

# Drivers of Innovative Growth of Regional Agro-Industrial Complex

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## ABSTRACT

The relevance and significance of the research topic are predetermined by the need to ensure factors for creating a system of food security in the Russian Federation, preserving the traditional way of life in the field of agriculture, increasing the share of products with a high share of added value in the agro-industrial complex (AIC). The innovative way of economic development is now becoming an alternative to Russia. And this is doubly important for the agricultural sector. Because the profitability of production here, as a rule, is much lower than in other industries, costs pay off many times slower, and the intensity of labour and energy often do not stand up to any criticism. It is a small business (in the face of farming) that should become, according to the authors, the trigger for the development of innovative processes in the field, which will allow in the future to receive multiplicative and synergistic effects from the competent and rational investment of assets. In this context, a group of scientists analysed existing experiences of best practices at the Kaluga region's regional agricultural enterprises: companies "Molokograd" and LLC "Green lines-Kaluga" are determined the vectors future trends in agriculture. Among these areas, gastronomic tourism and eco-tourism are seen as the most promising.

**Keywords:** *Agro-industrial complex (AIC), Region, Innovation, Ecology, Profitability, Strategy, Tourism.*

## 1. INTRODUCTION

Today, in almost all post-industrial countries, the managerial emphasis is increasingly being shifted to not so highly profitable areas as to projects with a high environmental component. First of all, this applies to the system of the agro-industrial complex (AIC).

The new values of society, as practical experience shows, have become well-forgotten old ones. These are the categories of health, longevity, well-being, harmony with nature. For example, in Japan, the unprofitable agricultural sector is quite generously supported (subsidised) by the state, as "a traditional reproduction branch with an important mental meaning". The country returns up to 20% of the costs to farmers in the United States. Almost half of the expenses of entrepreneurs engaged in gastronomic tourism are borne by the Italian authorities.

There is no such level of support in Russia today (and it is not expected soon). Also, domestic agricultural enterprises are in much worse credit conditions than their Western counterparts. But the percentage of natural risks they have is not an example of more.

Therefore, Russian science's main task is to find those drivers that could accelerate positive processes' dynamics. This is the search for reliable partners in financial support, the development of new non-traditional areas of the agricultural industry (gastronomic tourism, eco-tourism), and innovative tools and models to improve the product line.

It is assumed to take as a basis the meso level structure (on the Kaluga region example). There are already positive empirical developments in this direction, which have quite broad generalising values. The corresponding adaptation mechanism will allow using the developed algorithm in almost any of the Russian Federation subjects.

## 2. RESEARCH METHODOLOGY

The article's scientific basis is the dialectical method and a set of economic research methods combined with system, situational and process approaches to studying this problem.

## 3. ANALYSIS OF STRATEGIC MANAGEMENT IN THE AGRO-INDUSTRIAL COMPLEX OF THE KALUGA REGION

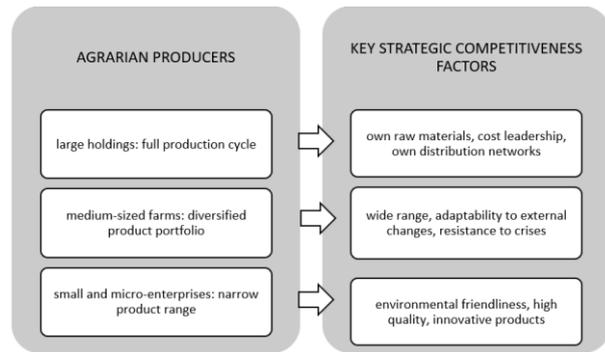
The relevance of the quality and living standards' significant improvement of a most of the Russian population, consumer demand's growth, the need for food security and independence of the state formulate, as a priority, intensive development of an agro-industrial complex in Russian regions based on the formation and effective implementation of innovative processes. The solution of this problem is necessary first of all because in the formed economic realities a significant share of agricultural products is still produced on outdated equipment and worn-out fixed assets, with the use of manual labour of low-skilled workers.

Also, it should be noticed that some Russian agricultural producers who are not part of large agro-industrial holdings, due to the low marginality of their products and high business risks in this area, do not have the opportunity to use modern technologies and implement the scientific achievements and technological progress in their daily practice.

In these conditions, to preserve not only large agricultural holdings in the state economy but also smaller enterprises, as well as to form a rational proportion between large, medium and small enterprises in the agricultural sector of Russia, small businesses in agriculture need to consider their competitiveness in the market as a management priority.

Medium-sized agricultural enterprises should adopt strategies for forming a diversified portfolio of activities, which will include, among other things, products (services) of an innovative nature. Such a portfolio proved to be most effective in economic crisis conditions when the highest risks are exposed to agricultural products' single-product production (figure 1).

With the innovative development of the agro-industrial sphere, product processing problems always come to the fore for any activity scale enterprises. This production cycle must be performed with high quality and lowest cost. One example of this vector's development in the Kaluga region is the "Molokograd" company, which produces products such as milk, butter, cottage cheese, various types of cheeses, and Indian sweets.



