Innovative-Industrial Development Strategy of the Regional Agribusiness

Bagova O.I.
The Kabardino-Balkarian state agrarian university of V.M. Kokov, Nalchik, Russian Federation

Abstract—The innovation-industrial strategy of the region’s development should be aimed at creating favorable conditions and rendering all-round support to the economic sectors for the formation of a competitive and efficient economy. At the same time, the key task is to achieve a stable and stable development of the Kabardino-Balkarian Republic through the development of diversified areas in the economy. These activities should contribute to the budgetary independence of the region, as well as creating conditions for the transition in the long-term perspective to the production of agricultural goods, able to compete in markets outside the republic. The article considers the mechanisms for the withdrawal of the regional agroindustrial complex to the level of sustainable economic growth in the context of the innovation-industrial strategy. In strategic terms, the Kabardino-Balkarian Republic is formed as a region with a competitive economy open to dialogue and cooperation with all regions of the Russian Federation, as well as beyond its borders.

Keywords—potential, region, strategy, innovation, industrial innovative program.

I. INTRODUCTION

In modern conditions, the innovative potential of the agrarian regions is seen as the main source of economic development in the context of the modern model of sustainable development.

Innovation potential of the region includes such concepts as: scientific potential, material and technical, personnel, financial, production and technical, social and economic potential of the region. In the conditions of the agrarian region, an important component of this concept is the natural and resource potential of the territory. [20].

At present, there is no single approach to the definition of the concept of “innovation potential”. A significant contribution to the study and development of the conceptual toolkit and methodological approaches in the assessment of the innovation potential of the regions was made by such scientists as JA. Schumpeter [21], D.S. Lvov [12-15], L.I. Abalkin [2], N.D. Kondratiev [5], E.A. Monastery [16-17], I.V. Kurtsev [9-11], S.V. Kochetkov [7-8] and others.

In general, we can say that the innovation potential of the region is the degree of readiness or socio-economic potential of the region to lead innovation activity, depending on its resource, scientific, personnel, financial, material and technical, technological and intellectual security. [3]

For example, the Kabardino-Balkarian Republic is a small region, with an open economy that cannot both affect the level of all-Russian prices, and even more so at the level of world prices. In this connection, for the conditions of the republic, it is more urgent to create high-tech industries, including in the agro-industrial complex, in order to protect the regional economy from the influence of external factors. [4]

In strategic terms, the system of economic relations of the Kabardino-Balkarian Republic, innovation activity should be given a key role, since its final results determine the economic viability of the region.

In connection with this, the urgent strategic tasks in the agro-industrial complex of the republic are: the development of high-tech production at the regional level; development and application of information technologies that promote the receipt of competitive products; observance of interests of regional economic security due to preservation and multiplying of the agro-industrial and scientific-technical potential of the region.

Regional authorities certainly have a more limited set of tools to effectively influence their economies, but, despite this, they should not abstract from current trends. [19]

The most important tasks of the innovation strategy for the development of the AIC of the CBD are as follows: development and practical implementation of departmental innovation and scientific and technical programs, stimulation of investment activity of the population. The solution of these problems will require a revision of the existing state system of management of innovation and industrial development. For the effective implementation of these measures, it is necessary to establish new structures, namely the Investment Fund of the Kabardino-Balkarian Republic (CBIF), the CBD Development Bank and the Regional Innovation Fund. These institutions are called upon to create a unified system whose stable functioning will be based on the principles of healthy competition and specialization.

The main task of the CBIF is to provide financial support to private entrepreneurs in the agricultural and other sectors, through equity participation in the initial capital of enterprises, both in Kabardino-Balkaria and abroad. The CBIF should work in cooperation with the CBD Development Bank. These two structures should interact both in work on the allocation of initial capital, and in financing projects, by lending. The innovative and industrial development strategy of the CBD assumes...
the provision of financial support to the subjects of agriculture and the agro-industrial complex, in particular. The forms of support envisage the creation of new key products with reduced payback periods for the planned export-oriented projects. This direction is the locomotive of the industrial-innovative program that can be implemented in the short term by implementing the core positions of the Republican target program "Development of agriculture and regulation of markets for agricultural products, raw materials and foodstuffs in the Kabardino-Balkaria Republic for 2014-2020" [1]. These positions are the main criteria for applying the industrial-innovative program, which can be activated through the appropriate development of the AIC. In this regard, the agrarian policy of the CBD should be aimed at creating conditions for the development of healthy competition, as the main tool for self-regulation of the market economy.

