

## ENSURING FOOD SECURITY AT THE LEVEL OF STATE POLICY

### **Yakhshiyeva Mavluda Tursunovna**

PhD of the Department of  
"Fundamental Economics"  
Tashkent State University of Economics  
Islam Karimov avenue 49  
100003 Tashkent, Uzbekistan  
<https://orcid.org/0000-0002-8850-4208>  
email: m.yaxshiyeva@tsue.uz

### **Abdullayeva Madina Kamilovna**

PhD of the Department of  
"Fundamental Economics"  
Tashkent State University of Economics  
Islam Karimov avenue 49  
100003 Tashkent, Uzbekistan  
<https://orcid.org/0000-0002-0671-7972>  
email: m.abdullayeva@tsue.uz

### **Rasulev Alisher Fayziyevich**

Doctor of Science, Professor of the Department of  
"Fundamental Economics"  
Tashkent State University of Economics  
Islam Karimov avenue 49  
100003 Tashkent, Uzbekistan  
<https://orcid.org/0000-0002-8526-6777>  
email: a.rasulev@tsue.uz

### **Bababekova Dilfuza Sherkulovna**

PhD of the Department of General Economic Sciences  
Tashkent Institute of Management and Economics  
<https://orcid.org/0000-0001-5393-1392>  
email: bababekova-1973@mail.ru

### **Bakiyeva Iroda Abdushukurovna**

PhD of Perfect University  
Tashkent, Uzbekistan  
email: i\_bakiyeva@mail.ru

---

**Abstract.** The scarcity of food is becoming a global issue nowadays. COVID-19, natural calamities, change in climate and scarcity of potable water make the production of food very difficult. The demand and price of the food are rising very rapidly. Ensuring food security is a prime concern for every country in the world. Considering the condition of food security concern,

Uzbekistan is also very serious on this issue because the sovereignty, political and socio-economic stability depend on food security significantly. This study has investigated on the major problems of food security in Uzbekistan.. It has also discussed ongoing reforms, results, trends and case studies in the country's food industry. This study has been conducted through data mining and reviewing the existing literature to picture out the whole scenario of Uzbekistan's food security. The outcome of this study will provide a good insight to this field of knowledge. Policy makers of Uzbekistan can also utilize this report for developing national food policy.

**Keywords:** Food security, transformation, standardization, agribusiness, diversification, material and technical base, industrial cooperation, innovation.

## 1. Introduction

In the context of globalization, the rapid development of the world economy, along with the positive effects and results, also leads to the emergence of new threats. One such threat is the problem of food security. By definition, a nation is considered to have achieved food security when its citizens have reliable access to nutritious food at a cost that meets basic societal needs and legal requirements, regardless of fluctuations in global food prices. For the first time, during the 1974 World Food Summit, the term "food security" was used to describe a situation in which "there are always adequate stocks of essential foodstuffs in the world to support sustainable expansion of food consumption and to compensate variations in production volumes and prices." [1].

Humanity's most fundamental need are met by the food business. Economic development, population health, social protection, and availability of basic commodities are only some of the issues that must be addressed today. For this reason, it is essential to increase efforts to entice foreign investment in order to optimize the use of existing means, modernize and diversify the food production sector, and thereby alleviate the crisis at hand. Therefore, there is a chance to upgrade food production technology and speed up the manufacturing process; set up new manufacturing lines; expand product variety and quality; and satisfy all of the population's demands for consumer goods. [2]. Recently, for implementing the measures to improve the competitive environment in enterprises in the sector, there are positive shifts in the transformation of the food industry. By attracting investments in this area, the introduction of modern technologies in the processing and production of fruits, vegetables, meat and dairy products, the

renewal of the technological base of production will provide the domestic market with quality and safe local food products. laid the groundwork for its growth.

## 2. Methodology

The government of Uzbekistan is very concerned on ensuring the food security. From the time of independence, the government has been trying to ensure food security by major reform in food policy. Opinions and comments of the President of the Republic of Uzbekistan on the formation of a stable and efficient economy, further strengthening the efficiency of enterprises in the food industry and deepening the competitiveness of products through the deepening of transformational processes in the food industry. adopted laws and regulations, relevant decisions of the Government of the Republic. Financial statements of government statistical agencies, scientific institutions, periodicals, news agencies and the Internet were also used. The research has utilized dialectical methods of cognition, scientific observation, analysis and synthesis, induction and deduction, statistical grouping, monographic research, comparative econometric analysis and forecasting methods.

