

Socio-economic environment of Nanai and Udege people living (Russian Far East)

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Abstract. The problem of settling and preserving the population is one of the most important for the eastern regions of Russia. All regions of the Far East are characterized by various natural and socio-economic factors and different population sizes. These regions differ significantly in their ability to provide favorable living conditions. The goal is to study the features of the socio-economic environment of three municipal districts in which the significant part of the indigenous aboriginal peoples of the Udege and Nanai live. These are the Nanai and Lazo districts of the Khabarovsk Krai, and the Pozharsky district of the Primorsky Krai. It was revealed that natural movement dynamics of population in the districts differs slightly from each other. It is shown that named municipal districts have significant differences in settlements characteristics, standards of population living and socio-economic development of the territory. The Lazo district has the worst position in population dynamics. The Pozharsky district has the most favorable geographical position among three studying districts. It is located in the center of the most developed part of the Far East, has relatively diversified complex of industries «reinforced» by transport and logistics communications. This contributes to greater development of the district and the quality of life of the population. The Nanai district of Khabarovsk Krai has a large number of social infrastructure institutions. Ethnic self-awareness and traditional nature management of the Nanai people are supported and developed with an emphasis on river fishing.

1 Introduction

The Russian Far East is characterized by heterogeneous demographic and socio-economic processes. The human potential of most regions of the district is under threat. This is evidenced by the difficult socio-economic (low standards and quality of life) and medical and demographic situation of the population (natural and migration decline, low level of health), including the indigenous peoples of the North and the Far East.

The population of the Far East is unevenly distributed. Its main part is concentrated in the southern regions, including Khabarovsk and Primorsky Krai. On these territories according to the results of the All-Russian Census [1] 26 ethnic groups or 23,271 persons belonging themselves to the aboriginal people live (on the Primorsky territory – 1,876

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persons, on the Khabarovsk territory – 21,395). This is 9.8% of the number of all indigenous peoples living in Russia.

The indigenous peoples of Primorsky Krai are indeed very few in number. The number of residents of the region who identify themselves as belonging to three peoples - Nanai, Taz and Udege - in 2020 was only 302; 221 and 715 people, respectively [1]. At the same time, the total number of Udege - the most numerous indigenous people of the Primorsky Krai - throughout the Russian Federation in 2020 was only 1,325 persons. A significant part of them lives in the neighboring Khabarovsk Krai (548 people) and only 62 people live in other regions of the country. The list of indigenous peoples of Khabarovsk Krai includes the Negidals, Nivkhs, Orochs, Ulchis, Evenks, Evens, Nanai and Udege. The Nanai are the most numerous indigenous people (10,736 persons in 2020).

Khabarovsk and Primorsky Krai have favorable trends in socio-economic development. These are an increase in the indicators of the level of development and sustainability of the economy, which is a necessary condition for improving the quality of life of the population in the regions. These regions of the southern Far East are extremely heterogeneous both in terms of natural living conditions, which constitute an important feature of the places of permanent residence of the population, and in terms of the level of socio-economic development of the regions [2]. The unevenness of economic development of the territories is associated with low transport accessibility and the significant remoteness of individual municipalities from developed socio-economic centers within the regions (Nanai district and Lazo district of Khabarovsk Krai, Pozharsky district of Primorsky Krai). It should be noted that the main goal of socio-economic development of any region of the Russian Federation is to improve the well-being and quality of life of the population [3].

The goal of the paper is to study the features of the socio-economic environment of three municipal districts in which the significant part of indigenous aboriginal peoples Udege and Nanai live. These are the Nanai and Lazo districts of Khabarovsk Krai, and the Pozharsky district of Primorsky Krai in the south of the Far East.

1.1 Characteristics of the Nanai and Udege people - the indigenous population of Primorsky and Khabarovsk Krai

Khabarovsk and Primorsky Krai are the territories of compact residence and economic activity of the ethnic groups of the southern Tungus-Manchurian group - the Nanai and Udege. It should be noted that the development of this territory by man began in ancient times. In the middle of the 19th century, when the Ussuri region finally became part of Russia, the indigenous population occupied a vast territory from the Tatar Strait in the north to the southern tributaries of the Ussuri River. Within the borders of modern Primorye there were 326 Nanai and 1127 Udege in 1897.

