



# INNOVATION IQTISODIYOT

*Ilmiy-amaliy elektron jurnal*

**2026**

**№5**

**ИННОВАЦИОННАЯ ЭКОНОМИКА**

Научно-практический электронный журнал

**INNOVATIVE ECONOMY**

Scientific and practical electronic journal



Indexlanadigan bazalar:  Google Scholar  Crossref  OpenAIRE  CYBERLENIKA



# INNOVATION IQTISODIYOT

ILMIY-AMALIY  
ELEKTRON JURNAL

5-jild  
5-son  
May, 2026

May, 2026  
Volume 5  
Number 5

ИННОВАЦИОННАЯ  
ЭКОНОМИКА  
Научно-практический  
электронный журнал

INNOVATIVE ECONOMY  
Electronic scientific and  
practical journal



## INNOVATSION IQTISODIYOT

### ILMIY-AMALIY ELEKTRON JURNAL

ISSN: 3030-315X

ojs.kstu.uz

#### Muassis:

**Qarshi davlat texnika universiteti**

**Tahririyat Kengashi raisi:**

R.X.Ergashev, iqtisodiyot fanlari doktori, professor

**Tahririyat Kengashi raisi o‘rinbosari:**

S.N.Xamrayeva, iqtisodiyot fanlari doktori, professor

#### Mas’ul muharrir:

N.A.Ochilova, PhD, dotsent

#### Texnik muharrir:

S.J.Qulmurotov

*Jurnal har oyda bir marotaba elektron shaklda jurnalning rasmiy sayti orqali nashr etiladi.*

#### Tahririyat manzili:

180100, Qarshi shahri, Mustaqillik ko‘chasi 225-uy Tel.:

+998 (75) 221 09 23

+998 (93) 902 72 63

Faks: +998 (75) 221 1395

innoeconomic@kstu.uz

“Innovatsion iqtisodiyot” ilmiy - amaliy elektron jurnali O‘zbekiston Respublikasi Oliy ta’lim, fan va innovatsiyalar vazirligi huzuridagi **Oliy attestatsiya komissiyasi rayosatining 2025-yil 5-apreldagi 369-sonli qarori** bilan milliy ilmiy nashrlar ro‘yxatiga kiritilgan.

**Jurnalda quyidagi ruknlar asosida maqolalar nashr etiladi:**

1. Nazariya va metodologiya
2. Raqamli iqtisodiyot
3. Mintaqa va tarmoqlar iqtisodiyoti
4. Kichik biznes va xususiy tadbirkorlik
5. Inson kapitali iqtisodiyoti
6. Menejment va marketing
7. Buxgalteriya hisobi, iqtisodiy tahlil va audit
8. Moliya, kredit va investitsiya
9. Ekonometrika va statistika
10. Xizmat ko‘rsatish va turizm sohasi

#### TAHRIRIYAT KENGASHI:

##### Tahririyat Kengashining xalqaro a'zolari:

Ovchinnikov Viktor Nikolayevich - i.f.d., professor, akademik (Janubiy Federal Universitet, Rossiya)

Solodovnikov Sergiy Yurevich - i.f.d., professor (Belorussiya milliy texnika universiteti)

Sidorov Viktor Aleksandrovich - i.f.d., professor, (Kuban davlat universiteti)

Shevchenko Igor Viktorovich - i.f.d., professor (Kuban davlat universiteti, Rossiya)

Kusainov Xalel Xaymullievich - i.f.d., professor, akademik (Qozog‘iston Respublikasi Milliy fanlar akademiyasi)

Samandarzoda Iskandar Hakim - Iqtisodiyot fanlari doktori (Sh.Shotemur nomidagi Tojikiston agrar universiteti)

Gibadullin Artur Arturovich - i.f.n. dotsent (Milliy tadqiqot universiteti, Moskva energetika instituti, Rossiya)

Sergey Aleksandrovich Voynash - ilmiy xodim (P.Lumumbi nomidagi Rossiya xalqlar do‘stligi universiteti)

Valentina Nikolayevna Pulyayeva - iqtisod fanlari nomzodi, dotsent (Rossiya Federatsiyasi hukumati qoshidagi Moliya universiteti)

Dmitriy Evgenievich Morkovkin, iqtisod fanlari nomzodi, dotsent (Moliya universiteti, Rossiya Federatsiyasi hukumati)

Sadriddinov Manuchehr Islomiddinovich - i.f.d., professor, (Tojikiston Respublikasi Milliy fanlar Akademiyasi)

Perskaya Viktoriya Vadimovna - i.f.d., professor, (Rossiya Federatsiyasi hukumati huzuridagi Moliya universiteti)

Molchanov Igor Nikolayevich - i.f.d., professor, (Lomonosov nomidagi Moskva davlat universiteti)

Basova Mariya Mixaylovna - i.f.d., professor, (Rossiya Federatsiyasi hukumati huzuridagi Moliya universiteti)

Aleksandr Leonidovich Chupin, iqtisod fanlari nomzodi (P.Lumumbi nomidagi Rossiya xalqlar do‘stligi universiteti)

Nezamaykin Valeriy Nikolayevich - i.f.d., professor, (Rossiya davlat gumanitar universiteti)

