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To cite this article: I Merenkova *et al* 2019 *IOP Conf. Ser.: Earth Environ. Sci.* **274** 012020

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# Resources for the transition of rural areas to a diversified development model

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**Abstract.** One of the priority strategic objectives aimed at reducing the unjustifiably high spatial differentiation of rural areas is their diversification, carried out by involving unused resource reserves into development, creating new opportunities for the industries which products have a steady market demand. The purpose of this scientific work is to justify the need to move from a predominantly mono-functional to a diversified model of rural development. Creating models for their diversified development requires defining the rural areas as a special space, in which a specific activity closely related to the natural habitat is carried out, depending on the natural, economic factors of farming and formed in the conditions of the almost universal distribution of multi-component agricultural production. In the process of research, the relationship between the diversity of the rural economy structure and the multifunctionality of rural areas was revealed, which showed the need to diversify the economy by stimulating various types of activities. Taking into account domestic and foreign experience, approaches to building a model of diversified development of rural areas are justified. Based on a study of the rural economy structure, a model of diversification was proposed, containing single-industry and multi-industry blocks, including a different combination of industries and their advantages and disadvantages. It is concluded that the most effective is an industry-specific model with a diversified rural economy due to the maximum possible set of various economic forms and activities that meet the needs of the population in employment.

## 1. Introduction

Due to historically established prerequisites, rural areas play a huge role for Russia, which is connected with providing the population with food, maintaining wealth and diversity of the landscape, cultural and natural heritage. In recent decades, rural areas, despite the progress achieved in agricultural production, face new socio-economic and environmental problems. This is primarily due to the fact that agriculture, in its essence, is a life-supporting sector of the national economy and the effective development of the agro-industrial complex contributes to the country's food security. More than that, the rural areas continued to be an internal sphere of agricultural production with underdeveloped industry and other non-agricultural activities, for a number of years which to a large extent affected the deterioration of working conditions and the standard of living of rural people. A



total of 92.0% of all rural settlements in Russia were and remain agrarian, and 35.0% of residents associate their lives and work exclusively with agricultural activities, which currently do not provide employment for rural people and do not meet the modern requirements of highly productive production.

Over the years of reform, the role of agriculture in the Russian economy has noticeably decreased. In 1990, its share in the gross domestic product was about 16.0%, and it was only 4.4% in 2016. In addition, in recent years, the proportion of people employed in agriculture has been constantly decreasing despite the fact that the share of the rural population remains at about the same level (26.0%). The general structural crisis has led to a reduction in the number of jobs in the industry, and the service sector is not developing so dynamically as to provide space for the freed labor force.

Socio-economic, cultural, and other processes in rural areas are slower than in cities, and the cost of their maintenance becomes greater. The rural economy, as the basis of the quality and standard of living of people, in the form in which it exists, does not withstand competition with urbanized urban settlements, as evidenced by the migration of rural residents. In addition, there are still problems related to providing employment, raising the standard of living and welfare of the population, building and maintaining engineering and social infrastructure facilities, and organizing leisure activities, which are largely decided by local authorities.

It is obvious that the current situation in the countryside requires increased attention to rethinking the existing problems and creating the necessary conditions for the development of the rural community, which is possible through the transition of rural areas to a diversified development model, which would allow them to be stimulated through the integrated use of resources, employment, and growth of incomes of rural residents, increasing the budget of rural municipalities [1].

The development of research on a wide range of problems in rural areas was greatly contributed by: R. Kh. Adukov, V. M. Bautin, V. I. Belousov, S. N. Bobylev, L. V. Bondarenko, A. G. Granberg, I. B. Zagaytov, A. P. Zinchenko, A. I. Kostyaev, V. V. Kuznetsov, E. G. Lysenko, Yu. P. Mikhailov, T. G. Nefedova, L. A. Ovchintseva, A. P. Ogarkov, V. V. Patsiorkovskiy, P. M. Pershukevich, A. V. Petrikov, A. D. Ursul, I. G. Ushachev, I. F. Khitskov, A. V. Chayanov, A. A. Shutkov, and others.

