REGIONAL PROBLEMS

Analysis and Forecast of the Poverty Rate in the Arctic Zone of the Republic of Sakha (Yakutia)

V. N. Markova^a, K. I. Alekseeva^b, A. B. Neustroeva^c, and E. V. Potravnaya^{d,*}

^a *Institute for the Development of Professional Competencies and Qualifications OPEN, M.K. Ammosov North-Eastern Federal University of Sakha (Yakutia), Yakutsk, Russia*

^b *Ministry of Economy, Republic of Sakha (Yakutia), Yakutsk, Russia*

^c *Academy of Sciences, Republic of Sakha (Yakutia), Yakutsk, Russia*

^d *Interregional Center for Environmental Auditing and Consulting, Moscow, Russia*

*e-mail: potr195@gmail.com

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Abstract—The article analyzes the indicators of the poverty level in the regions of the Arctic zone of the Russian Federation, and assesses the level of poverty and quality of life in the Arctic zone of Yakutia. The results of sociological studies on the level of poverty in the Arctic regions are presented as well as the measures for its reduction associated with addressing the problems of employment, increasing incomes of the population, and the development of traditional crafts.

Keywords: poverty, sociological research methods, Russian Arctic, Republic of Sakha (Yakutia), measures to combat poverty

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Introduction. Improving the standard of living of the population is one of the main targets of the socioeconomic development for each region of the Russian Federation and the country as a whole. The standard of living, its dynamics and differentiation are determined by the development level of productive forces, the volume of production, indicators reflecting the use of the gross national product, the nature of the income distribution and redistribution.

Speaking at the Davos online economic forum in February 2021, the President of the Russian Federation called combating poverty the main task of Russia. According to the World Bank, the number of Russian residents with incomes below 5.5 US dollars per day (PPP-adjusted), has decreased from 64 million people in 1999 to 5 million people at present. According to Rosstat, the poverty level in Russia for nine months of 2020 increased to 13.3%, or by 400 thousand people, compared to the same period of last year (13.1%) due to the coronavirus pandemic. By 2030, it is planned to reduce this figure to 6.5%¹.

The Decree of the President of the Russian Federation On the National Development Goals of Russia until 2030, as of July 21, 2020, determines the national goals of development, health, and well-being of people aimed at increasing their number and improving the

national standard of living in order to implement the breakthrough development of the Russian Federation. At the same time, within the framework of this national goal, indicators have been identified that characterize its achievement by 2030, including a reduction in the poverty level by half compared to the indicator in 2017 [1].

It is obvious that the problem of raising the standard of living and solving the problem of poverty is specific in different regions. In this context, the development of the social potential of the Arctic region, including measures to combat poverty in this area, is a priority task [2], in view of the increasing geopolitical, social, economic and infrastructural significance of the development of the Arctic territories [3, 4].

The implementation of the strategy for the development of the Arctic zone (AZ) and ensuring national security for the period until 2020 led to an increase in life expectancy at birth in the AZ from 70.65 years in 2014 to 72.39 years in 2018, a 53% decrease in the migration outflow in 2014–2018, a decrease in the unemployment rate (according to the ILO methodology) from 5.5% in 2017 to 4.6% in 2019 [5].

The “Strategy for the socioeconomic development of the Arctic zone of Sakha (Yakutia) for the period up to 2035” sets such target indicators for its implementation according to the innovative option as the level of natural growth and a decrease in the migration outflow of the population, an increase in the standard of

¹ V. Putin called the combat against poverty the main task of Russia. <https://news.mail.ru/economics/45026910/?frommail=1>.

living in the Arctic regions 1.8 times compared with the baseline, reduction in the poverty level by half by 2030 compared to 2017, and reduction in the overall unemployment rate to 8.3% [6].

Addressing the complex of economic and social problems in the AZ of Russia, including the Republic of Sakha (Yakutia), requires a search for new approaches to the analysis and assessment of the poverty level of the population, including the use of sociological research methods.

Theoretical approaches to measuring the poverty rate.