Nikonorova Alla Vladimirovna - i.f.n., dotsent, (Rossiya Federatsiyasi hukumati huzuridagi Moliya universiteti)

Dmitriyeva Olga Aleksandrovna - i.f.n., dotsent, (Rossiya Federatsiyasi hukumati huzuridagi Moliya universiteti)

Shvets Yuriy Yuryevich - i.f.n., dotsent, (Rossiya Fanlar akademiyasining Nazorat fanlari instituti)

Kolosova Yelena Valeryevna - i.f.n., dotsent, (Plexanov nomidagi Rossiya iqtisodiyot universiteti)

##### Tahririyat Kengashi a'zolari:

Gulyamov Saidaxror Saidaxmedovich - i.f.d., professor, akademik

Pardayev Mamayunus Qarshiboyevich - i.f.d., professor

Navruz-zoda Baxtiyor Negmatovich - i.f.d., professor

Xatamov Ochildi Qurbonovich - i.f.d., professor

Fayziyeva Shirin Shodmonovna - i.f.n., professor

Jumayeva Gulrux Jo‘raqulovna - i.f.n., professor

Egamberdiyeva Salima Raimovna - i.f.n., dotsent

Erkayeva Gulbahor Panjiyevna - i.f.n., professor

Yakubova Shamshinur Shuxratovna - i.f.d., (DSc) dotsent

Amirqulov Shuhrat Olimovich - i.f.f.d., (PhD), dotsent

Samiyeva Gulnoza Toxirovna - i.f.f.d., (PhD), dotsent

Aliqulov Azamat Tuyg‘unovich - i.f.f.d., (PhD), dotsent

Aminov Fazlitdin Baxadirovich - i.f.n., dotsent

Xo‘jaqulova Nigora Rustamovna - i.f.f.d., (PhD), dotsent

Turobov Sherzod Alisherovich - i.f.f.d., (PhD), dotsent

Alimova Munisa Yulchiyevna - i.f.f.d. (PhD) dotsent

Ergasheva Nasiba Raxmatullayevna - i.f.d., (DSc), dotsent

Boboqulov Sanjar Baxromkulovich - i.f.f.d., (PhD), dotsent

Djalilov Raxmonkul Hamidovich - i.f.f.d., (PhD), dotsent

Nomazov Baxrom Bobomurodovich - i.f.f.d. (PhD) dotsent

Alimxanova Nigora Alimxanovna - i.f.f.d. (PhD) dotsent

Jonuzokov Mirzabek Kulmamatovich - i.f.f.d. (PhD), dotsent

Muxammadiyeva Yulduz Yusupovna - i.f.f.d. (PhD)

Tursunova Aziza Xoshimovna - i.f.f.d. (PhD)

Xolliyev Sherali Baxtiyorovich - i.f.f.d. (PhD)

Panjiyev Samijon Aliqulovich - PhD, dotsent



## ИННОВАЦИОННАЯ ЭКОНОМИКА

### Научно-практический электронный журнал

ISSN: 3030-315X

ojs.kstu.uz

**Учредитель:**

**Каршинский государственный технический университет**

**Председатель редакционного совета:**

Р.Х.Эргашев, доктор экономических наук, профессор

**Заместитель председателя редакционного совета:**

С.Н.Хамраева, доктор экономических наук, профессор

**Ответственный редактор:**

Н.А.Очилова, PhD, доцент

**Технический редактор:**

С.Ж.Кулмуротов

Журнал издается один раз в месяц в электронной форме и публикуется через официальный сайт журнала.

*Адрес редакции:*

180100, г. Карши, ул. Мустакиллик, дом 225

Тел: +998 (75) 221 09 23

+998 (93) 902 72 63

Факс: +998 (75) 221 1395

E-mail: [innoeconomic@kstu.uz](mailto:innoeconomic@kstu.uz)

Научно-практический электронный журнал «Инновационная экономика» включён в перечень национальных научных изданий на основании решения Президиума Высшей аттестационной комиссии при Министерстве высшего образования, науки и инноваций Республики Узбекистан от 5 апреля 2025 года № 369.

**В журнале публикуются статьи по следующим рубрикам:**

1. Теория и методология
2. Цифровая экономика
3. Экономика регионов и отраслей
4. Малый бизнес и частное предпринимательство
5. Экономика человеческого капитала
6. Менеджмент и маркетинг
7. Бухгалтерский учет, экономический анализ и аудит
8. Финансы, кредит и инвестиции
9. Эконометрика и статистика
10. Сфера услуг и туризм

#### Редакционная коллегия:

##### Международные члены Совета редколлегии:

Овчинников Виктор Николаевич - д.э.н., профессор, академик (Южный федеральный университет, Россия)

Солодовников Сергей Юрьевич - д.э.н., профессор (Белорусский национальный технический университет)

Виктор Александрович Сидоров - д.э.н., профессор, (Кубанский государственный университет)

Шевченко Игорь Викторович - д.э.н., профессор (Кубанский государственный университет)

Кусаинов Халел Хаймуллович - д.э.н., профессор, академик (НААН Республика Казахстан)

Самандарзода Искандар Хаким - д.э.н., профессор (Таджикистанский аграрный университет им. Ш. Шотемура)

