

Financial and economic aspects of the development of mountain regions in the Russian Federation

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Abstract. Mountain areas are a common national heritage, containing a significant part of unique natural and recreational resources, as well as a place for storing ethnocultural and historical traditions. Currently, about 15% of the human population lives in mountainous areas. In this regard, the problems of development of mountain areas are system-wide and inherent in all countries of the world. At the present stage, the development of mountain territories is carried out almost entirely through budget financing, and therefore the problem of increasing the optimization of the use of budget resources, as well as the formation of effective mechanisms for attracting private investment funds, are relevant and priority. The methodological approaches developed by the authors for optimizing the system of financing the sustainable development of mountain territories, which are systemic in nature and contain directions for optimizing the interaction of three forms of financing, seem quite timely and relevant. The main results of the study are the development and justification of a mechanism for financial support for the development of sustainable development of mountain territories, which, unlike existing ones, takes into account the specific features of mountain territories, and is also based on the possibility of transforming forms of financing (budgetary, private and mixed).

1 Introduction

The relevance of the study of aspects of financial support for the sustainability of mountain territories is due to the fact that mountain areas in certain constituent entities of the Russian Federation provide accommodation for at least 40 people (the Republic of Dagestan, the Chechen Republic), which means that the development of measures to ensure their effective development is mandatory and relevant [2]. The territories of mountainous regions perform systemic functions of preserving the livelihoods of the population on the planet, are a repository of unique ecosystems, and also serve as natural borders with neighboring states. Considering their multifunctional significance, the formation of programs for the sustainable development of these territories requires the use of specific management tools that allow achieving real effectiveness of the documents being developed. The significance and specificity of mountainous areas formed the conditions for financial support for their

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development, with the prioritization of budget financing and low investment attractiveness for private investors [1]. At the moment, there is practically no gradation between the methods used to provide financial support for mountainous and lowland territories, which creates different levels of return on the budget funds used [3]. There is an objective need to study this issue in order to develop an optimized mechanism for financial support for the sustainable development of mountain areas. The object of the study is the financial conditions for ensuring the development of mountain territories in the context of increasing their productivity and transformation, taking into account the specifics of the territories under study. The subject of the study is a set of theoretical, methodological and practical aspects of financial support for the sustainable development of mountain territories. The purpose of the study is to develop theoretical and methodological approaches to optimizing the mechanism for financial support for sustainable development of mountain areas.

2 Research Methodology

As part of the study, the author used a set of techniques and general principles of scientific research, the laws of economic science, traditional economic methods: system analysis, the method of expert assessments, statistical, graphical, abstract-logical, program-targeted, etc. The theoretical basis of the study consists of scientific works of domestic and foreign economists devoted to the problems of studying the financial conditions for sustainable development of mountainous areas. The research methodology is based on a systematic approach using methods: graphical (when visualizing the financial mechanism for ensuring sustainable development of mountain territories), design and logistics (when justifying three forms of financing of the studied areas), system analysis and generalization (when forming a mechanism for financial support for sustainable regional development). Various well-known scientists have been involved in the development of this topic, among whom are: Kushankur Dey, Pradeep Kumar Mishra [1, pp. 342-353]; Francesco Rizzi, Chiara Pellegrini, Massimo Battaglia [2, pp. 805-817]. The issue of optimizing the financing of projects in mountainous areas, taking into account the environmental aspect, has been developed in the works of such modern scientists as: Liselotte S. Hagedorn, Mark J. Kutse, Peter J. H. van Beckering, Luke M. Brander [3.] and others.

3 Results and Discussions

Various scientists, both in Russia and abroad, have been studying the problems of sustainable development of mountain territories for a long period of years. The basis for the sustainable development of mountain areas is the understanding of the Concept of state regulation of the country's socio-economic development, which states that throughout the Russian Federation, high-quality conditions for living the life of the population and providing them with socio-economic benefits should be equally created [5].