The issue of diversification of the regional rural economy is reflected in the scientific publications of N.I. Antonova, V.A. Kundius, V.D. Menshikov, A.A. Polydi, L.I. Rudenko, T.I. Sorokina, V.I. Trofimova, A.I. Firsova, N.Sh. Shakirova, and others.

The results of research on these scientists create the necessary basis for studying the diversification of the rural economy. Nevertheless, there are no models that objectively characterize the specifics of the rural economy and allow effectively planning the improvement of its structure.

Diversified development of rural areas largely depends on the correct goal setting, which (in general terms) is formulated as achieving their socio-economic sustainability and improving the quality of life of the rural population through the transition to a multifunctional development model.

## **2. Methods**

In the process of research, general scientific methods were used. First of all, we relied on the dialectical method of understanding economic and social processes. Second, we employed deduction, decomposition, computational-constructive, monographic, formal-logical, as well as economic-statistical methods, including system analysis and economic comparison.

## **3. Results**

It is important to ensure the diversified development of rural areas, is the study of the nature of the multifunctionality and versatility of the subsystems of the rural territorial system, the establishment of the relationship between the economy, the social sphere, and the environment. And this is not accidental, since rural territories (being spatial-territorial entities) represent a complex spatial-functional structure, including multifunctional and interrelated social (rural settlements, rural population, social sphere and infrastructure), economic (land, industrial and economic complex,

business entities, labor resources), and environmental (natural conditions and the reproduction of the natural environment) components, which is the basis for identification conditions of rural diversification [2].

On the one hand, “multifunctionality” determines the implementation of various functions in rural areas, and on the other hand, diversified development of rural areas. It is important to keep in mind the polystructural nature of the rural economy, consisting of the subsystems of several systems (sectors of the economy, society, the natural system, etc.). That is, polysystemicity underlies the multifunctionality of the rural economy and rural areas. And from this follows a complex relationship, the functions they perform, their relative independence and the requirement of functional completeness and non-redundancy.

Therefore, the multifunctionality and diversity of the rural economy structure are associated with the processes of diversification of rural areas, which is reflected in the creation of the maximum possible investment conditions and the available natural-economic potential of a set of various economic forms and activities: processing of agricultural products, rural tourism, trade, provision of personal services, folk crafts and trades, etc. (Figure 1).

The economic motives associated with the profitability of capital, the desire to increase revenues and survive in the competitive struggle, and for the rural territory itself as a system (economy, society, nature) as the prerequisites for diversification can be called the prerequisites for diversification and the level of his income, the deterioration of the demographic situation, the growth of unemployment, the uneven development of branches of the rural economy, the low level of development with quality and market infrastructure; the uncontrolled use of natural resources available in the territory, the depopulation of territories [3].

Therefore, in order to strengthen the rural economy and preserve the rural areas as a subsystem of society that perform many important functions, it is necessary to diversify the economy by stimulating various activities.

