

## Problems of sustainable development of rural areas in the Vologda Oblast

*The article is devoted to the sustainable development of rural areas in the Vologda Oblast. It deals with the nature and objectives of sustainable development of rural areas. The analysis of the key indicators of agricultural activity and the state of social infrastructure in rural areas has been carried out and the main problems have been revealed. Regional and international experience in the development of rural areas is presented here. The results of this research allow us to suggest the ways of sustainable development in rural areas, which will be helpful to employees of regional authorities, managers of enterprises and organizations to create an effective system of rural development in the region.*

*Sustainable development, rural areas, agricultural activities, social infrastructure.*



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The current situation in the countryside is characterized by the depreciation of agricultural labor, the weakening of the motivational mechanisms of its development and the lack of socially acceptable living conditions in rural areas. It is an obstacle to the formation of the social and economic conditions for sustainable development of rural areas.

Sustainable development of rural areas presupposes the stable social and economic development of rural territories, agricultural and fish production growth, effectiveness increase of agriculture and fish industry, full employment of the rural population, rise in the standard of its living and rational land utilization.

The works of such famous Russian and foreign scientists as A.N. Antipov, V.M. Bautin, S.N. Bobylev, A.V. Gordeev, A.G. Granberg, A.P. Zinchenko, S. Kuznets, G. Myrdal,

S. Nikolskiy, A.V. Petrikov, V. Rostow, V.F. Tomilin, G.V. Sdasyuk, M. Todaro, I.G. Ushacheva, etc. are devoted to various aspects of rural areas development.

Sustainable development of rural areas is a complex problem. It is possible to solve it if we perform the following tasks:

- guaranteed employment and rise in the living standard of rural population;
- enhancement of the role of management factors, informatization and science in the development of agricultural production;
- achievement of the conditions when rural areas will be equal to urban areas in income and public goods;
- overcoming of the bureaucratic disunity in the rural areas management and coordination of rural development between the state and municipal authorities, public and commercial organizations, business entities and population;

- arrangement of conditions for increasing of production competitive strength, preservation and reproduction of natural resources which are used in agriculture and fishery;
- output expansion in crop production and livestock farming through improved crop yield and productivity of livestock and poultry;
- attraction of the largest investors' financial resources to realize the priority investment projects [1].

The rural population of the Vologda Oblast accounted for 350.4 thousand people on 01.01.2011 (29.2% of the total population). The total area of our oblast is 14.5 million hectares including 10% of agricultural land (882 hectares of arable land) and 65% of reserve land and forest resources. Agricultural sector of the Vologda Oblast produces 4% of gross regional product and takes 11% of total employment.

Analyzing population dynamics of the Vologda Oblast in the period from 1990 to 2009 (*tab. 1*), we should note that the region is

characterized by a dangerous tendency to extinction and migration of rural residents. So resident population size in the Vologda Oblast decreased by 137 thousand people (10%) in the period from 1990 to 2009 including depopulation in the urban areas by 49 thousand people (5.5%) and depopulation in the rural areas by 88 thousand people (18.8%). There are no permanent residents in the quarter of 8 thousand settlements in the region. These changes will allow us to think that despite the costs of the Federation and the Oblast to maintain the village viability, the process of spatial compression and depopulation of the region is continued. So, as a consequence, there is the fall in agricultural production as well as destruction of the material and technical base of agriculture and industrial infrastructure.

In confirmation of above-mentioned information, there is a significant decrease of the area under all crops from 815.1 thousand hectares in 1990 to 478.3 thousand hectares in 2009 (41.3%).