Nanai (obsolete self-designation - goldy) with self-designation - nanai, nani – «people of this land». The first information about the settlement of the indigenous peoples in the Amur basin appeared in Russia in the middle of the 17th century, during the campaigns of E. Khabarov and other explorers. According to the historian B. Polevoy, the «dyuchers», who lived in the lower reaches of the Sungari River and along the Amur in the area of the mouths of the Sungari and Ussuri Rivers, were Nanai [4-5].

Currently, Nanai villages are located on both banks of the middle Amur (approximately from Khabarovsk City to Komsomolsk-on-Amur City) and its tributaries, some Nanai people live on the eastern bank of the Ussuri River (Pozharsky district of Primorsky Krai). The number of Nanai, according to the All-Russian Population Census in 2010, in Khabarovsk Krai was 11,009 people, in Primorsky Krai - 383 people. The dynamics of the number of Nanai is presented in Table 1.

Table 1. Dynamics of Nanai and Udege people in Primorsky and Khabarovsk Krai according to the All-Russian population Censuses [1, 4].

Territory	1989		2002		2010		2020	
	Nanai	Udege	Nanai	Udege	Nanai	Udege	Nanai	Udege
Khabarovsk krai	10582	697	10993	613	11009	620	10813	548
Primorsky krai	425	766	417	918	383	793	296	713

At the beginning of the 20th century, the Udege occupied a continuous territory along both slopes of the Sikhote-Alin Mountains. Their distribution in the east reached the coast of the Sea of Japan (currently the Terneysky municipal district of Primorsky Krai). In the west they reached the middle parts of the right tributaries of the Ussuri River, including the Bikin River, the Bolshaya Ussurka River (currently Pozharsky and Krasnoarmeysky municipal districts of Primorsky Krai) [6-7]. In the south they bordered with the territory of indigenous Tazy people (Olginsky municipal district of Primorsky Krai now). In the west, they lived along the Khor River on the territory of Lazo district of Khabarovsk Krai. Currently Gvasyugi village is a national Udege village of the Khabarovsk Krai. It is located on the bank of the Buli River where it flows into the Khor River channel.

In the 1920s, the Udege had four territorial groups, which consisted of representatives of different clans. Each family occupied a certain territory, but there was no ownership of land. However, due to collectivization and the consolidation of settlements in the 1930s, by the beginning of the 1940s the Udege lost the unity of their ethnic territory and were concentrated in nine enlarged settlements, administratively belonging to the Primorsky and Khabarovsk Krai. Currently, the Udege and Nanai people in the Primorsky Krai live compactly in three municipal districts and their ethnic names are «bikingka» in the Pozharsky district, «imangka» in Krasnoarmeysky district, and «samargingka» in the Terneysky district [8].

There are 23 non-profit organizations of indigenous people registered in Primorsky Krai. Their activities are aimed at preserving and developing of the Udege and Nanai people culture and traditional economic activities (hunting, fishing, gathering wild plants), ecological and hunting tourism [9]. A specially protected natural area has been created on the western macro slope of the Sikhote-Alin ridge – «Bikin National Park» (Krasny Yar settlement) in the Pozharsky district of Primorsky Krai. The main objective of the park is to preserve historical and cultural sites, protect the habitat and traditional way of life of the indigenous peoples - the Udege and Nanai.

There, the Bikin Udege and Bikin Nanai live compactly in the villages of Krasny Yar, Olon, Verkhny Pereval, Okhotnichye, and also in the urban-type settlement Luchegorsk. According to A. Startsev, the Bikin Nanai are practically no different from the Udege except for different surnames. It can be said with confidence that the Bikin Udege and Nanai constitute a single socio-economic community. They are conditioned by the same outlook on nature and natural and everyday needs. The basis of economic activity for these ethnic groups is hunting, river fishing, gathering, as well as folk crafts, agriculture and animal husbandry [8].

2 Materials and methods

The analysis of the current socio-economic situation was carried out using official statistical data from the territorial departments of Rosstat of the Khabarovsk Krai and

Primorsky Krai, official information from the administrations of Nanai and Lazo districts of Khabarovsk Krai, Pozharsky district of Primorsky Krai, and information from the database of indicators of municipalities of the Russian Federation [2, 10-17].