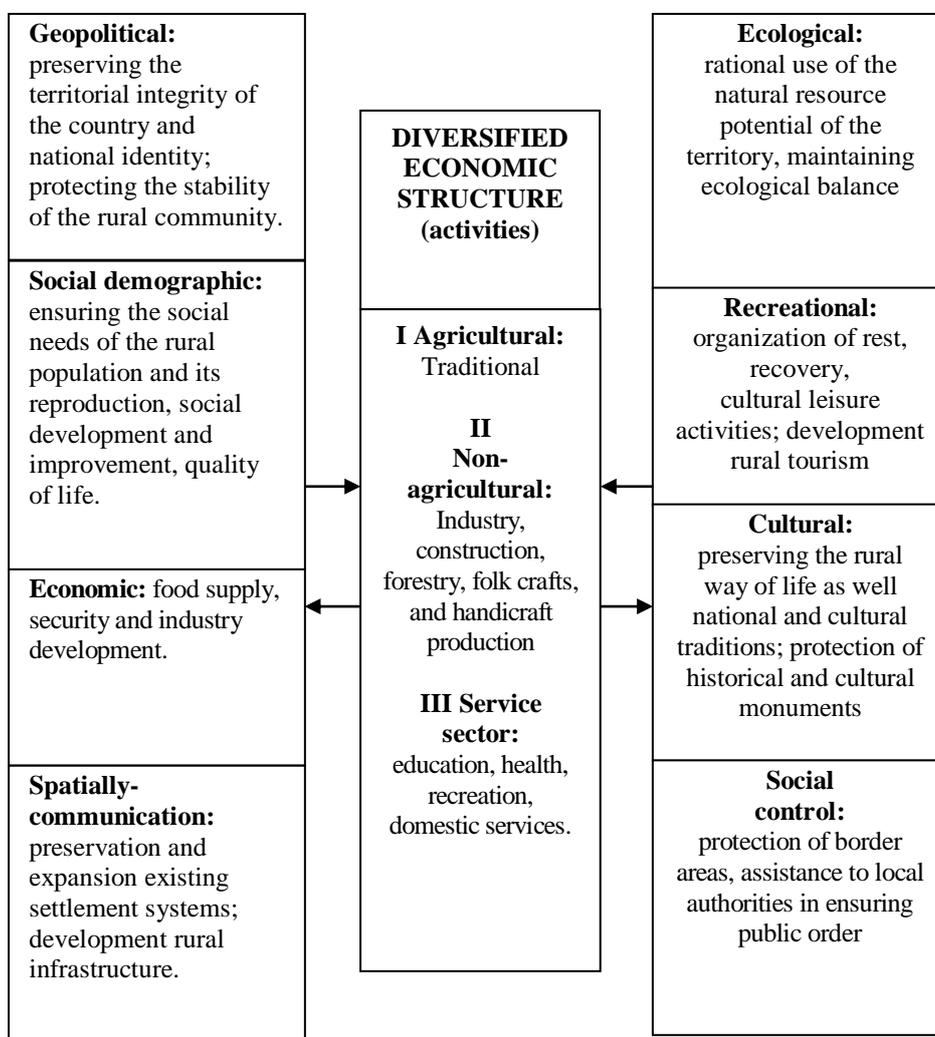
Analyzing the experience of developed countries, it can be stated that most of them are covered by the diversification process, which is a powerful tool for the development of rural areas, which determines the diverse structure of the economy. This path of development was chosen by most countries (European Union, USA, China, etc.), in which special development programs for rural areas of non-agricultural activities are being successfully implemented [4].

In Sweden, Germany, Slovenia, a significant proportion of European farmers (over 50.0%) are independent of agriculture in ensuring their income. Almost 87.0% of the rural population is associated with non-agricultural activities, in which 95.0% of the additional value of production is created [5]. In addition, the EU countries are characterized by a different share of diversified farms in their overall structure, which indicates various opportunities for diversification. Thus, the structure of farms in the EU countries with alternative sources of income varies from 18.2% in Belgium to 61.4% in Sweden (it is 32.0% on average).

In recent decades, EU countries paid special attention to the development of effective approaches to rural diversification, while being highly stimulated by new conditions to reform their industries in accordance with the Common Agrarian Policy (CAP). Gradually, the “agrotrend” in the development of the village loses its importance in connection with the promotion of non-farm or non-agricultural sectors, as well as the relationship between the city and the village [6]. Support for non-farm employment of rural residents of RNAE (rural non-agricultural employment) is more aimed at compensating for its decline in agricultural production and reducing inequality [7].

If we consider the sectoral structure of employment in the EU countries, it is obvious that the service sector prevails (59.0% of the employed population); second place is taken by all sectors except agriculture (27.0%), and the last place with the smallest share population (14.0%) belongs to agriculture. In developing countries, about 35–50.0% of rural employment can be attributed to non-agricultural, which contributes from 34.0% of rural income in Africa and up to 51% in Asia [8, 9].

**RURAL TERRITORY FUNCTIONS**



**Figure 1.** Interrelation of multifunctionality of rural areas and diversification of the rural economy.

As an alternative model of economic diversification, Ireland can be mentioned, which has not been a part of the industrialized countries of Western Europe since the 1980s. To a greater extent, in its structure dominated the industry agricultural complex. As a result of the economic policy pursued over the past years (including fiscal stabilization, openness of trade and investment regimes, active structural policies), the structure of the country’s economy has undergone significant changes due to an increase in the share of other sectors.

