

# **PROSPECTS OF INNOVATIVE DEVELOPMENT OF THE AGRICULTURAL NETWORK**

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**Abstract:** As the population grows, the demand for agricultural products increases. The introduction of innovative technologies in the sustainable development of this sector and the increase in agricultural production with the rational use of resources is becoming increasingly important. This article analyzes the current state of development of the agricultural industry, developed indicators of prospects and the main directions of innovative development.

**Keywords:** agriculture, crop production, innovation, innovation activity, innovation processes, forecast.

#### INTRODUCTION

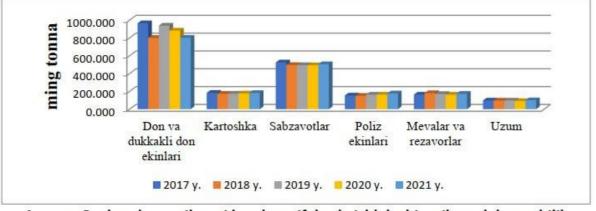
In the conditions of the current global integration process, ensuring the country's food security requires the industry to be flexible to the changing external environment, effective in various innovations and scientific and technical development, based on the sustainable development of agriculture. Therefore, in many developed countries of the world, the modern stage of agricultural development is described as the stage of transition to an innovative model that ensures the systematic integration of the agrarian and scientific-technical sectors in order to increase its efficiency. In particular, in order to "optimize production and distribution systems and implement new business models, which allow us to effectively use land, energy and other natural resources, and at the same time pay more attention to the needs of the world's poor population, we will introduce "smart agriculture" there is a need to create "jaligi". According to scientists, an important role in solving the strategically important problems of various countries in the 21st century is based on knowledge-based economy or innovation economy]. In the last 15 years, the number of people working in the field of innovation in the USA and Western Europe has doubled, and in Southeast Asia it has increased 4 times. The share of innovative active industrial enterprises in the European Union was more than 56%. In the developed countries of the world, 75 percent of the gross domestic product is accounted for by innovations. In the context of global climate change, in the coming decades, the agro-food chain will face a sharp increase in world demand and intensifying competition for limited natural resources, and it will require adaptation to changes and mitigation of such changes. . Innovation, as mentioned above, aims to meet growing demand and to expand the whole network that integrates sustainable food production, processing, distribution and consumption, waste reduction, and the so-called food system. appear as important means of adaptation. According to scientists' estimates, by 2050, the population of the planet will reach 9.6 billion, and in order to provide them with food, it will be necessary to increase production by 60% compared to today. If we pay attention to foreign trends, 1 mln. the number of innovations created per population (recognized in foreign patent offices): in the USA -261.7, in Japan - 213.0; in Germany - 206.3; in France - 171.9; In Russia, it is 1.3. Today, in the Republic of Uzbekistan, consistent measures are being taken to ensure a wider integration of science, education and production, to create and apply new knowledge, to introduce innovative technologies and best practices. . However, the results of the research on the introduction of innovative technologies and the development of the agricultural sector do not reach the lowest levels of the sector, and the problems that have not been solved for years prevent the agricultural sector from developing more rapidly. Therefore, in the future, "... as one of the main directions of agricultural development, the creation of effective mechanisms for the dissemination of knowledge integrated with the production of research, education and consulting services, science, education, information and consulting development of the services system" is defined as a priority task. This situation requires the development of scientific and methodological bases for increasing the efficiency of innovative processes in increasing the economic potential of agricultural entities, conducting systematic research on the scientific-theoretical and methodological aspects of these processes. Based on the theoretical views and analyzes presented above, in our opinion, innovation is the use of scientific achievements and best practices, improvement and development processes of social production, products with new consumer characteristics (goods, products, techniques, technology, other organizational forms and tools). is the materialized final result of investment and creative activity based on formation, implementation, helps to satisfy market and social needs, saves costs and ensures that people have different results in different spheres of life and activity.

#### **Research methodology**

In this scientific article, the scientific research works of foreign and domestic economists on innovation, introduction of innovative activities in the sustainable development of economic sectors, including agriculture, and innovative development of the agricultural sector have been studied. Statistical data grouping, comparative analysis, monographic observation, and mathematical modeling methods were used based on the information of the Statistical Committee of the Republic of Uzbekistan, the Statistical Department of Kashkadarya Region.

