

## FEATURES OF INNOVATIVE PROCESSES IN THE DEVELOPMENT OF AGRICULTURE

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### ABSTRACT

The article discusses the features of innovative processes in agriculture, and the role of innovation processes in the development of agriculture of Uzbekistan.

**Keywords:** agriculture, innovation, innovative process, innovative activity.

### INTRODUCTION

An important condition for the sustainable development of agriculture is an effective innovation policy, the ultimate goal of which is the introduction of new, advanced technologies, inventions, forms of labor organization, and production management based on the achievements of scientific and technological progress.

World experience shows that innovation processes, as a rule, are not only encouraged, but also regulated by the state through the formation of an appropriate policy and the systematic organization of innovation activities.

About various sectors and spheres of the country's economy, the essence of innovation activity does not have fundamental differences, while the nature and direction of the innovation process in them can vary significantly. In particular, the innovation process in the agro-industrial complex has its specifics, due to the peculiarities of agro-industrial production, and, above all, its main component - agriculture.

The main features of the formation and development of the innovation process in agriculture include the following:

- The plurality of types of agricultural products and products of their processing, a significant difference in the technology of their cultivation and production;
- Strong dependence of production technologies in agriculture on natural and weather conditions;
- A large difference in the period of production for certain types of agricultural products and products of their processing;
- A high degree of territorial disunity of agricultural production;
- Isolation of agricultural producers (at all levels) from organizations producing scientific and technical products;
- Different social level of agricultural workers;
- The multiplicity of different forms and connections of agricultural producers with innovative formations;
- The absence of a clear and scientifically based organizational and economic mechanism for the transfer of scientific achievements to agricultural producers and, as a result, a significant backlog of the industry in mastering innovations in production.

The high level of complexity of agricultural production as a system and the indicated features of the innovation process in it predetermine the originality of approaches and methods for its implementation.

Agriculture is the most extensive area of human activity, most of the technological processes of which are carried out on large open-air land massifs, where nature systematically makes its adjustments. The constant presence of elements of risk, instability of production processes due to local time and weather restrictions require managers and specialists of farms, farmers to have in stock alternative management solutions for implementation in extreme conditions, and in their absence, a quick search and application of scientific recommendations and advanced experience for technological readjustment of production, maneuvering equipment, and other resources to weaken or eliminate the influence of adverse environmental factors. In this process, rural producers should be assisted by various innovative formations: agrotechnoparks, research and production systems, associations, small businesses, cooperatives, information and consulting centers and points, and other innovative institutions and organizations.

In the conditions of market relations, as experience and scientific research have shown, the basic principles of the functioning of innovative formations are somewhat changing. The functioning of any form of an innovative character is based, as is known, on certain principles, the fullest possible observance of which in practice, in turn, determines the achievement of the goal set for this formation. These principles are the starting points that reflect the most diverse aspects both for the creation of these formations and for their functioning.

About innovative formations, when developing the foundations for their functioning in the conditions of market relations, it is advisable to single out five blocks of these principles:

- Organizational, related to the organizational foundations for the creation and structural features of these formations;
- Functional, related to the definition and performance of their specific functions;
- Economic, related to the economic content of innovative formations and the relationship of their participants in the process of functioning;
- Social, associated with the form of ownership, staffing, working conditions of specialists in them;
- Development of external relations, covering various aspects of foreign economic and advertising and propaganda activities.

All these principles in modern conditions should be observed to the maximum and find their embodiment in specific decisions and parameters that would not conflict with them. Compliance with these principles will allow innovative formations to successfully operate in market conditions and have a positive impact on the development of scientific and technological progress in agricultural production and the agro-industrial complex as a whole.

The main directions of innovation policy in the agro-industrial complex are:

- Formation of a sectoral innovation system in the agro-industrial complex;
- Activation of the activity of agrarian science in carrying out fundamental and applied research;
- Regulatory and legal support of an innovative activity, protection of intellectual property objects and their introduction into economic circulation;

- All-round acceleration of mastering the achievements of science, technology, and advanced experience in production;
- Development of infrastructure for the innovation process, a system of certification and promotion of scientific and technical developments, training and retraining of personnel;
- Development and improvement of information and consulting activities;
- State support for agricultural producers to restore their solvency and the possibility of implementing innovative activities;
- Improvement of the competitive system of examination and selection of innovative projects and programs for their implementation in agro-industrial production;
- Formation of an economic mechanism for managing and stimulating innovative processes in the agro-industrial complex at all levels;
- Training of highly qualified personnel for the subjects of innovative activity;
- Development of international cooperation in the organization of innovative activities in the agro-industrial complex.

The totality of complex activities in the indicated areas of implementation of the innovation policy in the agro-industrial complex should ensure the sustainable scientific and technical development of the agro-industrial complex.