In a number of countries, such as the USA, France and others, the policy of diversification of rural areas is aimed not only at developing the non-agricultural sector, but also at maintaining organic agriculture [10]. In developed countries, given the local conditions of the area, there is a transition to an environmentally oriented agrarian policy, in which the state supports agricultural producers through subsidies, concessional lending. Also, in some countries, there is a complete abolition of rural business taxation.

Let us turn to domestic experience, which also shows that the development of non-agricultural business and infrastructure are the most important components of the integrated development of the village, along with agriculture. In Russia, practically the first step in the direction of stimulating alternative rural employment has been taken in the State program “Development of Agriculture and

Regulation of Markets for Agricultural Products, Raw Materials and Food for 2008-2012". Within the framework of the Program, particular attention was paid to subsidies that were given not only to pay back part of the interest rate on loans received by agricultural, peasant farms and other organizations to organize primary and subsequent industrial processing of agricultural products, but also to develop in rural areas tourism, folk crafts and crafts, trade, domestic and socio-cultural services, harvesting and processing of wild fruits and berries, medicinal plants, and other non-wood raw materials. Most often, the recipients of these subsidized loans were the personal subsidiary and peasant farms, as well as agricultural consumer cooperatives.

Consequently, the federal target program for the sustainable development of rural areas for the period up to 2020 included measures to expand the circle of recipients of subsidized loans for the development of non-agricultural activities in the countryside; the introduction of tax and customs benefits for business entities that would open non-agricultural business; recreational cooperation in the countryside; the legal regulation of the opening of agroholdings and other integrated business structures, leading agricultural production, non-agricultural employment for employment of released workers [11].

At the same time, despite the implementation of the program objectives for the development of rural diversification, its process is carried out at a slower pace, which is generally explained by the low practical implementation of these measures and their insufficiency. To a greater degree, the development of diversification is hampered by excessive bureaucratic procedures and a fairly high level of corruption among officials. The authorities often lack incentives for the effective development of basic legislation and infrastructure, which has a negative effect on attracting investment in the rural economy, which is explained by the weak management activities of municipalities and the lack of organizational experience [12].

Along with this, as the reasons that impede the development of diversification in rural areas, it is necessary to note the lack of working capital and investments; unfavorable market conditions; poor development of small and medium businesses; lack of proper interest among entrepreneurs in the development of diversification; undeveloped engineering and social infrastructure, as well as features of the rural mentality and lifestyle of rural residents.

The ongoing transformations in rural areas are characterized by different periods, varying intensity, but the spatial socio-economic inequality of their development continues, which is expressed in the degree of diversification of the rural economy [13]. It is clear that the diversification opportunities of the village are small. It is impossible to ignore objective limitations, such as the quantitative and qualitative composition of the labor force, the capacity of the main markets and their proximity, the weakness of the innovation component of production, etc. In addition, the generally implemented domestic model of rural development is imperfect, and, by and large, corresponds to the low-efficiency sectoral model of rural development.

It is important to reorient rural areas to a diversified development model, making a gradual transition from a predominantly monofunctional model of rural economy development to a multifunctional, based on a social approach and taking into account the natural, production and resource features of rural areas. The mobilization of internal potential and the creation in rural areas of the most complete set of diverse economic forms and activities for all the basic components of rural society should be carried out through the formation of institutions for rural development and state support [14, 15].

When justifying approaches to building models of diversified rural development, it is important to consider the following [16].

First, the development of rural areas at the present stage will not be monofunctional at the expense of any one industry (most often agriculture), since it cannot be the main source of employment and income for rural residents, does not create resources and does not provide with guarantees for the state.

Second, the basis of the developed model, on the one hand, is the economy structure in rural areas and their multifunctionality. On the other hand, it is the level of diversification, which characterizes

both the real level and development potential and the possibility of organizing new activities in rural areas.

Third, the social sphere influences the reproduction of the labor force and has a significant diversification potential for the development of new types of economic activity that are included in the system of social services for the rural population and are focused on meeting its needs.