Гибатуллин Артур Артурович - к.э.н., доцент (Национальный исследовательский университет «Московский энергетический институт»)

Войнаш Сергей Александрович - научный сотрудник (Российского университета дружбы народов имени П.Лумумби)

Пуляева Валентина Николаевна - к.э.н., доцент (Финансовый университет при Правительстве РФ)

Морковкин Дмитрий Евгеньевич - к.э.н., доцент (Финансовый университет Правительство РФ)

Садриддинов Манучехр Исламиддинович - д.э.н., профессор (Национальная академия наук Республики Таджикистан)

Перская Виктория Вадимовна - д.э.н., профессор (Финансовый университет при Правительстве РФ)

Молчанов Игорь Николаевич - д.э.н., профессор (Московский государственный университет имени М.В. Ломоносова)

Басова Мария Михайловна - д.э.н., профессор (Финансового университета Российской Федерации)

Чупин Александр Леонидович - к.э.н. (Российского университета дружбы народов имени П. Лумумби)

Незаймакин Валерий Николаевич - д.э.н., профессор (РГТУ)

Никонорова Алла Владимировна - к.э.н., доцент (Финансового университета Российской Федерации)

Дмитриева Ольга Александровна - к.э.н., доцент (Финансового университета Российской Федерации)

Швец Юрий Юрьевич - к.э.н., доцент (Институт проблем управления РАН)

Колосова Елена Валерьевна - к.э.н., доцент (Российский экономический университет имени Г.В. Плеханова)

##### Члены Совета редколлегии:

Гулямов Саидхорр Саидхмедович - д.э.н., профессор, академик

Пардаев Мамаюнус Каршибоевич - д.э.н., профессор

Навруз-зода Бахтиёр Негматович - д.э.н., профессор

Хатамов Очилди Курбанович - д.э.н., профессор

Файзиева Ширин Шодмоновна - к.э.н., профессор

Жумаева Гулрух Журакуловна - к.э.н., профессор

Эгамбердиева Салима Раимовна - к.э.н., доцент

Еркаева Гулбахор Панжиевна - к.э.н., профессор

Якубова Шамина Шухратовна - д.э.н., (DSc), доцент

Амиркулов Шухрат Олимович - д.ф.э.н., (PhD), доцент

Самиева Гулноза Тохировна - д.ф.э.н., (PhD), доцент

Алигулов Азамат Туйгунович - д.ф.э.н., (PhD), доцент

Аминов Фазлитдин Бахадирович - к.э.н., доцент

Хужакулова Нигора Рустамовна - д.ф.э.н., (PhD), доцент

Туробов Шерзод Алишерович - д.ф.э.н., (PhD), доцент

Алимова Муниса Юльчиевна - д.ф.э.н., (PhD), доцент

Эрашьева Насиба Рахматуллаевна - д.э.н., (DSc), доцент

Бобокулов Санжар Бахромкулович - д.ф.э.н., (PhD), доцент

Джалилов Рахмонкул Хамидович - д.ф.э., (PhD), доцент

Номазов Бахром Бобомуродович - д.ф.э.н., (PhD), доцент

Алимханова Нигора Алимхановна - д.ф.э.н., (PhD), доцент

Джанузакон Мирзабек Кулмаматович - д.ф.э.н., (PhD), доцент

Мухаммадиева Юлдуз Юсуповна - д.ф.э.н., (PhD)

Турсунова Азиза Хошимовна - д.ф.э.н., (PhD)

Холлиев Шерали Бахтиёрович - д.ф.э.н., (PhD)

Панджиев Самиджон Аликулич - PhD, доцент



**Mintaqa va tarmoqlar iqtisodiyoti**  
**Economy of the region and industry**  
**Экономика региона и отрасли**



# INSTITUTIONAL MECHANISMS FOR ENSURING FOOD SECURITY IN UZBEKISTAN AND PROSPECTS FOR INTERNATIONAL COOPERATION

*Boboqulov Sanjar Baxronkulovich*

# ИНСТИТУЦИОНАЛЬНЫЕ МЕХАНИЗМЫ ОБЕСПЕЧЕНИЯ ПИЩЕВОЙ БЕЗОПАСНОСТИ В УЗБЕКИСТАНЕ И ПЕРСПЕКТИВЫ МЕЖДУНАРОДНОГО СОТРУДНИЧЕСТВА

*Бобокулов Санжар Бахронкулович*

# O‘ZBEKISTONDA OZIQ-OVQAT XAVFSIZLIGINI TA’MINLASHNING INSTITUTSIONAL MEKANIZMLARI VA XALQARO HAMKORLIK ISTIQBOLLARI

*Boboqulov Sanjar Baxronkulovich*

Received: May 14, 2026 May: May 17, 2026 May: May 21, 2026 Published: June 1, 2026

**Abstract:** this article analyzes institutional mechanisms for ensuring food security in Uzbekistan and prospects for international cooperation. The study examines the impact of global factors affecting food security, such as climate change, water scarcity, demographic pressure, and geopolitical instability, on the agricultural sector. It also examines reforms implemented in the country to ensure food security, including the agro-cluster system, subsidies, concessional loans, and the introduction of innovative technologies.