Currently, there is no unified approach to the definition of poverty. When calculating poverty indicators, countries use different definitions and calculation methodologies, which often leads to inconsistencies in data. A great deal of effort is invested in improving poverty statistics by international organizations, such as the World Bank, the United Nations Economic Commission for Europe (UNECE), the Organization for Economic Cooperation and Development (OECD), Eurostat, and others.

In international statistical practice, poverty assessment is carried out based on monetary and nonmonetary approaches [7]. The monetary approach consists in comparing the average per capita indicators of the population's standard of living (income or consumer spending) and the poverty line, which can be absolute or relative [8].

In Russia, when determining the level of poverty, the concept of absolute poverty is taken as a basis, and in order to measure it, such indicators are used as the share of the population with monetary (total) incomes below the subsistence minimum and proportion of the population with incomes below the international poverty line based on PPP. The subsistence minimum (SM) is the cost estimate of the consumer basket as well as mandatory payments and fees. Note that by the decision of the Government of the Russian Federation, the subsistence minimum per capita in 2021 was 11653 rubles, for the working-age population 12702 rubles, for children 11303 rubles, and for pensioners 10022 rubles. In the Republic of Sakha (Yakutia), the SM value is determined quarterly and established by the government of the republic. In the consumer basket, the list of foodstuffs for determining the SM value additionally includes bushmeat (venison), horse meat, omul, and vendace.

For a statistical assessment of absolute poverty in Russia, the indicator of the share of the population with monetary incomes below the SM value is used, which is determined based on the data from a sample survey of household budgets.

The concept of relative poverty in the framework of the monetary approach is widely used in the EU and OECD countries. For this, two types of indicators are used; they are calculated

—Based on money income: the share of the population with money incomes below 40–60% of the median value of money income.

—Based on equivalent disposable money income, the share of the population with money incomes below 40–60% of the median value of disposable income (in the EU countries, 60% of their national median value).

However, monetary approaches to poverty assessment do not ensure full identification of the poverty scale and the multidimensional nature of this phenomenon. In many countries, this concept is rightly associated not only with the level of income or consumption but also with the availability and quality of health care, education, and public-service utilities. Therefore, when studying poverty, it is important to develop complex indicators that would allow assessing the impact of all these factors on the level and quality of life.

Currently, various approaches to nonmonetary poverty estimates are implemented using the following indices:

—Multidimensional poverty index (multidimensional poverty index and at-risk-of-poverty-or-social-exclusion index) is used to measure forms of deprivation that are not measurable in value (health, education, living conditions), and shows the average number of poor people on average per household.

—Deprivation index, or the share of households that, due to lack of funds, cannot afford the goods and services necessary for a normal life. For example, in the EU countries, the following indicators are monitored: availability of a computer and access to the Internet for personal use; replacement of furniture pieces and worn-out clothes with new ones; participation in leisure and recreation activities, etc.

For international comparisons, it is recommended to take into account the list of material deprivations used in the EU countries as a basis [9] i.e.,

—The social exclusion index, which characterizes the inability of people to fully participate in the life of society, is calculated separately for children under the age of 14 inclusive and for adults. This takes into account various aspects of life in three areas: economy, social services, social life and social networks.

According to the approaches adopted in the United States, for normal consumption, food costs should account for one third of total consumer spending. Thus, the poverty threshold in the United States is determined based on the size of the SM multiplied by a factor of 2.5, and is adjusted annually. For households of different composition, different poverty lines are set.

The subjective concept of poverty is based on assessments by people who are guided by their chosen standards of their own situation. Such an assessment is an important indicator for understanding the sources

Table 1. Main indicators characterizing the quality of life in some Arctic countries