When developing a diversified rural development model at the regional level, it is important to know not only the general conditions for the development of diversification of the rural economy, but also to take into account the regional specifics of this process [17]. To model diversification processes in the village, the Voronezh Region was chosen. This is a developing region of Russia with high scientific, innovative, educational, and economic potential, which is represented by 2 urban districts, 30 districts, 445 rural settlements, and 1,699 rural settlements. A total of 33.3% of the total population of the region lives in rural areas.

Rural areas of the Voronezh region are characterized by a number of features and vary greatly in the potential of rural development. Based on the territorial characteristics of the location of production, the level of specialization and the structure of the economy, we distinguish 6 types of regions, differentiated according to the proportion of the main branch of the economy in the overall structure. At the same time, we consider one industry as the main industry, which occupies more than 50.0% in the structure, or two industries that occupy from 30 to 45.0%. The districts without dominant industries include those in whose structure the three industries simultaneously occupy about 20-40.0%.

The structure of the economy of municipal districts of the Voronezh region in terms of production, sales, and provision of services in accordance with the sectors of the economy prevailing in them could be considered in 6 types. Type 1 – the areas with the predominant “agriculture” industry (Nizhnedevitsky, Talovsky, Vorobyevsky, Verkhnamaonsky, Repyevsky), Ternovsky, Buturlinovsky, Petropavlovsky). Type 2 – the areas with a predominant industry (Kashirsky, Bobrovsky, Verkhnekhavsky, Olkhovatsky, Rossoshansky, Podgorensky, Er-tilsky, Novokhopersky, Gribanovsky, Anninsky). Type 3 – the districts with the main branch of “trade” (Ramonsky, Kamensky). Type 4 – the areas with developed agriculture and industry (Khokholsky, Ostrogozhsky, Povorinsky); Type 5 – the areas with developed industrial production and construction (Kalacheevsky, Pavlovsky, Novousmanskyy). Type 6 – the districts without dominant industries (Bogucharsky, Kantemirovsky, Liskinsky, Paninsky, Semiluksky) [18].

Part of the territories of rural areas of the Voronezh region is at the primary stage of the diversification process, as they are mainly specialized in the production of agricultural or industrial products and have a weak link with other sectors, such as processing, trade, construction [21]. At the same time, there are also such rural territories, which economy is diversified due to the development of new industries and spheres. But even such areas can be closely related to rural specificities, and can be poorly integrated into the specifics of rural areas, so the diversified development of rural areas is just that the process is based on the close integration of all sectors and industries in order to increase the level of diversification.

Based on the above, the proposed model of a diversified rural economy of the Voronezh region will include two main blocks: single-industry and multi-industry. The single-industry economy is characterized by a concentration of resources in one industry and an orientation towards obtaining the maximum amount of effects from its operation. The priority sector of the economy occupies more than 50.0% in its structure. On the basis of this, the groups selected in this block will have a pronounced sectoral activity. The main advantage of this type of model is to maximize the benefits obtained, and the disadvantage is dependence on the natural factor, the limited market maneuvering.

The multisectoral configuration of the rural economy is aimed at maximizing the territorial potential. It will be characterized by the uniform development of all sectors of the rural economy divided into two groups: weakly diversified – one or two sectors that occupy from 30 to 45.0% in the structure, and the rest are distributed relatively evenly and diversified (all activities develop almost evenly). The strength of this model can be considered as the maximum use of the territory's

capabilities and protection from the “sectoral shocks” of the economy, and the weak distribution of labor resources across industries, as well as the lack of rational use of resources.

Considering, that diversification is not only stimulating economic, but also ensuring the social development of rural areas through increasing the employment of rural residents and increasing their incomes, the following indicators are defined, which characterize the social orientation:

- Employment rates of the rural population, %;
- Average monthly salary, thousand rubles;
- standards of living.

Thus, the basis of the model being developed is the multifunctional nature of rural areas and the structure of the economy, which characterizes both the real development potential and the possibility of organizing new types of activities in rural areas, which would create the most favorable conditions for their future development [22].

Considering the above, a structural model of diversification of the rural economy of municipal districts of the Voronezh region is proposed (Figure 2).

