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FORMATION OF THE INNOVATIVE ENTREPRENEURSHIP DEVELOPMENT STRATEGY IN THE REGION

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Abstract

The article analyzes the dynamics of the level of innovation in the subjects of the Russian Federation, included in the North Caucasus Federal District. The problems of realization of regional innovation potential on the example of the Kabardino-Balkarian Republic, which is attributed by experts to the group of weak innovators, indicators of its innovation activity, which determine the position of the region in the rating of subjects of the Russian Federation on the level of innovation development. The comparative analysis of the dynamics of the main statistical indicators of innovation activity of organizations in the country as a whole, the federal district and the region under study for 2015–2018 years. There is a study of the dynamics of costs of research and development in the context of funding sources and expenditures. We have developed and proposed a strategy for the development of innovative entrepreneurship, which includes a set of organizational, methodological and economic measures to ensure the effective development of innovative entrepreneurship in the CBD. Organizational principles of its formation have been singled out on the basis of the analysis of different approaches of researchers to the construction of this strategy. The article defines general purpose, strategic targets, tasks and measures of the strategy implementation aimed at the development of innovative entrepreneurship of the territory with the purpose of increasing the efficiency of innovative entrepreneurship subjects' activity, ensuring the social and economic development of the territory at the expense of cartoon mezoeffects, reducing transaction costs and resource mobilization.

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Keywords: Innovation, innovative entrepreneurship, regional economy, strategy,

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1. Introduction

The key factor of sustainable growth of the economy of the territories in modern conditions are innovations, the effective implementation and use of which allows economic entities to maintain competitive advantages in the market due to the improvement of the quality of manufactured goods and services, growth in the level of technical and technological development, as well as increasing their innovative potential. The introduction of innovations contributes to their unique competitive advantages, which are difficult to reproduce by competitors due to the complexity and multifactorial of the innovation process (Krutik & Reshetova, 2003). Both objective factors (geographical location, mineral resource base, development of business environment, etc.) and subjective factors (amount of investment in innovation, GRP structure, economic policy of regional authorities, etc.) have a significant impact on the innovation activity of the regions).

Currently, the level of innovation implementation in the region is insufficient, and innovation processes are often haphazard and irregular. In our opinion, in order to maximize the effectiveness of innovation activities in the Kabardino-Balkarian Republic (KBR), the priority task is to develop an effective strategy for the development of innovative entrepreneurship in the region, which requires a tightly coordinated implementation both vertically and horizontally by the state executive authorities, and the tools for its implementation are program-targeted management.

2. Problem Statement

The innovative potential of the region can be realized in the conditions of the most favourable conditions for the development of innovative entrepreneurship, especially in small forms, which is conditioned by the need to actively use the factor of creativity, as well as to ensure flexibility and high adaptability of business structures at early stages of development.

Most of the organizations in the region, despite the existing innovation potential, do not pay enough attention to the introduction of developments and inventions that are competitive both in the Russian and international markets, as well as to the issues of their commercialization. Realization of their innovation potential is hampered by insufficient financing of domestic R&D expenditures at the macro- and meso-levels, low growth rates, absorbed by the inflation rate; reduction of the real level of investment in R&D, especially at the regional level (Malkanduev & Ksanaeva, 2018).

Due to the low rate of investment inflows, research of social and economic importance is declining. The role of private investment in the financing of R&D is extremely low, and the CBD has not yet established an integral infrastructure for innovative development, and budget investments and own funds of enterprises are spent mainly on the survival of innovative organizations, rather than on their technological and technical development (Zemtsova, 2019).

3. Research Questions

In accordance with the purpose of the study, the following tasks were set and solved: 1) to study the indicators of innovation activity of the CBD, which determine the position of the region in the rating of the subjects of the Russian Federation on the level of innovation implementation; 2) to analyze the

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changes in the main statistical indicators of innovation activity of organizations in the country as a whole, the federal district and the region in 2015–2018; 3) to develop and propose measures to stimulate the introduction of innovations aimed at the development of innovative entrepreneurship in the region; 4) to develop and propose a strategy for the development of innovative entrepreneurship, including.