Country	HDI rating, 2018	HDI, 2018	Life expectancy at birth, 2018	GNI per capita, US dollars, 2018	General unemployment (share of unemployed population aged 15 and over), 2018	Gini index, 2010–2017	Average annual change in income of the poorest 40% of the population 2005/2017, %
Norway	1	0.954	82.3	68059	0.81	27.5	0.3
Iceland	7	0.938	82.9	47566	0.93	27.8	0.4
Sweden	8	0.937	82.7	47955	0.90	29.2	–0.4
Denmark	11	0.930	80.8	48836	1.08	28.2	–0.5
Finland	12	0.925	81.7	41779	0.96	27.1	0
Canada	13	0.922	82.3	43602	0.93	34.0	–0.3
USA	15	0.920	78.9	56140	0.93	41.5	–0.4
Russia	49	0.824	72.4	25061	0.94	37.7	1.2

Source. Compiled by the authors based on the UN Human Development Indices and Indicators Report (2019) http://hdr.undp.org/sites/default/files/hdr_2019_overview_-_russian.pdf.

of social tension and regulating government programs for the poor. The use of this approach makes it possible to single out more significant aspects of poverty, since it manifests itself not only in insufficient livelihoods but also in the state of health, the quality of nutrition, the level of education, housing conditions, and social isolation.

One of the important tools for assessing the country's achievements in the field of human development is the *human development index* (HDI), which is an integrated indicator that characterizes the development of a person (Table 1). In compiling it, life expectancy, gross national product per capita, education level, and income of the population are taken into account.

According to UN estimates, about 70% of the world's poor aged 15 and over have no school education or only have some basic education [10]. When assessing the level of poverty and the quality of life, the level of the territory's development is important. An example is the Lena region in the Republic of Sakha (Yakutia) where the spatial contradiction between the level of social development and the rate of economic growth is most acutely manifested [11].

The COVID-19 pandemic brought about a slowdown in poverty reduction. The World Bank estimates that by 2021 the world's extremely poor population will be about 150 million people.

By 2030, the world's poverty rate may be about 7% (the share of the population with daily incomes less than 1.9 US dollars). At the same time, the main goal of sustainable development is to reduce this indicator to less than 3% in 2030.

The economic impact of COVID-19 has also affected overall well-being. The slowdown in economic activity, exacerbated by the pandemic, has particularly affected the poorest population groups in the AZ.

Analysis of the main indicators reflecting the living standard of yakutia's AZ. A sociological study carried out in April 2020 on the impact the coronavirus pandemic made on life in the Arctic regions of Russia, during which 291 people from various Arctic federal subjects were interviewed, showed that difficulties and changes in the life of the population related to the deterioration in the quality of life affected 40.5% (59.5% of the respondents from among the indigenous peoples), job loss and lack of stable earnings 50%, and changes in work and life 48.4% (51.6% of the respondents belonging to indigenous peoples) [12]. In order to characterize the quality of the citizens' life and social stability, the concept of precarious employment should also be used [13].

Taking into account these approaches, the main indicators of the population's living standard in the context of the regions of the Far East and AZ of Russia are given in Table 2.

The highest minimum subsistence level for 2019 is observed in the Chukotka Autonomous District and the Kamchatka krai. The highest ratio of per capita money income to SM is typical of Yamalo–Nenets AD at 5.2 times, Nenets AD 4.1 times; average monthly accrued wages to the value of SM in Yamalo–Nenets AD 6.2 times. The Republic of Sakha (Yakutia) ranks fifth in terms of the ratio of the average monthly wage to the SM, while in terms of the ratio of per capita money incomes it ranks ninth, which is due to a relatively high dependency burden. The excess of the average Russian indicator of the poverty level is typical of most regions in the Far East and the AZ of Russia, with the exception of Yamalo–Nenets AD (5.6%), Chukotka AD (8.7%), Nenets AD (9.5%), Magadan (9.4%), and Murmansk oblasts (10.8%) (Table 2).

