



## ECOLOGICAL SETTLEMENTS AS ONE OF PERSPECTIVE FORMS FOR RUSSIA RURAL TERRITORY MULTIFUNCTIONAL DEVELOPMENT

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### ARTICLE INFO

#### Article history:

Received 01 August 2018  
Received in revised form 24  
December 2018  
Accepted 13 January 2019  
Available online  
21 January 2019

#### Keywords:

economic crisis;  
mountain regions;  
depressed republics;  
rural territories;  
multifunctional  
development;  
ecological settlements;  
sustainable development.

### ABSTRACT

Modern socio-ecological-economic processes of the rural territory functioning in the depressed republics of the North Caucasus make it necessary to rethink the rural community problems and develop new approaches, mechanisms and directions for their recovery and sustainable development. The rural settlements of the mountainous areas in the republics of the North Caucasus Federal District could not fit into market relations and lose their socio-economic purpose catastrophically in the sphere of agrarian relation organization and implementation, which threatens with unpredictable consequences not only for the socio-economic, but also for the political sphere. In these conditions, the strategic task for the future is to conduct structural and functional transformations of rural areas, to develop new qualities and characteristics, which allow to adapt to changing external socio-economic conditions [11, 13].

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## 1. INTRODUCTION

The rural territories, which were the part of the agro-social sphere, have been going through difficult stages of their development for the last quarter of a century. The transition to market relations changed the type (quality) and the character (dynamics) of rural settlement development radically, which made a large and destructive impact on their essential characters.

All this suggests that it is methodologically incorrect to consider rural territories in

isolation from the general background of the socio-economic and political processes taking place in the country.

Many problems of multifunctional rural development are still beyond social and economic research. For example, the problems of imperfect organizational and methodological support of procedures for the evaluation and the implementation of functions by rural settlements, the analysis of the organizational and economic components of multifunctional development mechanisms for rural areas, focused on the implementation of new functions while maintaining traditional ones, are very relevant.

These and a number of other problems and issues of theoretical, methodical and practical nature predetermined the purpose and the objectives of the study.

## 2. RESEARCH METHODOLOGY

The object of the research is the rural settlements of mountainous areas in the depressed republics of the North Caucasus. In-depth studies of ecological settlement creation problems as one of the promising forms of rural mountainous area multifunctional development in the North Caucasus Federal District were carried out on the empirical and factual basis of the Kabardino-Balkarian Republic mountain regions.

During the study they used abstract-logical, morphological and semantic analysis, the structural and the functional approach, the expert assessments and other methods of economic research.

## 3. RESEARCH RESULTS

Modern rural settlements of the North Caucasus republic mountainous territories are well-established phenomenon, on the one hand, and unexplored one, on the other. All sorts and even revolutionary changes in the social structure of the state, the models and the mechanisms of socio-economic and political development took place in the country for decades and even centuries, but mountain settlements have always been isolated and characterized by the presence of dominants that are stable and unchanging by nature - the way of life and economy management, as well as the traditional way of farming as economic activity type.

The presence of a large variety of conceptual approaches to the study of rural areas is caused by the cross-subjectivity of their functioning areas. At the same time, there is not much research on rural settlements in mountainous areas, although this is very relevant from all sides and aspects.

First of all, the rural settlements of mountainous areas need to be considered not only in the context of territorial organization and settlement systems, but also in the context of geopolitical changes taking place.

Secondly, although the rural settlements of the mountainous territories are in a deplorable state today, they nevertheless need to be considered as a structural element of the regional socio-ecological-economic system. And this is natural, because, in accordance with the provisions of the general management theory, even small rural localities are an object of

management with complex characteristics, properties and functions.

Of course, the modern rural settlements of mountainous areas cannot be considered exclusively from the standpoint of any particular approach, since the processes and phenomena carried out in them are extremely complex by nature and character, and therefore require an explanation with regard to the synthesis of interdisciplinary knowledge.

The rural settlements as the systemic formations of complex nature with mixed genesis are continuously in the field of influence of many external and internal multidirectional factors [2, 12, 14].