**Key words:** food security, institutional mechanisms, international cooperation, agricultural sector, agrocluster, logistics infrastructure, agriculture, innovative technologies, sustainable development, export potential, food quality, water resources, climate change.

**Аннотация:** в данной статье анализируются институциональные механизмы обеспечения продовольственной безопасности в Узбекистане и перспективы международного сотрудничества. В исследовании рассматривается влияние глобальных факторов, влияющих на продовольственную безопасность, таких как изменение климата, дефицит воды, демографическое давление и геополитическая нестабильность, на сельскохозяйственный сектор. Также рассматриваются реформы, проводимые в стране для обеспечения продовольственной безопасности, включая агрокластерную систему, субсидии, льготные кредиты и внедрение инновационных технологий.

**Ключевые слова:** продовольственная безопасность, институциональные механизмы, международное сотрудничество, аграрный сектор, агрокластер, логистическая инфраструктура, сельское хозяйство, инновационные технологии, устойчивое развитие, экспортный потенциал, качество продуктов питания, водные ресурсы, изменение климата.

## INTRODUCTION

The world's population is growing every year, and the corresponding reduction in available fertile land is one of the pressing problems observed not only globally, but also in our country. For example, in recent years, the expansion of urban areas, improved infrastructure, and increased food consumption by the population have led to an increase in demand for them. This, in turn, requires

ensuring food security, improving its legislative framework, using modern technologies, developing intensive agriculture, and improving the institutional structure. In particular, according to the Food and Agriculture Organization of the United Nations, "730 million people in the world face the problem of hunger and malnutrition" [1]. Therefore, to overcome this global problem, it is necessary to assess the situations that may



arise in our country and find the right solution for them. In support of our idea, the Strategy of the Republic of Uzbekistan for Ensuring Food Security and Healthy Nutrition until 2030 sets as a priority the task of “strengthening the resilience of agricultural and food production processes and their markets to natural and man-made disasters and the risks of climate change” [2]. Therefore, improving institutional mechanisms for ensuring food security and strengthening international cooperation in its implementation is one of the pressing issues of our time. Ensuring food security in Uzbekistan has been identified as a priority of state policy, and institutional reforms are being implemented in this area. In particular, the introduction of a cluster system in agriculture, the rational use of land and water resources, the adoption of innovative technologies in production processes, and the application of international standards contribute to improving the efficiency of the agricultural sector. At the same time, regional disparities in development, water shortages, and the inefficient use of export potential highlight the need for a systemic approach in this area.

### LITERATURE REVIEW

Food security is one of the most important and complex processes in the modern global economy and international politics. In recent years, climate change, demographic pressure, geopolitical instability, and disruptions in global supply chains have further exacerbated the risks in this area. Therefore, ensuring food security is directly linked not only to economic stability at the national level, but also to the effectiveness of international cooperation and institutional mechanisms. In particular, the manuscript by R. P. Escamilla, “Definitions, Concepts, Frameworks, Measurements, and Applications of Food and Nutrition Security: Global Lessons” [3], contains an in-depth analysis of the modern theoretical evolution of the concept of food security and the mechanisms for its practical assessment. The scientist interprets food security as a primary link in human health and social well-being, clarifying the conceptual boundaries of this concept. The study aims to assess the institutional capacity of the international indicator system used to monitor food security. However, the scientist sheds light on the theoretical foundations of food security. In particular, the correlation between poverty, social inequality, and health indicators is not considered.

The article “Multi-level Policy Implementation of a Six-Dimensional Model of Food Security” [4] by J. Clapp, W. Moseley et al. examines the process of adoption of the six-dimensional model of food security by international and national political institutions. These include: accessibility, usability, sustainability, political systems, and resilience. At the same time, the report “The UK Food Security Report”, published by the UK government, shows that the six-dimensional institutional model for assessing food security is integrated into public policy” [5]. The report notes that the national monitoring system has been improved based on the indicators of accessibility, use, sustainability, agency, and environmental sustainability. At the same time, the fact that the applicability of this system in developing

countries has not yet been sufficiently analyzed remains a scientific gap.

In his article “Global and Local Perspectives on Food Security and Food Systems” [6], J. Fanzo provides a scientific basis for the impact of inequality in the global food market, environmental degradation, and geopolitical instability on food security. He argues that the gap in coordination between global policy and local governance institutions is one of the main causes of food security threats and proposes an approach to modeling food systems as complex ecological-economic systems. However, the lack of a methodologically complete integration of local conditions into institutional indicators remains a scientific limitation.

Local scholars have conducted numerous studies on food safety and institutional improvement. In particular, the textbook “Fundamentals of Food Safety” [7] by KODaev, DTatakulova, and ZD Kholmurodova covers the environmental aspects of nutrition and priority issues of food safety, while the article by ABKhojaeva “Prospects for International Legal Cooperation between the Food and Agriculture Organization of the United Nations (FAO) and the Republic of Uzbekistan” [8] analyzes the contribution of the Food and Agriculture Organization of the United Nations (FAO) to food safety in the region of Uzbekistan, as well as the regulatory documents and recommendations developed by FAO that serve to strengthen Uzbekistan’s participation in international food safety, and promising strategic areas of international cooperation based on the principles of international law.