In 2019, there was a decrease in absolute poverty in Yakutia compared to 2016 (Table 3). The significant

Table 2. Poverty level indicators in some regions of the Far Eastern Federal District and the AZ of Russia in 2019

Region of the Russian Federation	SM per month, rubles	Wages		Income		Ratio of the region's SM to the average for the Russian Federation, times	Poverty level, %
		rubles	to SM, times	rubles	to SM, times		
RF	10890	47867	4.4	35249	3.2	1	12.3
Republic of Sakha (Yakutia)	17181	73402	4.3	45335	2.6	1.6	17.9
Republic of Karelia	13648	42964	3.1	30763	2.3	1.3	15.7
Republic of Komi	13707	53416	3.9	35435	2.6	1.3	15.5
Arkhangelsk oblast	12707	52434	4.1	33789	2.7	1.2	12.7
Murmansk oblast	16800	63715	3.8	43915	2.6	1.5	10.8
Nenets AD	19993	88027	4.4	80973	4.1	1.8	9.5
Yamalo–Nenets AD	16318	101012	6.2	84135	5.2	1.5	5.6
Krasnoyarsk krai	12477	49932	4.0	31386	2.5	1.1	17.5
Chukotka AD	22213	107107	4.8	81778	3.7	2.0	8.7
Kamchatka krai	20499	80448	3.9	52472	2.6	1.9	15.0
Khabarovsk krai	14328	50213	3.5	41483	2.9	1.3	12.2
Magadan oblast	19680	94856	4.8	65028	3.3	1.8	9.4

Source. Compiled by the authors based on Rosstat data.

scale of poverty in Yakutia, first of all, is due to the large number of children, characteristic of Russia's national republics, and the largest share of villagers among the regions of the AZ in the RF [14]. Several years ago, Rosstat began to use the relative poverty index, which takes into account the proportion of the population with money incomes below 40, 50, and 60% of the median per capita money income.

For 2016–2019, the population of the republic increased by 12300 people, in the AZ of Yakutia, on the contrary, the population decreased by 1200 people. The total population growth zone included only four regions: Olenek, Anabar, Bulun, and Even-Bytantay, the population growth in which is due to the migration inflow of the able-bodied population due to the development of mining enterprises. More than a third of the migration outflow is accounted for by young people aged 14–19, school graduates who leave for study. In the age group 20–24, there was a migration inflow, which is associated with the school-leavers' return to their former place of residence after training or study.

A significant natural population growth of 2.2 times, exceeding the average republican value, remains in the Anabar region, the smallest was recorded in the Ust-Yansk and Upper Kolyma regions.

In the age structure of the population in the Arctic zone, there is an increase in the share of the working-age population from 55.9 to 56.2%. The proportion of the working-age population above the national average is observed in Anabar (59.6%), Even-Bytantay (59.8%), and Bulun regions (63.5%). The largest percentage of the employed population in 2019 falls on the Olenek region (84.9% of the working-age population) with an average salary of 95.9 thousand rubles; the lowest percentage of the employed is in the Mid-Kolyma region (55.4% of the total working-age population), the average wage is 58.4 thousand rubles. In total, in the AZ of Yakutia in 2019, the average number of employees was 24556 people and it decreased by 0.3% as compared to 2016.

In the employment structure of the AZ, the budget sector prevails. More than 24.5% of its population are employed in education, 14.2% in the production and distribution of electricity, gas, and water, 13.8% in public administration, and 9.8% in healthcare and the provision of social services. In 2017–2019, the number of employees in agriculture, forestry, hunting, fishing and fish farming decreased in the Republic as a whole by 9.1%. The largest outflow of workers compared to 2010 was noted in the fishing industry, which is due to the low level of wages in this industry. Special attention should be paid to the tasks of preserving traditional types of activity: low wages of workers in the reindeer husbandry and fishing industry in the amount of 28000–33000 rubles leads to an outflow of labor.

Table 3. Poverty indicators in the Republic of Sakha (Yakutia)

Indicators	2016	2017	2018	2019
Absolute poverty index	19.8	19.6	18.6	17.9
Relative poverty index (60%)	24.2	24.3	24.8	24.8

Source. Sakha (Yakutia) Service of state statistics.

