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## Sustainable Development of Territories Based on the Integrated Use of Industry, Resource and Environmental Potential

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**Abstract:**

**Purpose:** Attention to the problems of social and economic development of rural areas by Government authorities, economists and the scientific community was mainly theoretical or sometimes targeted practical in nature.

**Design/Methodology/Approach:** At the same time, rural poverty and high unemployment rate, worsening demographic situation, reducing network of institutions of social infrastructure in rural areas, which together have a negative impact on the reproduction of labor resources, lower production volumes and high migration rates have always been the problems of rural development in the country.

**Findings:** Overall, sustainable development of rural areas characterizes, on the one hand, external major natural resource constraints that form a distant prospect, and on the other hand, determine the possibilities of social and economic development of rural communities, economic entities, diversification of the territory's economy, the formation of new activities and environmental engineering. This is a very wide range of problems, which are currently considered from different perspectives in Russia and in several countries of the world.

**Practical implications:** The article discusses the problems of economic development of rural areas as the main factor in ensuring the sustainable development of rural areas of the agrarian regions of Russia.

**Originality/Value:** The authors define the core resources for development of the rural areas in the region, provide an overview of agribusiness and tourism industry clusters, revealing their points of growth, cluster sales channels, tourism and recreation development.

**Keywords:** Rural area, sustainable development, cluster, resources, agribusiness, tourism, ecology.

**JEL Classification:** O13, Q1, Q18, R11, R58.

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## **1. Introduction**

The World Conservation Strategy developed by the UN Committee on the Environment and the World Wildlife Fund was one of the first international documents mentioning the term "sustainable development". The strategy emphasized the need to consider environmental factors in the process of socio-economic development of territories. In 1983, under the aegis of the UN, the "Our Common Future" report was prepared, presenting the concept of sustainable social and economic development of territories in equilibrium with the environment for the first time ever (Alferova, 2015). The provisions of the report were the basis for the Declaration on Environment and Development, approved by the United Nations Conference in Rio de Janeiro in 1992. The declaration officially announced the thesis on the need to ensure a balanced solution of social and economic problems and the problems of preserving a favorable environment and natural resource potential in order to meet the needs of present and future generations (Kolesova, 2015; Podoprighora *et al.*, 2016; Korobov and Raupov, 2017; Aleksandrova *et al.*, 2017).

The solution to the problems of stable economic development and the well-being of the Russia people is largely determined by the development of rural areas (Sycheva *et al.*, 2018; Poltarykhin *et al.*, 2018; Ivanova *et al.*, 2018; Aleksandrova *et al.*, 2015; Nikolaeva *et al.*, 2018). The focus on the model of sustainable rural development involves achieving social and economic stability, systematically increasing the efficiency of economic entities in the region, as well as rural income and quality of life; rational use of natural resources (Podprugin, 2012; Yarlykapov, 2013; Kovalenko, 2012). However, there is still no clear and understandable government reformation strategy contributing to sustainable development of the rural areas (Nagimov *et al.*, 2018; Kopteva and Koptev, 2018; Koptev and Kopteva, 2017a).

## **2. Methods**

The research is based on the study of sustainable development of the territories based on the integrated use of industry, resource and environmental potential, the formation of organizational and economic relations between the subjects of sustainable development (Korableva *et al.*, 2018), in particular through the mechanism of territorial clustering (Polyakova *et al.*, 2018; Sozinova *et al.*, 2017; Akhmetshin *et al.*, 2017a; 2017b). To achieve the objectives under study, the authors used critical analysis of literature sources and general scientific methods – a systematic approach, methods of analogies, abstract, logical, monographic, statistical and economic methods. Systematic approach served as a methodological basis for this study, which allowed ensuring the comprehensive and targeted character of the study.

### **3. Results**

Sustainable rural development is often confused with steady rural sustenance. These concepts are closely interrelated; however, the concept of sustainable development of rural areas is much broader, as it includes the socio-economic and environmental aspects of agriculture and rural landscaping in general (Danilov-Danilian, 2003; Akhmetov *et al.*, 2009; Poltarykhin *et al.*, 2018; Voronkova *et al.*, 2018c). At the same time, the villager, his needs and interests are at the center steady rural sustenance system. Moreover, the sustenance itself is associated with improving the quality of life of the rural population (Rozenberg, 2005). While considering a rural territory as a system several scientists distinguish three subsystems: economic, social and environmental, each of which can also be presented as a separate system consisting of a set of elements (Polushkina, 2012; Sycheva *et al.*, 2015; Voronkova *et al.*, 2018a; 2018b; Korobov and Podoprighora, 2018; Podoprighora and Korobov, 2017; Podoprighora and Saychenko, 2017). The indicated approach is quite consistent with the paradigm of sustainable development; in which it is considered in the context of three components. When considering rural areas as socio-ecological-economic systems, one can distinguish the following structural elements (Voronkova *et al.*, 2018a; 2018b):

1. Rural area as a basis for living and meeting the vital needs;
2. Production organizational structure ensuring the development of the economy with the direct participation of the region's population;
3. Ecological and economic balance of the territory, that is, sustainable and steady development of agriculture with the use of intensive, but environmentally safe agricultural technologies preserving the environment.

