Organizational and economic mechanism for managing the innovative potential of integrated agroindustrial formations

Mecanismo organizacional y económico para la gestión del potencial innovador de las formaciones agroindustriales integradas

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ABSTRACT

The working hypothesis of the research is based on the assumption that the modernization of the organizational and economic mechanism for managing the innovative potential of an integrated agro-industrial formation allows the agroecosystem to adapt to the conditions of a competitive market environment as much as possible; modify applied technologies and develop new ones; build up innovative potential, which leads to an increase in the competitiveness of economic entities in the agro-industrial complex. On the basis of a systematic approach, the paper substantiates theoretical provisions and a set of recommendations for the formation of an organizational and economic mechanism for managing the innovative potential of integrated agro-industrial formations, in the development of which general scientific methods of analysis and synthesis were applied, as well as methods of scientific abstraction, functional and structural analysis, modeling method, theory and methodology of the systems approach and other methods of scientific knowledge. The paper substantiates the need for the formation of mechanisms tuned to maximize the implementation of the innovative potential of integrated agro-industrial formations, characterized by the predominance of the scientific and technological component with the inherent function of self-development and the ability to accelerate the development of the agro-industrial complex of meso-level economic systems. The organizational and economic mechanism for managing the innovative potential of integrated agro-industrial formations, presented as a system of tools and impact processes, can be applied in practice to obtain innovative results. The use of the proposed management tools will allow influencing innovative processes and ensuring the effectiveness of activities based on a synergistic effect. The scientific significance of the study lies in the development of theoretical and methodological provisions and scientific and practical recommendations aimed at forming an organizational and economic mechanism for managing the innovative potential of integrated agro-industrial formations.

Keywords: Management; Model; Agroecosystem; Integrated Agro-Industrial Formation; Synergistic Effect.

RESUMEN

La hipótesis de trabajo de la investigación se basa en el supuesto de que la modernización del mecanismo organizativo y económico para la gestión del potencial innovador de una formación agroindustrial integrada permite que el agroecosistema se adapte lo más posible a las condiciones de un entorno de
mercado competitivo; modificar tecnologías aplicadas y desarrollar nuevas; Generar potencial innovador, que conduzca a un aumento de la competitividad de las entidades económicas del complejo agroindustrial. Sobre la base de un enfoque sistemático, el documento fundamenta las disposiciones teóricas y un conjunto de recomendaciones para la formación de un mecanismo organizativo y económico para gestionar el potencial innovador de las formaciones agroindustriales integradas, en cuyo desarrollo métodos científicos generales de análisis y Se aplicaron síntesis, así como métodos de abstracción científica, análisis funcional y estructural, método de modelado, teoría y metodología del enfoque de sistemas y otros métodos de conocimiento científico. El trabajo sustenta la necesidad de la formación de mecanismos afinados para maximizar la implementación del potencial innovador de las formaciones agroindustriales integradas, caracterizadas por el predominio del componente científico y tecnológico con la función inherente del autodesarrollo y la capacidad de acelerar el desarrollo del complejo agroindustrial de sistemas económicos de nivel meso. El mecanismo organizativo y económico para gestionar el potencial innovador de las formaciones agroindustriales integradas, presentado como un sistema de herramientas y procesos de impacto, se puede aplicar en la práctica para obtener resultados innovadores. El uso de las herramientas de gestión propuestas permitirá incidir en procesos innovadores y asegurar la efectividad de las actividades basadas en un efecto sinérgico. La trascendencia científica del estudio radica en el desarrollo de disposiciones teóricas y metodológicas y recomendaciones científicas y prácticas orientadas a formar un mecanismo organizativo y económico para gestionar el potencial innovador de las formaciones agroindustriales integradas.

**Palabras clave:** Gestión; Modelo; Agroecosistema; Formación Agroindustrial Integrada; Efecto sinérgico.

1. **INTRODUCTION**

Study of the regularities of the influence of economic methods of strategic management on the innovation sphere of enterprises of the agro-industrial complex and their modernization in order to increase economic efficiency, socio-economic and scientific-technological development of the country, improve the environmental friendliness of production activities of economic entities of the agro-industrial complex and their associations, in the context of intensifying the innovative component of scientific and technological development of the domestic agro-industrial complex is relevant and in demand.