Table 4. Working-age population in the AZ of Yakutia in 2019

Region	Working-age population, People, 2019	Average number of workers		The number of unemployed population registered with the agency for labor		Dynamics in the level of general unemployment, %		
		people	%	people	%	2010	2019	2019 to 2016, %
Total for Yakutia	557524	371047	66.5	9663	1.7	8.9	6.9	95.8
AZ of Yakutia	36660	24556	66.9	1685	4.6	10.6	8.3	96.5
Abyi	2129	1547	72.7	111	5.2	9.6	6.7	95.7
Allaikhovskii	1436	1029	71.7	70	4.9	11.7	8.0	97.6
Anabar	2046	1636	79.9	82	4.0	8.6	8.4	96.6
Bulun	5014	3407	67.9	54	1.0	15.2	12.8	98.5
Upper Kolyma	2188	1610	73.6	109	4.9	5.4	4.8	94.1
Verkhoyansk	6110	3594	58.8	312	5.1	8.8	6.0	93.8
Zhigansk	2127	1454	68.4	94	4.4	8.0	8.5	96.6
Momskii	1967	1503	76.4	94	4.8	8.8	9.3	96.9
Lower Kolyma	2259	1507	66.7	97	4.3	9.0	7.2	96.0
Olenek	2202	1871	84.9	87	3.9	15.7	9.7	97.0
Mid-Kolyma	3820	2116	55.4	250	6.5	13.1	9.0	96.8
Ust-Yansk	3816	2386	62.5	187	4.9	11.0	7.3	96.1
Even-Bytantay	1546	896	57.9	138	8.9	11.7	13.4	97.8

Source. Compiled by the authors based on data from Sakha (Yakutia) service of state statistics and information from the Republic of Sakha (Yakutia) State Employment Committee.

Table 4 shows data on the number of working-age population in the regions of AZ Yakutia in 2019, as well as on the dynamics of the unemployment rate.

The number of unemployed citizens in the AZ of Yakutia who are registered in the search for work in 2019 amounted to 1685 people (63.1% of the able-bodied population of the AZ). The highest percentage of unemployed is in the Even-Bytantay region (8.9% of the working-age population), the lowest percentage is in the Bulun region (1.1%). For the period from 2010 to 2019, the unemployment rate in the AZ of Yakutia exceeded the average republican level. In 2016, this figure was 8.6%, in 2019 the unemployment rate decreased by 0.3 pp. Maximum values of the indicator were recorded in the Even-Bytantay and Bulun regions.

In modern conditions, the process of adaptation of the regional labor market to changes in the economy is accompanied by a massive layoff of workers at enterprises, an increase in hidden unemployment and overdue wage arrears. The overall unemployment rate in the republic at the beginning of 2021 was 7.2%. The greatest lay-off of workers occurred in organizations related to the "Mining" economic activity.

The number of employees of enterprises and organizations that switched to remote work arrangement, as of January 12, 2020, amounted to 32500 people. On average, in the AZ of Yakutia, the average monthly wage is 71300 rubles, which is lower than the national

average by 2.8 pp. The level of average wages in the Arctic regions in 2019, despite the application of the increased regional coefficient and the coefficient for work in the Arctic regions, is lower than the national average in ten regions. In three regions, the average monthly wage of workers is higher than the national average (73400 rubles); these are Anabar (117700 rubles), Olenek (95500), and Bulun (81700). The lowest wage level in 2019 was recorded in the Even-Bytantay region.

According to the Territorial Body of the Federal State Statistics Service for the Republic of Sakha (Yakutia), in 2019 the ratio of the average monthly wages of employees of organizations to the subsistence minimum for the working-age population in the AZ regions of Yakutia averaged 3.5; the Anabar region is in the lead in the rating of regions for this ratio at 5.8.

In the structure of monetary incomes of Yakutian population, wages (71.3%) account for the largest share. They are followed by social payments, including pensions and scholarships (19.1%). Income from entrepreneurial activity accounts for 7.2%, income from property for 1.9%. In 2020, compared to 2019, real wages amounted to 100.8%, but despite some growth and an increase in the volume of social transfers by 13%, there was a drop in real disposable income of households, which negatively affected the consumption sphere.