4. Purpose of the Study

The purpose of the study is to develop a strategy for the development of innovative entrepreneurship in the CBD, based on the analysis of the problems of realization of regional innovation potential, the study of the dynamics of the main statistical indicators of innovation activity of organizations and based on the use of a program-targeted approach.

5. Research Methods

The research was carried out using statistical, comparative and abstract-logic analysis methods, as well as a program-targeted approach.

6. Findings

The main problems in the implementation of the innovative potential of the state arise mainly at the regional level due to the large geographical extent of the country and the uneven level of socio-economic development of its subjects, with the acceleration of the development of high-tech business technological gap, and therefore, the gap in socio-economic development between the center and the periphery of the state is only growing (Alikaeva et al., 2018). Thus, according to the rating of the subjects of the Russian Federation on the level of innovation implementation in 2018, prepared by the Association of Innovative Regions of Russia (AIRR), the three strongest innovative regions are the city of St. Petersburg, the Republic of Tatarstan and the city of Moscow, and the least developed innovation activities in the subjects of the North Caucasus Federal District (Babich, 2017).

This rating, in our opinion, accurately reflects the state of innovative development of Russian regions' economies. Starting from 2016, 29 indicators are taken into account in this rating, which are grouped into 4 thematic blocks. The indicators of the three basic blocks – research and development, innovation activities, social and economic conditions of innovation – remain unchanged in order to track long-term dynamics in key areas of regional development. an important difference from the ratings of previous years in 2018 is the consideration of 6 qualitatively new indicators, combined into one semantic block "Innovation activity of the region" (Rating of innovative regions of Russia, 2018).

Of the seven regions of the North Caucasus Federal District (NCFD), only one is classified as a group of medium strong innovators (Stavropol Territory), two as medium weak innovators (CBD, North Ossetia-Alania, and four others – the Republic of Dagestan, Chechen Republic, Karachaevo-Cherkessia and Ingushetia – as a group of weak innovators, closing the rating. We investigate how the positions of the NCFD subjects changed in 2015-2018 according to the AIRR ratings (Table 1).

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Table 01. Rating of NCFD regions by level of innovation implementation in 2015-2018

Name of the region	2015	2016	2017	2018	Rating change
Stavropol Krai	35	32	47	34	↓– 1
Kabardino-Balkarian Republic	64	69	76	68	↓– 4
Republic of North Ossetia-Alania	70	68	67	71	↓– 1
Republic of Dagestan	67	75	80	78	↓– 11
Chechen Republic	83	82	83	80	↑+ 3
Karachaevo-Cherkessia Republic	78	81	77	81	↓– 3
Republic of Ingushetia	82	83	84	85	↓–3

Table 1 shows that only Chechnya improved its ranking during the period under review, rising by 3 positions by 2018. However, the region ranks only 80th in the ranking. The rating of Stavropol Krai – the leader in innovation in the federal district under study, which belongs to the group of medium strong innovators – despite a significant deterioration in performance in 2017 (8 positions lower), by 2018 almost returned to the level of 2015, moving down only one position. Two regions in the group of medium weak innovators – CBD and North Ossetia – took the lower places in the ranking compared to 2015, by 4 and 1 position, respectively. Note that CBD in 2017 received the lowest rating for the period under review, ranking 76th, but improved its indicators by 2018. The most significant decrease in the indicator is noted for Dagestan, which has moved from the group of medium weak innovators to the group of weak, having fallen to 78th place by 2018, which is 11 positions below the level of 2015. Negative dynamics in the rating is also observed in Karachay-Cherkessia, which took 81 positions in 2018. The indicators of innovation implementation in Ingushetia, which occupies the lowest position in the overall rating of entities, have deteriorated, although the position of the CBD in terms of innovation indicators relative to other entities of the federal district is at a relatively acceptable level, second only to the Stavropol Krai, in our view, the gap between the values of the indicators of the region taken into account in the rating and the average values of indicators in Russia is quite significant. This necessitates a more detailed study of the indicators of innovation implementation, their comparison with the values of indicators for the North Caucasus Federal District and the Russian Federation as a whole, and the development of measures to overcome this gap through the formation of a strategy for the development of innovative entrepreneurship and the tools for its implementation.