Table 1. The main indicators of agricultural activity in the Vologda Oblast

Indicators	Year						2009 to 1990, in %
	1990	1995	2000	2005	2008	2009	
Resident population size, thousand people	1355	1333	1290	1245	1223	1218	89.9
including urban areas, thousand people	887	904	887	847	839	838	94.5
including rural areas, thousand people	468	429	403	398	384	380	81.2
Area under crops in enterprises of all categories, thousand hectares	815.1	757.3	686.1	541.6	492.8	478.3	58.7
Livestock population in enterprises of all categories (at the end of year), thousand head:							
livestock	1344	1004	716	524	474	459	34.2
including cows	613.3	438.9	317.0	233.1	215.3	204.5	33.3
pigs	253.4	201.1	150.4	109.2	99.9	93.5	36.9
sheep and goats	280.1	251.2	187.9	149.9	135.3	139.4	49.7
Production in enterprises of all categories, thousand tons:							
grain (weight after processing)	197.6	113.6	61.4	31.8	24.2	22.3	11.3
flax fiber	382.2	252.0	220.3	192.8	242.2	238.2	62.3
potatoes	7.1	5.0	3.9	4.5	1.7	3.2	45.0
vegetables	322.3	925.7	481.5	255.1	256.8	235.5	73.0
store (slaughter weight)	57.8	115.3	134.4	81.4	62.0	59.7	103.3
milk	112.4	71.1	51.6	50.7	51.4	49.3	43.9
eggs, mln. pieces	755.3	494.9	494.9	470.1	481.5	465.9	61.7
	475.4	458.7	538.3	620.4	510.6	575.1	121.0

Sources: Statistical Yearbook of the Vologda Oblast. 2009: stat. digest / Vologdastat. – Vologda, 2010. – P. 38; Regions of Russia. The main characteristics of the subjects of the Russian Federation. 2010: stat. digest / Russtat. – Moscow, 2010. – P. 182, 184.

Menacing reduction in the total number of agricultural animals in the enterprises of all categories is going on in the region (decline from 50% up to 89%). Grain production dropped from 382.2 tons in 1990 to 238.2 thousand tons in 2009 (38%), potatoes and flax production decreased by 27% and 55%, respectively. Production of stored livestock and poultry decreased by 56%, milk production dropped by 38%, while egg production increased by 100 million (21%).

During observable period the number of profitable agricultural organizations in the region decreased by 232 units (60.3%), the number of unprofitable agricultural organizations increased by 17.7 times (*tab. 2*).

Relative density of unprofitable agricultural organizations increased from 2% in 1990 to 44.7% in 2009. Profitability of economic activities of all agricultural organizations amounted to 7.9% from 1990 levels in 2009.

Thus, the study enables us to state the fact of economic devastation of rural areas, which had a negative impact on the agricultural sector, the possibility of preservation of cultural heritage in the region, regional originality and national identity.

Analyzing the dynamics of the main indicators of social infrastructure in rural areas of the Vologda Oblast for the period from 1990 till 2009 (*tab. 3*), it should be noted that the process of reduction and refinement of the settlement

Table 2. Efficiency indicators of agricultural organizations in the Vologda Oblast

Indicator	Year						2009 to 1990, in %
	1990	1995	2000	2005	2008	2009	
Number of agricultural organizations	392	423	401	321	257	277	70.6
Number of profitable agricultural organizations	385	167	240	221	202	153	39.7
Number of unprofitable agricultural organizations	7	256	161	100	55	124	by 17.7 times
Relative density of unprofitable agricultural organizations (in % from the total number of agricultural organizations)	2	60.5	40.0	31.2	21.4	44.7	by 22.3 times
Profitability of economic activities of all agricultural organizations, in %	38	9.4	15.9	11.0	9.5	3.0	7.9

Source: The main indicators of financial and economic activity of agricultural organizations in the Vologda Oblast in 2008: stat. digest / Vologdastat. – Vologda, 2009. – P. 10.

