

Assessing the quality of life of the population in rural areas of the Altai region

V Vorobyova^{1*}, S Vorobyov¹ and S Shlegel²

¹ Altai State University, 61 Lenina prosp., Barnaul 656049 Russia

² The Altai Branch of the Russian Presidential Academy of National Economy and Public Administration, 187 Partizanskaya str., Barnaul 656008 Russia

E-mail: vvvtoria@mail.ru

Abstract. The paper assesses the state of the housing stock, the availability and accessibility of social services in the economy (culture and sports, health care, pre-school, and general education) as the main criteria for diagnosing the quality of life of the population of the Altai Krai. The paper focuses on the tendency of deterioration of a human capital in rural territories, as well as the distribution of an asocial way of life of rural inhabitants. It justified that the problems of the development of social engineering infrastructure are predetermined by the low density and small population in most rural communities.

Keywords: quality, quality of life, population, rural population, rural areas

1. Introduction

In modern conditions, the assessment of the quality of life of the population in rural areas is an actual problem. Under the assessment of the quality of life refers to the compliance of the actual satisfaction of the material, cultural, spiritual and other needs of the population to certain standards of the basic level. The implementation of measures to raise the level and quality of life of the rural population is one of the main conditions for the development of economic sectors, but even with the state-recognized priorities of rural development in modern conditions, there is a growing gap between town and country in terms of incomes of citizens, accessibility of health services, culture, trade and life.

2. Materials and Methods

The theoretical and methodological basis of the research was the research of scientists in the field of sustainable development of rural areas and the functioning of social infrastructure. In the process of research, general scientific (scientific abstraction, inductive, deductive, and comparative analysis) and special approaches were used. Special methods, such as: comparison, monographic, economic and statistical (statistical sampling, economic grouping, calculation of statistical indicators, including averages, absolute and relative values). For the analysis of statistical data was used Microsoft Office software package. The sources of statistical information were Rosstat and its territorial bodies, data from the Ministry of Agriculture of the Altai Krai, and the Ministry of Health of the Altai Krai.

3. Results

In 2010-2017, the rural housing stock was 47.5-47.8% of the total area of the housing stock of the Altai Territory. Per inhabitant, there was 23.1-25.5 m² of area, which is higher than in urban areas by 11.6-15.0%, however, taking into account the number of abandoned houses in rural areas (7% of the total area) the gap is not so significant. A large number of abandoned homes due to the fact that part of the rural residents, due to the lack of permanent work and modest living conditions, are forced to move to larger communities, including the city. Abandoned houses are concentrated, as a rule, in rural areas with the largest number of residents over the age of working age. The total area of dilapidated and emergency housing increased from 598.8 thousand m² in 2005 to 713.6-737.8 thousand m² in 2013-2017, or by 29.2-23.2% (2.75-2.84% of the total housing area). At the same time, in 2010, the level of emergency and dilapidated housing exceeded 15% in 7 districts (Solton, Shelabolikhinsky, Khabarsky, Novichikhinsky, Suyot, Soloneshensky, Eltsovsky), as well as in 2011-2017, in 3 more rural areas (Novichikhinsky, Soloneshensky, Eltsovsky districts).

The housing stock in rural settlements of the Altai Territory is equipped with: central water supply by 69.1% (centralized water supply – 48.6%), sewage – 49.4 (at the same time in Bayevsky, Bystroistoksky, Egoryevsky, Zalesovsky, Rubtsovsky, Soloneshensky, Soltonsky, Suyu, Ust-Pristansky districts only by 5.5-24.4%) (centralized sewage – 6.3%), heating - 86.1 (at the same time in Biysky, Zonal, Krosnogorsky, Krutikhinsky, Suyetsky, Slavgorod, Uglovsky districts from 49.0 to 69.4%) (centralized heating – 19.5%), hot water supply – by 23.0% (c centralized hot water supply – 2.4%).