Let us analyze the dynamics of the main statistical indicators of innovation activity of the organizations of the CBD, the North Caucasus Federal District and the Russian Federation for 2015-2018, used in the preparation of the AIRR rating (table 2).

Table 02. Main statistical indicators of innovation activities of the CBD, the North Caucasus Federal District and the Russian Federation in 2015-2017 (Department of the Federal State Statistics Service of the North Caucasus Federal District), 2019)

Indicator name	Region	2015	2016	2017	2018	Growth, %
Share of organizations engaged in technological innovation in the total number of organizations, %	CBD	9.7	2.4	3.8	–	–60.8
	NCFD	4.4	2.6	2.9	–	–34.1
	Russia	8.3	7.3	7.5	–	–9.6
The share of organizations engaged in organizational innovation in the total number of organizations, %	CBD	1.2	0.5	0.6	1.3	8.3
	NCFD	1.0	0.5	0.4	0.5	–50.0
	Russia	2.7	2.4	2.3	2.1	–22.2

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Share of organizations engaged in marketing innovation in the total number of organizations, %	CBD	1.2	0.5	0.6	0.6	–50.0
	NCFD	1.1	0.4	0.5	0.5	–54.5
	Russia	1.8	1.4	1.4	1.3	–27.8
The share of innovative goods, works and services in the total volume of goods, works and services shipped, %	CBD	4.1	1.3	0.9	0.9	–78.0
	NCFD	8.9	6.4	5.8	4.4	–50.6
	Russia	8.4	8.5	7.2	6.5	–22.6
Share of technological innovation costs in the total volume of goods, works and services shipped, %	CBD	2.5	0.2	0.9	1.0	–60.0
	NCFD	1.3	1.4	1.5	0.8	–38.5
	Russia	2.6	2.5	2.4	2.1	–19.2

As it follows from the data in Table 2, over the period under review all the indicators of innovative activity of organizations – both in the Russian Federation as a whole, and in the North Caucasus Federal District and the region – decreased. At the same time, according to the CBD, the decline in indicators was the most rapid: the share of organizations engaged in technological innovation decreased by 60.8 %, the share of marketing innovations decreased by 50 %, the share of innovative goods (works, services) decreased by 78 %, and the share of technological innovation costs decreased by 60 %. The value of the NCFD innovation performance indicators is also negative, albeit less pronounced. The largest decrease in the period under review – by 50.6 % – is noted for the share of innovative products in the total volume of goods shipped (works performed, services rendered). The number of organizations engaged in innovation – technological – decreased by one third, and organizational and marketing organizations more than doubled.

It should be noted that the dynamics of indicators for the North-Caucasus Federal District is positively influenced by the region-leader in innovation in the federal district – the Stavropol Territory, which has slowed the rate of decline in the indicators of innovation activity of the North-Caucasus Federal District. It should be noted that in the Russian Federation as a whole the decrease in the indicators was less pronounced, although the negative dynamics is characteristic of the majority of the constituent territories of the Russian Federation, but it, as well as in the federal district as a whole, was leveled out by the influence of the growth in the indicators of innovation development of large innovative regions, such as the city of Moscow, the city of St. Petersburg, the Republic of Tatarstan, the Tomsk, Moscow and Novosibirsk regions. This confirms the conclusion made earlier that it is necessary to solve the problems of innovative development growth at the regional level, especially in the constituent entities of the Russian Federation, which belong to the group of medium weak and weak innovators, which includes almost all the regions of the North-Caucasus Federal District (except for the Stavropol Krai, which is a part of the North-Caucasus Federal District).

The analysis of various types of innovation activity shows that at present the priority is the implementation of scientific research and development. We investigate the change in the absolute values of the costs of research and development in the context of sources of funding and areas of spending in 2015–2017 in the region (figure 1).