Table 3. The main indicators of social infrastructure in rural areas of the Vologda Oblast

Indicator	Year						2009 to 1990, in %
	1990	1995	2000	2005	2008	2009	
Resident population size, thousand people	1355	1333	1290	1245	1223	1218	89.9
including urban areas, thousand people	887	904	887	847	839	838	94.5
including rural areas, thousand people	468	429	403	398	384	380	81.2
Total area of housing premises, per capita in rural area, square meter	22.0	23.4	25.4	28.1	29.4	30.2	137.3
Houses deployment in rural areas, square meter per capita	0.52	0.15	0.13	0.18	0.29	0.30	57.7
Number of preschool institutions	705	486	387	353	325	320	45.4
Number of full-time educational institutions	760	757	712	575	516	463	60.9
Number of village first-aid stations	818	759	696	674	611	586	71.6
Number of clubs	1122	900	720	682	257	273	24.3
Number of public libraries	711	640	613	598	580	568	79.9

Sources: Statistical Yearbook of the Vologda Oblast. 1999: stat. digest / Vologdastat. – Vologda, 2000. – P. 148; Statistical Yearbook of the Vologda Oblast. 2009: stat. digest / Vologdastat. – Vologda, 2010. – P. 38, 117, 125, 230; The main social and economic indicators of service industries in the Vologda Oblast: stat. digest / Vologdastat. – Vologda, 2010. – P. 81.

network caused weakening of social infrastructure potential conditional due to the decline of the financial basis of its development. Thus, during the study period the decrease in the rural population size was 18.8%, at the same time the reduction of educational institutions accounted for 39%, the reduction of health-care agencies accounted for 28% and the decrease in culture organizations was from 20% to 75%. These figures allow us to draw the conclusion about the further outflow of population from rural areas.

Rural pre-school educational system is characterized by the tendency to the dominance of small kindergartens – 60.8%, which consist of from 1 to 3 groups. The number of preschool educational institutions has steadily decreases; that indicator reached the level of 1990 in 2009 (45.4%).

The number of schools in rural areas of the region reduced by 297 units in 2009 (39.1%) in comparison with 1990. The number of students in rural areas dropped by 2.5 times for the last 10 years: from 138.3 thousand pupils in 2000 to 55.5 thousand pupils in 2009.

There is a steady downward trend in rural areas. It is the closure of health-care agencies. The number of village first-aid stations decreased by 232 units (28.4%).

Rural cultural organizations suffered great losses during the period of market reforms. The number of clubs and recreation centers decreased by several times, the number of libraries decreased by about 20%. Because of traffic, financial and other difficulties the possibility of familiarization of rural population with theatres, museums and exhibitions is more theoretical than practical.

The state of housing stock is a factor which intensifies rural areas unattractiveness for young people and undermines the sustainability of agricultural production. Houses deployment in rural areas was substantially reduced in the early 1990s and it was remaining at the low level for a long time.

Only 0.30 sq. m. of housing per capita was deployed in 2009; it is 1.7 times less than it was in 1990. Total area of housing premises per capita in rural area increased from 22 square meters in 1990 up to 30.2 square meters in 2009 (37,3%).

The level of rural housing face-lift is low. According to the statistics, currently only 31% of living floor space is fitted with running water, 21% - with sewerage, 20% – with central heating, 62% – with gas (49% of them have natural and liquefied gas and 13% of them have natural gas), 14% – with hot water supply.

The volume of road construction decreased significantly during the study period. The network of public hard-surface roads is only 31.5%; 61% of them are the rough roads and the road with poor clutch characteristics of the road carpet. So many guest forms of medical, cultural, consumer and commercial services are complicated because of the bad roads. There is no bus service in many places in autumn and in spring (1957 rural settlements with 29.2 thousand residents). There are only three municipal districts of 26 ones (Cherepovets District, Ust-Cubenskiy District and Syamzha District) where 100% of rural settlements have regular transport service with the administrative centers [2].

Of course, if we carry out a comparative analysis of the social sphere development level over the last 20 years, it is necessary to note that the positive trends were also observed during that period. Thus, fixed location phones, cellular communications, satellite TV, Internet access appeared in many villages of the region; a range of goods at retail was expanded. The objects of civil engineering infrastructure were set in operation in several regions; some of them were supplied with gas [3].