#### Analysis and results

The volume of the gross regional product of Kashkadarya region plays a significant role in the formation of the country's gross domestic product. Kashkadarya occupies 6th place after Tashkent city, Tashkent region, Navoi region, Samarkand region, Fergana region in terms of GDP of the region. By the end of 2021, the country's GDP amounted to 734587.7 billion soums. It can be observed that the volume of GDP was 43833.3 billion soums. This, in turn, indicates that the volume of GDP increased by 202.9% and the volume of the gross agricultural product by 197.3% compared to 2017. The growth rate of agricultural production in Kashkadarya region over the past 5 years was 103.3 decreased from 101.9 percent to 101.9 percent, in particular, the volume of agricultural products, the volume of agricultural products of farms and peasant (personal assistant) farms increased by 1.01 and 1.02 times, respectively. increasing organizations decreased by 1.65 times. Based on the data of the Statistics Department of Kashkadarya region, the agricultural products produced in all categories of the region were assessed as unstable growth when the volume of growth in 2017-2021 was studied. In particular, in 2021, compared to 2017, we observe that grain and leguminous crops increased by 83.1%, potatoes by 96%, vegetables by 115.1%, 105.4% and 102.9%, respectively. it can be observed that it increased by percent (Fig. 1).



1-rasm. Qashqadaryo viloyati barcha toifalarda ishlab chiqarilgan dehqonchilik mahsulotlari<sup>1</sup>

Taking into account that the permanent population of Kashkadarya region is equal to 3,408,345 people as of January 1, 2022, we will consider the level of standard provision of agricultural products to medical standards (Table 1).

1-jad	val
2021yilda aholi jon boshiga dehqonchilik mahsulotlari bilan ta`minlanganlik	
darajasi <sup>2</sup>	

			uarajas	1			
Mahsulot turi	Yalpi mahsulot hajmi, tonna		Aholi jon boshiga Yam hajmi, gr/kun		Tibbiyot normasi,	Me`yorga nisbatan ta`minlanganligi, %	
	2020y	2021y	2020y	2021y	gr/kun <sup>3</sup>	2020y	2021y
Kartoshka	176752	181776	142	146	220	64,5	66,4
Sabzavotlar	493098	504988	396	406	330	120	123
Poliz ekinlari	163301	177112	131	142	80	163,7	178
Mevalar va rezavorlar	163178	172334	131	139	285	46	48,6
Uzum	91248	100579	73	81	30	243,3	269,5

As it can be seen from the table, potatoes, fruits and berry plants are not enough to fully provide the population. It is known that 2020-2021 was an unfavorable year for agriculture in terms of natural climate conditions. As a result, the production volume of fruit products in the republic decreased sharply compared to previous years. Therefore, we believe that it is appropriate to introduce innovative technologies in the production of agricultural products, taking into account adverse weather conditions, to ensure food safety of the population.

## **Conclusions and suggestions**

Currently, Uzbekistan has all the necessary socio-economic bases for deepening innovation processes and strengthening the innovation base. However, there are problems in moving the agrarian sector to the path of innovative development, or in other words, implementing innovative projects even at the scale of one or several farms, because farms and entities processing agricultural products are currently slowness of participation in the ordering of scientific research works and financing of research, the inability of the economic entity to carry out research in the development of advanced innovative technologies and the financing of scientific research, development of agricultural products for the use of new technology, new varieties producers and processors do not have enough knowledge, they need to use the services of scientists and specialists, and farmers face certain difficulties in processing and selling products. Problems such as insufficient demand of producers for innovative developments prepared by scientists of higher educational institutions and scientific research institutions, lack of organic connection between them, irresponsibility of some producers of agricultural products hinder innovation in agriculture. can be included among the factors that hinder the processes. The problems of innovative development

with wide and effective use of new resource-efficient, advanced technologies ensures rapid economic growth, taking into account the preservation of the environment. Without denying the importance of other directions in the innovative development of the agricultural sector in the current conditions, we consider technical and technological innovations to be the most important direction in the conditions of modernization of agriculture. The development and implementation of technical and technological innovations will be aimed at reducing the current and investment (capital) costs of production, maximum adaptation of the used techniques and technologies to the natural climate, soil and specific characteristics of each region.

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