Materials of Conferences

FUNCTIONS OF JEWISH AUTONOMOUS REGION RURAL SETTLEMENTS

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The functions performed by the rural area are diverse and many-sided. A rural settlement can perform several functions at the same time. With the rural settlement functions' change its status and sometimes the villagers' welfare also change, so, having understood the processes taking place in the village and leading to the rural settlements' functions' transformation we can find an optimal solution for arising problems. In connection with the economy specificity, boundariness of the region, competitiveness of the adjoining state in the agricultural commodities produced the functions of rural settlements of the Jewish Autonomous Region (JAR) deserve a special attention. Thus, the study of the rural settlements' and the whole JAR non-urban area's functions is a topical problem, which is developed not deep enough yet at the present time.

The purpose of our work is to study the JAR rural settlements' functions. The object of our research is the rural settlements and the subject - the JAR rural settlements' functions.

The combination of various activities of the rural population creates various kinds of rural settlements. The presence of one of the following two conditions can be considered a feature of a rural settlement: 1. the prevalence of farming in the population activities; 2. the combination of the people occupied with farming and the workers of enterprises and establishments serving the agricultural sector directly or managing it. With the presence of favourable agro-climatic conditions the settlements with rural functions are found in the area; with the lack of favourable agro-climatic conditions, but with the presence of any natural resource used in the material production, the villages with non-rural functions prevail.

The economic transformations of the last decade have affected the composition and activities of the JAR population, especially rural one. In spite of a great demographic potential the rural settlements increasingly incur the deficit of labour power. The people refuse doing heavy, but low-paid work and in the pursuit of a more highly-paid job move for cities. Without constant maintenance and care the farming lands are quickly overgrown, turn sour and become unsuitable for farming. As a result, the rural settlements change their specialization from the agricultural commodities production to other non-agricultural activities (service, as a rule).

The recovery of agriculture after the crisis of the 90's and also the entry of the national project on the agricultural development into legal force increased the possibilities of farmers and agricultural enterprises using waste lands for their production. The recultivation of farmlands and state-of-the-art technologies introduction allow improving the labour performance, the rural population living standards and, developing the non-urban area, preserving the rural areas' potential.

About 80% of the JAR rural settlements have a pronounced mono-specialization; that considerably affects the socioeconomic development of the rural area. Under present-day conditions the rural settlements with mono-economic functions trail the poly-functional ones in viability. The settlements with mono-economic functions do not cope with the changing socioeconomic conditions and are found at the verge of extinction. Some rural settlements involved in one economic activity (agricultural, mining, wood-processing, etc.) turned out to be unable to further functioning due to the change in the environment (exhaustion of mines, fertility depletion, decline in wood reserve, etc.). Many rural settlements supplying railway tracks also suffered, as modernization and electrification of the railway resulted in the change of transportation service, which translated into the small way stations number reduction. The rural settlements performing several functions are in the best position, as they easily accept the changing economic conditions, varying their some or other functions, and, therefore, develop in the changing economic conditions.

Thus, the economic transformations of the last decade affected the composition and activities of the rural population (rural settlements change their specialization from the agricultural commodities production to other non-agricultural activities, as a result of which the number of rural settlements performing non-agricultural functions grows). The poly-functional rural settlements are in the best position, as they easily accept the changing economic conditions, varying their some or other functions, and, therefore, develop in the changing economic conditions more dynamically.

TERRITORIAL HEALTH DIFFERENCIES IN RUSSIAN FAR EAST POPULATION

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The health of population is a biosocial phenomenon, as it depends both on the body features of

separate people and external conditions. That is why the health level can be thought of as a factor of adaptation of a concrete population group to natural and socioeconomic environment of the territory reflecting how the given environment is comfortable for normal life activity of this group of people [1].