Management of the innovative potential of integrated agro-industrial formations (hereinafter - IAF) requires the development of inter-farm interaction between the subjects of innovation in the agro-industrial complex, based on the principles of long-term, multi-level partnership, high information content and sensitivity to new ideas, knowledge and technologies of various functional purposes.

The problem of developing the organizational and economic mechanism for managing the innovative potential of the IAF manifests itself in the process of responding to the metamorphoses of the market environment and improving scientific, technical and innovative activities. The dominant importance of the innovation factor brings to the fore the task of accelerating the innovative activity of agricultural formations in meso-level economic systems. At the same time, solving the problem of such a high level should be carried out within two key areas:

1. Orientation of economic entities of the agro-industrial complex to integration processes with the aim of forming, developing, improving internal corporate, organizational, economic and financial mechanisms, as well as increasing the efficiency of their innovative activity. The mechanisms tuned to maximize the implementation of the innovative potential of the IAF are distinguished by the predominance of a scientific and technological component with an inherent function of self-development.
2. Stimulating the formation of new resource-saving directions for the development of agroecosystems, aimed at increasing the innovative activity of the IAF, based on the use of organizational, financial levers and methods tested in Russian and world practice.

The concept of the modernized organizational and economic mechanism for managing the innovative potential of the IAF is based on sustainability, self-development potential, mobility, and susceptibility to environmental factors.

The absence in the modern scientific literature of a single definition of the concept of "organizational and economic mechanism" reflects the complexity of this economic category. Most of the currently known approaches in economic science to the disclosure of the term "organizational and economic mechanism" are based on the functional approach traditional for the neoclassical school of economics, which does not take into account modern technical, technological and methodological possibilities of direct influence on management processes. In the new economic dictionary, the organizational and economic mechanism is defined as "... a set of methods and means of influencing economic processes, their regulation". Moreover, "... the economic mechanism is a system of interrelated economic phenomena that arise in certain conditions ..." (Azrilian, 2009; Overview of the Russian M&A market in 2015: KPMG, 2016).


Foreign scientists traditionally consider the economic mechanism as one of the key research objects. Thus, the French economist A. Kuhlman defines the category of "economic mechanism" as a necessary relationship that arises between natural economic phenomena. According to this theory, A. Kuhlman distinguishes between closed and open economic mechanisms, in accordance with the expected end result (Kulman, 1993). This approach allows you to classify mechanisms depending on the direction of a specific economic activity.

L. Hurwitz, R. Myerson, E. Maskin made a significant contribution to the development of the theory of economic mechanisms (Dovbenko, Osik, 2011). Leonid Hurwicz and Stanley Reuter created the theory of "information efficient economic mechanisms"; developed a methodology for constructing decentralized information-efficient economic mechanisms, the functioning of which achieves the specified goals (desired results) (Hurwicz, 2006). In their opinion, an mechanism is a structure of mathematical models that describe institutional systems designed to organize and coordinate economic activity (production, consumption, exchange) at different levels of economic ties (economic systems, states, enterprises and households). The effectiveness of the mechanisms of Hurwitz and Reiter, admitting a quantitative assessment, is determined in terms of the costs of their management in the dominant strategy from the standpoint of solving emerging information problems.

In the Russian scientific school, interest in the study of the feasibility of mechanisms in economics arose in the 70s of the XX century. The term "economic mechanism" was considered from the point of view of the presence of a set of economic elements at different levels. Subsequently, interpretations of the terms "economic mechanism", "organizational mechanism", "control mechanism", "financial mechanism", "organizational-economic mechanism", etc. appeared in the economic literature, which were developed in the works of Russian scientists: Abalkin L.I, Balashov A.I., Egorychev S.A., Osipov Yu.M., Belyaev A.A., Mocherny S.V., Kobzev V.V., Bunich P.G., Yashin N.S., Minaev E.S., Titov A.B., Mashevskaya O.V, Zabredina L.R., Monakhova A.V., Lysenko Yu.V., Tskhurbaeva F.Kh., Farnieva I.T., Gauzhaev A.
In the Modern Economic Dictionary (Raizberg, Lozovsky, Starodubtseva, 1999), the concept of a mechanism is defined as a set of methods and means of influencing economic processes in order to regulate them. This approach is used in the works of S.A. Egorychev (2014), Shatilov I.S., Slyaev N.A., Tushkanov M.P. (2002), Yashin N.S. (2003). The organizational and economic mechanism focused on achieving strategic goals is presented as a set of principles, methods, tools, management models.

