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# INNOVATIVE ACTIVITY AS A FACTOR FOR IMPROVING COMPETITIVENESS OF AGRICULTURAL ENTERPRISES

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#### Abstract

The article deals with the issues of the influence of the business entity's innovation activity on the state of its competitiveness in the agro-industrial complex. The essence of innovative activity of agrarian enterprises in agroindustrial complex is highlighted, its features and key differences are revealed. The economic essence of innovation and innovation by different scholars is considered. The ways of increasing the competitiveness of agricultural enterprises through the prism of the systematic introduction of innovations under the market economy system in the conditions of globalization are described. The factors contributing to the development of the introduction of innovations in the enterprise and those that impede or prevent the introduction of innovative technologies in the production and processing of agricultural products and the development of the management system and its individual components in the enterprise are analyzed, which in turn directly or indirectly affects efficiency of the business entity in the market in conditions of high competition. The problems of the external environment affecting the introduction of innovative technologies at small and medium enterprises, in particular at the state level, are described in the part concerning the introduction and development of an effective mechanism for stimulating the development of innovation activity at the enterprises of the agro-industrial complex. Considerable attention has been paid to promising directions of innovation development in the part of increasing the competitiveness of the enterprise, namely, the focus is on the development of environmentally safe innovations in the context of the concept of sustainable development and taking into account the negative influence of the management of a highly intensive method of cultivating crops and, accordingly, in this regard, improvement of the investment climate both in the agro-industrial complex as a whole, and in the field of ecologically safe technologies in particular.

**Keywords:** innovation, innovation activity, agrarian enterprises, agro-industrial complex, agriculture, balanced development, competitiveness.

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**Problem statement.** On the present stage of development of the agro-industrial complex of Ukraine, in the conditions of high competition, the key value in the context of ensuring the efficient functioning of the enterprise in the market, is acquiring the introduction of new technologies, which reduces the cost of production on the one hand and increases the efficiency of production and increase market share on the other. In modern realities of the Ukrainian agro-industrial sector, an intensive method of agriculture prevails, which is negatively reflected in the ancient agricultural ecosystems, and the main resource is land and its above and, as a rule, the obtained results.

Considering these factors causes companies to change their marketing strategy to a greener environment through the introduction of innovations in both production and business unit management approaches. After all, the achievement of market leadership is possible only under the conditions of better technologies than competitors, which create not only production advantages and change the attitude of consumers to the brand and the company as a whole in the context of meeting their consumer needs. That is why the problem highlighted in this study is relevant.

Analysis of recent research and publications. The issues of innovation and its impact on the efficiency and competitiveness of enterprises in agriculture are still being studied. Scientists such as I. Budnichevich, V. Andriychuk, O. Vysochan, I. Vinichenko, G. Saranchuk, O. Datsi, O. Kot, L. Rybina, S.V. Koliadenko [12], I.Yu. Salkova [16] made a significant contribution to the study of innovation problems in the agro-industrial sector of the economy and other.

The purpose of the article is to study the impact of the innovation activity of enterprises in the agro-industrial complex on the state of their competitiveness and to identify basis ways to ensure their effective functioning, increase the competitiveness of these enterprises through the systematic implementation of innovations in the market economy in the context of globalization.

Presentation of the main material of the research. The implementation of the modern technologies and the results of scientific and technological progress plays an important role in the development of the agro-industrial complex of Ukraine. Innovation is a means of improving the efficiency of production, as well as the adaptation of enterprises to changes in the social, economic and political environment.

Based on the literature, we believe that innovation is the end result of an innovation that is realized as a new or improved product that is used for further implementation in practice, and also is the result of the introduction of innovative developments in the market, that is, the invention proven to the stage of commercial use

- a product or goods, when they begin to produce economic effects.

Characterizing the importance of innovation for enterprises, it is worth noting that innovation processes provide optimization of organizational forms of interconnections, contribute to the development of infrastructure in the enterprise system and become the basis for the formation of effective motivational mechanisms for their further functioning in the market [3].

Speaking about the innovation system in the agroindustrial complex, it is worth noting that its formation occurs under unfavorable conditions (insufficient provision of scientific sphere with modern logistical resources, lack of information support, loss of highly skilled workers, etc.).

