

Prospects for Innovative Agricultural Development

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Abstract.

One of the current problems of the country's agro-industrial complex is an innovative way to develop agricultural production. Accelerated introduction of innovations in agriculture will help increase labor productivity, save material, labor and financial resources, increase production. In a market economy, the application of innovation in the enterprise is important. The formation of an innovative environment creates the conditions for constant product renewal, renewal of production assets on the basis of new techniques, creating opportunities for the development of society. The strategic objectives of agricultural innovation policy are to increase national competitiveness through innovation, especially the resources required by direct agricultural producers, and to identify and support high-tech areas that will accelerate economic growth.

Keywords. Innovation, investment, production, competition, scientific development, science and technology development, market economy, economic growth

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Introduction. One of the current problems of the country's agro-industrial complex is an innovative way to develop agricultural production. Accelerated introduction of innovations in agriculture will help increase labor productivity, save material, labor and financial resources, increase production.

In this regard, the President of the Republic of Uzbekistan Shavkat Mirziyoyev on December 3, 2020 at a meeting to discuss priorities for the development of science and innovation in higher education institutions, scientific organizations, industries and regions expressed the following views on the development of science and innovation. In particular, it was noted that “Especially, the need for developments that will increase agricultural productivity, specialize the regions, increase high-value products was emphasized. It was noted that the creation of crop varieties suitable for the climate of the regions, the preparation of quality seeds is absolutely unsatisfactory. In the last two years, \$ 108 million worth of seedlings and seeds have been imported. This year, imports of seed potatoes alone have doubled compared to last year.

It was noted that it is necessary to establish private seed enterprises in the regions, import marketable varieties from abroad and create seed brands adapted to local conditions. The Ministry of Agriculture and the Ministry of Innovative Development have been tasked to cultivate new generation hybrid seeds and establish seed production laboratories.

Problems in the field of water management can also be solved through scientific solutions. In particular, the use of water-saving technologies in irrigation is expanding. However, there is no system for proper dissolution of fertilizers, timing of irrigation, timely maintenance. The implementation of scientific research on sprinkler irrigation is also lagging behind”. This means that the main factor in ensuring and developing their future development in all areas of the country, both manufacturing and service enterprises, depends on innovation.

The problems of enterprises operating in different forms of ownership in a market economy can arise in the application of innovative processes. While businesses focus on addressing the challenges of applying innovation in their operations, they are more likely to find themselves in difficult situations in certain situations. Because the application of innovations can not be implemented in any enterprise. Therefore, the implementation of innovations can be observed only in the activities of some enterprises. For example, in the process of innovating, enterprises face unresolved issues and challenges in attracting foreign investment and producing competitive products, and seek to find solutions to them. However, there are enterprises where the process of updating old equipment and technology is slow, product quality and environmental requirements do not meet world standards. Such enterprises face serious problems in the application of innovation, which require large sums of money to overcome. New competition can be based on the application of innovations in enterprises. In other words, there are changes in competitive trends. Perfect competition is a very strong incentive for a society to minimize production costs and bring wages as close as possible to its normative productivity.

Literature review. The benefits of innovation will further increase the activity of the enterprise. Joseph Alois Schumpeter (1883-1950) called this benefit as a static profit¹. At the same time, economic efficiency is not able to bring production to a new level. The new level is about innovation, which requires extra cost. Innovation creates a new type of competition. This happens when a new brand, a new technology, has the same novelty, an advantage in general.

¹ Joseph Alois Schumpeter. Economic development theory. –M.: Progress0, 1982. Page 122

The innovator begins to interfere with the survival of other businesses. Because an opponent who operates on the basis of innovation can jump ahead of others and become a monopolist in his field. This is what J. Schumpeter called a “creative disorder.”

A key element of the system of effective development of agriculture is the transition to an innovative model based on technical and technological re-equipment of the industry. The introduction of innovations in all spheres of activity of agricultural enterprises will help to increase labor productivity, save various resources, reduce the cost of agricultural products, increase the volume and efficiency of agricultural production. By summarizing the news in agriculture, they can be classified as follows in agriculture.