From the point of view of a systematic approach, the organizational and economic mechanism of management is considered not just as a set of tools for influencing economic processes, but as an interconnected and interdependent combination of specific economic regulators. In the studies of Fedorkov A.I. the organizational and economic mechanism is presented as a certain set of interrelated economic and organizational and legal methods, with the help of which the subject of management regulates its own interests in accordance with the interests of the object of management (Fedorkov, 1998). Balashov A.I. a similar point of view is noted: the organizational and economic mechanism of management is considered as a set of system-forming interrelated methods and methods of influencing the object, conditioned by the interests of the managing subject and aimed at ensuring a continuous process of balanced purposeful and progressive development of the object as a socio-economic system (Balashov, 2012).

Tskhurbaeva F.Kh., Farnieva I.T. consider the organizational and economic mechanism of management as a multi-level hierarchical system of the main interconnected elements and their typical groups (subjects, objects, principles, methods and tools), as well as the ways of their interaction, including integration and disintegration, during and under the influence of which economic relations between the state, owners, creditors and personnel, including representatives of the top management of the corporation and society (Tskhurbaeva, Farnieva, 2009).

In the works of Titov A.B. and Mashevskaya O.V. it is noted that the organizational and economic mechanism of management is characterized by a set of elements that are influenced by external and internal factors within the processes occurring at the enterprises of the industry, from the totality of which the entire model of object management is formed (Titov, Mashevskaya, 2016).

According to the assumption of Gauzhaev A.Z., Ilàeva Z.M. (2014), Krolivetskiy E.N., Olnev O.K. (2012) the organizational and economic management mechanism has a number of properties, including: efficiency, reliability based on reliability and modern scientific and technical methods of work, optimal gradation and balance of centralization and decentralization.

Chalenko A.Yu. argues that the organizational and economic mechanism of management cannot function without a resource component and defines this economic category as a set of resources of the economic process and methods of their connection (2010).

Proponents of the process approach, within the framework of the IDEF0 functional modeling methodology, interpret the organizational and economic management mechanism as a resource provision for the process, including a set of interrelated elements that contribute to the performance of the process function (Mark, McGowan, 1993).

According to Uskov A.E. the mechanism, firstly, cannot exist outside the process, since it is its integrating part and is aimed at performing only process functions; secondly, the mechanism does not have its own governing body and is in a state of waiting for control by the subject; thirdly, the correlation of the
mechanism with management has an internal meaningful field in terms of statics and dynamics, as well as innovative solutions (Uskov, 2012).

In view of the foregoing, it should be noted that the complex problem of managing the innovative potential of the meso-economic level formations requires further research, taking into account the peculiarities of the interactions of a group of economic actors and strengthening the role of knowledge management for the effective use of the innovative potential of each IAF participant in order to obtain a synergistic effect. Despite the fact that much attention is currently paid to theoretical and practical issues of managing innovative potential, a number of conceptual, methodological and methodological aspects of this issue at the sectoral level remain poorly studied.

Analysis of literary sources on the problem under consideration allows us to conclude: the concept of "organizational and economic mechanism for managing innovative potential" has not received a clear definition and visual representation in scientific research. For a more accurate representation, it is necessary to substantiate the differences in the concepts of “economic mechanism”, “organizational and economic mechanism for managing the innovative potential of integrated formations” and “mechanism for managing the development of integrated formations”.

According to our amended definition, "the organizational and economic mechanism for managing innovative potential" is an important component of the entire economic mechanism and can be represented as a set of organizational and economic structures that form the scientific and technological development of the agro-industrial complex, and levels of management, including legislative, financial and economic, organizational and administrative methods of influence ensuring sustainable development of the industry. At the same time, sustainable development of the industry should be carried out on the basis of the principles of purposefulness, consistency, innovation, comprehensive implementation of the innovative potential of the agro-industrial complex, adaptability, consistency of interests of interacting integrated agro-industrial formations.