Currently, most domestic agribusinesses have difficulties in the context of supplying high quality, and most importantly, competitive products to the domestic market, and particularly acute problem is when it comes to entering foreign markets. The problem of this is such negative phenomena as: outdated machinery, inequality of prices for products of industry and agriculture, constant increase in prices for fuel and lubricants, imperfect credit and financial system and legal framework, etc. Thus, there is a need to refocus existing public policy on a highly effective innovation model [2].

Under the innovative model of improving the efficiency of the economic system we mean a system of measures that are aimed at solving a number of problems in the middle of the system, in order to implement a strategy to improve the performance of subsystems.

Using the principles of systemic approach [12], namely the sequential transition from the general to the partial, where the consideration (competitiveness enhancement) underlies the consideration, that under the innovative model of increasing the competitiveness of the enterprise is understood a set of interconnected measures aimed at creating and disseminating innovation. (products or technology) to increase the competitiveness of the enterprise.

In the context of our research, it is worth noting that the concept of enterprise competitiveness is complex and highly ambiguous. The concept of competitiveness of an enterprise is interpreted as its ability not only to produce high-quality products that meet the requirements of the market in a certain period of time, but also to ensure its commercial success on the basis of internal and external competitive advantages of the enterprise, formed by intensifying its innovative activity, efficient use of innovative, personnel and production capacity. First of all, competitiveness is based on the priority development of intellectual and innovative resources of the enterprise [3].

In fig. 1 schematically presents an innovative model of competitiveness enhancement that reflects the interdependence of the main goal and the private tasks that need to be addressed.

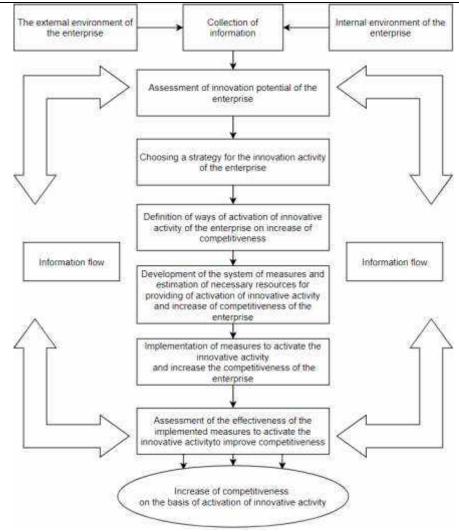


Fig. 1. Innovative model of enterprise competitiveness

Source: compiled by the author based on data [3].

In the condition of globalization, an innovative model of competitiveness enhancement cannot be effective only with technological upgrading of the resource and material base and structural restructuring of the economy. It involves the transfer of the vector of development from traditional scientific and technological solutions to the using of fundamentally new progressive technologies that affect the processes of socioeconomic development of the progressive countries of the world. That is why the widespread use of innovations is the most effective and efficient way of solving the acute socio-economic problems of the agricultural sector, related to finding mechanisms to increase the economic performance of agricultural enterprises and provide high quality agricultural products to the population [11].

Innovative development of this sector of the economy means its qualitative reforming, based on the growth of production indicators while improving the socio-economic mechanism of agriculture, as well as interconnected industries. This process should ensure the continuous use of more improved technologies for the production and processing of agricultural products, new varieties of crops and animal species, progressive models of socio-economic development, modern models of information technology [4].

Formation of effective innovative development is a way based on deepening of the combination of the goals of the agro-industrial enterprise, its subsystems, the goals of each individual working in the team, improvement of its activity, improvement of business processes to achieve the overall strategic goals [16].

Innovation is an important component of improving the efficiency of agricultural enterprises. Its effectiveness depends on the professional level of scientific staff and specialists of agricultural production. Although the great innovative potential of agrarian science, it is underutilized and is lost every year. Modern problems of functioning of agricultural enterprises are caused by economic discrimination, lack of necessary preventions and state measures for overcoming the consequences of the economic crisis. Innovation policy should ensure the sustainable development of economic entities on the basis of the organization and management of innovation activities of agricultural enterprises [12].

The role of the innovative factor that is constantly growing and the associated intention to get a reasonable time expected economic effect makes it difficult to count on the situation that has arisen in the agricultural sector with the introduction of the latest scientific developments and their widespread use. In order for the

innovative development of the agrarian sector to produce the expected results, a full support is needed that will allow to change the inert and even regression nature of this process. And this should apply to all areas of active and efficient innovative development of the agricultural industry [9].

Since the mid XX century. Innovative component of the economy makes it possible not only to accelerate national development, but also to increase the standard

of living. In this regard, there is a need for the immediate development of an innovative, high-tech component of the economy and intensive development of programs to promote innovation [10].