Mountain territories occupy a special place in the structure of management of strategic socio-economic development, since due to their specific natural and geographical features, namely high-altitude relief, the development of these territories requires a special approach, both in terms of the formation of management activities and in the application specific tools. Mountain territories occupy a fairly large space in the Russian economic system, since almost every third subject of the Russian Federation, to one degree or another, has mountainous areas.

The system of public administration in the field of socio-economic development is certainly built on taking into account the specific characteristics of regional territories. In this regard, the formation of a mechanism for the sustainable development of mountain

territories is a more problematic issue due to the fact that when constructing it, it is necessary to maintain a balance in the development of the environmental, social, technological and economic spheres, as the main aspects of the formation of the life of the population in these territories.

Environmental aspects are considered in some detail in the works of domestic and foreign research, therefore, in the framework of this study, we will mainly consider the features of the formation of financial conditions for the sustainable development of mountain territories, which are also specific in some cases.

Mountain areas not only fulfill strategic development tasks, providing the population with the necessary sources of life such as drinking water, but also have significant potential in economic and economic development. In addition, in relation to the republics of the North Caucasus, mountainous areas also serve as the state border with foreign countries, and therefore the formation of mechanisms for managing such territories should also affect the border aspect in terms of providing engineering infrastructure in these territories.

First of all, to ensure sustainable development of mountain areas, it is necessary to understand their development trajectories in terms of the real sector of the economy. At the moment, following the example of the territories of the republics of the North Caucasus, one can see that investment projects are being successfully implemented in mountainous areas, but most of them relate to the agricultural complex and tourism. The development of the agricultural industry is connected, first of all, with the traditions of the peoples living in the mountainous regions of the republics, as well as the existing infrastructural conditions, which often simply do not provide alternative industrial production [4]. Tourism activities in the republics of the North Caucasian Federal District are quite widely developed, and every year, with the support of national projects and programs, the development of the tourism cluster occurs at an increasingly intensive pace. At the same time, it is necessary to note the general problems that characterize the development of mountainous areas not only in the North Caucasus, but throughout the Russian Federation as a whole: underdeveloped transport links; lack of sufficient social infrastructure; dispersion of residents in mountainous areas, and so on.

When forming a strategy for the development of mountain territories, first of all, it is necessary to specify the financing mechanism and the interaction of subjects of financial relations between the federal center, regional authorities and municipalities of mountain territories, in terms of identifying the necessary and urgent problems shaping this system. Often, the use of federal funds to finance regional development does not bring the desired effect due to the fact that their use is carried out illiterately, without proper methodological preparation and without a detailed analysis of the current economic conditions.

Subjects of the North Caucasian Federal District already have significant experience in strategizing the socio-economic development of mountain territories, since this program has been ongoing in individual subjects since 2012, and algorithms have been developed for the development of truly effective regulatory instruments [6]. For example, in Dagestan, since 2014, there has been a program for the socio-economic development of mountain territories, which has currently been extended until 2030. The main goals of the program are aimed at improving the socio-economic situation of mountain territories, as well as ensuring the proper level and quality of life in such areas, no worse than in flat areas.

The development of strategic documents was based on a detailed analysis and diagnosis of the state of the social and economic spheres of mountain territories, in the context of individual industries and complexes; the development potential of mountain territories was analyzed, and a set of measures and mechanisms for the intensive development of the studied territories was formed.

The experience of the practical implementation of such strategic programs indicates that individual projects relating to transport infrastructure, logistics, as well as the formation of

large production complexes, are only possible with the attraction of budget funding, since the funds of municipalities, and often regional budgets, are simply not enough. At the same time, the effectiveness of such projects shows, at a minimum, the social satisfaction of the population in terms of the management activities of executive authorities. Considering that in the republics of the North Caucasus about 40% of the population live in mountainous areas, the issues of development of these particular territories are relevant and paramount.

The tasks for the development of mountain areas are characterized by their multifaceted nature, since there are many problems in modernizing existing infrastructure facilities and industrial production, which are outdated not only physically, but also morally. In this regard, the creation of highly productive jobs in such conditions is simply not possible yet.