The organizational and economic mechanism for managing the innovative potential of the IAF should be defined, in our opinion, as a set of forms, methods, incentives, tools and levers for enhancing innovation in the agro-industrial complex, providing a scientific and technical breakthrough in the regional economic system. The organizational and economic mechanism should be distinguished:

1) organizational block, including:
   - planning and organization of research activities;
   - development of entrepreneurship in the scientific and technical sphere;
   - formation of information content for the dissemination of innovations and their transfer to production;

2) an economic block including:
   - financing and lending;
   - taxation and insurance of organizations that create and master innovations;
   - stimulation of the innovation process;
   - pricing for scientific and technical products - completed R&D, innovations and innovative projects;
- government support for innovation.

The working hypothesis of this study is based on the assumption that the modernization of the organizational and economic mechanism for managing the innovative potential of an integrated agro-industrial formation allows the agroecosystem to adapt as much as possible to the conditions of a competitive market environment; modify applied technologies and develop new ones; to produce innovative products; build up innovative potential, which in general leads to a synergistic effect and increased competitiveness of business entities in the agro-industrial complex.

The purpose of the study is to substantiate the theoretical provisions and a set of recommendations for the formation of an organizational and economic mechanism for managing the innovative potential of integrated agro-industrial formations based on a systematic approach.

Within the framework of the designated research goal, the following tasks were set:
- consideration and clarification of the conceptual apparatus associated with the definition of the economic essence of the organizational and economic mechanism;
- substantiation of the features of the organizational and economic management mechanism in the theoretical and methodological coordinate systems;
- formation of a conceptual model of the organizational and economic mechanism for managing the innovative potential of integrated agro-industrial formations;
- clarification of the basic principles of the impact of the organizational and economic mechanism for managing the innovative potential of the IAF on the object of management;
- substantiation of the structure and content of the organizational and economic mechanism for managing the innovative potential of the IAF.

2. MATERIALS AND METHODS

In the question of determining the economic essence of the organizational and economic mechanism of management, the author's point of view is based on a systematic approach. In this regard, it is proposed to consider the organizational and economic management mechanism as a set of interrelated elements, including:
- principles of transformation of input and output parameters;
- applied functions;
- applied methods and technologies;
- organizational and economic methods of the subject's influence on the object, aimed at ensuring the process of managing the sustainable development of the object.

The main system-forming factor of the control mechanism, in our opinion, is its ability to self-regulation, adequate self-assessment, self-development and self-preservation, as well as high adaptability to changes in the external and internal environment.

In accordance with the plot of the study, we have identified the following features of the organizational and economic mechanism of management as an integral system:

1) the presence of goals and objectives that determine the impact of the subject on the object;
2) the presence of interrelated elements that form the internal structure of the organizational and economic mechanism;

3) the presence of functions for the performance of which an organizational and economic mechanism has been created;

4) the availability of resources required for the functioning of the organizational and economic mechanism;

5) the presence of external links with other mechanisms and processes.

A conceptual model of the organizational and economic management mechanism of the IAF is shown in Fig. 1.

Figure 1. Conceptual model of the organizational and economic management mechanism of the IAF

It should be noted that the organizational and economic management mechanism of the IAF is a multifaceted concept that includes interrelated elements: principles, functions, methods, technologies.
The interrelation of the organizational and economic mechanism with the processes being implemented in the economic entities of the agro-industrial complex determines the presence of a subject and an object of management, as well as a material flow to be converted into material benefits. This definition is explained by the objective content of business processes in the agro-industrial complex.

The subject of management is a subsystem that generates solutions and acts on the object to achieve its goals. In the process of managing the development of the IAF, external and internal environmental factors are manifested. The factors of the external environment include economic processes at the macro level, including the competitive environment, government policy and others. The factors of the internal environment include the qualitative composition of the integrated agro-industrial formation, the personnel component, the experience of financial and economic activities, and others.

Modernization of a controlled system, the activities of which are regulated by the subject, are accompanied by the transformation of the material flow: from resources to results, which, in fact, is one of the key management tasks that affect the effectiveness of management in general.

The principles of the organizational and economic management mechanism form the theoretical and practical basis of the entire system. Functions reflect the external manifestation of the properties of the organizational and economic mechanism in the system of relations arising in the management process. The methods characterize the ways in which the organizational and economic mechanism affects the management processes. Technologies are an indirect reflection of methods and are a set of means, influences, operations with the help of which the management process is implemented.

