.5	8,550	8,310	-2.8
Jewish Autonomous Oblast	2,120	3,298	+55.6	2,023	3,293	+62.8
Chukotka Autonomous Okrug	2,675	2,981	+11.4	2,727	3,144	+15.3

Sources: Population and migration of the Russian Federation in 2016. Federal State Statistics Service of the Russian Federation. Available at: http://www.gks.ru/bgd/regl/b17_107/Main.htm; Population and migration of the Russian Federation in 2017. Federal State Statistics Service of the Russian Federation. Available at: http://www.gks.ru/bgd/regl/b18_107/Main.htm

In Primorsky Krai, the Jewish Autonomous Oblast, the Republic of Sakha (Yakutia), Chukotka Autonomous Okrug and Kamchatka Krai, the ratio of departures and arrivals of working age population increased. In perspective this ratio will determine the specifics of the labor market in the Far Eastern macro-region. Consequently, it is very problematic to increase a population number and form labor resources in the Far East at the expense of interregional migration. We can agree with the widespread opinion that

“this problem can not be solved by means of migration policy measures, focused on attracting migrants from other regions of the country” [37].

Research results. On the basis of the study results it is possible to make a short-term forecast on possible risks (as mentioned above) in the nature of formation of demographic, including labor, potential in the region, that is, in the implementation of the fundamental indicators stipulated by the Far East demographic policy concept. The current model of its demographic development indicates a promising reduction in the number up to 5.9 million people by 2030, which corresponds to the number of half a century ago. Accordingly, within the framework of the model trend, an even greater decrease in the Far Eastern population may occur by the middle of the 21st century – to 5.2–5.4 million people (the 1959 level). Hopefully, the situation would change in a positive direction, but, as repeatedly said, it needs a sustainable demographic development and a fundamentally new socio-economic mechanism to attract and retain population in the territories [38, pp. 69-81; 39, pp. 40-50]. In our opinion, it is necessary to [15, pp. 37-42; 31, pp. 30-32; 32, pp. 26-30]:

- constantly monitor the demographic and migration situation in the Far East;
- solve the issue of transport accessibility (connection with RF regions) and year-round subsidizing of traveling of the Far Eastern population by air and rail;
- preserve regional coefficients and introduce experience allowances to wages for long service in the Far East (this will reduce interregional differences in the level and quality of life of the population and increase interest in living and working in the Far East);

- form modern high-paid jobs designed for the employment of Russian labor resources and creating incentives for the growth of Far Eastern population [40, pp. 83-90];

- introduce quotas at regional universities and the Far Eastern Federal University for Far Eastern school leavers;

- not extend the law on working pensioners (indexation of pensions) in the subjects of the Far East.

These proposals were discussed and supported at the Project workshop “Far East – space of the future”, organized by the Federal Autonomous Scientific Institution “Eastern Center of State Planning” in October 2018 in Khabarovsk. Another proposal was worked out:

- to create a special migration regime in the Far East, involving the facilitation of citizenship.

Since the demographic factor is the most important condition for social development, the implementation of the given measures will allow the region to obtain better demographic results.

Conclusion. The analysis shows that the trend of long-term population decline is observed in the Far East.

Natural movement of the Far Eastern population still continues to have a negative impact on population dynamics after a short growth associated with people’s achievement of reproductive age. In the short term, a visible increase in the birth rate is unlikely even with the implementation of various types of state policy aimed at increasing childhood in the family. Therefore, since natural movement of the population is negative, an increase in a number of inhabitants in the macro-region is not possible, which contradicts the targets of the adopted Far East demographic policy concept.

Intensive population's outflow from the Far East is one of the main factors in reducing its number. In the post-Soviet period there is a certain part of the population, whose behavior is determined by the desire to move to western regions of the country. The Far Eastern regions lag behind many subjects of the European part of Russia in terms of real per capita income. Therefore, migration losses are formed mainly at the expense of interregional migration flows. To revert the trend in the foreseeable future is impossible in the conditions of existing socio-economic differentiation: the quality of life here is relatively lower and modern tools, such as various benefits, do not prove its effectiveness.

The macro-region's positive migration interaction with the near abroad countries has decreased, which contradicts the assumption of the positive role that migration from the CIS countries plays in the dynamics of population. It should be recognized that the expectations associated with the attraction of Russian-speaking population of the former Soviet republics are not realized.

Representatives of foreign countries have reduced their presence in the Far East. However, sustainability of this trend depends largely on economic success.

The conducted work shows that the Far East occupies the worst position in the ranking of life expectancy. The data given in the article give reason to doubt the achievement of estimated average life expectancy of the Far East population by 2025, according to the Concept.

Long-term natural decline in the conditions of migration outflow involves changes in the population age structure in the Far East. Migration outflow of the working age population and the youth contributes to the increase in the share of older generation. Population growth and massive formation of labor resources due to interregional migration seem unattainable in the foreseeable future. In the long term, this circumstance will determine the specifics of the macro-region's labor market, doubting the implementation of the goals of accelerated development of its economy.

We have to admit that almost none of the incentives for population growth in the macro-region are working nowadays. Perhaps, the calculations provided for in the Concept do not have regard to certain risks. In the executive authorities' programs, the formation of population¹³ and labor resources probably should not be any independent benchmark. It is entirely possible that the long-term formation of population and labor resources in the Far East requires its economy development, which can increase population's real incomes, comparable to those of other successful countries and regions. It is also necessary to be ready to ensure progressive development of the macro-region's economy in the conditions of its low population level, since it is not possible to change a long-term trend of population reduction in the Far East in the foreseeable future.

¹³ The term "formation of population" refers to the increase or decrease in population under the influence of demographic and migration processes.

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Received November 28, 2018.