



## **THE ROLE AND ECONOMIC SIGNIFICANCE OF AGRO-BUSINESS IN A MARKET ECONOMY**

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### **Abstract**

This research work comprehensively examines the role of the agribusiness system in the modern market economy, its functions in ensuring economic stability, and the laws of its development. The theoretical and methodological foundations of the agribusiness system are analyzed, in particular, the value chain from the cultivation of agricultural products to their delivery to the consumer. The study scientifically substantiates the strategic importance of agribusiness in GDP growth, ensuring employment, improving the investment climate, and guaranteeing food security. Also, international experience, in particular, cluster approaches and innovative technologies in the agricultural sector of developed countries, were comparatively analyzed with the conditions of Uzbekistan. At the end of the study, practical proposals and recommendations were developed to increase the competitiveness of agribusiness entities and digitalize the industry.

**Keywords:** Agribusiness, market economy, agricultural sector, economic efficiency, food security, investment, innovation, value chain, agro-industrial integration, cluster.

### **Introduction**

In a market economy, the strategic development of the agricultural sector is a fundamental factor ensuring not only the growth of one sector, but also the stability of the entire national economy. Today, in the context of population growth, climate change, and limited resources on a global scale, the management of agriculture and



all related economic processes as a single “agribusiness” system has become the most priority area of state policy.

In the Development Strategy of the Republic of Uzbekistan for 2022-2026, the development of agriculture on a scientific basis, the creation of a value chain in the industry, and a sharp increase in export potential are defined as important tasks. The concept of agribusiness includes resource supply, primary production, processing industry, logistics, and retail trade. The interconnectedness of these sectors, along with increasing economic efficiency, will bring intersectoral cooperation to a new level.

Currently, agribusiness is a complex ecosystem that integrates not only food production, but also innovative technologies, digital solutions, and international marketing strategies. Therefore, a deep theoretical and practical analysis of the economic significance of agribusiness, identification of problems in the industry, and scientific substantiation of their solutions are relevant.

## **2. METHODS**

In the preparation of this scientific work, multifaceted methods of studying the agribusiness system were used. The methodological basis of the research is a systematic approach, in which agribusiness is considered not as a separate link in the economy, but as a complex of interconnected industries.

The following methods were used in the analysis process:

- Economic and statistical analysis: used to study production indicators in the industry, investment flows, and export dynamics;
- Comparative analysis: Differences and similarities in the agribusiness system of developed countries and Uzbekistan were identified;
- Induction and deduction: The activities of individual subjects were used in the transition from general economic conclusions and general theories to specific practical recommendations;
- Value chain analysis: served to assess economic efficiency at the product stages from field to table.

The official reports of FAO (UN), the World Bank, and the Statistics Agency of the Republic of Uzbekistan for the period 2019-2024 were taken as the basis of the database.



### 3. RESULTS

The concept of agribusiness was introduced into science in 1957 by Harvard University scientists J. Davis and R. Goldberg. They defined agribusiness as “the totality of all operations related to the production of resources for farms, the cultivation, storage, processing, and distribution of agricultural products” [1].

In modern interpretations, agribusiness consists of three major spheres:

1. Input Sector: Seed, fertilizer, fuel, equipment, and technology supply.
2. Production Sector: Direct cultivation of agricultural crops and production of livestock products.
3. Output Sector: Processing, sorting, packaging, transportation, and marketing services for finished products.

M. Porter, based on cluster theory, substantiated the importance of vertical and horizontal integration for increasing competitiveness in agribusiness [2].

Agribusiness is one of the locomotives of economic development. Global experience shows that 1% growth in the agricultural sector is 2-3 times more effective in reducing poverty than in other sectors. In developing countries, including Uzbekistan, this sector provides a significant share of GDP (on average 25-30%).

The development of infrastructure in rural areas and raising the standard of living of the population directly depend on agribusiness entities. Agribusiness provides employment not only to farmers, but also to representatives of dozens of related service industries.

In a market economy, the development of agribusiness entities directly depends on capital flows. However, the agricultural sector is distinguished from other sectors by its long production cycle, high natural and climatic risks, and low capital turnover rates. Therefore, the availability of state guarantees and preferential credit lines plays a decisive role in attracting investments to the industry.

Main directions for increasing investment activity:

- Foreign direct investment: Transfer of modern technologies and introduction of international management experience (know-how);
- Public-Private Partnership (PPP): Attracting private sector funds for the modernization of irrigation and land reclamation systems;

Leasing relations: Updating expensive agricultural machinery and units based on long-term lease.



Commercial banks and special funds play a significant role in financing agribusiness entities. In the conditions of Uzbekistan, preferential loans allocated by JSCB “Agrobank” and other financial institutions are an important source of replenishing the working capital of dehkan and farmer farms. Studies show that the lack of credit resources is one of the main factors hindering the technological renewal of small and medium-sized agribusiness entities.

The fourth industrial revolution (Industry 4.0) is fundamentally changing agribusiness. The “Smart Agriculture” system allows increasing yields several times with maximum resource savings (water, fertilizers, fuel) [3].

The components of this system include:

1. Internet of Things (IoT): Sensors that monitor soil moisture and the condition of crops in real time;
2. Drones and satellite monitoring: visual analysis of sown areas and precision pest control;
3. Big Data: Determining the optimal sowing and harvesting time by analyzing weather data and harvest history.