The organizational and economic mechanism is realized through the toolkit of influence, which is a set of actions of one or another instrument. Organizational and economic instruments of influence are distinguished. Organizational tools include: developing development strategies; organization of development, implementation of scientific and technical programs and projects; the formation of investment attractiveness, etc. The economic management influences include: budgeting, financing, audit, outsourcing, price regulation and others.

3. RESULTS

In accordance with the presented conceptual model, it is proposed to define the organizational and economic mechanism for managing the innovative potential of the IAF as a system that is a complex set of interrelated elements, consisting of principles, functions, methods, technologies and processes. The designated mechanism can be defined as a complex of organizational and economic impacts of a subject on an object in order to ensure the innovative development of agroecosystems.

In this context, the object of management is the innovation potential of the IAF, and the management bodies of the IAF or individual subsystems of the IAF that implement the functions of innovation management can act as the subjects of management. It should be noted that the following specific factors of the internal environment can influence the subject:

- production and economic relations between the participants of the IAF;
- the level of innovative development of the IAF participants;
- the specifics of activities (production, research, financial, sales, etc.);
- limitations of the IAF innovation potential management system.
The organizational and economic mechanism for managing the innovative potential of the IAF is focused on improving the efficiency of the IAF's innovative activities and building up its innovative potential. In this connection, we have formulated a number of tasks of the organizational and economic mechanism for managing the innovative potential of the IAF, including:

1) creating conditions for the implementation of the innovation process in the IAF;

2) creating opportunities for accelerated adaptation to changes in the market environment;

3) stimulation of innovative activity of all IAF participants;

4) attraction of funds from external investors, including in the person of public authorities for material and financial support of innovative activities;

5) creation of industry unions for participation in joint innovation projects.

The need to solve the set tasks allows us to formulate the basic principles of the impact of the organizational and economic mechanism for managing the innovative potential of the IAF on the control object:

1) the principle of the completeness and balance of the toolkit of influence (combined and joint work of all subsystems that implement the innovation process);

2) the principle of combining centralization and decentralization of management (delimitation of the sphere of decision-making between subsystems of different levels, as a necessary condition for the management of innovative activities of the IAF);

3) the principle of continuity (the permanence of the innovation process);

4) the principle of adaptability (the ability of the mechanism to adapt to the transformations of the external and internal environment);

5) the principle of stability (ensuring the persistence of the mechanism for its functioning in case of significant fluctuations and disturbances of the external environment);

6) the principle of efficiency of costs and resources (material, financial, labor, etc.);

7) the principle of compatibility (the ability of the components of the mechanism to interact with other systems and processes implemented in the IAF).

Methodological tools, as an element of the organizational and economic mechanism for managing the innovative potential of the IAF, in this study are represented by the following types:

1. Economic management methods are based on the use of objective socio-economic laws and represent a set of tools and techniques with the help of which a targeted impact on the internal environment of the IAF is carried out in order to create favorable conditions for its development. Within the framework of the mechanism proposed for implementation, economic methods of comprehensive assessment, analysis and diagnostics, direct economic calculation, and modeling are used.

2. Organizational management methods are focused on the development of organizational solutions; determination of resource requirements and deadlines, development of human resources and
implementation of control measures. The organizational methods include: organizational planning; collection, processing and systematization of management information; control; motivation; coordination. Technologies as a component of the organizational and economic mechanism for managing the innovative potential of the IAF are a means of implementing this mechanism, representing a synthesis of organizational and economic methods, the use of which allows to achieve the set objectives. Within the framework of the mechanism under study, the methodology for assessing the innovative potential of the IAF is considered as the basic technology, which includes the collection and analysis of information on the state of innovation in the IAF, the calculation of economic indicators, the assessment of the results obtained, modeling the development of the innovation process in the future, the development of regulatory documents to improve management the innovative potential of the IAF.