To study the Russian Far East population health we used the factors of life expectancy at birth (LE), men and women separately, in the rural and urban areas, and infant mortality.

$$Y=(X-Xmin)/(Xmax-Xmin),$$
$$Y=(Xmax-X)/(Xmax-Xmin),$$

where Y – is a special index, X – the factor of this or that region, Xmin and Xmax – referential points [3]. The Y value varies anywhere from 0 to 1. Zero corresponds to the worst complex estimation, and 1 – to the best one.

The same minimum and maximum values (25 and 85 years accordingly) were chosen as the LE factor referential points. The smallest and largest values of the given factors were chosen as the minimal and maximal referential points for infant mortality in Russia in 2006 – 4,7 (St.-Petersburg) and 33,0 (Koryak AD) per 1000 of newborns accordingly. The spread in values of the chosen factors varied from 1,1 to 3,1 times.

The LE territorial differences manifest themselves considerably stronger in the rural area. A most vivid demographic feature of the FEFD subjects compared to average Russian factors is a tragically low rural area female LE level (Russia – 71,8 years). Even in the safest Republic of Sakha (Yakutia) in the Far East it is lower than the average Russian one (71,3 years). The rural area male LE in 2006 in the majority of FE regions, exclusive of the Republic of Sakha (Yakutia) - 60,2 years, is lower than the average Russian factor. The infant mortality factors in 2006 in the FE regions are higher than the average Russian one (10,2%) and vary from 10,6% in the Republic of Sakha (Yakutia) to 33,0% in the Koryak AD.

When calculating the LE index, first, we calculated and then summarized the indexes on separate components (men and women in town and village) weighted ¼. At the second stage the final health index was calculated as an arithmetic middling of the two special LE indexes and infant mortality.

We assumed that the health index maximum value fell on Sakha (Yakutia) – 0,73, the minimum value – 0,26 – on the Koryak AD. The difference between the minimum and maximum values of the health indexes among the Far East regions makes 2,8 times.

Proceeding from the obtained health indexes we marked out 4 groups of the FE regions by the health index value and the LE and infant mortality level combination. The first group with the population health level **above the average** was made up of Sakha

The population health and territorial difference definition integral estimations were carried out on the basis of the health index calculated with the help of four LE factors and the infant mortality factor on the method of linear scaling. It is based on the definition of referential points (maximum and minimum values of indicators) and shows the position of a separate region between them. First, the calculation of special indexes on every factor is performed by the formula:

to calculate the LE
to calculate the infant mortality,

(Yakutia) and the Primorski Krai, in the territory of which 45% of the FE population live. A relatively high LE and low infant mortality are typical of the given subjects' population. The **average** population health level is observed in the Khabarovsk Territory, Magadan, Amur, Kamchatka and Jewish Regions and makes 53,8% of the residents from the whole District population. The population of these regions has average LE and infant mortality values or one factor is lower and the other is higher. The population health level **under the average** is defined in the Chukchee AD (comprising 0,75% of the FE population), which a relatively low LE and high infant mortality are indicative of. The **low** population health level is defined in the Koryak AD with the part of 0,35% of the whole Far East District population. An extremely high infant mortality and low LE are common to the population of the given district.

An **index-map** with the FE regions' population health level territorial difference has become the result of our research.

The analysis of the FEFD population health state allowed coming to the following conclusions:

- The Far East as a whole has average and under-the-average health factors in Russia (the health index in the whole Russia in 2006 – 0,72).

- The LE factors irrespective of sex and the type of locality in the FE territory is much different from the average Russian ones and vary between 1 and 14,7 years.

- Regional differences in the population health state within the Far East are essential. The greatest territorial variability is typical of the rural area female LE, which makes 14,7 years. The rural area male LE makes 13 years. In the urban area the difference makes 11 years for both sexes.

- On the final health index value and the combination of LE and infant mortality index values there are 4 groups of regions marked out in the Far East with the differentiation on the health state. The majority of the FE subjects has an average population health level (53,7% of the FE population).

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