The pilot project “Development of social potential of rural settlements” was started to realize in 2005 to solve those problems in the Vologda Oblast. Its main objective is to develop a new type of rural community behavior, a

new value system, where labour, family and responsibility for our native places will be the principal guidelines [4]. Within the scope of the project the exhibition “Pilot Settlements in the Vologda Region” was organized in Vologda in October 16, 2010. It was based on the Inter-regional exhibition, cultural and leisure complex “Vologda Settlement”. There are five houses here where you can see the exhibitions of the pilot villages (Novlenskoe – Felt Boot Museum, Museum of Samovar; Smetanino – Flax Museum, an exhibition of A. Alyabiev’s sport biathlon; Vanskoye – Crafts Museum with an exhibition devoted to Ustyuzhna blacksmiths, an exposition of Vologda Handicraft Chamber; Turovets – cranberry land).

Also, the Vologda Oblast government adopted the Decree № 57 “On the concept of sustainable development in rural areas of the Vologda Oblast for the period till 2020” in January 31, 2011. According to this concept a variant of integrated area development is selected as the most appropriate option for the further development. It involves the creation of an effective organizational and managerial mechanism to obtain optimum benefits from the available resources.

The main idea of the concept is the creation of the inter-regional Centers for rural development based on the municipal districts or the settlements that preserved the highest potential for development. These Centers will become the organizational and management tools, capable to manage the rural economy from the perspective of centralized examination of personnel problem, technological, logistical, infrastructural and financial security in rural areas [5].

It is necessary to consider the possibility of moving to a new competitive way of life in rural areas with modern economy and infrastructure. It should be a local version of the economy which is developed at the expense of the products with higher added value.

It is necessary to involve the following areas of rural development to form it:

- the use of “small” technologies that allow us to create the local production, which can compete with mass (imported) goods in the market and win back the local market;
- development of non-agricultural activities in rural areas and the services market that can take human resources, which can’t work in the agricultural sector (personal services);
- creation of the Regional Innovation Development Center (industrial park);
- strengthening of the forest industry due to the production of related materials, including the development of new types of wood-based products (mini-plants for the production of OSB, MDF and wood pellets);
- collecting, harvesting and processing of wild plants, which have an obvious potential for entering the consumer market;
- the development of fishery;
- forming of building of infrastructure and services in the field of rural tourism, including the identification of innovative tourism products.

All these things can be successfully combined with the introduction of marketing technology (branding and place marketing) in rural areas, the development of online businesses and services, as well as the development of more traditional forms of small farming in rural areas – the farmers, personal subsidiary plots.

It is also important to guarantee qualitative basic social services: preschool and school education, public health, housing and communal services (electricity, gas, water supply and wastewater), communications and transport, roads, services of cultural institutions [6].

Considering the international experience, it is worth to note that the development of rural areas is becoming increasingly an important area of public policy of the European Union (hereinafter EU) in recent years.

The main areas for rural development in the EU (particularly in Germany and France) are the following:

- ✓ a multi-agency approach to solve the multifaceted problems of rural areas;

- ✓ a comprehensive (integrated) territorial approach based on the close cooperation of different levels of management, representatives of various economic sectors and rural population;

- ✓ a subsidiarity principle and participatory; implementation of the programs for rural development is mainly occurred at the municipal level with the active participation of the rural population;

- ✓ establishing of a agencies network for the rural development, development of agricultural production to meet the needs of rural areas;

- ✓ establishment of rural policies; rural policies are the territories and settlements

which combine and promote the development of new activities in the certain areas and give a multiplier effect for other activities;

- ✓ creation of state policy to develop rural tourism and build a chain of guest houses. In the EU public policy on rural tourism is aimed mainly at depressed areas. It is a kind of social shock absorbers because rural tourism can create jobs and promote rural development [7].

The choice of rural development areas should be based on the analysis of production needs, existing and expected resources, demand and infrastructure restrictions, science and technology advances and best practices. Only joint efforts of the state, municipalities, science, business and civil society can bring rural areas to the sustainable social and economic development. So, it is necessary to use an integrated approach to the rural development to remove the bureaucratic disunity and determine the rural support priorities.

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