Researchers identify many groups of factors for the development of rural settlements, including:

- \* social factors (infrastructure, social causes and consequences of economic and political crises, war, etc.);
- \* institutional factors;
- \* environmental factors;
- \* innovation and investment factors;
- \* economic factors, etc. [5]

The set of factors for rural settlement development in mountainous areas within the system of their involvement in the form of structural components of territorial development potential can be structured into four groups:

- \* natural factors;
- \* economic factors;
- \* production and system factors;
- \* social factors [7].

There is also a more pragmatic approach, in which all factors of rural development are located in two blocks:

- \* the block of factors for territorial prerequisites;
- \* the block of factors and citizen interests.

The majority of rural settlements (and especially mountainous areas) is constantly in the search of a balance between homeostasis and adaptation within the conditions of increasing competition. Preserving the homeostasis (the constancy) of the situation, hence the inability of any innovations, the rural settlements of mountainous areas are archaized even deeper, and the socio-economic gradients intensify in comparison with the lowland settlements.

In the course of communication with the residents and the leaders of municipalities in the mountainous regions of the Kabardino-Balkarian Republic, namely, Cherek, Chegem and Elbrus regions, we were convinced that these settlements are not ready still to adapt, to “build in” a postindustrial economy, to reformat their morphological characteristics and features.

At that, it should be noted especially that over the past quarter of the century, the rural

settlements of mountainous areas have lost their originality and territorial recognition noticeably, many clans and families do not follow the way of centuries-old traditions of farming [9, 10, 15].

This is the essence of an optimal balance finding between homeostasis and adaptation in the multifunctional development of mountainous area rural continuum. Speaking about the multifunctional development of rural areas, it is necessary to consider it both as the phenomenon and as the process.

In the first case, the thing is about the fact that the phenomenon of rural territory multifunctional development is identical to the socio-economic phenomenon of modern Russia, which consists in the presence of special types of territories with quasi-agricultural and agricultural landmarks of the economy and the nature of social and other serving spheres ensuring the development of personality and society.

The process of rural area multifunctional development should be considered as a gradual logical linear-evolutionary movement towards the complication of the functions implemented by rural settlements, the abandoning from unclaimed and the emergence of their new combinations [5,16].

In accordance with the rating of RF regions concerning the quality of life compiled by the RIA Rating agency, the Kabardino-Balkarian Republic occupies 83-85 place among 85 Russian regions over the past few years (since 2000).

In the course of the analysis, we studied the set of socio-economic indicators of population life quality in the Kabardino-Balkarian regions, including such as the proportion of the population below the subsistence minimum, unemployment, natural population growth, the provision with hot water, sewage and investment attractiveness. In the course of the analysis, we have (as an absolutely losing scenario) discarded previously the comparisons of mountain territory rural settlements with urban settlements, leaving (besides the first ones) the rural settlements of lowland territories.

Even in comparison with the unfavorable rural settlements of the flatlands, the settlements of the mountainous territories almost lose by all socio-economic indicators, except for one - the crime rate per 1000 people. There is a significant imbalance for all analyzed comparative indicators.

All paramedic-obstetric points are closed in the mountainous territories, small schools are eliminated, there are not enough social and cultural services, housing is not built in any village by the authorities or commercial structures ... The construction in the mountainous terrain is very expensive and unaffordable for the mountaineers. In the highlands, the backyard area is very scarce in terms of crop yields.

In the structure of regional resources, the savings of the highlanders do not exceed 3%, which is difficult to comment. In the structure of expenditures on the final consumption of villagers in mountainous areas - 35% is for the payment of services, 35% is for non-food products; 30% is for food. It is noteworthy that food costs make up to 40% in the lowland

areas. Such a gap is simply explained by the fact that the mountaineers do not have so much income to spend so much on food - they live at the expense of personal subsidiary farming.

Unemployment is the most depressing indicator - it is 5 times higher than official one in mountainous areas and reaches 80% in some villages. And this is natural, unfortunately - there is not a single agricultural or processing enterprise left in the highland villages. For this reason, agriculture is no longer a system-forming one, and hence, rural settlements remain the legacy of the Soviet planning and administrative economy, when they were placed according to the production basis, ignoring all other aspects [4,6].