**Table 1
Classification and content of innovative innovations in agriculture**

| Classification of innovative novations | Content of innovative novations |
|---|--|
| <i>Biological</i> | - new varieties and hybrids of agricultural plants; - new breeds, species of animals and birds; - creation of plants and animals resistant to diseases and pests, adverse environmental factors. |
| <i>Technical</i> | - use of new types of machinery or equipment. |
| <i>Technological</i> | - new technology of agricultural processing; - new technology of animal husbandry; - science-based systems of agriculture and animal husbandry; - new resource-saving technologies for the production and storage of agricultural products. |
| <i>Chemical</i> | - new types of fertilizers; - new means of plant protection. |
| <i>Economic</i> | - a new form of organization, planning and management; - new forms and mechanisms of innovative development of the enterprise. |
| <i>Social</i> | - providing comfortable living and working conditions for the rural population. |
| <i>Management novations</i> | - a new form of labor organization and incentives; - a new way to effectively manage employees. |
| <i>Marketing</i> | - entry into a new market segment; - Improving product quality and expanding the range; - new distribution channels. |

Innovation is an important component of sustainable agricultural development. In general, the structure of innovation in agriculture can be expressed in the form of four main stages:

- creation of scientific developments;
- dissemination of news (approbation, verification and transmission of information on innovations);
- mastering innovations in production;
- evaluation of the effectiveness of innovations.

It is in the agricultural sector that, unlike other sectors, the development of innovations is slower,

which requires special attention. The most common innovations are: new varieties and hybrids of plants, animal breeds, strains of microorganisms, brands and modifications of agricultural machinery, technologies, chemical and biological drugs, the implementation of economic changes.

The longest time is the process of creating innovation. Although associated with a certain risk of obtaining unsatisfactory results, conducting fundamental and applied research and development is a necessary stage in the process of creating scientific and technical products.

It will only be a novelty once the scientific development has been approved and recommended for mass introduction into production. The process of approbation of fundamental innovations in agriculture is also a long-term stage: the results of scientific achievements in crop production bring maximum income in 15-20 years from the start of funding for each area of research, and in breeding livestock and animal breeds - 20-30 years and more. more.

Approbation and verification of samples is carried out by scientific institutions, special government agencies and organizations. The increase in innovations in agriculture is carried out by seed farms (cultivation of elite and reproductive seeds of new varieties and hybrids of agricultural crops);

- breeding plants (breeding of purebred animals);
- machine-building enterprises (serial production of new equipment);
- biological factories (production of vaccines, etc.).

The introduction of developments into production or the transformation of innovations into innovations is carried out at the initiative of business entities to achieve commercial benefits.

Scientific research requires large-scale funding and full state support every year, because the scientific level and quality of innovation depends on it, which is very important in the context of the spread of competitive foreign technology and scientific and technical products to the domestic market. This is especially true of imports of agricultural machinery, seeds of foreign plant varieties and plant protection products. Financial support for innovation is also needed at other stages of the innovation process, as implementation incentives should meet the demand for local scientific developments.

The introduction of innovations and market development are limited by a number of factors, the most important of which are the low solvency of farms, the lack of reliable and complete information on the latest local scientific developments in the field of agriculture.²

The development of agriculture is largely determined by the level of involvement of innovative technologies and production efficiency. The innovative development of agro-industrial production will contribute to the steady growth of exports and the level of domestic consumption, the decline in imports due to the replacement of domestic production. As a result, it will increase the competitiveness of agricultural production and increase the attractiveness of investment in the sector³.

²Бугара А.Н. Инновационный потенциал предприятий аграрного сектора села // Инновационный менеджмент: теория, методология, практика: Материалы XV Международной научно-практической конференции. - Новосибирск: ЦРНС, 2016. - С. 96-99.

³Ходос Д.В., Антамошкина О.И., Антамошкин А.Н., Шапорова З.Е. Инновационный потенциал и развитие сельскохозяйственных предприятий // Вестник Красноярского государственного аграрного университета. - 2010. - № 11. - с. 23-28.

Modern innovation policy in the country should be aimed at creating favorable conditions for raising the technological level of production and improving its composition, as the state is to increase the competitiveness of domestic products, economic growth and, accordingly, the formation of economic and national security.