## 3. Results and discussion

### 3.1 Consumption of food products

One of the primary goals of the agricultural sector reforms in Uzbekistan has been to achieve food self-sufficiency in order to provide the people with enough food to fulfill the nutritional requirements of everyone. As a result of transitional difficulties and damaged economic and commercial ties with its Central Asian neighbors, Uzbekistan's per capita food consumption has been on the decline since 1990. There has been an increase in consumption since 1996. Although overall food intake has increased, many people still fail to meet nutritional requirements. Bread, flour, and pastry goods are often consumed in greater quantities to make up for caloric deficiencies (Table 1). The proportion of income spent on food is another measure of the food insecurity crisis. Since 1997, this metric has been on the decline, which is encouraging news for bringing this issue to a close. From Table 1, it is evident that Uzbekistan people are not capable to fulfill the minimum requirement of yearly food demand to some criterion, It is fundamental requirement to develop food policies for ensuring food security.

**Table 1:** Annual food consumption scenario

	Annual requirements	Year of consumption					
		1995	2000	2005	2010	2015	2020
Meat	75.60	33.00	31.00	32.00	35.00	38.00	43.90
Products of diary and milk	196.20	160.00	153.00	178.00	195.00	225.00	260.00
Eggs (pieces)	180.00	53.00	50.00	60.00	78.00	75.00	90.00
Fish and fish products	1.60	1.40	1.80	1.96	2.14	2.33	2.54

Bread	186.60	157.00	198.00	215.82	235.24	256.42	279.49
Potatoes	150.00	23.00	36.00	39.24	42.77	46.62	50.82
Vegetables and melons	84.00	120.00	99.00	107.91	117.62	128.21	139.75
Fruit, berries, and grapes	24.00	29.00	26.00	28.34	30.89	33.67	36.70
Sugar	25.20	9.90	18.00	19.62	21.39	23.31	25.41
Vegetable oil	13.80	13.90	13.60	14.82	16.16	17.61	19.20

### 3.2 Production of agricultural commodities

The Republic of Uzbekistan's agricultural sector is a major economic driver. There are more than 60 percent of people who reside in rural regions, and over 40 percent of the adult work force is involved in agriculture. Also, agriculture accounts for between 25 and 30 percent of GDP and 55 percent of total foreign exchange earnings. Agriculture is the backbone of the republic's economy. Uzbekistan's cotton fiber production and supply became especially noticeable during Soviet rule. Cotton was planted on the finest farmland. Seventy percent of all irrigated land was dedicated to growing cotton, and in certain areas that number was much higher. This imbalanced approach meant that opportunities to boost food production were missed for a long time. Areas planted with vegetables, forage crops, orchards, and grapes all shrank steadily over time. From other parts of the Soviet Union, basic pastry products, potatoes, sugar, livestock, and a variety of other foods were imported. Prior to independence, the country imported an average of 1700 thousand tons of flour and pastries each year, 450 thousand tons of potatoes, 300 thousand tons of sugar, 478 thousand tons of meat and animal products, and 2929 tons of milk and dairy goods. Even certain types of fruit were imported by Uzbekistan. After the independence from the Soviet regime, ensuring food security is the prime concern of Uzbekistan. The country developed various numbers of reform and policies to increase the edible food production. Table 2 represents food and agricultural commodities production scenarios. From table 2, it is evident that production of cotton is decreasing with time. On the other hand, the production of food is increasing each year.

**Table 2:** Annual food production scenario

Product names	Years of production					
	1995	2000	2005	2010	2015	2020
Raw cotton	3934.00	3206.00	2564.80	2051.84	1641.47	649.98
Wheat	2347.00	3555.00	3946.05	4380.12	4861.93	6800.00
Rice	328.00	346.00	384.06	426.31	473.20	293.45
Potato	440.00	691.00	767.01	851.38	945.03	1048.99