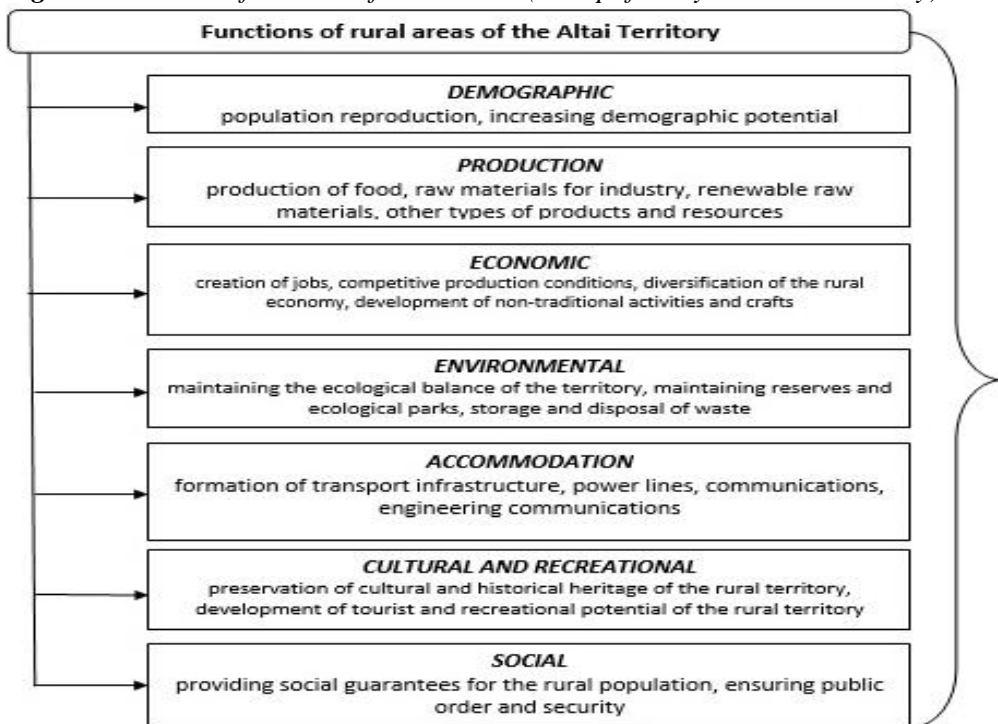
Since rural areas are open systems, their management is not an autonomous closed structure. The process of managing rural areas is an integral element of the existing system of state and municipal government (Movchan and Yakovleva, 2017; Kuznetsov and Suprun, 2017; Semenov and Kuznetcov, 2015; Malarev *et al.*, 2019; Shishlyannikov and Lavrenko, 2016; Nefedov, 2018; Ganieva *et al.*, 2017). There are two outlines formed in the structure of rural areas management: the external one, where the state is the subject of management, and the internal one, where local and self-government and the economic authorities are the subjects of management (Pikulkin, 2010; Korableva *et al.*, 2018). Therefore, the development of rural is exercised through the interaction of organizing and self-organizing foundations.

Consequently, it can be stated that the rural territories, which are controlled from the outside by the state, are under development, while this system continues self-developing. The success of rural development depends on the correctness of external regulation and self-development rate. At the same time, the purpose of state

authorities' activities is to create the prerequisites and conditions for self-development of the rural territories in the country's agrarian regions.

The agrarian-oriented region of the Altai Territory is characterized by a transboundary geo-economic position at the junction of the Kazakhstan, China and Mongolia borders, in direct contact with historically close countries and the growing markets of Central Asia, at the intersection of large migration and transcontinental transport flows. The unique nature of the regional resources and specific structure of the regional economy determine the complex of specific capabilities (in terms of realizing the potential of integration in the macro-region of Central Asia) and risks (due to the threat of disturbing the balance and security of the natural, social, economic and institutional systems) for sustainable development of the region for current and future generations of people (Sycheva *et al.*, 2013; 2017; Gabidullina *et al.*, 2018; Achaeva *et al.*, 2018; Kayumova *et al.*, 2019; Achaeva *et al.*, 2015, 2016; Bittman *et al.*, 2017). In this connection, the idea of creating a model and technology for sustainable development of the territories on the example of Altai region as an agrarian region of cross-border cooperation, which determines the achievement of positive social, environmental and economic effects of economic development, social sphere and the consumption of natural resources (Figure 1).