The strategic objectives of agricultural innovation policy are to increase national competitiveness through innovation, especially the resources directly required by agricultural producers, and to identify and support high-tech areas that will accelerate economic growth.

In a market economy, the application of innovation in the enterprise is important. The formation of an innovative environment creates the conditions for constant product renewal, renewal of production assets on the basis of new techniques, creating opportunities for the development of society.

The current state of economic development in our country in accordance with the state of economic development and structural changes in all sectors leads to the coordination of changes in the economy. Many problems arise in the process of innovation, especially in the field of production and services, and their timely solution requires the necessary personnel, material and technical base, organizational and methodological measures.

Today, in the structure of the national economy, “special attention is paid to the implementation of an active investment policy on the technical and technological re-equipment of existing enterprises and the acceleration of the establishment of new production based on modern, high technology.”⁴.

Analysis and results. It takes place in the following stages in the implementation of innovation processes in the enterprise. This can be seen in the diagram below.

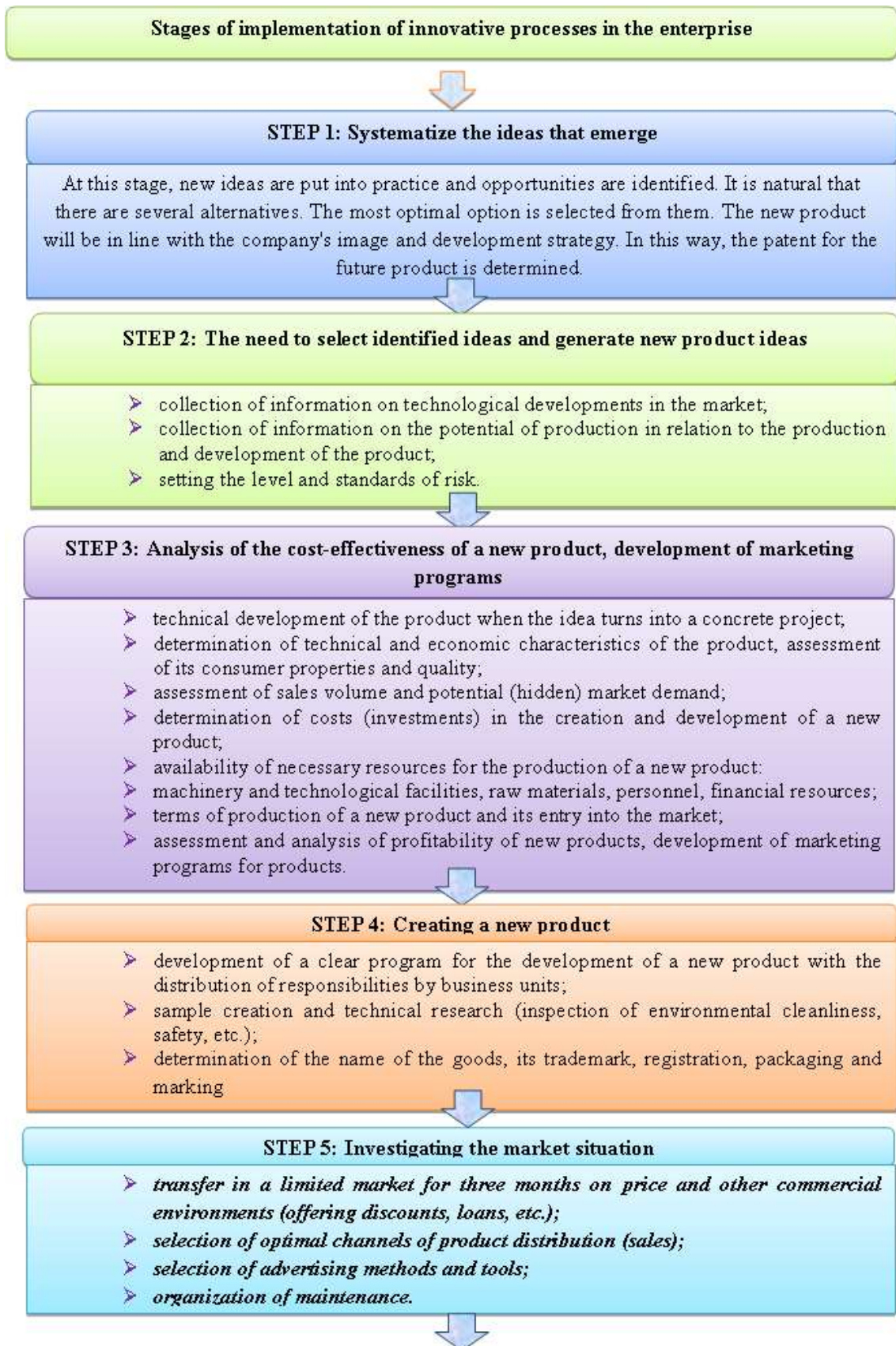
If the steps shown in chart 1 are done carefully, any enterprise will be able to enter the market rapidly and start to make maximum profit when it introduces innovation.