The analysis of demographic processes (reproduction, mortality and total population) of the Udege and Nanai people was carried out using regional statistical data from the Krasny Yar rural settlement of the Pozharsky district of Primorsky Krai [1, 13]. The analysis of demographic indicators of the entire population of Lazo and Nanai districts of the Khabarovsk Krai was carried out using literary sources and data from the Khabarovsk Statistics Committee [1, 12, 14-15].

The collected materials were used for the identifying and analysis of the existing trends in the number and composition of the population, in the economic and socio-geographical factors of the living environment that affect the quality of life of the Nanai and Udege people in the Primorsky and Khabarovsk Krai.

3 Results

The Pozharsky district of the Primorsky Krai was formed in 1939. The settlement of the district territory began in the late 19th century by peasants from the western regions of the country. The share of the population of Pozharsky district in the total population of the Primorsky Krai is 1.7% (14th place in the region). The average population density is 1.4 people per km². The district includes 24 settlements. About 70% of the population lives in urban areas. The most populated places are located along the Vladivostok - Khabarovsk highway and in the urban-type settlement of Luchegorsk. The number of permanent populations in 2022 was 26,806 people (decreased by 20.8% in 2005-2022) (Table 2).

Electric power, coal mining, non-ferrous metallurgy, forestry, metalworking, food processing are the industries in Pozharsky district now. They produce and sell 6.4% of the industrial output of the Primorsky Krai. They generate about 20% of electricity and mine about 50% of brown coal from the total Krai's volumes. It should be noted that two settlements of Pozharsky district - the urban-type settlement of Luchegorsk and the village of Svetlogorye - are the mono-territories. Their main social-economic problems connected to their strict dependence on the work and financial stability of the city-forming enterprises.

The agricultural sector of Pozharsky district is not in a good condition in many respects. Only about 30% of 80 registered agricultural entities operate stably. The gross output of agricultural products by peasant farms in the district decreased by 25.0% in 2018-2022. Administration of the district is working with farmers to create unions of agricultural producers and develop cooperation. Particular attention in the development of agriculture is given to beekeeping.

Table 2. Some socio-economic indicators of the Pozharsky district of Primorsky Krai in 2018-2022.

	2018	2019	2020	2021	2022
Number of permanent populations, people	27611	27306	26975	26896	26806
Registered unemployment rate, %	1.9	2.2	1.9	1.9	1.9
Average monthly salary, rub.	49708	54132	57813	61513	65511
Housing commissioning, sq. m.	3499.0	1449.0	1797.0	2246.0	3362.0

The Bikin National Park was created on the territory of the original residence of the Udege in the Pozharsky district on November 3, 2015. Its total area is 1160469 hectares. This is a specially protected natural area in Russia. Its task is: 1) to protect the habitat and traditional way of life of indigenous peoples (Udege and Nanai), 2) to involve them in the

management of the territory. The park territory contains natural and historical sites revered by the Udege. The Udege lead a traditional way of life and traditional economic activities in their ancestral hunting areas using nature-preserving methods (hunting, fishing, gathering). The territory of the park was included in the UNESCO World Heritage List on July 2, 2018. The main settlement of Udege and Nanai people in Pozharsky district is Krasny Yar village. Their number in 2022 was 556 persons (less than 3% of the total population of Pozharsky district) (Figure 1). Krasny Yar village received some infrastructure development after creation of the Bikin National Park and due to support of the ANO Amur Tiger Center.

