

MAJOR TRENDS OF POPULATION'S DEVELOPMENT OF CITIES AND URBAN-TYPE SETTLEMENTS IN THE RUSSIAN ARCTIC

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Abstract: *The article shows the dynamics of the population's development of cities and urban-type settlements in the Arctic zone of the Russian Federation; it describes the condition and prospects for the development of urban-type settlements; the statistical material of the population censuses and the data of the current population accounting are given: recommendations for the infrastructure's development of the Arctic zone of Russia are given.*

Keywords: *Arctic, the population of cities and urban-type settlements, natural resource potential.*

1. INTRODUCTION

In recent years, there have been well-founded fears about the lack of population and unreasoned resettlement policy in the regions of the North and the Arctic. As the Russian demographer, sociologist and economist Rybakovsky L.L. once mentioned: «For a country with such a vast, sparsely populated territory, which has enormous natural resources, it is of great importance, not even the dynamics of the population, but its resettlements. Problems

with resettlement are often due unreasoned resettlement policy. Therefore, Russia should direct efforts and means to increase the level of population of the territory and improvement of settlements scattered across the vast expanses». This primarily concerns the land territories of the Arctic. There it is necessary to create an environment for life, adequate to the role of the Arctic in the economic and geopolitical interests of Russia. The main purpose of this article is to fill the existing gap in the study of the problems of population problems and the resettlement in the Russian Arctic. The research interest is aimed at studying the population trends, assessing the population in urban settlements and the place of cities in the system of resettlement of the Russian Arctic for the future.

2. POPULATION DYNAMICS

The population of the land territories of the Arctic zone amounted to 2,3 million people, or 2% of Russia's population. Of them 2,1 million people (89,3%) live in towns and urban-type settlements, 256 thousand people (10,7%) live in rural areas. Three regions have a population of more than 500 thousand people: Murmansk region has 766 thousand people, Arkhangelsk region – 655 thousand people and the Yamalo-Nenets Autonomous District – 540 thousand people.

The population of the Russian Arctic in 2015 decreased by 22% compared to 2002, including urban - by 9%. In six regions there was a decrease in the population. In two regions (Nenets and Yamalo-Nenets Autonomous Areas), the population, including the urban population, has increased. Regions of the Arctic zone are highly urbanized. The urban population in Vorkuta (the urban district in the Komi Republic, which belongs to the Arctic zone) is 99,4%, in the Arkhangelsk Region – 92,7%, in the Murmansk Region – 92,6%, in the Yamalo-Nenets Autonomous Area – 83,8%. In Russia as a whole, the share of the urban population is only 74,3%. Two regions are poorly urbanized: The Sakha (Yakutia) Republic – 50,4% and the Chukotka Autonomous Area – 68,3% (Table 1).

Table 1. The population of the the Arctic zone of the Russian Federation in 2002-2015

Region	The number of population, thousand people			Including the urban population, thousand people			Including the urban population,%		
	2002	2010	2015	2002	2010	2015	2002	2010	2015
Russian Federation *	145166,7	142856,5	143972,4	106429	105313,8	106951,5	73,3	73,7	74,3
Arctic zone of the Russian Federation	2641,256	2428,104	2391,631	2355,623	2173,004	2135,359	89,2	89,5	89,3
The Komi Republic	134,172	95,854	82,953	132,378	95,241	82,481	98,7	99,4	99,4
The Sakha (Yakutia) Republic	33,161	28,325	26,194	18,244	14,64	13,192	55,0	51,7	50,4

Krasnoyarsk Region	284,361	229,392	227,205	258,285	206,3	204,942	90,8	89,9	90,2
Arkhangelsk Region (without Nenets Autonomous District)	694,652	663,604	655,1	638,564	614,125	606,986	91,9	92,5	92,7
Murmansk Region	892,534	795,409	766,281	823,215	738,382	709,548	92,2	92,8	92,6
Nenets Autonomous Area	41,546	42,09	43,373	26,242	28,539	31,118	63,2	67,8	71,7
Chukotka Autonomous Area	53,824	50,526	50,54	35,869	32,734	34,522	66,6	64,8	68,3
Yamalo-Nenets Autonomous Area	507,006	522,904	539,985	422,826	443,043	452,57	83,4	84,7	83,8

*- excluding the Crimean Federal District

The population of the Russian Arctic is characterized by an increased proportion of men in relation to the proportion of the men in Russia as a whole. However, there was a decrease in the proportion of men in the total population. In 2002 the number of men was only 48,5%, in 2010 – 47,8%. It can also be noted that in 2002 in three regions the number of men exceeded the number of women (Chukotka Autonomous Area – 52,6%, The Sakha (Yakutia) Republic - 51% and the Yamalo-Nenets Autonomous Area – 50,3%). And in 2010, the excess of the number of men was observed only in the Chukotka Autonomous District – 50,1% (Table 2).