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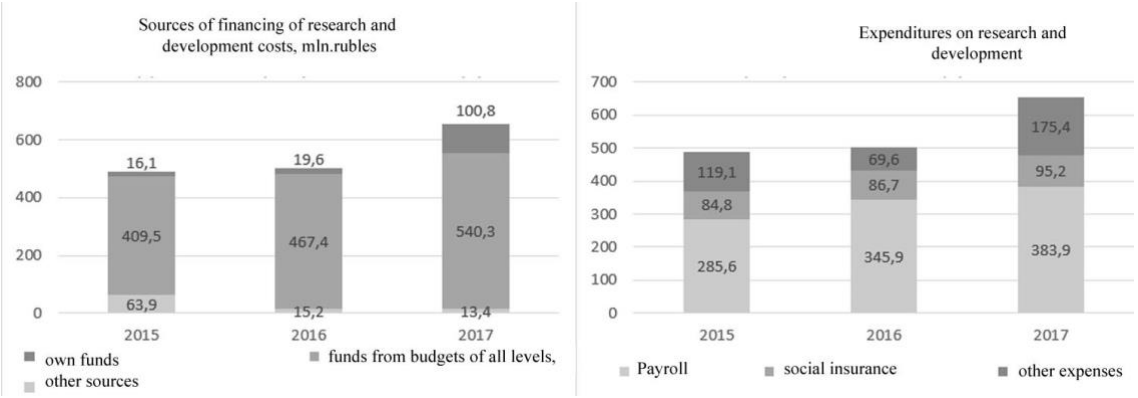

Figure 01. Dynamics of research and development costs by sources of financing and types of spending, million rubles

From the data of figure 1 it is visible that in the analyzed period dynamics of expenses for researches and workings out has been positive – the growth of an indicator has made 34 %, that is 165 million rbl. in money terms. The growth of the indicator was due to the growth of budget investments by 32 %, and the increase of more than 6 times in the value of own investments of enterprises compensated for the decrease in funding from other sources – investments of the business sector and foreign organizations, the share of which in 2017 in total was only 2 %, against 13 % in 2015. It should be noted that most of the funds raised (more than 58 %) are spent on wages and salaries, as well as allocations for mandatory social insurance (15 % of total costs), and only 27 % of the funds are spent on material and technical equipment and other needs of the surveyed organizations. In our opinion, the growth of the payroll fund in the period under review was due to the increase of the minimum wage in 2017 up to 7.800 rubles, i.e. by 31 %, which caused a proportional increase in salary costs and mandatory social contributions. It should be noted that in 2017, equipment purchase costs and capital expenditures accounted for only 1.7 % of expenses.

The management of the region's innovative development represents the most important component of the regional economic development strategy based on the system of relations between the state and municipal authorities, economic entities, scientific and public organizations, and individuals regarding the formation of a structurally balanced and competitive national economy (Alyabiev et al., 2018; Merzliakova, 2015; Rudenko, 2019). The analysis of different approaches of researchers to the construction of a regional strategy to stimulate the development of innovative entrepreneurship allowed us to highlight the organizational principles of its formation: 1) setting strategic goals and objectives in accordance with SMART technology – specificity, measurability, achievability, relevance and temporal certainty; 2) justification and definition of the necessary organizational, managerial, material and technical, financial and information resources to ensure the implementation of the strategy in general and private tasks.

In accordance with the principles set forth above, the strategy is defined as a set of goals and objectives for the development of innovative entrepreneurship in the region, including in small forms, as well as resources and new technologies through which they are implemented, and a flexible management system that ensures the achievement of goals and objectives. Taking into account the above definition of the strategy and the organizational principles of its formation, the general purpose was developed – the

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transition of the CBD to the group of medium innovators by the end of 2025 in the rating, compiled according to the AIRR methodology, the strategic targets, which reveal its main directions, as well as specific objectives and measures of the strategy implementation, aimed at the development of innovative entrepreneurship of the territory (figure 2).