Considering that public finances make up a large share of financial support for the development of mountainous areas, it is necessary to consider in more detail the mechanism for providing these funds. In accordance with the legislation of the Russian Federation, financial support for the implementation of state policy regarding the sustainable development of mountain territories is carried out strictly in accordance with strategic programs.

Despite the vast experience of accumulated material on programs for the strategic development of mountain territories, several limiting factors can nevertheless be noted that do not allow for maximum efficiency from the use of budget resources. First of all, this is the isolation of the formed strategies and concepts from the immediate problems of the population of mountainous territories, that is, taking into account their needs is practically not affected, and a general national vector of development of the national economy is declared. Secondly, practically no emphasis is placed on the actual activation of the population in mountainous areas, which is why the real involvement of the population in the process of development of territories is either absent or extremely low [7]. The formation of development programs must begin with the transformation of the institutional approach, based on the fact that the existing institutions of socio-economic development of the regions lag behind the immediate needs of the population of mountainous areas. In this regard, a paradox arises that even in conditions of full funding and allocation of budgetary resources, solving the problems outlined in strategic documents does not lead to a general change in the socio-economic condition of mountainous areas.

The fact is that, on the one hand, the Constitution of the Russian Federation enshrines equal powers and rights of all residents of the territory of the Russian Federation, in connection with strategic documents aimed at ensuring the uniform distribution of productive forces, but in relation to mountainous territories this principle practically does not apply. In order to stimulate the development of mountainous areas, it is necessary to create a different, specific approach that allows the use of their competitive comparative advantages, that is, the types of activities inherent in mountainous areas - agriculture and tourism - should become clusters and points of economic development. This is a more effective approach compared to the equal distribution of financial resources across all sectors of the national economy, some of which are not actually implemented in mountainous areas.

Visualization of the financial mechanism for ensuring sustainable development of mountain territories is presented in Figure 1. The main goal of forming this interpretation is to optimize the financing mechanism in order to ensure the sustainability of the socio-economic development of mountain territories. It should be noted that the difference between the presented mechanism is the three-level financing system, which are interconnected through methodological tools [8]. We have already mentioned the specificity and importance of mountain areas, and therefore budgetary financing of their development remains a priority in order to ensure the fulfillment of all constitutional rights and guarantees of the population of these areas. Budgetary financing is based on generally

accepted tools, such as financial planning, financial forecasting, financial regulation and financial control.

The methods used in budgeting the development of mountain territories are in many ways similar to generally accepted methods of strategizing, however, they need to be clarified taking into account the specifics of the scope of application. For example, financial planning based on a program-target approach involves the use of tools such as strategies and programs for sustainable development [9]. However, in contrast to the generally accepted understanding of the development of strategic documents, in the context of the development of mountainous areas it is necessary to use only the “bottom-up” method, when, based on the formed problems of municipalities, the vectors for the development of these territories will be determined and then the necessary financial resources will be allocated.

The specification of this approach will also be manifested in the fact that the development strategies of mountain areas will be more narrowed, tailored to a specific industry or complex of the national economy. For example, when developing a strategy for the development of an industry such as crop production or livestock farming, specific specific types of activities unique to this territory will be identified. Thus, the resulting programs will not be characterized by complexity; according to experts, they will be highly specialized tools, which makes their practical implementation more feasible compared to complex programs.