The action plans for the implementation of this strategy should take into account the regional features at each stage of the innovative development of the CBD and provide for specific activities to implement the strategy. At the same time, it is understood that the main and the main directions of industrial development are to develop separately sectoral programs, where their terms of implementation and executors will be determined, as well as the proposed volumes and sources of funding for program activities, broken down by year.

The mechanism for implementing the strategy involves participation in the development of programs not only for organizations engaged in scientific and research activities, but also for other organizations, regardless of their forms of ownership and departmental subordination. Within the framework of the proposed program, the necessary amount of financial resources should be calculated, as well as their sources. Our point of view boils down to the fact that the bulk of the financial burden will fall on the agricultural producers themselves. Presumably, the ratio of participation of public and private capital should be 1 to 3. The development of the scientific and technical potential of the industry is impossible without active involvement of agricultural producers in the investment activity. [6]

The measures being developed by the state authorities both at the federal and regional levels, within the framework of the specified strategy of innovative development, do not find support at the level of agricultural commodity producers. The main problem is that often enterprises are not interested in innovations, or, as a result, lack of financial resources, professional qualities or simply getting used to work "in the old-fashioned way". To change the situation, one needs motivation, one hundred government bodies (in the form of privileges and preferences), as well as demonstration of the positive experience of enterprises that have taken an innovative path of development of their production. Further we will consider in more detail similar examples within the framework of the republic. [18]

At present, there is no clear system of indicators allowing quantitative assessment of the scientific and technical potential of the region and the effectiveness of innovative activities of agricultural producers, there are only all possible authoring techniques, one of which we would like to look at the example of the Kabardo-Balkarian Republic.

In his works, the academician of the Russian Academy of Agricultural Sciences, Kurtsev I.V., considers as an indicator characterizing the scientific and technical potential of agrarian territories - the ratio of the amount of material inputs of crop production and/or livestock production, as well as the depreciation of machines and equipment per employee employed in agricultural production. [9] Let us represent this relation in the form of a formula characterizing the scientific and technical potential of the agrarian region (scientific and technical potential of the agro-industrial complex):

\[
\frac{\text{Material costs of crop production} + \text{Material costs of animal husbandry} + \text{amortization of equipment}}{\text{average annual number of workers engaged in agricultural production}}
\]

In our opinion, this indicator is informative and justified, due to the following factors:

First, in the agricultural production the level of material costs is largely determined by the technological process of agricultural production:

- in plant growing: what kinds of seeds are used, fertilizers, plant protection products, etc.;
- in animal husbandry: animal breeds, feed and additives to fodder, veterinary preparations, etc.

Material costs also include costs associated with protecting the environment and others. If an increase in the indicator is observed under this expenditure item, then it can be concluded that the technological process of agro-industrial production is innovative.

Secondly, the inclusion in the calculation of depreciation charges testifies to the use of machinery and equipment in agro-industrial production, and, as is known, innovative activity is inextricably linked with the use of technology, i.e. with the maximum mechanization of the production process.

Thirdly, the use of the indicator of the number of workers employed in agricultural production in calculating the scientific and technical potential of the agroindustrial complex is also, in our opinion, justified, since any innovation process is necessarily connected with the replacement of manual labor with machinery and, as a consequence, employed in production.

Consider the above indicator for assessing the scientific and technical potential of the AIC of the CBD, as a research base, agricultural producers in all regions of the republic were considered. Depending on the index of innovative activity of agricultural producers calculated according to formula 1, they were divided into four groups. As indicators characterizing the effectiveness of the activities of the farms in question, the following was accepted: revenue per 1 ha of arable land and revenue per employee (Table 1).

The data in Table 1 reflect the direct dependence of the indicator of scientific and technical potential and performance
indicators of agricultural organizations. As you can see, poultry farms are singled out as a separate line in this analysis, this situation is explained by the fact that this category of farms is the most active in the field of innovations in the republic, which is also confirmed by the calculation carried out.

| Groups of agricultural and food producers on the basis of innovation activity | Number of farms in the group | The estimated value of the indicator of scientific and technical potential for the group | Revenues from sales for 1 hectare arable land | At 1 employee |
|---|---|---|---|---|
| Group I: | 19 | up to 100 | 3.4 | 134 |
| Group II P: | 28 | from 100 to 170 | 3.4 | 137 |
| Group III: | 15 | from 170 to 240 | 6.6 | 232 |
| Group IV: | 13 | over 240 | 18.1 | 520 |
| Poultry farms | 8 | over 420 | - | 574 |

II. CONCLUSION

Thus, the experience of innovatively active organizations of the agro-industrial complex of the republic shows that innovations in the technological process significantly improve the efficiency of agricultural production.