The following can be distinguished as the ways (methods) of the influence of the organizational and economic mechanism on the process of managing the innovative potential of the IAF:

1) economic:
- attraction of external sources of financing for innovative activities;
- resource provision of the innovation process;
- economic stimulation of the development of production and economic relations within the IAF, as well as with external contractors;

2) organizational:
- organizational and methodological support of joint innovation activities of organizations belonging to the IAF;
- organization, coordination and control of the innovation process;
- organization of a system for continuous monitoring of the development of innovative activities in the IAF.

The organizational and economic mechanism for managing the innovative potential of the IAF ensures the process of managing the innovative potential, in connection with which it is advisable to consider the management process in conjunction with the organizational and economic mechanism. The IAF innovation potential management contributes to the formation of the necessary conditions for the IAF innovation activity, as it strategically determines the directions of efforts in the creation of innovative products, works, services, processes and technologies based on the development and adjustment of the IAF key directions in accordance with the transformations of the external environment.

The IAF innovation potential management allows solving key tasks in the process of innovation potential formation, its building and implementation:
- preliminary planning and acquisition of resources necessary to achieve innovative goals (formation);
- quantitative and qualitative improvement of indicators of the state of innovation potential at the enterprise (building up);
- transformation of the components of the innovative potential into the final product - into innovation (implementation).
In the process of managing the innovative potential Knyazev S.A. (2010) identified six successive stages:

1) mission definition, goal setting;
2) development of a basic strategy;
3) definition of innovative goals;
4) assessment of innovative potential;
5) development of innovative projects, selection from an alternative set of options;
6) implementation of innovative potential within the framework of the selected innovative project.

Reshetnikov A.V. (2004) substantiates a similar point of view, however, this model is dominated by the cyclical factor, which makes it possible to adjust the mission, goals and strategies depending on the results obtained. In the model of management of innovative potential, presented in the works of Agafonova M.S., Lakhina M.A., there are three directions:

1) creation of favorable conditions for the implementation of productive work of the subsystems of innovative potential;
2) managing the process of implementing innovative activities, taking into account the relevance of diagnostics; identification of deviations from the planned innovative result;
3) choosing a more optimal trajectory for innovative development; the search for the most effective methods for adapting the innovation system to active changes in environmental conditions (Agafonova, Lakhina, 2016).

Managing innovation potential can be thought of as a regulatory process through the implementation of the IAF’s core competencies. At the same time, the distinctive features of the innovative potential are highlighted, including the undoubted value and the impossibility of replacing with other resources, which allows this economic category to be attributed to the key competencies of the IAF. According to the proposed by Glukhov V.V. and Balashova E.S. (2015) approach, the application of key competencies should be carried out in stages:

1) selection of unique economic resources;
2) analysis and comparison with the main competitors in order to identify the unique opportunities of the promoted business idea;
3) continuous improvement of key competencies;
4) creation of an organizational roadmap that regulates the intermediate stages of development of key business parameters;
5) formation of a strategic framework for business development based on the implementation of key competencies.
The analysis of approaches to the management of innovative potential allows us to formulate a conclusion: the basis of the universal model for managing the innovative potential of the IAF is a number of elements: setting innovative goals; determination of the current level of innovative development; analysis of internal and external factors affecting the level of innovation potential; implementation of innovative potential; adjustment of the developed innovation strategy; availability of "feedback".

Zdolnikova S.V. (2016) there are seven stages of IAF innovation potential management:

1) identifying the problems of managing the IAF's innovative potential;
2) substantiation of the goals and objectives of management of innovative potential;
3) analysis of the current state of innovative development of the IAF, including an assessment of the parameters of the internal and external environment, as well as market parameters;
4) a comprehensive assessment of the IAF's innovative potential;
5) development of an organizational and economic mechanism and measures to increase the innovative potential of the IAF;
6) implementation of organizational and economic measures to increase the innovative potential of the IAF;
7) adjustment of organizational and economic measures to increase the innovative potential of the IAF.

Thus, taking into account the above and on the basis of the research carried out, the architecture of the organizational and economic mechanism for managing the innovative potential of the IAF was formed, meaningfully and structurally ensuring the effective development of innovative activities of economic entities of the agro-industrial complex (Fig. 2).
Figure 2. Organizational and economic mechanism for managing the innovative potential of the IAF
4. DISCUSSIONS

The efficiency of managing the innovative potential of the IAF is determined by the complexity of the tasks being solved, including the need to increase financial stability in the long term. In this regard, it becomes necessary to implement a set of measures based on:

1) systematic updating of strategic guidelines for innovative development of the IAF and, on this basis, updating the goals and objectives of managing innovative potential;

2) a systematic, comprehensive assessment of all components of the IAF's innovative potential;

3) determining the level of the IAF's innovative potential in accordance with the technical and technological requirements for the development of the agro-industrial complex and agroecosystems.