At the same time, the quality of housing stock has deteriorated significantly in recent years. The number of rural settlements with centralized drainage (sewage) for the period 2005-2017. decreased by 17.9%. In 2017, central water disposal was only in 2.9% of rural settlements. Most water supply systems do not have the necessary equipment to improve water quality. About 75% of the population living in rural areas of the region use water that does not meet sanitary norms and standards. More than 40.4% of the length of the street water supply network has exhausted its resource, and it needs its complete replacement. With all kinds of amenities, 4.8% of households live, while in urban areas - 68.3%. A problem impeding the development of rural areas is also the dilapidation of engineering infrastructure facilities. Currently, about 31% of heating networks, 37% of water supply systems and 22% of sewerage networks require replacement. Due to the deterioration of communications, in addition to the loss of resources, the number of emergency situations increases.

In 2010-2017, the level of gasification of houses (apartments) with network gas in the rural areas of the Altai Krai was 5.0-5.5% against 52.6-54.2% on average in rural areas of Russia, which does not allow to reduce costs population, does not contribute to the improvement of living conditions. The operation of boilers for solid fuels does not provide the necessary heat to consumers, which violates the thermal regime in residential buildings, kindergartens, schools, hospitals, cultural institutions with all the negative consequences that follow from this.

The demographic problems of the rural areas of the Altai Krai affected the state of the social sphere. Thus, one of the features of the general educational network in the region is that 75.9% of schools operated in rural areas, of which 60% are small size schools. For the period 1995-2017, the number of rural general education schools as a result of the restructuring of the educational network decreased from 1,351 to 631 or 2.1 times. The main reasons for the closure of schools were the decrease in the number of students, the transfer of students at the request of parents to other schools. During the same period, the number of students in them has decreased by 1.8 times. Number of pre-school educational institutions for the period 1995-2017 decreased 1.4 times.

In total, for the period 1995-2017, the villages were built: secondary schools – 22,714 pupils (average annual input is 7.3 times less than the average for 1971-1985), pre-school institutions – 2577 pupils (20.8 times less), hospitals – 677 beds (6.5 times less), outpatient clinics - 2840 visits per shift, gas networks – 1978 km, places in recreation centers - 840 (in 1971-1985 – 66680 places).

Club institutions play an important role in the social sphere of the village, the number of which decreased in the period 1995-2017. by 18.1%. The lack of cultural facilities in many rural settlements

is one of the factors of the low attractiveness of the rural lifestyle, the population moving to large settlements and cities, contributes to manifestations of the antisocial lifestyle of rural residents [1]. The situation with health facilities is no better. During 1997-2017, their number decreased by 2.9 times, district hospitals were eliminated. The medical network has the following medical institutions: 877 village first-aid station, 208 outpatient clinics, 5 regional, 9 hospital of medical district, 3 joint practice and 59 central district hospitals (Table 1).

Table 1. Network of medical organizations providing medical care to the rural population.

Populated points by the number of inhabitants, ppl.	Number of settlements, units	Medical organizations					
		Village first-aid station	Households / joint practice	Outpatient clinic	Hospital of medical district	District hospital	Polyclinics of central district hospitals
From 1 to 100	422	77	114	-	-	-	-
From 101 to 300	473	392	34	-	-	-	-
From 301 to 1000	436	322	-	112	2	-	-
From 1001 to 2000	166	86	-	76	3	1	-
Over 2000	92	-	4	21	4	4	59

At the same time, the network of healthcare institutions is currently not balanced and does not meet federal standards. The network is dominated by institutions of level IV medical care (providing primary health care), there is a shortage of medical personnel (staffing in rural areas is 68.9%). Provision of rural population with doctors from 13.4-15.1 people (Suet, Shipunovsky and Eltsovsky districts) to 26.3-31.7 people (Baevsky, Zavyalovsky, Kalmansky, Kosikhinsky, Romanovsky, Topchikhinsky, Rodinsky districts), on average - 21.3 people, which is 1.5 times lower than in urban areas (31.1 people).