Digitalization is important not only in production, but also in the marketing process. Electronic trading platforms (Marketplace) serve to reduce product costs and increase the farmer's profit by reducing intermediaries between the producer and the consumer [4].

In modern agribusiness, the export success is determined not only by the cultivation of products, but also by their packaging and certification in accordance with international standards (GlobalGAP, Organic, Halal). The transition from raw material exports to finished product exports through the formation of a "value-added chain" in the fruit and vegetable sector of Uzbekistan is a strategic task.

One of the biggest problems in the industry is losses during the storage and transportation of products. According to FAO data, 20-30% of the harvest can be lost due to improper logistics [3]. Therefore, the creation of modern agro-logistics centers in each region of the republic, including refrigerated warehouses, sorting and packaging workshops, is of urgent economic importance.

#### **4. DISCUSSION**

The Aral Sea region, in particular the Republic of Karakalpakstan, has its own difficulties in the development of agribusiness. In conditions of saline soils, water



scarcity, and a sharply continental climate, agribusiness entities should specialize in the cultivation of resistant crops (halophytes, oilseeds).

Currently, measures are being taken in the region to modernize the livestock, poultry, and rice industries by creating agro-industrial clusters. Nurimbetov, it has been proven that the widespread introduction of water-saving technologies (drop irrigation) in Karakalpakstan increases the profitability of agribusiness up to 40%. Also, licorice root and medicinal plant clusters play a driving role in increasing the export potential of the region.

As a result of the research, the following systemic problems hindering the development of the industry were identified:

1. Inefficient use of water resources: High water losses due to the deterioration of irrigation systems;
2. Low integration of science and production: Slow implementation of research in the field of breeding and seed production;
3. Lack of marketing knowledge: Insufficient skills in analyzing world market conditions in farms.

In the USA, state regulation of agribusiness is one of the most perfect systems in the world. The Farm Bill program, implemented by the US Department of Agriculture (USDA), covers five-year periods and provides for the insurance of farmers' income, price stabilization, and export promotion [1].

Features of the US experience:

Income insurance: Farmers are insured against crop loss or a sharp drop in market prices. The largest part of the insurance premium (up to 60%) is covered by the state budget;

- Tax benefits: For farms, the "Cash Accounting" (cash method) system is applied, which allows them to effectively manage the tax burden at the end of the year;

- Scientific Research (R&D): The state allocates billions of dollars annually to agricultural universities and research centers, which ensures technological advantages.

In Germany, agribusiness develops within the framework of the European Union's Common Agricultural Policy (CAP). The basis of the German experience is environmental sustainability and the transition to a "green economy":

- Direct payments: Farmers receive basic payments for each hectare of sown area;



- Environmental conditions: To receive payments, farmers must comply with strict requirements for environmental protection, animal welfare, and biodiversity conservation [4];

- Cooperative Movement: In Germany, more than 80% of agribusiness entities are united in various cooperatives, which allows them to buy resources cheaply and sell products at higher prices.

In a market economy, land is one of the main assets of agribusiness. The reforms being implemented in Uzbekistan are aimed at stabilizing legal relations regarding land.

- Long-term lease: The lease of land for a period of 30 to 50 years allows agribusiness entities to draw up long-term investment plans [6];

- Economic value of land: The improvement of mechanisms for determining the market value of land and its use as collateral opens the way to credit resources.

A distinctive feature of the Uzbekistan agribusiness system is the cluster approach. The cluster system unites all links from the producer of raw materials to the producer of finished products on the basis of economic interest [7]:

- Cotton-textile clusters: made it possible to achieve a 100% level of raw cotton processing;

Fruit and vegetable clusters have become a driver for expanding the geography of exports and forming logistics centers.

Over the past five years, the share of agribusiness and related industries in the economy of Uzbekistan has been steadily growing. According to the Statistics Agency, the share of agriculture, forestry, and fisheries in GDP at the end of 2023 was approximately 24-25% [8].

The structure of agribusiness exports has fundamentally changed. If previously the main export product was cotton fiber, now the share of finished textile products, yarn, fresh and processed fruits and vegetables has sharply increased. In 2022-2023, the volume of food exports increased by 1.5 times [9].

## **5. CONCLUSION**

According to the research results, in order to increase the competitiveness of agribusiness in the future, it is necessary to pay attention to the following priority areas:



1. Strengthening vertical integration: development of direct contractual relations of farms with processing enterprises;
2. Human capital development: training of agribusiness managers, agronomist-technologists, and logistics specialists based on modern market requirements;
3. Environmental certification: access to high-income European and Asian markets through the widespread introduction of "Organic" and "Green" standards;
4. Agrotourism and service: creation of additional service sectors in rural areas through diversification of agribusiness.

As a result of the conducted research, the following conclusions were made:

- In a market economy, agribusiness is not only a raw material sector, but also a complex system that ensures economic growth;
- The introduction of the cluster system in Uzbekistan initiated the process of industrialization in agriculture;
- Digitalization and innovation are the most effective way to increase the profitability of agribusiness.

### **Practical recommendations:**

1. Development of the insurance market for agribusiness entities and expansion of the mechanism of state subsidization of insurance premiums.
2. Provision of long-term tax holidays (Tax Holidays) for entrepreneurs who have implemented water-saving technologies in the regions (especially in the Republic of Karakalpakstan and desert zones).
3. Creation of e-commerce platforms (B2B, B2C) in agribusiness and their integration into international logistics systems.

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