In his article “Features of Ensuring Food Security in Uzbekistan” [9], IMBabaev examines the relevance of ensuring food security, its importance for the country’s economic security, and the specifics of the socio-economic reforms being carried out in this regard in our country, while D.Sh. Kasimov, in his article “Problems and Solutions for Ensuring Food Security in Uzbekistan” [10], examines key factors such as the efficiency of the agricultural sector, limited water resources, climate change, logistics infrastructure, and population income. He also analyzes modern approaches to food security based on international organizations (FAO, World Bank, IFPRI) and the latest scientific literature.

### RESEARCH METHODOLOGY

This study utilized a comprehensive approach to analyzing institutional mechanisms for food security. The research utilized methods of scientific knowledge analysis and synthesis, comparative analysis, systematic approaches, and statistical and logical analysis. Specifically, the experience of international organizations and foreign countries in ensuring food security was examined and its applicability to Uzbekistan’s context was analyzed. The institutional foundations of food security were also assessed based on data from the Food and Agriculture Organization of the United Nations, the World Bank, and the Asian Development Bank, as well as national regulatory documents, government programs, and statistical data. The study systematically examined factors influencing food security, including agricultural production, logistics



infrastructure, water resources, climate change, and the interdependence of international cooperation.

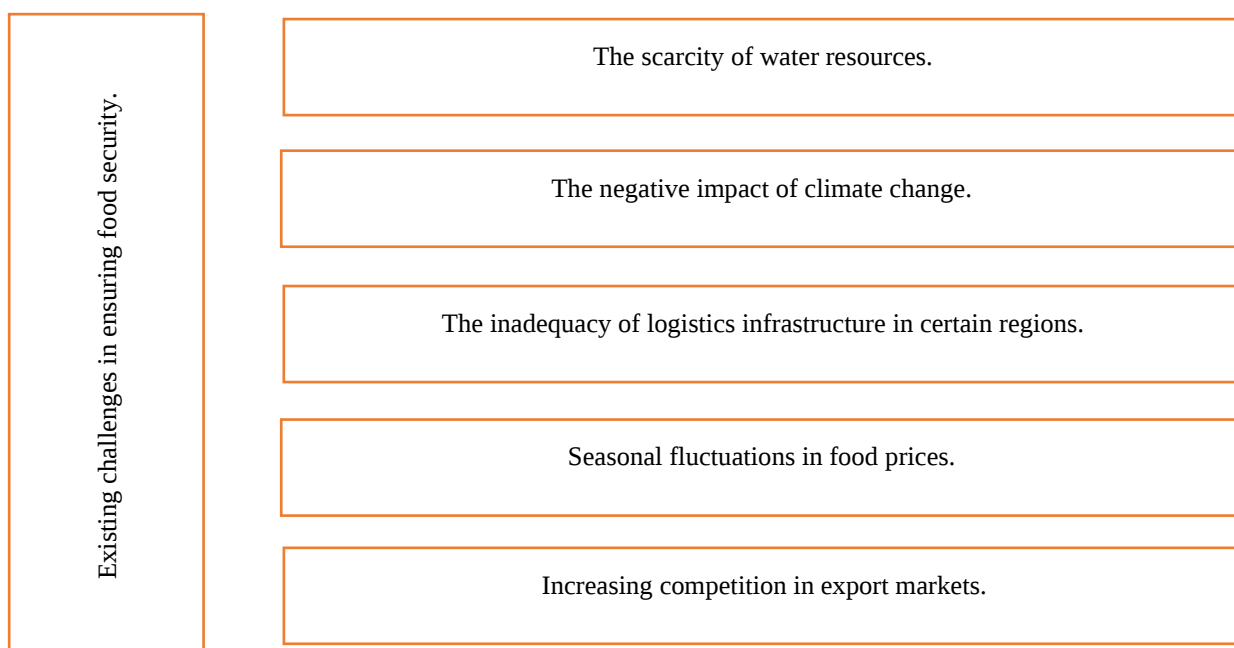
### ANALYSIS AND RESULTS

Global climate change, geopolitical conflicts, pandemics, and disruptions in the global economic logistics system have made food security a strategic priority. Particularly in developing countries, ensuring a sustainable supply of high-quality and safe food products is a priority for public policy. The concept of food security entails ensuring an uninterrupted supply of sufficient high-quality and safe food products. Specifically, according to the approach developed by the Food and Agriculture Organization (FAO) of the United Nations, food security comprises four key components[11]:

- Availability of food products;
- Their economic and physical impact on the population;
- Level of quality and safety;
- Stability of supply.

The institutional framework represents a system of interaction between government agencies, the regulatory framework, financial institutions, research centers, and international organizations. This framework is an important factor determining the effectiveness of food safety management.

In recent years, the Republic of Uzbekistan has also been implementing large-scale reforms aimed at modernizing the agricultural sector, introducing market mechanisms in agriculture, supporting agricultural activities, and increasing food production. In particular, the Law of the Republic of Uzbekistan “On Food Safety”[12] aims to regulate relations in the field of food safety, including state support for the food safety sector, as well as the rights and obligations of consumers and business entities in the field of food safety. Ensuring food safety is closely linked not only to increasing production volumes, but also to the development of effective institutional management and international cooperation. However, today, the following problems remain in ensuring food safety in Uzbekistan (Fig. 1).