Table 5. Demographic load ratio for working-age population in 2016 and 2019

Region	Per 1000 able-bodied people:					
	children aged 0–15			men aged 61 and older, women aged 56 and older		
	2016	2019	2019/2016, %	2016	2019	2019/2016, %
Total for Yakutia	413.9	418.5	101.1	264.4	288.2	109.0
AZ of Yakutia	500.4	487.5	97.4	289.2	290.4	100.4
Abyi	488.4	425.9	87.2	339.7	353.8	104.1
Allaikhovskii	508.6	482.8	94.9	332.2	338.3	101.8
Anabar	542.1	517.2	95.4	176.9	160.8	90.9
Bulun	403.2	365.7	90.7	227.0	209.0	92.1
Upper Kolyma	365.2	389.5	106.7	392.2	427.6	109.0
Verkhoyansk	508.7	440.7	86.6	278.9	291.1	104.4
Zhigansk	560.7	582.2	103.8	284.2	279.3	98.3
Momskii	667.3	649.1	97.3	325.5	268.8	82.6
Lower Kolyma	510.5	470.4	92.1	324.7	320.3	98.6
Olenek	583.6	640.5	109.7	236.7	230.4	97.3
Mid-Kolyma	557.8	609.3	109.2	337.1	356.9	105.9
Ust-Yansk	443.7	480.9	108.4	292.2	353.7	121.0
Even-Bytantay	515.9	470.9	91.3	253.5	201.6	79.5

Source. Compiled by the authors based on data from Sakha (Yakutia) service of state statistics and information from the Republic of Sakha (Yakutia) State Employment Committee.

Among low-income households, the main share (88.4%) falls on households of three or more people. The growth in the share of low-income households (three or more people) is influenced by factors such as a decrease in the income of adult household members, and an increase in the dependency load of the unemployed adult population.

In various types of households with children, the depth of poverty increases with the number of children in the household, especially with the birth of the third child. Households with children have less flexibility in spending, reserves for savings, and in the context of an economic downturn and lower household incomes, they find themselves in a more difficult position compared to other groups of the population. In the republic, the dependency load factor of the working-age population with children under 15 years of age in 2019 compared to 2016 increased by 1.1%; on the contrary, on average in the AZ, there is a decrease in this load by 2.6% (Table 5).

In 2019, the number of pensioners in the AZ increased slightly relative to 2016. This figure is growing in the Anabar, Verkhoyansk, Zhigansk, Momskii, Olenek, and Mid-Kolyma regions. The average size of pensions at the beginning of 2020 in the republic is 19800 rubles, for the AZ, 21100 rubles.

The purchasing power of residents in AZ regions is lower than the average Russian indicator, the average per capita taxable income is provided by only 2.24 SM. The high cost of living in the Arctic regions does not

allow the population to maintain a high level of consumption. Due to significant transport costs, the real cost of the minimum set of food products included in the consumer basket in the Arctic regions is much higher than in the rest of the region. Thus, in 2020, the cost of products included in the consumer basket in the village of Zyryanka (the administrative center of Upper Kolyma ulus) was 9100 rubles.

Since 2017, the Ministry of Labor and Social Development of the Republic of Sakha (Yakutia) has been keeping records of citizens in particular need of social support. With the participation of municipalities, the Register of low-income families is formed annually with an average per capita income per person up to the subsistence level established on the average per capita in the republic. More than 12000 citizens are filed in this register in the AZ of Yakutia, which is 17.8% of the total population of the AZ. At the same time, the share of the needy is twice as high as than the national average.

The share of needy citizens (according to the Register) in the total population at the beginning of 2019 in seven regions of the Yakutian AZ (more than half of the AZ regions) is higher than the average republican level of this indicator (17.9%). For example, in the Even-Bytantay region this share was 33.2%, in Mid-Kolyma 27.2%, in Verkhoyansk 26.6%. The lowest share of needy citizens is observed in the Anabar region at 5.1% and the Olenek region at 5.8% (Table 6).