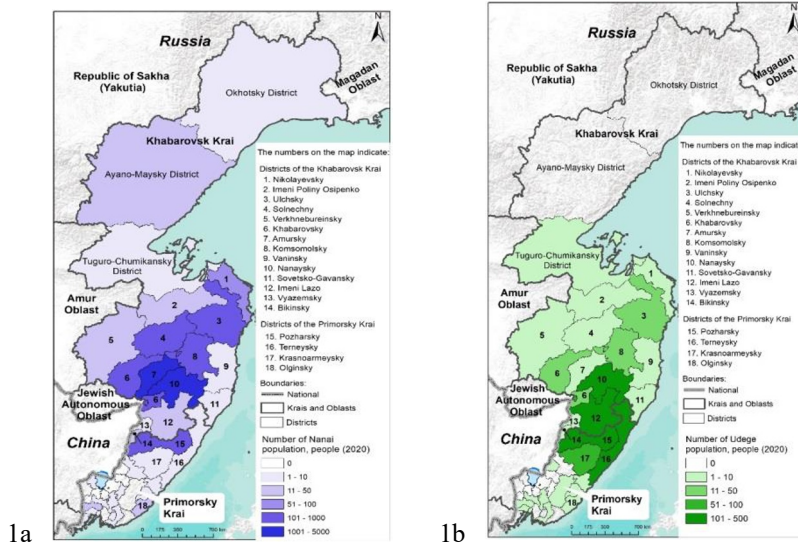


Fig 1. Maps of the spatial distribution of the Udege (1a) and Nanai (1b) in Primorsky and Khabarovsk Krai (based on the results of the 2020 All-Russian Population Census).

Generally indigenous population in the Krasny Yar area has negative trends. The birth rate varied from 27.3‰ to 3.6‰ for the period 2012-2022 (Table 3). The number of young people in the settlement changed due to population migration mostly because of jobs lack in Krasny Yar and moving for getting professional or high education.

Table 3. Demographic indicators of the population of Krasny Yar rural settlement of the Pozharsky district of Primorsky Krai in 2012-2022.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Population size, people.	615	616	592	582	580	570	573	558	552	558	556
Natural increase	8.1	6.6	3.4	-8.6	-8.7	7.0	-7.1	0	-10.8	-18.2	0
Birth rate, per 1000 live births	14.6	21.5	27.3	10.3	19.1	15.8	15.9	10.8	9.0	3.6	16.8
Mortality rate, per 1000 deaths	6.5	14.9	23.9	18.9	27.8	8.8	23	10.8	19.8	21.8	16.8

The mortality rate of the Udege population varies significantly (the maximum value was 27.8 ‰ in 2016). More than 52% of deaths occur due to cardiovascular diseases. On the second place accidents, injuries and poisoning are. The reasons of high mortality rate include changes in the traditional way of life and family values, low standards of living, professional activities that are not typical for indigenous peoples (the influence of the alien population).

Lazo municipal district belongs to the Khabarovsky Krai. The urban-type settlement Pereyaslavka is the administrative center of the district located on the federal highway «Ussuri» and on the Trans-Siberian Railway. There are 52 settlements (3 urban settlements and 49 rural) in the district. The basis of the district's industry forms by the enterprises of the forestry complex and the food industry. Agriculture is one of the leading sectors of the district economy. Milk and dairy products are the main commodity products. Agricultural enterprises are experiencing a shortage of skilled workers (agronomists, zootechnicians, veterinarians, livestock breeders) because of the lack of housing in rural areas and low wages.

Medical organizations of the district are: 1) «Central district hospital», which includes the district hospital of the village of Bichevaya, 5 medical outpatient clinics, 23 feldsher-midwife stations; 2) Municipal health institution «District hospital No. 1», which includes 5 feldsher-midwife stations; 3) Municipal health institution «District hospital No. 2», which includes 1 medical outpatient clinic and 5 feldsher-midwife stations. There are 27 pre-school educational institutions, 2 primary schools, 10 basic schools, 21 secondary schools, 2 evening schools, 1 special correctional boarding school, 2 orphanages, 4 institutions of additional education in the Lazo district.

The total population of the Lazo district was 38,232 people in 2022. It decreased by 17.2% in 2010-2022 (Table 3). The share of the urban population is 52.6%. The Udege live along the banks of the Ussuri, Khor, and Kiya Rivers in the village of Gvasyugi and the settlement of Srednekhorsky (Figure 1a). There has been an ethnocultural center «Ude» since 2003. This is an open-air museum and an entertainment complex with folklore performances. The main traditional occupations there are hunting and fishing.

Table 3. Population of the Lazo district of Khabarovsky Krai in 2018-2022.

	2018	2019	2020	2021	2022
The total people in Lazo district, people	40758	40067	39585	38819	38232
Total people in Gvasyugi rural settlement, people	441	430	437	433	367
All population of the village Gvasyugi, of which: udege	246	247	234	211	209
	188	188	185	182	179

The Nanai district of Khabarovsky Krai is a territory of compact residence and economic activity of the Nanai people. The entire population of Nanai district is rural. The number of permanent populations decreased by 1.25 times in 2010-2022 (by 903 people). The main reason is population migration (Figure 1b). The village of Troitskoye is the administrative center of Nanai district. Only 4,786 people lived there in 2020. There were 500 Nanai people there (in 2010 - 439 people according to the All-Russian Population Census).