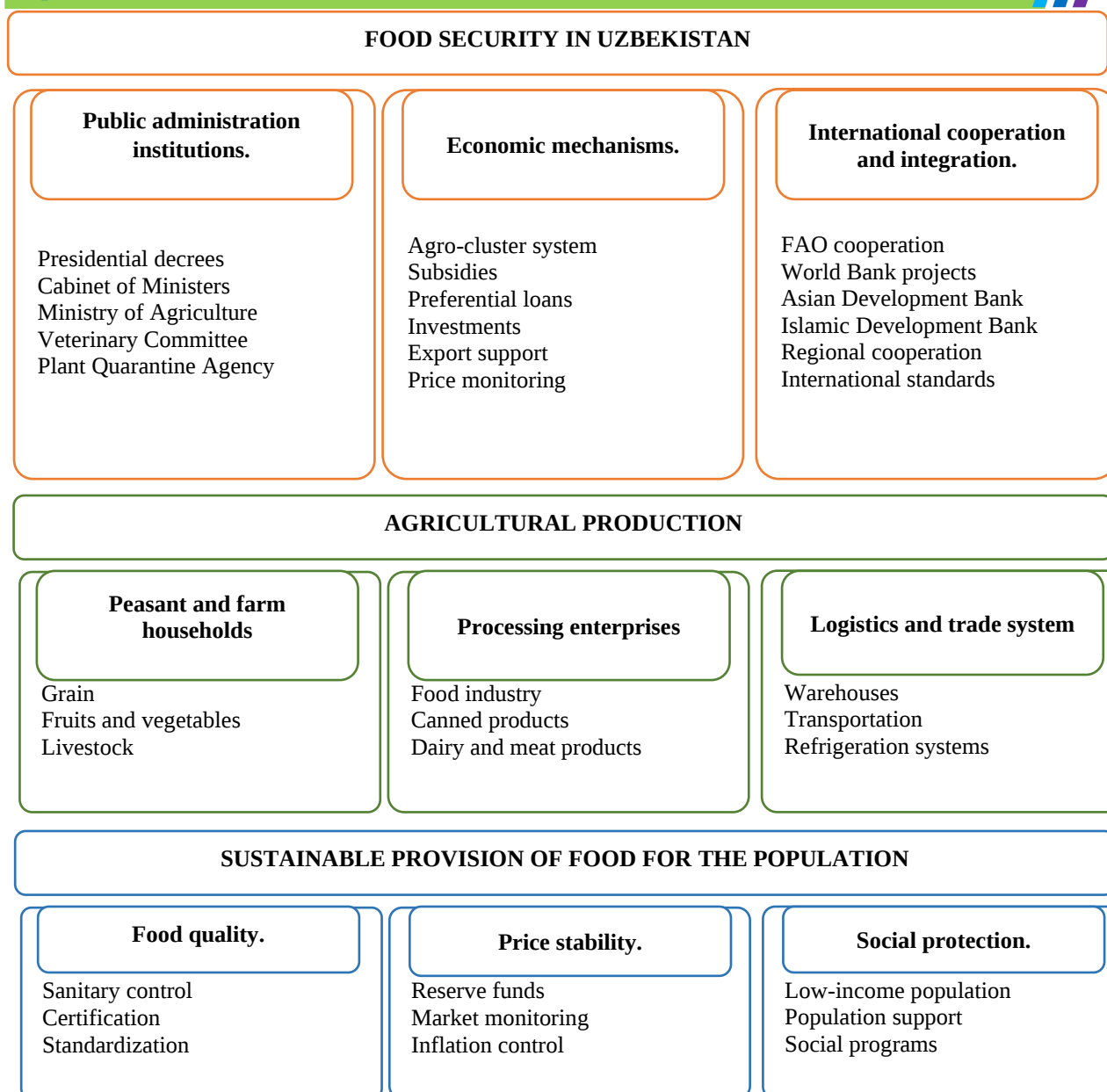
**Figure 1. Current problems of ensuring food security [13].**

Water shortages and the negative impacts of climate change undermine the sustainability of agricultural production and directly threaten food security. In some regions, underdeveloped logistics infrastructure hinders the efficient delivery of produce to consumers, while seasonal price volatility limits the ability of the population, especially the poor, to purchase food. Increased competition in export markets puts additional pressure on domestic market balances, further exacerbating the systemic nature of these problems.

In practice, we see evidence that the aforementioned problems are being addressed annually through state programs and presidential decrees. In particular, as a result of measures adopted in the Decree of the President of the Republic of Uzbekistan “On Additional Measures to Ensure Food Security in the

Republic”[14] to develop the food industry in the country, attract investment funds to this sector, and support export activities, the volume of food production has exceeded USD 6.1 billion, and the annual volume of exports has reached USD 510 million. Furthermore, over the past three years, the production of 75 types of import-substituting food products has been ensured, valued at USD 289.9 million, while the volume of imports has decreased by 7.4 percent. The share of the food industry in the country’s total industry has increased from 14 percent to 16.6 percent.