**Figure 1** Competitiveness factors of agricultural producers (developed by the authors).

"Molokograd" products are sold in more than 30 stores in Kaluga, in regional retail chains and in local city markets, where a full range of fresh products is always available in specialised branded outlets. The company continually conducts tastings of its products and new products, participates in food exhibitions and fairs.

A diversified business portfolio of medium-sized agricultural enterprises can be formed from these companies' activities in such essential areas as field farming, animal husbandry, horticulture, vegetable growing and beekeeping. In these sectors, various scientific developments and research, which act as an essential element of innovative development in the agricultural sector, have resumed.

An enterprise can be cited as an illustration of such a diversified portfolio: limited liability company (LLC) "Green lines-Kaluga". Over the past three years, there has been a large-scale increase in land resources, sown areas have increased many times and today amount to more than 12,000 hectares. The farm has identified three main strategic areas of field production: feed, grain and rapeseed production, processed on its production lines. In 2018, there was a large-scale construction of new facilities that provide efficient life under the increased capacity, particularly the construction of a new Elevator, storage facilities, and repair shops for year-round use. The structure of energy supply, pump stations, gas distribution facilities of roads, etc. was developed. This was made possible by capital investments and the results achieved in field production – obtaining high yields and volumes of products.

But no diversification on the path of innovative development can exist without providing financial resources. One of the strongest players in the local market is the Kaluga regional branch of PJSC "Rosselkhozbank" (RSHB). There is an agreement between the "Rosselkhozbank" and the Ministry of Agriculture of the Russian Federation on preferential lending to farmers, not exceeding 5%. "Rosselkhozbank" was the first to conclude this agreement with the Ministry of Agriculture of the Russian Federation. The mechanism significantly

simplified the process of obtaining subsidised funds and reduced the time to obtain a loan.

PJSC "Rosselkhozbank" is also altogether provides funding in this direction in the Kaluga region. Quarterly, the Bank considers on average more than 30 applications for financing under concessional lending and issues loans to agricultural enterprises at a rate of less than 5% for a total amount of about 600 million roubles.

Thanks to this, the Bank's position in the Kaluga region's economy as a whole is strengthened. Among the priorities and the agricultural sector – are industrial, construction and several other areas.

The regional government also creates unique industrial sites to construct new production facilities, where the investor can get a plot with the primary communications connected to it and where significant benefits are provided to him [2].

#### 4. DRIVERS OF INNOVATIVE DEVELOPMENT OF THE AGRO-INDUSTRIAL COMPLEX OF THE KALUGA REGION

It is strategically short-sighted to ignore such a factor as the Kaluga region's territorial proximity to Russia's largest consumer market – Moscow and the Moscow region. In the process of achieving the goal of increasing the competitiveness of agricultural enterprises in the region, it is possible to identify areas (industries) of activity that can act as drivers of rapid innovative development (figure 2), which at the present stage include the production of agricultural products with unique characteristics. These environmentally friendly products find constant sales in the market, and the organisation and development of agronomic and gastronomic tourism mainly focused on consumers from Moscow and the Moscow region.

The most critical innovative factor in the development of the regional agro-industrial complex was the stimulation of forming a system of rural tourism. The practice has confirmed the correctness of the chosen course – today, this type of non-core activity of the rural population brings a stable income. Moreover, the development of tourism provides a multiplicative effect of sustainable, integrated development of rural areas. Simultaneously, the share of rural tourism in Russia's total volume of tourist services remains relatively low. Following the concept of rural tourism development in the Russian Federation, as of 2015, it was estimated at 2% in domestic tourism. In 2019, the share of rural tourism remained low, at 6% [7]. This suggests that numerous eco-farms, ethnic parks, rural guest houses and so on exist today in the "grey zone". Amendments to the legislation will allow to withdraw them from there and make agrotourism a driver of the rural economy. Currently, there are practically no measures to support

agrotourism. The Ministry of Agriculture of the Russian Federation began developing measures for the development of agrotourism in the Russian Federation in 2020, and in 2021 it expects to support agricultural producers who will be engaged in rural tourism.

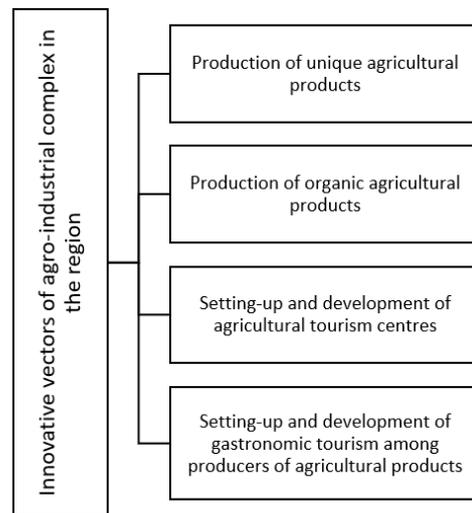


Figure 2 Vectors of innovative development of the agro-industrial complex of the region (author's development).