Toma.to	427.00	320.00	355.20	394.27	437.64	485.78
Cucumbers	8.00	8.00	8.88	9.86	10.94	12.14
Other vegetables	548.00	399.00	442.89	491.61	545.68	605.71
Melons	472.00	470.00	521.70	579.09	642.79	713.49
Fruit	602.00	544.00	603.84	670.26	743.99	825.83
Beef	391.00	393.00	436.23	484.22	537.48	596.60
Lamb meat	83	63	69.93	77.62	86.16	95.64
Poultry meat	16	11	12.21	13.55	15.04	16.70
Milk	3665	3495	3879.4	4306.1	4779.87	5305.6
Eggs (millions)	1232	1165	1293.1	1435.4	1593.29	1768.5
Dry fruit	13	10	11.10	12.32	13.68	15.18
Vegetable oil	340	279	309.69	343.76	381.57	423.54

The modernization of food security is very important to develop the agricultural sector and ensure food security. The development of software mechanisms in agricultural sector is important which can increase the productivity of a agricultural product. . It should be noted that the main economy of the country cannot be achieved without the development of agriculture, which is enumerated from the sectors. The development of the industry and the industry, first of all, determines its level only from the programs implemented by the state to support this sector and as a result of ongoing reforms. This is a real fact that is clear from the experience of many countries. A number of measures are being taken to form a modern economy and ensure agriculture in our country. In particular, as a result of efforts to provide the population with food, according to a study conducted by the US Research Center, Uzbekistan ranks 64th in the world in the ranking of food security [3].

With this in mind, President Sh. Mirziyoyev of the Republic of Uzbekistan said, "Our most important goal is to change the management structure of the agricultural sector, the adoption of sophisticated technology for the rational use of land and water resources as well as food security." [4].

Uzbekistan's food production is reported to increase by around 9-10% per year on average. The volume of export is also increasing every year. In this regard, the state has adopted important decrees and decisions, state programs, and their implementation has been consistently ensured. These include: Decree of the President of the Republic of Uzbekistan dated 18.02.2016. Uzbek President's Decree No. PP-2492, Issued on March 5, 2016, Concerning Measures to Further Improve the Organizational Management of the Food Industry of the Republic. The President of Uzbekistan issued Decree No. PQ-2505, "On Measures to Further Develop the Raw Material Base of Fruits, Vegetables, Meat, and Dairy Products in 2016-2020, Deepen Their Processing, Increase Food Production and Exports." Resolution No. PQ-4406 of the 29th of July, entitled "On

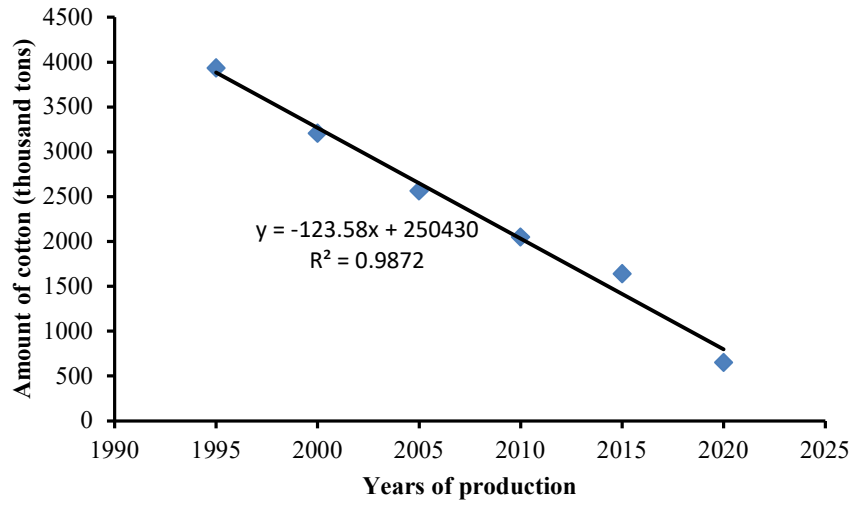
Additional Measures for Deep Processing of Agricultural Products and Further Development of the Food Industry." The country's food processing capacity will be expanded, the investment attractiveness of the industry will be raised, and cutting-edge technologies will be introduced as a part of these decisions.