Table 2. Distribution of the population of the Arctic zone of the Russian Federation by sex according to the 2002 and 2010 population censuses

	2002					2010				
	The number of population, thousand people	The number of male, thousand people	The number of female, thousand people	Females per 1000 males, %	Females per 1000 males	The number of population, thousand people	The number of male, thousand people	The number of female, thousand people	Females per 1000 males, %	Females per 1000 males
Russian Federation *	145166,7	67605,13	77561,6	46,6	1147	142856,5	66046,58	76809,96	46,2	1163
Arctic zone of the Russian Federation	2641,256	1281,767	1359,489	48,5	1061	2428,104	1160,319	1267,785	47,8	1093
The Komi Republic	134,172	64,985	69,187	48,4	1065	95,854	45,554	50,3	47,5	1104

The Sakha (Yakutia) Republic	33,161	16,927	16,234	51,0	959	28,325	14,119	14,206	49,8	1006
Krasnoyarsk Region	284,361	141,595	142,766	49,8	1008	229,392	113,694	115,698	49,6	1018
Arkhangelsk Region (without Nenets Autonomous District)	694,652	319,403	375,249	46,0	1175	663,604	302,387	361,217	45,6	1195
Murmansk Region	892,534	435,135	457,399	48,8	1051	795,409	379,56	415,849	47,7	1096
Nenets Autonomous Area	41,546	20,547	20,999	49,5	1022	42,09	20,487	21,603	48,7	1054
Chukotka Autonomous Area	53,824	28,302	25,522	52,6	902	50,526	25,318	25,208	50,1	996
Yamalo-Nenets Autonomous Area	507,006	254,873	252,133	50,3	989	522,904	259,2	263,704	49,6	1017

3. AVERAGE POPULATION AND NUMBER OF POPULATIONS

The population of cities in the Arctic increased from 1,8 million people in 1979 to 2,4 million people in 1989. In subsequent years, the population was constantly decreasing, and amounted to 1,9 million people in 2010. The population decline was 477 thousand people from 1989 to 2010. At the same time, in 2010 the urban population was more than its population in 1979 by 146 thousand people.

During the period under review the number of cities was constantly increasing. If in 1979 in the Russian Arctic there were 26 cities, then in 2010 there were already 37 cities. There were cities with a population of up to 50 thousand people. In 1979 there were 18 cities, and in 2010 there are 28 cities. The number of cities with the population of 100 to 250 thousand people varied from 2 to 4 for the analyzed period. In the Russian Arctic there are two cities with a population of more than 250 thousand people.

From 1979 to 1989, the average population of the cities of the Russian Arctic increased from 71 thousand to 82 thousand people. Then it constantly decreased and amounted to 53 thousand people in 2010. The average population of cities from 1989 to 2010 decreased by 28 thousand people. In Russia, the average urban population was significantly higher: in 1979 - 83 thousand people, and in 2010, 88 thousand people. The high population of Arctic cities is preserved due to the fact that the bulk of the population lives in cities with a population of more than 50 thousand people. In 1979 76,8% of the population lived in such cities, and in 2010 - 71%. An insignificant part of the population lives in small towns with a population of up to 10 thousand: in 1979 - 0,3%, in 2010 - 1,1% (Table 3).

Table 3. Distribution of the cities of the Arctic zone of the Russian Federation by population and average urban population according to the censuses of 1979, 1989, 2002 and 2010.

Indicator	1979	1989	2002	2010
The number of urban population, thousand people	1851,92	2475,255	2098,769	1997,562
Number of cities	26	30	38	37
Of these, with the number of inhabitants:				
less than 5 thousand people	1	1	1	4
5-9,9 thousand people			4	1
10-19,9 thousand people	5	4	9	9
20-49,9 thousand people	12	12	13	14
50-99,9 thousand people	3	8	7	3
100-249,9 thousand people	3	2	2	4
250 thousand people and more	2	3	2	2
The average population of cities, thousand people	71,2	82,5	55,2	53,9
The average population of Russian cities, thousand people	83,0	91,0	87,3	88,6

A special status in the settlement network is occupied by cities with a population of more than 100 thousand people, classified as large. In 2015 they were 169 of such cities, of which 6 are located in the Russian Arctic. The number of residents living in cities with a population of more than 100 thousand people decreased from 1,258 million people in 1979 to 1,238 million people in 2010 or from 67,9% to 62%. There are 7 cities having a population of more than 100 thousand people in 2015: Arkhangelsk (350 thousand people), Murmansk (305 thousand people), Severodvinsk (186 thousand people), Norilsk (176 thousand people), Novy Urengoy (115 thousand people), Noyabrsk (107 thousand people).