The coordinated development and interaction of subsystems within the IAF structure and business entities engaged in innovative activities forms the IAF innovation system, represented not just by the sum of individual components, but by a single whole, which causes the manifestation of a synergistic effect. This circumstance determines the relevance of improving the organizational and economic mechanism for managing the innovative potential of the IAF, since modern market conditions force us to look for opportunities for a balanced and sustainable innovative development of the IAF through a significant transformation of the innovation management system.

The organizational and economic mechanism for managing the innovative potential of the IAF is a system of influencing tools that are used in practice to obtain innovative results. It should be noted that only the effective and scientifically grounded use of a variety of management tools will allow the required impact on the innovation process and ensure the desired results are obtained.

Thus, the implementation of the organizational and economic mechanism for managing the innovative potential of the IAF allows the structure to fully adapt to the competitive conditions of the market environment, develop existing technologies and develop new ones, produce innovative products through the maximum use of the existing innovative potential, as well as its increase. The effectiveness of management influences is determined by an increase in the competitiveness of integrated agro-industrial formations.

5. CONCLUSIONS

The results of the study are the following systemic provisions:

1. The revised definition of “organizational and economic mechanism for managing innovative potential” has been substantiated. This concept, as suggested by the authors, is a complex of organizational and economic structures that form the scientific and technological development of the agro-industrial complex, and levels of management, including legislative, financial, economic, organizational and administrative methods of influence that ensure the sustainable development of the industry based on the principles of purposefulness, consistency, innovativeness, integrated implementation of the innovative potential of the agro-industrial complex, adaptability, consistency of interests of interacting integrated agro-industrial formations.

2. The organizational and economic mechanism for managing the innovative potential of integrated agro-industrial formations should be defined, in our opinion, as a set of forms, methods, incentives, tools and levers for enhancing innovation in the agro-industrial complex, providing a scientific and technical breakthrough in the regional economic system.
3. The organizational and economic mechanism for managing the innovative potential of the IAF is proposed to be defined as a system that is a complex structure consisting of interconnected elements functioning on the basis of special principles, functions, methods, technologies, processes, as well as organizational and economic suggestive influences of the subject on the object with the purpose of ensuring the innovative development of agroecosystems.

4. The main principles of the impact of the organizational and economic mechanism for managing the innovative potential of the IAF on the management object have been formulated, including: completeness and balance of the impact toolkit, a combination of centralization and decentralization of management, continuity, adaptability, sustainability, cost and resource efficiency, compatibility.

Thus, the logic of the study is based on the concept of a modernized organizational and economic mechanism for managing the innovative potential of the IAF, which is characterized by sustainable development, self-development potential, mobility, and susceptibility to environmental factors. At the same time, one of the main tasks of the accelerated development of the agro-industrial complex of meso-level economic systems is the formation of mechanisms tuned to the maximum realization of the innovative potential of the IAF, characterized by the predominance of a scientific and technological component with an inherent function of self-development.

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REFERENCES


Balashov, A.I. (2012). Formation of a mechanism for sustainable development of the pharmaceutical industry: theory and methodology, St. Petersburg: Publishing house of SPbGUEF.


Emelyanov, A.M. (2001). Collisions of the formation of a multi-structured agrarian sector of the economy,


Glukhov, V.V., Balashova, E.S. (2015). Identification of reserves for increasing the efficiency of an industrial enterprise based on the management of key competencies, Scientific and technical statements of SPbSPU. Economic Sciences, 3(221), 192-197.


Titov, A.B., Mashevkaya, O.V. (2016). Organizational and economic mechanism for managing the
innovative activity of an enterprise, Issues of economics and law, 1, 110-114.


Zdolnikova, S.V. (2016). Organizational and economic mechanism for managing the innovative potential of integrated industrial structures, Scientific and technical statements of SPbSPU. Economic Sciences, 4(246), 109-122.