**Figure 1.** *The main functions of rural areas (exemplified by the Altai Territory)*



Rural municipal areas of the Altai Territory are developing territorial socio-economic systems with irregular sustainability. The main issues of rural development that need to be addressed are:

- Low standard of living of the rural population in the region compared to the standard of living in the city of Barnaul – the capital of the Altai Territory, and the average standard of living in the country;
- Irrational use of land, recreational and labor resources of the territory;
- Unregulated partnership system between government, business and the public;

In rural areas of the Altai Territory, especially in the areas remote from the regional center, there is an acute problem of settling populations (Sultanova and Mardashov, 2016; Raupov and Podoprighora, 2017; Raupov and Korobov, 2018; Romashev and Aleksandrov, 2016; Aleksandrova and Shabarov, 2016). There is a stereotype, according to which, in order to get a better education, recreation, treatment, culture, utilities and other services people must leave the rural area. Young people are mostly moving to other regions of Russia. As a result, the strategy for ensuring the sustainable development of rural areas becomes a significant vector of socio-economic development of the agriculture-oriented regions of Russia the Altai region. The main resources contributing to the implementation of sustainable development of rural areas are:

- Natural resource unit to the maximum extent adapted to the formation and maintenance of internal and external demand for territorial products and services;
- The principle of population distribution should remain unchanged, while the type of production and development of natural resources may be transformed. This will increase the efficiency and comfort of resource development while reducing the social burden of rural municipalities;
- Developing an effective system of self-organization for the local community through the strengthening of the local self-government system and the formation of civil institutions;
- Ensuring the energy independence of the rural areas at the expense of local fuel resources and renewable energy sources;
- Rational use of natural industrial and recreational reserves of the territory, compliance with the ecological balance;
- Developing transport infrastructure, confirming the geopolitical, socio-economic and recreational status of rural areas;
- Developing the service sector through small and medium-sized business support mechanisms;
- Positioning of agricultural production as a factor of potential development of the region's economy, providing and satisfying both its needs and the needs of urban agglomerations;
- Combining unique natural, historical monuments and the cultural heritage of rural

areas should become a brand, a business card and a base for the development of tourism and recreation as a profitable sector of the economy.

In accordance with the above, the principal distinctive feature of strategic development for the rural territories is the approach to developing the region's territories through cluster networks. The technological chain may be local in nature and incomplete (shortened) or presented by a system of chains Koptev and Kopteva, 2017b; Lavrenko *et al.*, 2019; Solnyshkina *et al.*, 2014; Tananykhin *et al.*, 2018; Vasiliev and Mardashov, 2017; Podoprigora and Raupov, 2018; Aleksandrova and Korchevenkov, 2017). The development of clusters in rural areas of the Altai Territory is hampered by a low level of labor skills, outdated technologies, lack of available capital and poor development of public institutions.

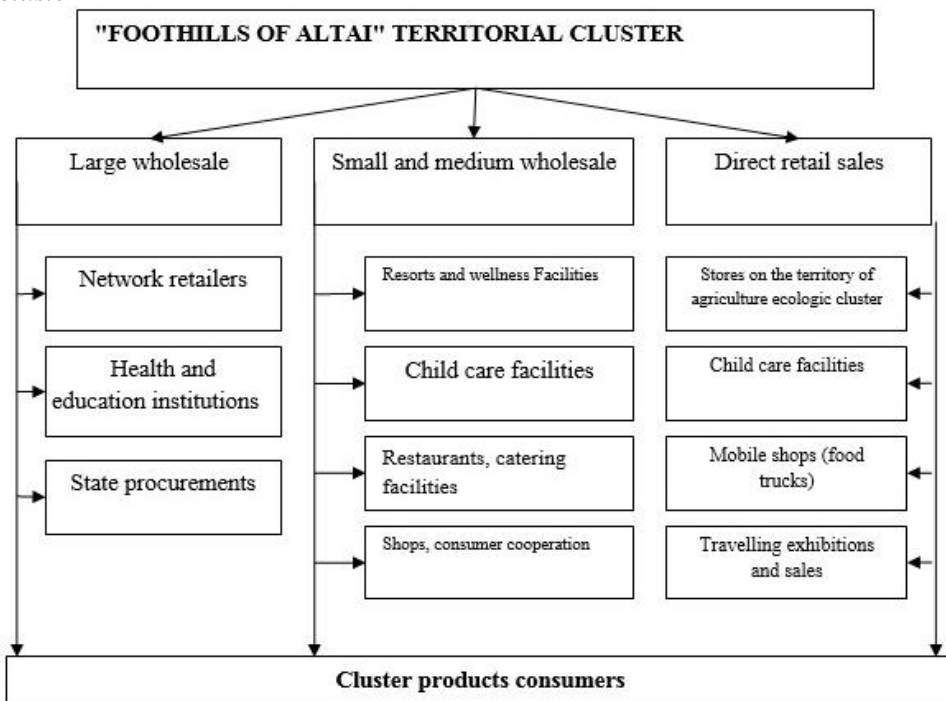
It should be noted that there is no standard version of the cluster. The cluster format directly depends on the specific location, available resources, their qualitative and quantitative characteristics, transport, logistics and information infrastructure, as well as on other factors. The mission of the rural territory is to achieve new standards for the quality of life of people with an effective combination of environmentally friendly industries with a unique natural complex. In territorial clusters, all processes related to planning, scientific substantiation, production, processing, storage, selling, certification of products (i.e. from a business idea to the final product) are combined in a single cycle. The territorial approach to the formation of clusters is due to significant differences of the regions' individual territories in their climatic potential, soil fertility, population density, level of infrastructure development, road accessibility, availability of markets for products, and the tourist and recreational potential of the area.