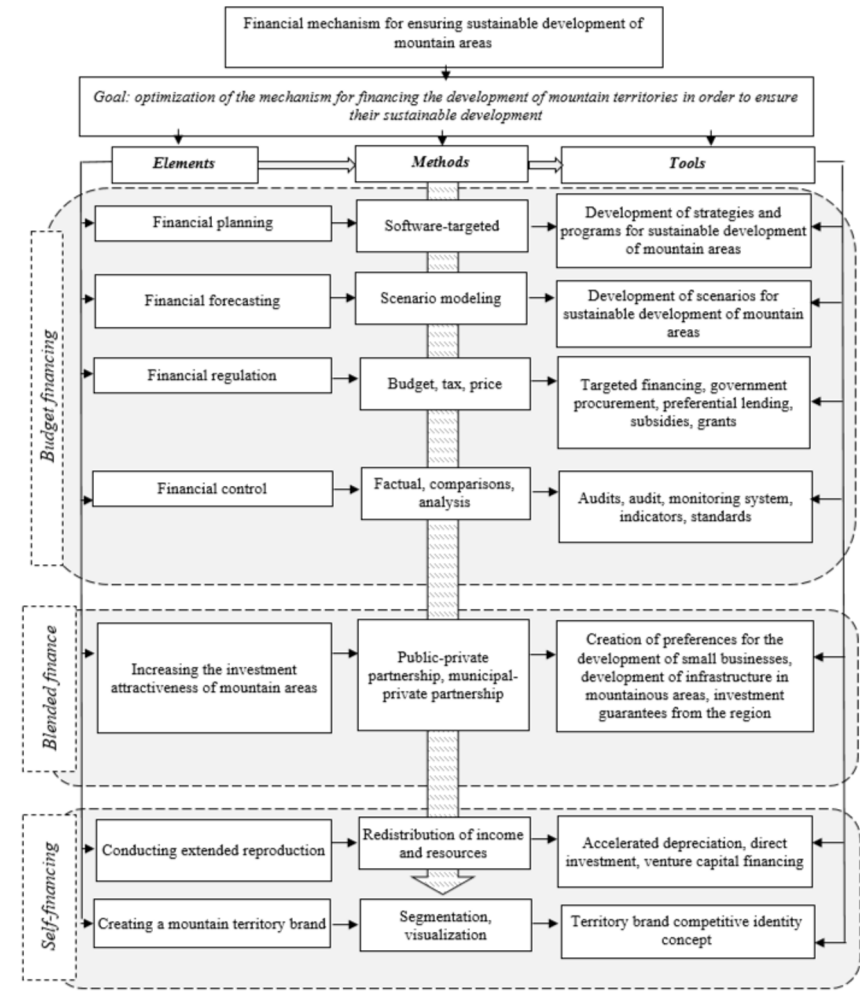


Fig. 1. Visualization of the financial mechanism for ensuring sustainable development of mountain areas.

A special role must be given to financial forecasting, which is the most effective tool for modeling future processes of sustainable development of a particular territory. At the moment, forecasting strategic documents is not sufficiently developed, again, due to the scale of the strategizing process. In this regard, when forming narrowly focused strategies, including for a specific municipality or region, the generated forecasts will be more realistic, which means we should expect an increase in the percentage probability of the predicted events occurring [10].

Instruments of financial regulation are system-wide and include: targeted financing, government procurement, provision of preferential loans for the development of certain industries, as well as subsidies and various grants. In the republics of the North Caucasus, there are already separate programs for the socio-economic development of mountain territories, which include the implementation of practical tactical measures aimed at:

- to provide grants in the form of subsidies for citizens who run private farms in the field of gardening;
- subsidizing the costs of building small greenhouses;
- subsidizing the costs of building logistics centers for storing products;

- subsidizing the costs of maintaining and modernizing enterprises producing industrial products;
- subsidizing the costs of purchasing small-sized agricultural equipment by private farms, etc.

Practice shows that only budget funding gradually “negates” all attempts to intensify the activities of municipalities to independently develop their territories. In view of this, this methodological approach proposes the use of a system of self-financing and funny financing, which will not only be elements of the general financial mechanism for ensuring sustainable development of mountain areas, but also in the future, will gradually replace budget financing, the use of funds of which is strictly targeted. The advantages of self-financing are that the municipality independently forms investment development programs by redistributing the revenue portion of available resources for its own needs and in those areas that it considers priorities. In addition, self-financing is facilitated by the creation of a separate brand of mountain areas, which will subsequently allow the formation of segmentation of areas according to the level of comfort, development and provision of infrastructure.

Municipal organizations themselves have internal sources of increasing investment attractiveness, both in individual production economic structures and in the municipality as a whole. For example, the use of your own direct financing, as well as the use of accelerated depreciation methods, can increase production efficiency, and thereby help attract additional investment.