One of the indicators that characterizes the competitive innovation system is the global innovation index (fig. 2). The Global Innovation Index is a rating global survey of the innovative climate of countries.

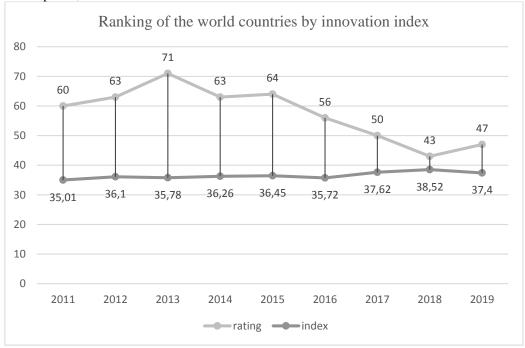


Fig. 2. Dynamics of the Global Innovation Index of Ukraine

Source: [18]

As you can see, the innovation index is 37.4, the rating data indicate a number of problems that do not allow to effectively realize the innovative potential of Ukraine.

Efficiency and dynamic areas of innovation have become decisive factor in ensuring economic competitiveness and largely determines the position of each country in the world. There are many problems in Ukraine that do not allow it to use its innovative potential effectively: low level of financial support for the innovation sphere; uneven distribution of innovations by region; inefficient use of existing scientific potential; lack of a proper base and compliance with international standards for the legal protection of intellectual property.

To improve the efficiency of enterprise innovation management of its activation should be carried out based on the totality of scientifically based principles. In order to maximize the effect of activating innovation, it is necessary to constantly develop and improve the methodological base.

The impact of innovation on the level of competitiveness of agro-industrial enterprises in today's globalization is constantly becoming important. First of all, because the main purpose of the enterprise is not only to be competitive with other enterprises, but also to constantly upgrade each stage of its own production. This goal can be achieved only if the innovation intensity is high, because through constant updating of production capacities, it is possible to respond to changes in consumer needs, scientific and technical aspects and the market as a whole in a timely and minimal cost. Competitive advantage is given to those market participants who take an active role in the use of innovation. The impact of innovation on the formation of system competitiveness is shown in figure 3. [5].

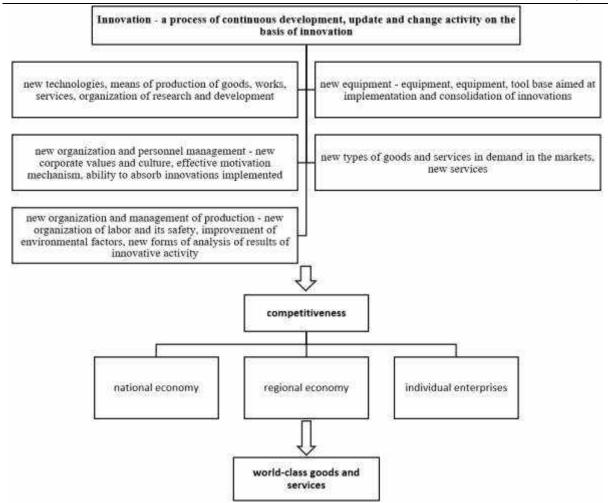


Fig. 3. The impact of innovation on the formation of the competitiveness of the system Source: created by author based on processed sources.

Therefore, innovation and the level of innovation activity are the most progressive factors affecting the competitiveness of the national economy. By classic definition, innovation is an activity aimed at utilizing and commercializing research and development results and leading to the launch of new competitive goods and services.

However, innovative processes in the agro-industrial complex have certain features. They differ in the variety of territorial, natural, sectoral, technological and organizational features. In particular, innovation in the agro-industrial complex is a type of innovation that is introduced to increase the efficiency of its activities and to ensure stable expanded reproduction of agro-industrial production. This is achieved through the introduction into business practice of the results of research and development in the form of new varieties of plants, breeds and species of animals and poultry, new technologies in plant production, livestock and processing industry, new fertilizers and plant and animal protection, new methods for the prevention and treatment of animals and poultry, new or improved food, materials, new forms of organization and management of various sectors of the economy, new approaches to social services that can improve production efficiency [1].

Thus, innovation is a set of economic, technical, legal, social measures related to the development, implementation and use of innovation, with the aim of achieving certain economic and / or social effects [7].