In our opinion, the formation of territorial clusters for the purposes of sustainable development of rural territories is of importance for the economic development of the agro-industrial region and the attraction of investment resources (Takhumova *et al.*, 2018; Prischepa *et al.*, 2018a, 2018b, 2018c; Prischepa and Averyanova, 2017; Kochneva, 2013; Kochneva *et al.*, 2015). Moreover, public support will be important for the creation of territorial clusters and for building awareness of their role in the strategic development of the country's agriculture. It is advisable to include territorial clusters' support activities in the regional agriculture support programs, to ensure the environmental safety of the land use, to increase innovation level of the territories, to reduce tensions in the labor market, etc. Thus, the ecological state of the foothill zone of the Altai region, its tourist, recreational, land and resource potential were the main criteria for the choice of a given territory in the development of a territorial cluster project (Kopteva and Malarev, 2018, Vasilyev *et al.*, 2018; Nefedov and Klepikov, 2018; Tarasova and Tarasov, 2018). This cluster is characterized by high soil productivity and relatively clean territory. It has all the necessary land and production prerequisites for creating a territorial cluster with the

project name "Foothills of Altai". Today, there are several production enterprises and companies specializing on partial processing of organic agricultural products in the region, as well as enterprises specializing in the production of medicinal plant materials (herbs, roots, sea buckthorn). Moreover, all areas included in this zone are distinguished by a high level of cultural, tourist and recreational potential. The nature of this area attracts many tourists with clean lakes, waterfalls, mineral springs and many other beauties of the ecologically clean protected Altai foothills.

It is advisable to allocate the following sectors in the model of the territorial cluster: production and processing, supply, transport and logistics, service, marketing and sales, laboratory and certification, tourism and recreation and cultural and educational sector. To ensure the life of the cluster and the development of its additional activities, it is necessary to introduce the sector of management and coordination, finance and personnel, innovative and academic sectors (Tananykhin and Saychenko, 2017; Tananykhin and Khusainov, 2016; Sharifov and Mardashov, 2018; Ovcharenko *et al.*, 2017; Akhmetshin *et al.*, 2018; 2019). The research revealed that the distribution channels for the territorial cluster products may be different, including direct retail sales, medium wholesale and small wholesale sales, as well as large wholesale (Figure 2).

**Figure 2.** Estimated sales channels for the products of the "Foothills of Altai" cluster



The territory of the foothill zone has a well-developed level of agricultural processing. There are numerous shops, retail outlets and catering establishments along the main tourist routes. Cooperation forms or vertically integrated formations, where the executive directorate or the leading processing enterprise serve as an integrator, can serve as organizational principles for the functioning of a territorial cluster.

#### **4. Conclusion**

In general, it should be noted that a smooth transition of some organizations to the principles of production, processing and provision of services in the format of territorial clusters requires successful experience in the operation of such cluster formations, as well as the appropriate level of information, organizational and financial support from regional and municipal authorities.

The authors believe that the activities of territorial clusters can have a significant positive effect on the level of economic, social and environmental development of rural administrative-territorial entities of the region by enhancing the regional market for both environmentally friendly and traditional agricultural products, full and environmentally balanced use of land resources, development of innovative agricultural technologies, increasing the level of employment of the rural population, activating the agricultural ecotourism, developing the ecological infrastructure of the territory, expanding the taxable base, and ensuring comprehensive sustainable development of the rural territories in the country's agricultural regions.

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