Based on the above review of the literature and existing problems in the field of food security in Uzbekistan, we propose the following mechanism (Fig. 2).



**Figure 2. Institutional mechanism for ensuring food security in Uzbekistan [13].**

This picture represents a multi-level and interconnected institutional mechanism for ensuring food security in Uzbekistan. It reflects the functioning of government bodies, economic mechanisms, agricultural producers, the logistics system, and international cooperation institutions as a unified system. Specifically, the state promotes the sustainable development of food production by regulating agricultural policy, distributing subsidies, providing preferential loans, and improving the regulatory framework. At the same time, the development of agro-clusters and processing plants is an important factor in improving product quality, filling the domestic market, and strengthening export potential.

This mechanism also emphasizes the role of international cooperation in ensuring food security. In particular, collaboration with international organizations such as the Food and Agriculture Organization of the United Nations, the World Bank, and the Asian Development Bank enables the introduction of modern agricultural technologies, the effective management of

water resources, and the development of logistics infrastructure. This creates the necessary conditions for meeting the population's growing demand for high-quality and safe food, ensuring price stability, and strengthening the social protection system. The effective functioning of this institutional system is crucial for ensuring the country's economic stability and national security.

Furthermore, to ensure food security in Uzbekistan, forecasts based on alternative scenarios for the medium and long term have been developed. As part of the new economic policy implemented in 2017, processes have been initiated to modernize the agricultural sector, improve production efficiency, and widely implement intensive technologies and innovative solutions. These reforms are aimed at strengthening the country's food security, developing the cluster system, and expanding the deep processing of agricultural products.

Main areas of cooperation with international organizations [13]

| Partner organizations                            | The essence of cooperation with Uzbekistan                                                                                                                                             |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Food and Agriculture Organization                | It provides technical cooperation to modernize agriculture, strengthen food security, introduce agricultural technologies and support farmers.                                         |
| World Bank                                       | This will help modernize irrigation systems, manage water resources, develop rural infrastructure and finance agricultural reforms.                                                    |
| Asian Development Bank                           | This will help develop the agricultural sector, improve logistics systems, finance investment projects in rural areas, and introduce innovative technologies.                          |
| Islamic Development Bank                         | Provides investments and credit lines for the development of the food industry, livestock farming and processing industries.                                                           |
| World Trade Organization                         | Provides advisory and institutional support for Uzbekistan's integration into the international trading system, increasing export potential, and implementing international standards. |
| European Bank for Reconstruction and Development | Participates in the development of agricultural clusters, support of the private sector and attracting investment in the food industry.                                                |
| Shanghai Cooperation Organization                | This will contribute to strengthening regional food security, developing logistics corridors and expanding scientific and technical cooperation in the agricultural sector.            |

An analysis of the table shows that Uzbekistan is developing multilateral and strategic cooperation with international organizations to ensure food security. In particular, collaboration with organizations such as the Food and Agriculture Organization of the United Nations, the World Bank, and the Asian Development Bank facilitates the modernization of the agricultural sector, effective water resource management, the introduction of modern agricultural technologies, and the improvement of logistics infrastructure. At the same time, investments and loans from international financial institutions create an important economic foundation for expanding agricultural production and increasing export potential. Furthermore, international cooperation strengthens Uzbekistan's integration into the global food system and enhances institutional stability in ensuring national food security. The introduction of international standards, innovative technologies, and advanced management practices improves the quality and competitiveness of products. As a result, the country is creating the necessary conditions for an uninterrupted supply of high-quality food to the population, increasing agricultural efficiency, and achieving sustainable economic development.

#### CONCLUSION AND SUGGESTIONS

In conclusion, in the current context of globalization and climate change, ensuring food security is a strategic priority for every state. The study's results showed that strengthening food security in Uzbekistan is closely linked not only to the development of agricultural production, but also to the formation of an effective institutional management system, the implementation of modern economic mechanisms, and the expansion of international cooperation.

Based on the analysis, it was found that the development of an agro-cluster system in the country, the provision of subsidies and preferential loans, the improvement of logistics infrastructure, and the introduction of innovative technologies contribute to an increase in the volume and quality of food production. At the same time, limited water resources, climate change,

price instability, and certain problems in the logistics system were assessed as the main threats to food security. Cooperation with international organizations such as the Food and Agriculture Organization of the United Nations, the World Bank, and the Asian Development Bank is also an important factor in modernizing the agricultural sector, effectively managing water resources, implementing international standards, and attracting investment. The institutional model developed during the study reflects the inextricable link between public administration, economic instruments, international integration, and social protection systems.

First, to reduce water resource shortages, it is necessary to digitalize irrigation systems based on IoT sensors and artificial intelligence, and implement a real-time water consumption monitoring system.

Secondly, it is advisable to create mini-agroclusters and local processing plants in backward regions in order to reduce the development gap between regions.

Thirdly, to effectively utilize export potential, it is necessary to introduce international certification systems, diversify logistics corridors, and strengthen cooperation with the WTO.

Fourth, it is recommended to establish a scientific monitoring system for assessing food security based on the FAO model and promptly adjust public policy using a digital platform.