The innovative processes in agriculture are directly influenced by the features of agricultural production. Since land is a major factor in agricultural production, production has a number of specific features compared to other industries, in particular:

- close connection with the reproduction of living organisms;
  - seasonal nature of production;
  - high level of occurrence of natural risks, etc.

Due to this, these specific features innovations implemented in agricultural enterprises other than listed above are also the duration of preparatory phase. The key role of research institutions in the process of innovation development is to take into account the natural and climatic conditions and the factor of territorial peculiarity of a particular region.

In general, it is considered that innovation requires the involvement of only financial resources - monetary relations with other entities and banks for the payment of scientific and technical products, supplies of equipment, materials and components, payments to customers, labor collectives and government bodies, etc. [4]. However, in agreement with the opinion of some scientists, we believe that the pursuit of innovation requires the involvement not only of financial resources, but also fixed and current assets, property rights and intangible assets, loans, loans and mortgages (debt), land tenure and land use, etc. [2].

In this regard, as I.V. Kachova rightly points out, that the domestic agrarian sector has considerable land and labor potential, but its effective implementation requires strengthening of material and technical base, replacement of existing resource-intensive and labor-intensive technologies with material-saving, energy-saving and labor-saving [9]. Only the activation of innovative processes and economic development will be able to ensure the formation of efficient, resourcesaving, and in the current state of agricultural resources - environmentally friendly agriculture, able to meet the needs of the internal market and ensure the competitiveness of enterprises of the domestic agro-industrial complex in foreign markets.

Unfortunately, at the present stage, Ukraine is in a crisis and under conditions of low investment attractiveness. This situation requires a clear definition of the perspectives and directions of innovative development of the agricultural sector. Ukrainian agriculture has low productivity and resource efficiency performance compared to that of developed countries in terms of balancing income and reducing or counteracting destructive environmental impacts. This indicates a limited and inefficient use of existing potential, or, in some cases, de facto complete destruction of agricultural land and consequently a loss of it as a major productive resource [4].

In addition, important problems are: the lack of transparent legislation that would create the conditions for regulating the relationship between entities engaged in agro-industrial complex; inability to obtain cheap credit from farmers or other small entities; use of outdated fixed assets; low level of information support of economic entities in the modern scientific world heritage in the field of agricultural production; the lack of state support and mechanisms to encourage innovation in agriculture; lack of development of village infrastructure [6].

These factors adversely affect the activity of modern agro-industrial enterprises of Ukraine, manifested in the increase in the value of agro-industrial products, and its quality. Under such conditions, without the improvement of the investment climate both in agriculture and in terms of innovation in particular, the development of enterprises of the agro-industrial complex is impossible.

For the effective development of the agro-industrial complex of Ukraine it is necessary to form effective mechanisms of activation of innovative processes in the enterprises focused on long-term perspective, in particular:

- to promote the formation of a proper legal environment for the development of innovative activities, enhancing motivation for high-performance and high-quality activities by amending the tax and customs legislation;

- determining the volume and ensuring sufficient funding for innovation processes;
- small businesses to access preferential credits for technological innovations and grants for research or the development of new technology in the production of products.

It is necessary to develop a system of measures to intensify the investment activity of commercial banks, their interest in long-term lending. An important factor for activation of innovative activity in the agrarian sector of the economy is also the provision of a high level of professional training of specialists and employees of agro-industrial complex, the combination of science with production [8].

In our view, equally important in the activities of agricultural enterprises is the presence of an innovation policy, which consists of the main strategic and tactical aspects of the enterprise with regard to marketing missions, goals and objectives. The goal of innovation policy should be to introduce innovation into the activities of enterprises to ensure optimal production utilization. It should take place in two ways:

- 1) modern market conditions;
- 2) concentration on available resources.

It is well known, that the amount of resources in agriculture is very limited, so investments in fixed capital and financing of working capital should be concentrated on agro-industrial enterprises, in which the production process will be carried out on the basis of continuous introduction of new technologies. Such enterprises can be any farms for agricultural purposes [5].

It should be noted, that the efficiency of innovations in the agro-industrial complex depends on the system of indicators of technological, economic, social and environmental efficiency. This approach will ensure that the agricultural enterprise constantly receives comprehensive information on the status and effectiveness of innovation processes.

As noted above, it is also important for innovative activities to be developed to create innovative programs that include the coordination of organizational issues, the creation and implementation of innovative products. To date, an innovative long-term development strategy based on balanced development is expanding in the agrarian sector, which is a general conception of the need to strike a balance between meeting the current needs and protecting the interests of future generations, including their need for safe nutrition and harmless environment [7].