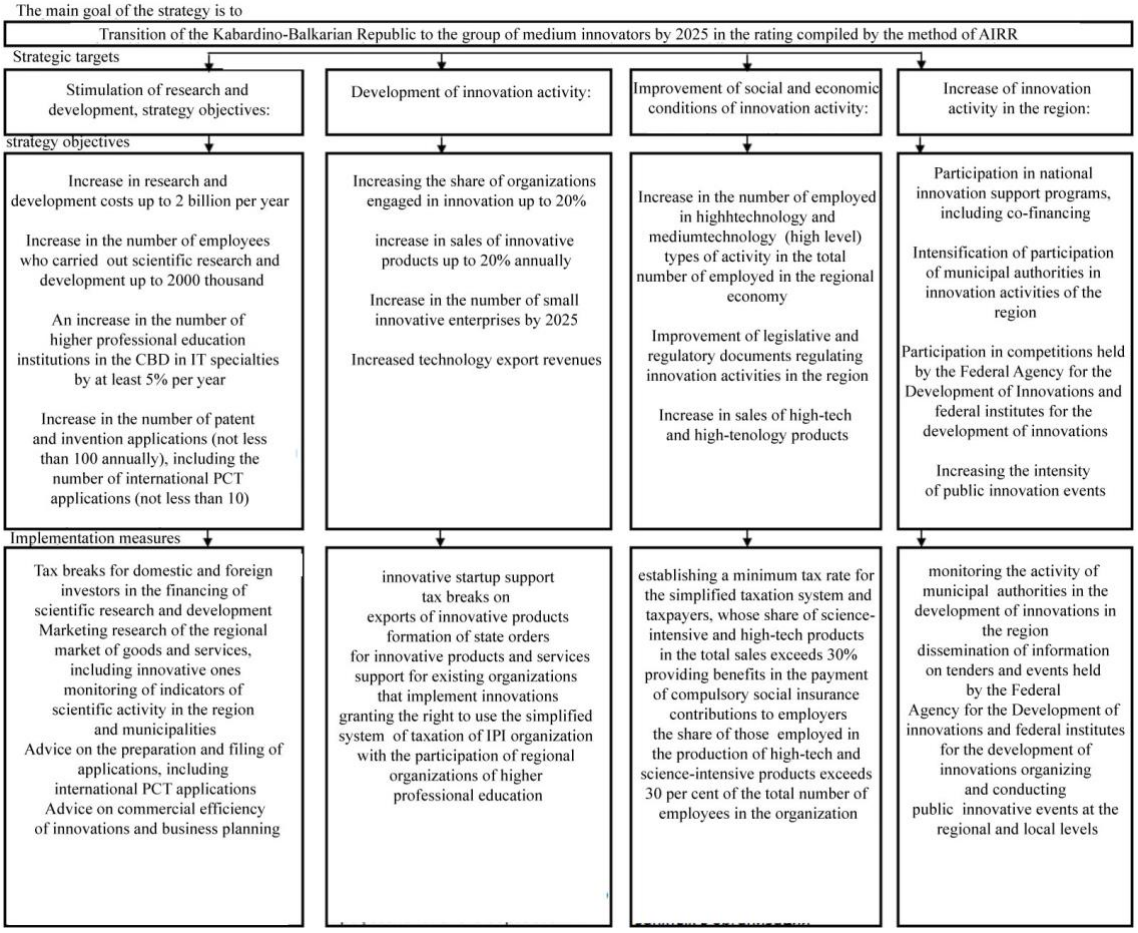

Figure 02. Strategy for the development of innovative entrepreneurship in the CBD. Stimulation of research and development

Implementation of the proposed strategy, in our opinion, will increase the efficiency of the KBR's innovative business entities, ensure the development of the territory through cartoon mesoeffects, reduce transaction costs and mobilize resources.

7. Conclusion

The analysis has shown that the proportion of enterprises that innovate is currently insignificant in the CBD and that the process of innovation creation and implementation is not sustainable. In our opinion, it is necessary to improve social and economic conditions for innovation activities in the CBD through the implementation of the proposed strategy for the development of innovative entrepreneurship, providing for the improvement of legal and regulatory support for regional innovation processes, strengthening state support for innovation and research activities, and stimulating demand for innovation; stimulating the creation and development of small and medium innovative enterprises; providing tax

benefits; consulting assistance in the preparation of patent applications, including international PCT applications and business planning.

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