As practice has shown, geographical clustering policy can contribute to regional economic growth and increase the competitiveness of small and medium-sized enterprises [11]. The Kaluga region's socio-economic development strategy until 2030 includes tourism and recreation among the seven main potential clusters. One of the twelve priority projects is forming an inter-regional tourism brand. Based on the need for state support, the priority direction of tourism development in the Kaluga region is agricultural tourism [8].

The tourism cluster is one of the most promising, because the Kaluga region is a historical territory, where more than 50 exciting museums are located, and tour operators have developed more than 130 routes around the region. [6]. The region has a rich cultural potential, which can be used, among other things, for the development of the regional agro-industrial complex, because according to the research of Simon Anholt cultural relations are a provably effective form of territorial branding [12].

In the domestic and inbound tourism of the Kaluga region, agricultural tourism is practically not developed. This is mainly due to external factors, such as politics, economy, transport communications, etc. There is certain inertia of the participants of the tourist market of the region themselves. Research conducted by tourism organisations in the Kaluga region showed that only 17% of companies use strategic management tools to implement innovative business changes [9]. It is impossible to ignore the approach of an era when the role

of strategic marketing is increasing due to increasing market pressure. But the strategy can be useful not only when focusing exclusively on systematic studies of customer behaviour, but only when the entire management system of the organisation is fully involved in it [10].

The state supports this area's development — the law on environmental products was adopted, which came into force on January 1, 2020. However, according to the owners of rural tourism facilities, including rural guesthouses, display facilities, etc., the mechanisms for supporting agrotourism, as already mentioned, are still insufficient in Russia, and the existing ones are usually opaque [4]. For example, in Italy, the number of so-called gastronomic hotels in which tourists can taste local dishes prepared at them is estimated in the thousands. This was achieved thanks to a simple and understandable mechanism: if an investor builds a hotel for agrotourism, 50% of the costs are returned to him by the state.

Another obstacle in the way of agritourism is the land question. The fact is that travellers need to bring somewhere, organise a Parking lot for their transport, build a restaurant, a guest house. That is, to create a tourist complex. Meanwhile, according to the law, any construction is prohibited on agricultural land.

However, a compromise regarding the use of land for guest houses can still be reached. About guest houses, progress is possible if the legislation will develop strict criteria for what they should be (that is, they should be used only for agrotourism) and requirements for their safety and reliability. All this should be consistent with the General requirements for the quality of such services as agrotourism.

The issue of permission for the construction of guesthouses can be resolved at the level of regional legislation. The construction of tourist facilities can be included in an investment project to develop rural areas approved at the regional level and then receive co-financing from the Federal budget.

Thus, the driver of the development of agriculture in the Kaluga region can be the formation of a sectoral complex of agricultural tourism, which would contribute to the improvement of both the material situation of villagers and the development of social and household infrastructure in rural areas, because the meaning of all transformations is the socially oriented growth of the region's economy. We can agree with O. K. Tsapieva's opinion that the critical value of the territory's development is people's quality of life, directly related to the economy's efficiency based on the natural and recreational local resources [5].

Innovative development of the agro-industrial complex is a type of economic development; the main factor is innovation due to innovative activity [3]. According to A.I. Tatarin, the focus on innovation in the

competitive struggle seems more promising today than solving other strategically essential business issues. Ultimately, the competition is won by those market participants who take an attacking position in the innovation war. The fact is that no matter how high the risk of innovations is, the inability to implement them creates an even greater risk [1].

## 5. CONCLUSIONS

During the study was concluded that innovative development of the agricultural sector in the region is possible only on a complimentary basis when the agro-industrial complex system (AIC) includes not only traditional areas (grain, dairy, vegetable growing, etc.) but also newly created ones (agricultural tourism, ecotourism, gastronomic tourism). The development of the first of these areas and the creation of the second requires significant resources. First of all, financial resources. Therefore, it seems necessary to strengthen the component of public-private partnership in this direction in terms of repayment of individual tranches at the expense of budget funds and the provision of state guarantees.

Another necessary step to improve the program's program and target support is to improve the program and target support. At the level of Legislative assemblies of individual regions, it is possible to develop and precisely adopt those by-laws and regulations that will contribute to the formation and development of the starting stages of gastronomic and ecological tourism. By the way, this is where the main adaptation contours of the model for the introduction of Kaluga best practices in other regions are seen. After all, each of the Federation's subjects' trends may differ significantly from each other, and here, as corrective measures, local legislators should have their say.

And one more conclusion suggests itself unambiguously. For a high dynamic effect, it is necessary to develop the cooperative movement in every possible way. It is necessary to create various associations and unions of farmers, which become pioneers of the agricultural industry's innovative renewal. This will contribute to the transfer and borrowing of best practices and a "sense of elbow", confidence in your future.

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