In recent years, targeted measures have been taken to develop innovative sectors of the economy and the social sphere, to provide comprehensive support and increase the efficiency of science and research.

A strategic program aimed at including the country in the list of 50 leading countries in the global ranking of innovations has been approved, new mechanisms for financing research projects have been introduced, additional conditions will be created for financial incentives for highly qualified personnel in science.

- Development of strategies for the development of priority sectors and industries on the basis of scientific achievements and innovations on the basis of long-term scenarios of innovative development of the country;
- Formation, approval of state programs of scientific activity and control over their implementation;
- coordination of the system of training of scientific level;
- Introduction of effective mechanisms for the involvement of young people in scientific and innovative activities and full support for their initiatives;
- of science and industry through the development of sectoral research;

⁴ Raximova D. Khudoyberdiev Z., Eshonxo'jaev D. Management. –T .: “Akademiya”, 2003. Pages 94-95



- Wide attraction of investments in the implementation of scientific and innovative projects, increasing the activity of the private sector and the development of venture-based financing;
- Carrying out financial, economic and technical examination of projects implemented on the basis of innovative developments and providing the necessary conditions for the implementation of intellectual property;
- Identification of the needs of the real sector of the economy and industries for scientific development and innovation, and strengthening the Wide attraction of investments in the implementation of scientific and innovative projects, increasing the activity of the private sector and the development of venture-based financing;
- Carrying out financial, economic and technical examination of projects implemented on the basis of innovative developments and providing the necessary conditions for the implementation of intellectual property;
- Identification of the needs of the real sector of the economy and industries for scientific development and innovation, and strengthening the Increasing the intellectual and technological potential of the regions, the formation of a modern infrastructure for the development of scientific and innovative activities;
- Increasing the intellectual and technological potential of the regions, the formation of a modern infrastructure for the development of scientific and innovative activities;
- creation of necessary conditions for commercialization and introduction of new developments in production, implementation of startup projects, formation of new organizations with intellectual property participation and development of rationalization activities;
- It is necessary to take measures to expand and strengthen international relations in the field of science and innovation, the transfer of innovations and technologies.

References:

1. Proceedings of the meeting of the President of the Republic of Uzbekistan Shavkat Mirziyoyev "Priorities for the development of science and innovation in higher education institutions, scientific organizations, industries and regions." December 3, 2020.
2. Joseph Alois Schumpeter. Economic development theory. –М.: Progress0, 1982. Page 122
3. Бугара А.Н. Инновационный потенциал предприятий аграрного сектора села // Инновационный менеджмент: теория, методология, практика: Материалы XV Международной научно-практической конференции. - Новосибирск: ЦРНС, 2016. - С. 96-99.
4. Ходос Д.В., Антамошкина О.И., Антамошкин А.Н., Шапорова З.Е. Инновационный потенциал и развитие сельскохозяйственных предприятий // Вестник Красноярского государственного аграрного университета. - 2010. - № 11. - с. 23-28.
5. Raximova D. Khudoyberdiev Z., Eshonxo'jaev D. Management. –Т .: “Akademiya”, 2003. Pages 94-95