The leading industry of the Nanai municipal district is logging. The main material and human resources are concentrated there. This industry accounts for 90% of the volume of industrial output in the municipality. Ten enterprises lease forest fund plots in the district. Traditional industries in the district are fish production and processing (Anyui fish hatchery with a capacity of 30 million pieces of migrating chum salmon). Promising industries are harvesting and processing of non-timber forest resources, agriculture, mining, development of folk crafts and tourism, brick production (Sindinsky brick factory with a capacity of up to 15 million pieces of products per year). Agriculture in the region does not function.

In the Nanai district ethnic public associations, educational centers, schools, regional associations work actively. For example, the Regional Public Organization «Association of Indigenous Minorities of the north of Khabarovsk krai» unites peoples of Evenks, Evens,

Negidals, Nanais, Ulchi, Orochs, Udegeys, Nivkhs. 23 family (clan) and territorial-neighborly communities were created in the district: communities «Bikhan», «Ussura» in the village of Daerga; «Donkan», «Areal» in the village of Sinda, «Daishin», «Aldan» in the village of Troitskoye.

The structure of the reproduction of the Nanai population has negative trends. The birth rate decreases and mortality rate in the overall increases. The decrease in the birth rate is associated with a decrease in the number of marriages (a decrease of 1.2 times), and a high level of divorces.

The natural population growth rate was -2.7‰ in 2022 (it was -7‰ in 2010). The birth rate was 19.4‰ in 2018. The highest value for 2010–2018 was recorded in 2014 – 20.8 per 1000 births. The mortality rate decreased by 1.3 times in 2010–2018 (there were 15.7 deaths per 1000 people in 2018). The population of the village of Troitskoye has ethnically mixed families. This means that the Nanai live together with representatives of other nationalities (Russians, Ulchi).

The population in national villages has a lower quality of life than in administrative and industrial rural settlements. The main reasons of that are as follows: 1) low incomes of the population, 2) low level of development of social and household, 3) low level of transport infrastructure. The real per capita income of the indigenous peoples of the region is three or more times lower than the corresponding indicators for other groups of the population. About 50% of the housing stock are in a dilapidated state in the villages of Troitskoye, Gassi, Naikhin, Jari, Daerga, Verkhnyaya Manoma, Nizhnyaya Manoma, Verkhny Nergen, Mayak, Dada. There is no water supply, sewerage or utility networks in these settlements.

4 Discussion

The Pozharsky district of Primorsky Krai and the Nanai district of Khabarovsk Krai have relatively high socio-economic values of indicators for a better quality of life of the indigenous population, compared to the Lazo district of Khabarovsk Krai. Pozharsky district is located in the center of the most developed part of the Far East and occupies a central position, which is «reinforced» by the system of the most important city-forming enterprises, transport and logistics and other communications. This central and at the same time border position gives to the district advantages in export-import activities, in industrial and economic cooperation, which also contributes to greater economic development of the district and the quality of life of its population.

The village of Troitskoye in the Nanai district of Khabarovsk Krai has a large number of healthcare, educational and social infrastructure institutions. This is the result of the Russian target programs «Demography», «Healthcare», «Affordable Housing». The Nanai population is developing ethnic self-awareness and traditional nature management with an emphasis on river fishing.

The Udege population of the village Krasny Yar (Bikin National Park at the UNESCO level) preserves and develops the Udege culture, traditional way of life, traditional economic activity using nature-preserving methods (hunting, fishing, gathering).

These municipal districts have significant differences: 1) differences in specialization and sizes of settlements, 2) different living standards of the population, 3) different socio-economic development of the territory. Different dynamics of natural population movement of the districts were revealed there. The worst population indicators are typical for the Lazo district of Khabarovsk Krai.

Preservation of the Amur, Bikin, Khor River basins, the Sikhote-Alin mountain system as unique natural complexes, is the main factor in preserving the ethnic community and territory for the «Bikin» Nanai and Udege. There is a need for constant interaction and

complete interdependence of the two communities - natural and ethnic, which is a guarantee of the well-being of each of them.

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