4. URBAN-TYPE SETTLEMENTS IN THE RUSSIAN ARCTIC

In the resettlement system of Russia, unlike the vast majority of countries, there are two categories of urban settlements - town and urban-type settlements. The second category appeared in the 1920s as a transitional form between real cities and rural settlements. It was assumed that with the development of industry and other non-agricultural branches of the economy, urban village would grow and eventually be transformed into real cities [Simagin, 2009]. Life has shown another. The majority of the town has not become cities, but have been transformed either into rural settlements or ceased to exist. From 2002 to 2010, the number of rural settlements decreased from 63 to 43, and the population living in them decreased from 256,9 to 175,4 thousand people. The number of urban-type settlements decreased to the greatest extent in the Chukotka Autonomous Area - from 13 to 5. On 4 units of them became less in the Murmansk region and the Yamal-Nenets Autonomous Area (Table 4).

Table 4: Number and population of urban-type settlements in the Russian Arctic, according to the censuses of 2002 and 2010

	2002			2010		
	The number of urban villages *	The number of population, thousand people	Average population, people	The number of urban villages**	The number of urban population, thousand people	Average population, people
Total	63	256,854	4211	43	175,442	4386
The Komi Republic	10	47,461	4746	8	24,693	4939
The Sakha (Yakutia) Republic	7	18,244	2606	6	14,64	2440
Krasnoyarsk Region	3	3,924	1308	3	2,577	859
Arkhangelsk Region (without Nenets Autonomous District)	3	10,286	3429	3	7,44	2480
Murmansk Region	16	90,341	5646	12	74,089	6174
Nenets Autonomous Area	2	7,631	3815	1	6,881	6881
Chukotka Autonomous Area	13	13,444	1222	5	10,021	2004
Yamalo-Nenets Autonomous Area	9	65,523	7280	5	35,101	7020

* Including 2 urban-type settlements without a population in the Chukotka Autonomous Area

** including 3 urban-type settlements without a population in the Komi Republic

The prevailing view is that all urban villages that do not have the prospects for growth and transition to cities must be transformed into rural settlements. An exception can be made for the settlements in the Russian northern and eastern regions, where the importance of urban villages in settlement systems is greatest, as well as in poorly urbanized regions. There, many mining urban villages play the role of organizing centers of large territories, forming the framework of urban settlement [Polian, 1988].

5. CONCLUSION

We analyzed the development of the population of cities and urban-type settlements. This allowed us to make a series of proposals. First, we need to define the concept of the development of urban-type settlements in the Arctic [Lytkina, 2014]. Today the city (even a

large one) is not able to develop independently to a form that presupposes self-sufficiency. An isolated city without a thought-out concept of development is unlikely to become a unit of development. We believe that such a formation can become a region, and the city become its centre [Bayandin, Bayandina, 2011]. Such a breeding ground for the Arctic urban development can be the Arctic land part as a single region of integrated development.

Secondly, the reduction of urban and rural settlements leads to an intensive washout of the population from interurban space. The small number of cities and significant distances between them lead to low territorial mobility of the population; Slow modernization of the way of life and much worse adaptation to socio-economic changes in the vast interurban spaces. One of the most negative results of this trend is spatial «contraction», that is, a reduction in the developed space, and first of all in peripheral territories of all kinds [Weinberg, 2013]. This is one of the problems that has no unequivocal solution. On the one hand, it is necessary to enlarge the settlements, develop the city network, give new life to rural settlements and on the other - it is necessary to develop the Arctic land part of Russia. This is due to the fact that the Arctic is an outpost between the mainland and neighboring states. It is necessary to have a certain settlement network based on the geopolitical and defense interests of the country.

Thirdly, today there is no unambiguous position regarding the size of the northern and Arctic cities. One can not apply one approach to Arkhangelsk and Murmansk, which have a century-long history, and to new cities created in the wasteland (Vorkuta, Noyabrsk, Novy Urengoy, Norilsk and Severodvinsk). We believe that most of the Arctic cities could or even should serve as the base cities, excluding Arkhangelsk and Murmansk.

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