Innovative activity in the implementation of all these areas is carried out subject to the following basic principles:

- Recognition at all levels (from the government to a specific commodity producer) of the priority of the development of innovative processes as the basis for effective functioning;
- Scientific validity of all decisions and practical actions for the implementation of innovation policy and the development of innovation processes in the agro-industrial complex;
- Integration of scientific, scientific, technical, and educational activities in the course of the development of innovative processes in the agro-industrial complex;
- Focus on a clear organization of the development of innovative processes and their high performance in production.

Agriculture is a vital area in Uzbekistan. The well-being of the large rural population, as well as ensuring the food security of the country, depends on its sustainable development. In this regard, the main directions of innovative development of agricultural sectors in Uzbekistan include:

- Development of new high-yielding varieties of crops resistant to diseases through the use of cell engineering, molecular genetics, and conventional breeding;
- An adaptation of highly productive varieties of crops of foreign breeding to the soil and climatic conditions of Uzbekistan;
- Development and implementation of new land-use systems and water-saving technologies;
- Development and implementation of resource-saving systems of machines for the integrated mechanization of technological processes in agriculture;
- Development and use of highly effective biological preparations for the control of plant diseases and pests;
- The creation of highly productive breeds of farm animals;
- An adaptation of farm animals of foreign selection to the conditions of Uzbekistan;



- Development and implementation of non-waste technologies for processing products of animal origin;
- The creation of new resource-saving systems of machines for the complex mechanization of technological processes in animal husbandry;
- Development of technical means of water supply based on the use of renewable natural energy sources;
- Improvement of animal housing and feeding systems;
- Development of new methods of diagnostics, prevention, and treatment of animals.

For the successful innovative development of agriculture, it is necessary to combine state support measures aimed at stimulating proposals for the introduction of innovations with measures promoting the innovative technological development of the industry.

The documents defining the directions of innovative development of the national economy of Uzbekistan are the Decree of the President of the Republic of Uzbekistan dated 07.08.2006, No. PP-436 "On measures to improve the coordination and management of the development of science and technology" and the Decree of the President of the Republic of Uzbekistan dated 15.07.2008. , No. PP-916 "On additional measures to stimulate the introduction of innovative projects and technologies into production". By Decree No. PP-436, to strengthen the role of science in the socio-economic development of the country, create conditions for the effective use of technology and design developments, the Committee for Coordinating the Development of Science and Technology under the Cabinet of Ministers of the Republic of Uzbekistan was formed. The main tasks of the Committee are the development, together with the Academy of Sciences, ministries, and departments, of priority areas for the development of science and technology, the organization of the use of the results of scientific research in various sectors of the economy and production, the development of mutually beneficial international scientific and technical cooperation.

Decree No. PP-916 establishes the procedure by which the annual Republican Fair of Innovative Ideas, Technologies, and Projects is held. Also, this resolution approved a set of measures for the development of innovative products and technologies, and also created a Coordinating Working Group to coordinate work on the implementation of projects.

To radically increase the level of equipping agriculture and processing industries with modern high-performance agricultural machinery and technological equipment of domestic production that meets international requirements and standards, to widely attract foreign investment for the modernization, technical and technological renovation of agricultural engineering enterprises, primarily direct investment from leading foreign companies The President of the Republic of Uzbekistan adopted Decree dated May 21, 2012, No. PP-1758 "On the Program for Further Modernization, Technical and Technological Re-Equipment of Agricultural Production for 2012-2016".

The program for the modernization of the technical and technological re-equipment of agricultural production poses great challenges for science, production, and education.

The need to improve the efficiency of agricultural production requires equipping the agro-industrial complex with new high-performance equipment.

The problem of development and implementation of innovations, modernization, technical and technological re-equipment of agricultural production remains today one of the main directions of the country's economic development. About production, this means the creation of new tools of labor, new types of materials and raw materials, the modernization of equipment, the transition to a more progressive one.

Their importance for the development of the economy in the modern period is immeasurably increasing. It largely determines the technical and economic level of material production and the direction of improving its structure, which can significantly increase the efficiency of the use of agricultural land, labor resources, production assets, and labor productivity.

Thus, the improvement of the system of innovation management in agriculture should be comprehensive, covering the entire spectrum of aspects of this activity in the agro-food sectors: from research and development, experimental verification of scientific results to implementation in production and evaluation of efficiency. Increasing the validity and effectiveness of the adoption of measures of state influence in the field of innovation management in agriculture could contribute to the selection of this problem as one of the priority areas of scientific research on agricultural issues. This will give a certain impetus to intensify innovation in the industry, which will help accelerate scientific and technological progress and improve the efficiency of agricultural production.

#### REFERENCES

1. Goraeva T.Yu. Economics and management of innovations: textbook. - Grodno: GSU, 2010.
2. Organizational and economic mechanism for the development of innovative processes in the agro-industrial complex (guidelines). - M.: GNU VNIIESKh, 2005. - 102 p.