The conducted research allows to draw some conclusions, the main goal of the innovation-industrial strategy for the development of regional agribusiness, in particular, the agro-industrial complex of the CBD, is the creation of potentially competitive agricultural production facilities focused on exporting products. However, the practical implementation of this strategy, in addition to the efforts of the state, is impossible without the participation of the agricultural producers themselves, namely their financial participation. As a result, the calculation shown above can serve as a motivational impetus for increasing the realization of scientific and technical potential at the level of individual farms, and as a consequence of this at the level of the economy of the region as a whole.

REFERENCES

[1] State program «Development of Agriculture and Regulation of Agricultural Products, Raw Materials and Food Markets in the Kabardino-Balkaria Republic» for 2014-2020

[2] Abalkin L.I. Soviet economy: a new quality of growth: Proc. allowance. For the system polit. Study – M.: Politizdat, 1988.

[3] Agarkova L.V. Innovative and investment design of sustainable development of agribusiness // Economics and management: problems, solutions. 2018. T. 2. № 1.

[4] Ankeeva N.V., Ivanov N.P. Regional aspect of the development of the food and processing industry: an innovative approach // Economy: yesterday, today, tomorrow. 2017. T. 7. № 1.

[5] Kondratiev N.D. Large cycles of conjuncture and theory of foresight - M: Economics, 2002

[6] Kazihanov A.M. Problems of innovative development of agro-industrial complex of the region // Bulletin of Dagestan State University. Series 3: Social Sciences. № 5, 2015.

[7] Kochetkov S.V. Management of development of innovative potential of industrial enterprises / Abstract of the dis. Dr. econ. Sciences: 08.00.05: SPbGUEF. - St. Petersburg, 2011

[8] Kochetkov S.V., Kochetkova O.V. Integrated use of the innovation potential – the basis for the development of Russian industrial enterprises // Bulletin of the Samara State University of Economics. 2008. - No. 7 (45)

[9] Kurtsev I.V. System principles of sustainable development of agriculture // Innovations № 13, 2008.

[10] Kurtsev I.V. Tasks and ways to improve innovative processes in the agro-industrial complex. In the collection: Strategy of innovative development of agribusiness of Siberia materials of the International scientific and practical conference. Russian Academy of Agricultural Sciences, Siberian Branch, SSI Siberian Research Institute of Agricultural Economics. 2009.

[11] Kurtsev I.V. Ways of innovative development of agrarian and industrial complex of Siberia // Agribusiness: Economics, Management 2010. № 9

[12] Lvov D.S. The fundamentals of the economic design of machines. - M: Economics, 1966.

[13] Lvov D.S. Effective management of technical development - M.: Economics, 1990.

[14] Lvov D.S. and others Measuring the efficiency of production: the example of automotive industry. - M: The Economy, 1974.

[15] Lvov D.S. The economic theory of scientific and technological progress. - M.: Nauka, 1982

[16] Monastery E.

[17] A., Spitsyn V.V. The optimality of the proportions of the innovation systems of Russia and the regions // Innovations № 5 (199), 2015

[18] Monastery E.A., Saklakov V.M. Investment models of development. Inflow and outflow of foreign investment in Russia // Innovations № 10 (204), 2015.

[19] Ososvin M.N. Priority directions of scientific and technical development of agribusiness: the current state and possible growth points // Проблемы современной экономики. 2017. № 2 (62)

[20] Ulezko A.V., Reimer V.V. Formation of the mechanism for the implementation of the innovative scenario for the development of regional agribusiness // Economics of Agriculture in Russia № 2, 2016.

[21] Shmakov V.S. Innovative development potential of Russian agriculture // Siberian Philosophical Journal. 2017. T. 15. № 2.

[22] Schumpeter J. A. The theory of economic development (Study of entrepreneurial profit, capital, credit, interest and cycle of conjuncture). - M: Progress, 1982.