In the course of the analysis, we were able to create a social portrait of a typical rural settlement of the republic mountainous areas: small (endangered) population; the absence of minimum necessary infrastructure, the old age of the population, the lack of hot water, sewer networks, incomes below the subsistence minimum, the catastrophic parameters of unemployment. At the same time, it should be noted that (unregulated) branches remain endemic industries in rural settlements of mountainous areas — agriculture (animal husbandry), hunting, and forestry.

In the past three decades, they developed various targeted long-term programs for the sustainable development of agriculture and rural areas.

In the course of their implementation, many different problems were identified, especially applied ones. All these problems, shortcomings and omissions are associated with a certain isolation from the true picture of the situation in rural areas, which have significant asymmetry in terms of socio-economic development. This asymmetry finally reduces the effectiveness of carried out activities, and also increases the risk of falling budget and social efficiency significantly [2, 8, 17].

Three main groups operate in the zone of rural area active interaction:

- \* the rural population itself;
- \* small business sector operating in rural areas;
- \* - municipal organizations [1,3].

The socio-ecological-economic landscape, rural society, as well as the subjects themselves produce the formed functions of rural areas, and the maintaining of a certain stability for the minimum level of villager life quality socio-economic standards is the primary task of municipal authorities. At the same time, with any resulting imbalance, the rural environment experiences an extremely unstable situation and is not able to function fully.

During the last 5-6 years, the production growth of agricultural products has been observed in the republics - this is mainly due to a successful combination of factors and circumstances, including the activation of import substitution state policy, increased state support for the agricultural sector, especially concerning the renewal of BPA, the provision of "long" loans to individual strategic suppliers and agricultural producers.

However, it should be noted that the increase of agricultural production cannot be unambiguously considered as the main indicator of the rural settlement multifunctional development.

The Kabardino-Balkarian Republic is a fairly favorable territory (relative to most Russian regions) for the competitive development of agriculture, the organization of new environmentally friendly products of various specializations. The agro-industrial products of the CBR are highly demanded in many regions of the country (meat, poultry, dairy products, apples, etc.), the republic supplies 20% of RF canned products.

In the context of Sustainable Rural Development strategy implementation regarding the organization and the development of new highly efficient species and resettlement schemes, it is necessary to develop the priority regional forms for the organization of future rural settlements. One of such organization forms for these settlements can be ecovillages, which, first of all, are focused on ecologically-friendly non-traditional ways of the area internal reserve use. The main activities of mountain area residents can be handicraft and ecological clean agricultural production, agrotourism, eco-tourism, hunting tourism, all kinds of creative and event industries, coupled with the involvement of historical, cultural, spiritual and recreational potential [7,12].

It is noteworthy that the basis of the created ecosettlement can be made up of both rural and urban populations, united by the idea of a man harmonization with nature, treating a man as part of noosphere, creating new (local) rules, norms, traditions and foundations ...

It seems to us that the quality of life in eco-settlements will be viewed through the prism of nature, resources and health safety. Such alternative forms of settlements can reduce the disunity of rural settlements, form a new spatial-economic network, reduce social tensions, etc. There are many informal eco-settlements in the Krasnodar Territory nowadays. As a rule, they are located in new remote uninhabited territories.

The algorithm of eco-settlement development in the regions may be the following ones:

- \* the development of the initiative group;
- \* the selection and the registration of land for an ecovillage;
- \* the procedures for the development and coordination of projects in the relevant authorities;
- \* the registration of a new settlement - an ecovillage [7].

The options for buying the houses of abandoned settlements are possible.

All this can be regarded as the turn towards social issues. According to our estimates, about 8 mountain villages are on the verge of liquidation due to the lack of a socio-economic base of settlements, unacceptable unemployment, the aging of population, and the complete degradation of social infrastructure.

The fact of an ecovillage creation in the Krasnodar Territory is noteworthy - often the migrants are able-bodied people, among whom there are many well-to-do people who want to feel the competitive advantages of the rural lifestyle in their "own" way of its implementation.



The fundamental rule of eco-settlement organization and their settlement is voluntariness, that is, personal wishes, initiative, which, undoubtedly, will allow to use a diverse set of functions of traditional rural settlements in order to provide a set of planned effects (to increase the quality of life, demography, the formation of investment attractiveness) [5].