A mixed form of financing is mutually beneficial for both the state and the municipality itself. In these conditions, the most effective method is public-private or municipal-private partnership. The creation of various types of preferences for the development of small businesses, joint financing of the development of transport and logistics infrastructure in mountainous areas, as well as the provision of guarantees for private investments on behalf of regional authorities will undoubtedly make the development of this territory more attractive for private investors.

The presented theoretical and methodological aspects contribute to the development of the theory of sustainable regional development in accordance with the goals of the Concept of long-term socio-economic development of the Russian Federation and regional programs for the development of mountain territories. A mechanism for financial support for sustainable regional development of the study areas has been developed, reflecting the specifications of mountain areas [11]. The visualization of the presented mechanism is systemic in nature, but can be adapted to changing business conditions. The presented main theoretical and methodological aspects of financial support for the development of mountain territories made it possible to identify the main problems in the formation of development strategies for these territories. The practical experience of individual regions in the development and implementation of programs for the sustainable development of mountain areas is considered, and ways to optimize strategic documents in terms of increasing their effectiveness are identified. The limiting factors that shape the low performance of existing strategic regional development programs that use budgetary resources have been identified.

4 Conclusions

The main provisions of scientific novelty in the presented research are as follows:

- 1) the specifics of the development of mountain territories in the strategic management system are substantiated;
- 2) the author’s visualization of the mechanism for financial support for sustainable development of mountain areas is proposed, which, unlike existing ones, is based on the

specification of the socio-economic conditions for the functioning of mountain areas, contains a level gradation of the methods and financing tools used, depending on the form used. It has been determined that the main form of financing for the development of mountain territories is currently budget financing, increasing the efficiency of which is a priority, however, the studied territories have high potential for intensifying investment activity and attracting private capital;

3) it has been established that the main production sectors in mountainous areas are agriculture and tourism. The development of these areas will help improve the quality and standard of living of the population in mountainous areas, as well as help create additional jobs. As proposals for optimizing financial support and developing private and mixed forms of financing, proposals have been developed to attract private capital in these sectors: creating a territory brand, expanding municipal guarantees for private investors, developing transport and logistics infrastructure, etc.

References

1. E. W. Sayers, J. Beck, E. E. Bolton, Database resources of the National Center for Biotechnology Information, **49**, 10-17 (2021)
2. S. A. Sarkodie, S. Adams, Renewable energy, nuclear energy, and environmental pollution: Accounting for political institutional quality in South Africa, **643**, 1590-1601 (2018)
3. S. V. Efremov, S. V. Kovshov, A. V. Zinchenko, V. V. Tsaplin, *Noxology*, **8** (2012)
4. A. V. Poddubny, Environmental problems and sustainable development of regions: a working curriculum for the humanities of the university, **15** (2002)
5. S. D. Zaugolnikov, M. M. Kochanov, A. O. Loit, Experimental methods for determining the toxicity and danger of chemicals, **184** (1978)
6. I. E. Ilyin, Study of the toxicity of surfactant transformation products formed in the process of water chlorination, **2**, 11-14 (1980)
7. Z. Usmani, M. Sharma, J. Gaffey, Valorization of dairy waste and by-products through microbial bioprocesses, **346** (2022)
8. M. Zapp, Revisiting the Global Knowledge Economy: The Worldwide Expansion of Research and Development Personnel, 1980-2015, **60**, 181-208 (2022)
9. D. Kushankur, K. M. Pradeep, Mainstreaming blended finance in climate-smart agriculture: Complementarity, modality, and proximity, **92**, 342-353 (2022)
10. F. Rizzi, C. Pellegrini, M. Battaglia, The structuring of social finance: Emerging approaches for supporting environmentally and socially impactful projects, **170**, 805-817 (2018)
11. L. S. Hagedorn, M. J. Kutse, P. J. H. van Beckering, L. M. Brander, Reducing the financial deficit for environmental solutions by spending time, **52**, 101371 (2021)
12. E. G. Kalabina, O. Y. Belyak, *The Manager*, **12(6)**, 101-114 (2021)