Anabar, Olenek, and Bulun regions are characterized by a relatively low level of needy citizens of working age (whose share is 4% of the number of those in special need), which is facilitated by the production activities of Almazy Anabara (Anabar diamonds) JSC. About 15% of seasonal workers of JSC Almazy Anabara are local residents of these regions. The company purchases fish and meat products from local fishing and hunting communities, which is confirmed by a large share of the employed population (more than 70% of the population of working age) and a high level of average monthly wages, which varies from 81700 rubles in the Bulun region up to 117700 rubles in the Anabar region. These regions are also characterized by a trend for positive natural and migratory population growth.

In most cases, the mother's taking maternity leave to care for a child up to three years of age contributes to the emergence of poverty, since the main source of income, as a rule, is only social benefits. Three settlements in the AZ of Yakutia with a population of less than 500 people require special attention of local self-government bodies and executive government authorities, the share of needy citizens here accounted for more than half of all residents of the villages: Berezovka in Mid-Kolyma region, village Tokuma in Verkhoyansk region, and village Khaiyr in Ust-Yansk region.

In the AZ of Yakutia, citizens of working age prevail among the most needy accounting for 47.9% (in the republic it is 45.3%), the share of children is 45.2% (48.6%). In the structure of especially needy citizens by gender, as well as on average in the republic, the share of women prevails (57.7%): the number of women is 6938 (or 57.7%), of which 2654 are children (38% of the total number of women); the number of men in total is 5088 (or 42.3%), of which 2776 are children (55% of the total number of men). The structure of 4128 needy households (families) is dominated by the share of households consisting of one person (27.6%), or 1140 households. Obviously, when substantiating measures for ensuring the quality of life, environmental well-being and economic well-being of the population in the AZ, one should take into account the gender approach and gender equality [15].

The developing socioeconomic situation in the country, the increasing gap between the rich and the poor, and a rise in the unemployment rate predetermine the growth in the number of persons without a permanent source of income. This group poses criminogenic risk. In this case, not only people with a previous criminal record but also the unemployed contribute to recidivism [16]. According to the Ministry of Internal Affairs for the Republic of Sakha (Yakutia), in the AZ of Yakutia in 2019, the total number of crimes committed by persons without a permanent source of income was 213 (5% of such crimes in the republic), including 62 crimes committed by unemployed citizens. The highest values of this indicator per 1000 peo-

Table 6. Rating of AZ regions of Yakutia by the share of needy citizens in the total population

Maximum values	%	Minimum values	%
Even-Bytantay region	33.2	Anabar region	5.1
Mid-Kolyma region	27.2	Olenek region	5.8
Verkhoyansk region	26.6	Bulun region	6.0
Ust-Yansk region	22.6	Upper Kolyma region	6.2
Zhigansk region	22.1	Allaikhovskii region	9.0
Momskii region	21.2	Lower Kolyma region	12.2
Abyi region	20.4		

Source. Compiled by the authors based on data from the Ministry of Labor and Social Development of the Republic of Sakha (Yakutia).

ple were noted in Zhigansk and Momskii regions (Table 7).

The rise in prices for services and essential goods, a decrease in per capita income and an increase in poverty, intensifying migration processes and an influx of labor migrants are factors that predetermine an increase in the proportion of citizens who do not have a regular income, therefore, this increases the vector of social tension of the considered category of citizens.

Assessing the main characteristics of the poor population in the AZ of Yakutia. In order to assess the poverty level of the population, a survey was conducted among residents of the republics arctic uluses [17]. The sample consisted of 792 respondents aged 18 and over. The survey was attended by indigenous residents of six settlements in three Arctic regions: Momskii, Abyi and Anabar. According to its results, 29% of respondents assessed themselves as "poor," 30.7% as "economically disadvantaged." The lowest subjective assessments of the financial situation were observed among the respondents from the Abyi region, where 37% classified themselves as poor, 34.3% assessed their position as economically disadvantaged, and 12% as low-income. In the region, high household debt load was observed as 60.7% of respondents or other members of their family had an outstanding credit or loan. The highest debt burden fell on low-income respondents.