This concept is driven by the emergence of a new kind of innovation - eco-friendly innovation. These include the production of environmentally-friendly products, the use of resource-saving production technologies, the concept of green office management, the concept of "eco-efficiency", the model of "clean production", methods of increasing resource productivity based on the MIPS concept, a new systematic environmental design and special product labeling providing a high level of ecological safety of production, products and services while strengthening the competitive position of business [4].

The implementation of eco-innovation in enterprises is influenced by various factors that both impede and contribute to their development, such as:

- organizational and economic (lack of investment resources for financing innovative projects, lack of material and scientific and technical base, lack of reserve capacity, dominance of the economic interests of the entrepreneur in normal production);
- financial and credit (inaccessibility of financial resources, imperfection of the tax system of innovative activity, existing high deductions from the payroll fund;
- political and legal variability and instability of the legislative base, the existence of restrictions on the part of tax, patent and licensing legislation);
- managerial (imperfect structure of management, predominance of vertical flows of information, orientation of manufacturers on already existing markets and short-term payback of investments, inconsistency of interests of participants of innovation processes);
- socio-psychological: (fear and resistance to changes that can have negative consequences for the company staff, unwillingness to change existing production methods, jobs, behavior and traditions, uncertainty).

The application of eco-innovations in the agricultural sector, which make better use of primary natural resources, will certainly improve the environmental situation in rural areas, promote the formation of sustainable network structures to support and promote best practices in eco-efficiency, retention and job creation. improving the quality of life of the population. Thus, in the conditions of globalization of economic processes, important directions of development of innovative activity in agro-industrial complex are application of biotechnology as an object of innovation, energy saving and resource saving technologies [4].

Summarizing the most current proposals, the main ways to develop the innovative potential of domestic enterprises and the overall improvement of the level of innovative development of Ukraine as a whole should be [11]:

- 1) improving the regulatory framework for the development of Ukraine's innovation system;
- 2) formation of innovatively oriented structure of national economy;
- 3) creating an innovative product market that will ensure an adequate level of intellectual property protection;
- 4) promoting the development of the organizational and financial component of the innovation infrastructure to ensure the consistency of the chain: "science technology production market";
  - 5) accelerated implementation of innovations;
  - 6) government orders for innovative products;
- 7) definition and support of territories of innovative development;
- 8) arrangement of techno parks, creation of scientific laboratories, innovation funds with the involvement of institutional investors;
- 9) creation of a network of small innovative enterprises;

- 10) to exert pressure on economic entities by imposing sanctions on the use of outdated products and technologies;
- 11) creation of an effective telecommunication system, integration into the global IT space;
- 12) purposeful training of personnel, managers of innovative activity;
- 13) active cooperation of the authorities both among themselves, as well as with the entrepreneurial, scientific and business educational sectors of the economy;
- 14) general development of innovative culture of society.

Therefore, innovation has a significant impact on the competitiveness of both business in particular and the economy as a whole. Regarding the innovative activity of Ukrainian enterprises, during the period of economic restructuring it has undergone negative changes and needs to be reformed in such major areas:

- economic (increase of state financing, reduction of tax pressure, etc.);
- regulatory legal (regulation of legislative and regulatory acts concerning the innovative activity of enterprises);
- social (increase of remuneration of education and science workers, improvement of their working conditions).

The aforementioned areas of reform concern the state in the first place, but the role of the enterprises themselves, which should stimulate and encourage innovative activity, enhance the level of innovation culture, should be emphasized.

Conclusions. Innovation is an important part of the system of measures to accelerate the development of agriculture, increase its competitiveness and efficiency. Summarizing the above, it is reasonable to conclude that the problem of development of innovative activity on the basis of using the achievements of scientific and technological progress in all spheres of agro-industrial complex is complex and multifaceted. The introduction of innovative technologies is an important task for any enterprise and is defined as a promising direction of development, which creates a favorable environment for efficient use of resource potential and formation of competitiveness. Innovation is the most important factor in the development of agricultural enterprises. In scientific research and in practice, it is advisable to use the definition of "innovation in the agro-industrial complex". One of the main ways to improve the innovation activity of the enterprise and, accordingly, to increase its competitiveness is to implement the innovation policy of the enterprise taking into account all the characteristics of the entity.

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