As a result, the need for digitalization of the agricultural sector, support for scientific and innovative activities, increasing export potential, widespread adoption of water-saving technologies, and further strengthening international cooperation to ensure food security was substantiated. Implementation of these measures is essential for ensuring the country's economic stability, the well-being of the population, and national security.

**Author details / Muallif haqida / Сведения об авторе**

Boboqulov Sanjar Baxronkulovich SamISI, “Raqamli iqtisodiyot” kafedrasi dotsenti, PhD / Бобокулов Санжар Бахронкулович PhD, доцент кафедры «Цифровая экономика» Самаркандского института экономики и сервиса / Boboqulov Sanjar Baxronkulovich SamISI “Raqamli iqtisodiyot” kafedrasi dotsenti, PhD

**E-mail:** [sanjar.bobokulov02@gmail.com](mailto:sanjar.bobokulov02@gmail.com),

**ORCID:** 0000-0002-1882-1507

**REFERENCES**

- [1]. Jahon sog'liqni saqlash tashkiloti (World Health organization) The state of food security and nutrition in the world 2024 <https://www.who.int/publications/m/item/the-state-of-food-security-and-nutrition-in-the-world-2024>
- [2]. O'zbekiston Respublikasi Prezidentining 2024-yil 16-fevraldagi PF-36-son Farmoni. O'zbekiston Respublikasining oziq-ovqat xavfsizligi va sog'lom oziqlanishni ta'minlashning 2030-yilgacha mo'ljallangan strategiyasi. <https://lex.uz/docs/6760627>
- [3]. Pérez-Escamilla, R. Food and Nutrition Security Definitions, Constructs, Frameworks, Measurements, and Applications: Global Lessons. PMC Journal List 2024 <https://pmc.ncbi.nlm.nih.gov/articles/PMC10977101>
- [4]. Clapp, J., Moseley, W.G., Termine, P., & Burlingame, B. Multi-scalar Policy Uptake of the Six-Dimensional Food Security Framework. Contents lists available at Science Direct Food Policy (2025). <https://mro.massey.ac.nz/server/api/core/bitstreams/2d2d6aa4-85f8-4426-8ef7-c400a63390c8/content>
- [5]. UK Government (2024). United Kingdom Food Security Report 2024. <https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2024>
- [6]. Fanzo, J. et al. (2024). Global and Local Perspectives on Food Security and Food Systems.

Communications Earth & Environment.

<https://www.nature.com/articles/s43247-024-01398-4>

[7]. Q.O.Dodayev, D.T.Ataqulova va Z.D.Xolmurodovlarning “Oziq - ovqat xavfsizligi asoslari” darslik Nashriyot: Intellect Resursni qo'shgan muassasa: Denov tadbirkorlik va pedagogika instituti 2023. 316 bet. <https://unilibrary.uz/literature/794692>

[8]. Xodjayeveva Aziza Bahtiyarovna “Xalqaro oziq-ovqat va qishloq xo'jaligi tashkiloti FAO va O'zbekiston Respublikasining o'zaro xalqaro huquqiy hamkorlik istiqbollari” Vol. 1 No. 1 (2025): YUKSAK EHTIROM

<https://scientificacademy.org/index.php/yuksak-ehitirom/article/view/261>

[9]. Babaev Ilyas Maxamadaminovich “O'zbekistonda oziq-ovqat xavfsizligini ta'minlashning o'ziga xos xususiyatlari” “Journal of science-innovative research in Uzbekistan” jurnali volume 2, issue 1, 2024. January ResearchBib Impact Factor: 8.654/2023 ISSN 2992-8869 <file:///C:/Users/User/Downloads/719-725.pdf>

[10]. Qosimov Dostonjon Shavkat o'g'li “O'zbekistonda oziq-ovqat xavfsizligini ta'minlash muammolari va yechimlari” Zamonaviy ta'lim islohotlari va ularning amaliy yechimlari ilmiy-amaliy konferensiya aprel 2026

<https://drive.google.com/file/d/1127xKvcNM60ExV4pNgm-i7TM5UsHuoSs/view>

[11]. Food and Agriculture Organization of the United Nations Building sustainable agrifood systems <https://www.fao.org/home/en>

[12]. O'zbekiston Respublikasining “Oziq-ovqat xavfsizligi to'g'risida”gi Qonuni 03.02.2025 yildagi O'RQ-1023-son <https://lex.uz/uz/docs/-7359113#-7359743>

[13]. Mavzuga oid adabiyotlar tahlili asosida muallif ishlanmasi

[14]. O'zbekiston Respublikasi Prezidentining “Respublikada oziq-ovqat xavfsizligini ta'minlashning qo'shimcha chora-tadbirlari to'g'risida”gi Farmoni 16.02.2024 yildagi PF-36-son <https://lex.uz/docs/-6802687>



**INNOVATION**  
**IQTISODIYOT**  
**ILMIY-AMALIY ELEKTRON**  
**JURNAL**

ISSN: 3030-315X



[t.me/kstu\\_uz](https://t.me/kstu_uz)



Qarshi shahri,  
Mustaqillik ko'chasi 225



[www.kstu.uz](http://www.kstu.uz)  
[www.ojs.kstu.uz](http://www.ojs.kstu.uz)