Low investment of funds in the 1990s, and the restructuring of the inpatient medical services network implemented in recent years (one of the results of the restructuring is the concentration of medical institutions in district and / or inter-district centers) resulted in a reduction in the number of health organizations in rural areas. On the one hand, the concentration of institutions in large settlements with the observed decrease in the number of rural residents can significantly improve the quality of services provided, and on the other hand, the provision of medical assistance to the rural population, including the first and most urgent, is complicated by the lack of telephone communications and covered roads

The availability of primary and primary specialized medical care to rural residents is ensured due to the increase in the volume of field work. Mobile medical teams of third-level medical organizations ensure accessibility to the population of rural areas of primary specialized medical care, providing organizational, methodological and practical assistance to medical organizations located in rural areas in conducting clinical examination of the adult population, preventive medical examinations of the rural population, determining the group of patients needing specialized, including high-tech, medical care. Since October 2011, in the Altai Krai, the "Health" autotrain has been functioning, which included 4 comfortable minibuses equipped with clinical diagnostic equipment, and a mobile photofluorograph. Brigades of doctors are formed from specialists of large regional medical organizations. Specialists "Health" auto-trains have the possibility of teleconsultation. The route of movement is formed on the basis of applications from the chief doctors of the central district hospitals, taking into account the incidence of the population and the need for medical services, determined on the basis of an analysis of statistical information [2].

The low quality of the standard of living of the population of the Altai Territory is evidenced by the rather high incidence rates of tuberculosis, HIV infections, alcoholism and drug addiction, which,

although they tend to decrease in 2009-2017. compared with previous periods, but significantly higher than all-Russia (for tuberculosis - 1.8 times, syphilis - 1.3, alcoholism and drug addiction - 1.2-1.3 times). At the same time, in the structure of morbidity in the population of the Altai Krai, syphilis and gonorrhea are dominated by a population of 20-29 years old - from 47.57 to 54.25%, and also from 30-39 years old - from 16.11% to 30.25%.

This situation indicates the degradation of the population, and the number of alcohol-containing beverages consumed, their structure and quality predetermine the health, mortality rate of the population (in 2007-2017 the proportion of deaths from accidental alcohol poisoning was 0.91-1.52% of the total number from suicides - 2.50-2.98%), the spread of sexually transmitted diseases, increases crime, cruelty, etc. In recent years, against the background of a decrease in total crime, there has been a tendency towards an increase in the number of crimes committed in a state of alcohol or drug intoxication.

At the same time, the problems of the development of social engineering infrastructure are primarily due to the low density and small population in most rural areas. The results of the All-Russian population census indicate the presence in the Altai Territory of about 39% of the settlements located in rural areas with a population of up to 200 people (of which 6 out of 10 settlements with up to 100 inhabitants) (Table 2). In such localities, the maintenance of health care, education and trade institutions is much more expensive than in urban areas, due to the effect of the law of economies of scale. Only in every fifth settlement is it economically advantageous to develop the whole range of social services [3].

Table 2. Grouping of rural settlements by population (according to the census) in the Altai Krai.

Indicators	1989			2002			2010		
	Total	Their population		Total	Their population		Total	Their population	
		Ths. ppl.	% to the total		Ths. ppl.	% to the total		Ths. ppl.	% to the total
Rural settlements, units	1,624	1,107.2	100.0	1,620	1,220.7	100.0	1,598	1,096.2	100
including without population	0	-	-	16	-	-	25	-	-
with population 10 or less	45	0.2	0.0	53	0.3	0.0	71	0.4	0.0
10-50				109	3.1	0.3	142	4.2	0.4
51-100	919	186.7	16.9	108	8.3	0.7	152	11.7	1.1
101-500				658	166.8	13.7	606	154.9	14.1
501-1,000	304	221.5	20.0	326	235.0	19.3	324	237.8	21.7
1,001-3,000				286	408.3	33.4	214	298.3	27.2
3,001 and more	356	698.8	63.1	64	398.9	32.7	64	388.9	35.5

4. Conclusion

The conducted research allowed assessing the low level and quality of life of the population in rural areas of the Altai Krai, the unsatisfactory state of rural engineering and social infrastructure, as well as the emergence of factors hindering the rational management of agricultural producers. In the future, in the absence of a solution to the identified problems, it is possible to predict a further decline in employment and attractiveness of the rural lifestyle. Also, one should focus on (a) the intensification of the processes of migration of the rural population to the city and the qualitative degradation of labor resources; (b) the formation of vast territories with the absence of economic activity; (c) the degradation of natural-ecological potential.

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