Sociological surveys of the Arctic zone residents enable us to compile a generalized "portrait" of a poor man in the Arctic uluses. This category comprises large families and families with young children. Unemployed people with incomplete secondary and secondary general education who experience difficulties in finding work categorize themselves as poor. Low-skilled and uneducated workers from the construction, transport, housing and communal services, and trade spheres consider themselves poor. Educational specialists, rural intellectuals with specialized secondary and higher education also classify themselves as poor.

Table 7. Crimes in the AZ of Yakutia committed by the poor in 2019

Municipalities/regions	Committed by persons with no permanent source of income		By the unemployed	
	units	per 1000 people	units	per 1000 people
Total for the Republic of Sakha (Yakutia)	4424	4.55	62	0.06
total for AZ of Yakutia	213	3.15	21	0.31
Allaikhovskii	9	3.34	2	0.74
Anabar	14	3.83	2	0.55
Abyi	16	4.05	1	0.25
Bulun	21	2.47	1	0.12
Verkhoyansk	41	3.71	1	0.09
Upper Kolyma	14	3.50	—	—
Zhigansk	19	4.62	3	0.73
Momskii	19	4.78	3	0.75
Lower Kolyma	12	2.82	2	0.47
Olenek	15	3.53	—	—
Mid-Kolyma	13	1.77	3	0.41
Ust-Yansk	16	2.28	3	0.43
Even-Bytantay	4	1.41	—	—

Source. Compiled by the authors based on the data of the Ministry of Internal affairs for RS(Y) and Sakha (Yakutia) service of state statistics.

In order to predict the poverty level, a forecast was made of the population size of the Yakutian AZ using the method of age movement resulting in 977800 people by 2032, which exceeds the base level (2019) for this indicator by 1.1%. Population growth is due to the excess of natural growth over migration loss. In the context of the Arctic municipalities, by 2032, the population is expected to increase in Olenek to 4400, Anabar up to 3800 people, and Zhigansk 4100 people. The greatest population decline will be observed in the Upper Kolyma region—by 1100 people. Despite the decrease in the migration turnover of the republic, multidirectional flows of migrants will retain their importance in the zones of advanced socioeconomic development [18].

According to the national development goals of the country, by 2030 the poverty level in the Republic of Sakha (Yakutia) will be 10.1%.

Conclusions. The concept of poverty currently implies not only low absolute and relative indicators of income or consumption, but also those restrictions that prevent the poor from obtaining the economic resources necessary to maintain an adequate standard of living in the form of access to such vital social institutions such as labor, education, etc.

In order to obtain more accurate information and improve the targeting of social protection in combating poverty, it is necessary to use an approach to the study of poverty, including both absolute and relative and subjective methods of poverty assessment. This will make it possible to determine the minimum pov-

erty threshold, to reveal the dynamics in the standard of living for the able-bodied population relative to the average standard of living, and to study the subjective opinions of the population and social groups about their situation.

In order to promote employment, a large-scale modernization of employment services is needed and their transformation into an analog of recruitment agencies that connect employers and unemployed citizens in a proactive format. The state offers a citizen a service necessary in a particular life situation, and for receiving it, it is sufficient to send information in response to an SMS. In order to increase the effectiveness of social support measures, it is necessary to create a unified system for assigning and accounting for social benefits, which will allow the formation of a digital family profile in terms of all social support measures—a “Social Treasury.”

Due to objective factors and limitations associated with the consequences of coronavirus infection, the achievement of the Russia’s national development goal to reduce the poverty level two times by 2024 (compared to 2017) has been prolonged until 2030. The target values of the “poverty rate” indicator in the Republic will be maintained in the “tense” scenario (14% in 2024, 8.6% in 2030).

It is found that the share of citizens in particular need of social support in the AZ of Yakutia is twice as high as the national average, and the level of registered unemployment (4.6%) exceeds it 2.9 times (1.6%).

Unemployment has a significant demoralizing effect on a person, aggravates his desocialization, lowers the standard of living and self-esteem, increases his vulnerable position in society, immiserates him. To reduce the unemployment rate, along with measures of state regulation, it is necessary to stimulate extractive companies to develop traditional crafts, create new jobs, as well as develop various forms of self-employment for the population and entrepreneurship, including indigenous peoples.

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