Unfortunately, there is no possibility yet to predict the number of possible eco-settlements in the CBR due to the lack of information base and target indicators, which would create a simulation model for the development of alternative settlements. There are no eco-settlements in the republic. Although, it is possible to make ecosettlement development forecast and population number based on linear trends. It is necessary to organize the monitoring of rural area multifunctionality for this.

It should be noted that there are all the necessary prerequisites in the system of local self-government for this - there are special methods for information base development, such as monitoring, analysis and diagnostics, the forecasting of socio-ecological and economic development, municipal statistics is also being developed. But at the same time, it is necessary to state the absence of a monitoring system concerning the multifunctionality of rural development, which does not allow to implement a set of rural development purposeful functions.

#### 4. CONCLUSION

The rural settlements of the mountainous areas in the depressed republics of the North Caucasus should be the object of constant significant state support. Today there is a significant shortage of measures concerning different directions and the impact of state support and increased stimulation of rural settlement socio-ecological-economic development. In the course of the study, we were able to substantiate the objective need of an organizational and economic mechanism development for the multifunctional development of rural settlements in mountainous areas. In our opinion, one of the effective tools for the socio-ecological-economic function imbalance reduction in the rural settlements of mountainous areas is the creation of new forms of human settlements — eco-settlements.

#### 5. REFERENCES

- [1] Agibalov A.V. The improvement of rural development management // Voronezh. VSAU. 2017. - 171 p.
- [2] Artamonov A.D. The development policy of RF rural areas: the settlements of the twentieth century. Tambov. - 2005. - 168 p.
- [3] Belkina Ye.N. The analysis of social aspects concerning the development of rural territories in the Krasnodar Territory // Bulletin of the Academy of Knowledge. 2018. №26. pp.50-56.
- [4] Buzdalov I.N. Methodological aspects of sustainable rural development // Economics of rural and processing enterprises. 2017. №6. pp. 2-4.
- [5] Gomanova S.O. Eco-settlements of Russia: institutional aspect // Power. 2017. vol. 25 №1. pp. 67-71.

- [6] Yemelyanov S.V. Multi-criteria decision-making methods / M.: Knowledge. 1985. - 32 p.
- [7] Inshakov O.V. Space institutionalization in the concept of spatial economics // Spatial economy. 2007. №1. pp. 5-21.
- [8] Kisileva N.N. The regional models of rural development in the North Caucasus Federal District // The modern problems of science and education. 2012. №6. pp. 430-43.
- [9] Misakov V.S., But V.V., Adzhieva A.Yu. Innovative infrastructure as the resource for balanced development achievement in the region // Economy and Entrepreneurship. 2017. 6 (83). pp. 200-203.
- [10] Misakov V.S. The problems of socio-ecological-economic security provision in the mountainous territories of the South of Russia // Proceedings of the Kabardino-Balkarian Scientific Center of the Russian Academy of Sciences. 2016. № 1 (69). pp. 113-120.
- [11] Misakov V.S., Adzhieva A.Yu., Ilaeva Z.M. The priorities of socio-economic development, allocated in accordance with the cluster zoning of rural areas // Economy and Entrepreneurship. 2017. No. 8-3 (85). pp. 232-238.
- [12] Nogmova L.A., Misakov V.S. The development of economic potential in the context of a balanced regional development // News of the Kabardino-Balkarian Scientific Center of the Russian Academy of Sciences. 2016. № 3 (71). pp. 143-148.
- [13] Shevlovkov V.Z., Misakov V.S. The problems of balanced development provision in the mountain territories of the South of Russia // From the collection: Sustainable development of territories: theory and practice. The materials of the VIIIth All-Russian Scientific and Practical Conference. 2016. pp. 134-140.
- [14] Becker G.S. Human Capital: A Theoretical and Empirical Analysis, 1964. Universiti of Chicago Pres: 3-rd edition: 390p.
- [15] Camareto L., Crus F. 2016. Rural sustainability, inter-generational support and mobility. European Urban and Regional Studies, 23, pp. 734-749
- [16] Hebinck P., Ploeg V.D. Shnaider S. Rural development and the construction of new markets. Rural development and the construction of New Mapkets, 3. pp. 1-212.
- [17] Pavelinc Olario C. 2013. Developing a Global Security Policy, Advances in agriculture and Botanic Published.



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