The model with single-industry configuration of the economy includes 20 regions with a non-diversified economic structure, in which the share of one industry (agriculture, industry, trade) in the total volume of production, sales, and service provision is more than 50.0%, while agriculture is as a major industry, which practically does not develop. This type of model has a low level of diversification and resource availability, employment ranges from 20 to 30.0%, wages range from 25 to 37 thousand rubles.

The model with a multi-industry economy configuration is divided into 2 groups:

- With a weakly diversified structure of the economy;
- With a diversified economic structure.

A sectoral model with a weakly diversified rural economy unites 6 districts, for which one or two industries occupy from 30 to 45.0% in the economic structure and the rest ones develop evenly. The employment rate ranges from 25.0% and above. Agriculture, most often, is one of the main industries, which share is about 25-35% of the total production with a low average monthly wage (not more than 25 thousand rubles).

The sectoral model with a diversified rural economy includes 5 districts, the share of all activities of which in the total volume of production, sales, and services is approximately the same, and agriculture is effectively combined with other sectors of the economy. The employment rate is at the level of more than 30.0%. In 75.0% of the areas of this model, the share of agriculture accounts for less than 30.0% of the total production, there is an average level of resource availability and the level of average monthly wages exceeds 30 thousand rubles.

After analyzing the mono- and polybranch models of the rural economy of the Voronezh region, it can be concluded that the polybranch model with a diversified rural economy is the most effective, the basis of which is the deepening production chains and obtaining products with a high degree of redistribution the formation of new areas of income, the use of various combinations and combinations of sectoral activities. Special attention in this model is paid to the development of the service sector (education, health care, cultural, leisure and consumer services), reforestation, and processing of agricultural products.

Thus, it can be said that prerequisites for the transition to a diversified model of rural areas are formed in all rural areas of the Voronezh region, as evidenced by the typology on the structure of the rural economy. However, despite this, agriculture and industry continue to remain the leading industries, which is confirmed by research [23].

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## STRUCTURAL MODEL OF DIVERSIFICATION OF RURAL ECONOMY

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### *CONFIGURATION OF RURAL ECONOMY*

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Monobranch			Polybranch	
<i>STRUCTURE OF RURAL ECONOMY</i>				
<b>Undiversified</b> in the structure of the economy, the priority sector occupies more than 50.0%			<b>Weakly diversified</b> in the structure, one or two industries occupy from 30 to 45.0%, the rest develop evenly	<b>Diversified</b> in the structure of the economy, all industries are developing almost equally
Rural household	Industry	Trade		
<i>DISTRICTS</i>				
8 districts (25.8%)	10 districts (32.3%)	2 districts (6.5%)	6 districts (19.4%)	5 districts (16.0%)

**Figure 2.** Structural model of economic diversification in rural territories of municipal districts of the Voronezh region.

#### 4. Conclusion

The study of international and domestic experience clearly demonstrates that the rural diversification in connection with the transformation of the employment structure of the rural population, changes in consumer preferences, the growth of the service sector, the development of organic agriculture leads to a restructuring of the rural economy, with its own specifics and policies, territorial features, and diversity of economic structure.

The interrelation between the multi-functional rural areas and the diversified structure of the economy, including agricultural and non-agricultural activities, as well as the services sector, which create new jobs and reduce unemployment, which, in turn, reduces social tensions and, as a result, contributes to additional income villagers and improve their quality of life.

A model with a different configuration of the rural economy is proposed. The single-output model includes 20 regions of the region with a non-diversified structure of the economy, in which the share of one industry (agriculture, industry, trade) in the total volume of production, sales, and service provision is more than 50.0%. A multisectoral model with a weakly diversified rural economy unites 6 districts, for which one or two industries occupy from 30 to 45.0% in the economic structure, the rest are developing evenly. The multisectoral model with a diversified rural economy includes 5 districts, the share of all activities of which in the total volume of production, sales, and services is approximately the same, and agriculture is effectively combined with other sectors of the economy.

In all rural areas of the region are formed the preconditions for a gradual transition from a predominantly mono-functional model of economic development of rural areas to a multi-functional one on the basis of a social approach, the essence of which is to create various economic forms and activities for all basic components of rural society.

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