### 3.3 Analysis

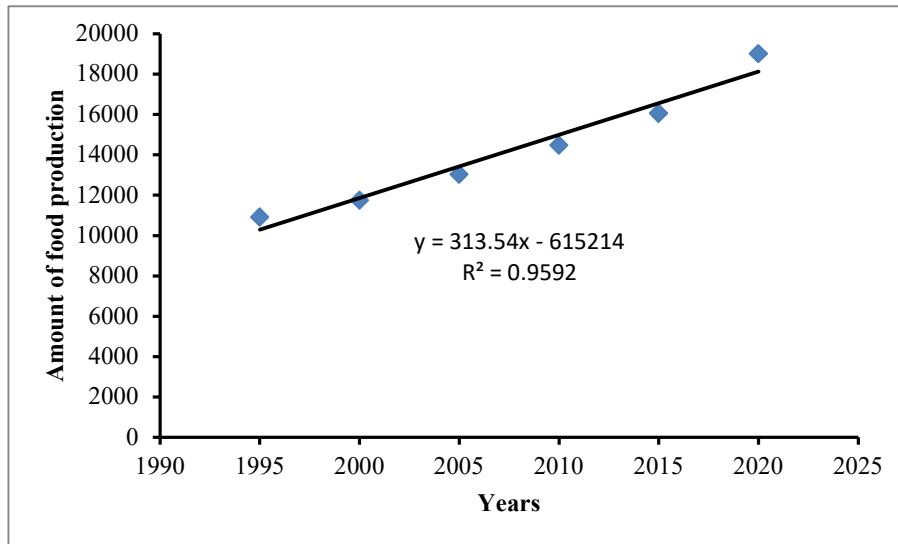
Uzbekistan, like all other nations, relies on addressing the problem of food security to ensure the country's sovereignty, economy, and government remain stable. This issue is still very much relevant in our nation. Meanwhile, both population growth and rising living standards are driving up the need for mahcylotlap. This shift in focus reflects a shift in public policy that has taken place over the previous three years, emphasizing the need of bolstering our nation's food security, agricultural output, and export potential. Uzbekistan is improving its food security continuously from the time of independence. This study has conducted regression analysis considering the production of cotton and production of edible food. Figure 1 represents the regression analysis of cotton production VS years. From the trendline, it clear that the production of cotton is continuously decreasing with year. Moreover, the regression coefficient is -123.58 which is negative. The cotton production is decreasing at a good rate. On the other hand, Figure 2 represents the regression analysis considering the production of food VS years. . From the trendline of Figure 2, it is clear that the production of food is continuously increasing with year. Moreover, the regression coefficient is 313.4 which is positive. This positive sign indicates that the food production is increasing at a good rate. Uzbekistan has taken a good strategy to ensure food security by lowering the production of cotton. The cotton production consumes huge amount of arable land which was the main impediment to grow enough food for the whole country.

This existing food policy is not enough to be sufficient in food demand. There still need effective policies to ensure food security. How will the government's plan to ensure everyone has enough to eat? The goal of rationally harmonizing output and import levels is to provide the populace with assured possibilities, foster the growth of pragmatic international cooperation, and facilitate the establishment of periodically renewable food supplies [5]. It's no secret that agriculture is the backbone of Uzbekistan's economy. There are 3.6 million individuals working in it, which is 27 percent of the total workforce. While the industry accounts for 32% of GDP, it is worth noting that more than 180 different kinds of agriculture and food products are being exported to more than 80 different nations [6]. Among them are several unrealized prospects for industry growth, farmer income enhancement, food safety, and resource conservation. Uzbekistan's current plan for agricultural growth from 2020 to 2030, as well as the President's Decree from January 16, 2018, "On measures to further secure food security of the nation," are pertinent here [7]. The main measures aimed at ensuring agricultural and food security in all countries are the implementation of state policy in the field of development of science in agriculture, the introduction of scientific and technological advances in agricultural production. One of the key

factors for success in food production in China is the widespread introduction of advanced technologies in the industry. As part of China's new economic policy, it is planned to increase funding for science in the sector and encourage the introduction of advanced advances in science and technology in manufacturing in the long run. China's experience in ensuring food security is unique, as the country is tasked with feeding 22 percent of the world's population, which is 7 percent of the world's land. If food is not produced in its territory, even the world's food exports will not be able to meet the needs of the people of this country. Therefore, China does not have a major problem of dependence on imports. [8]. Countries with high agricultural and economic potential rely on export-oriented approaches to agricultural and food security. Among them is the United States. Although only one percent of the population in the United States is directly involved in agricultural production, the country is not only the world's largest food exporter, not only meeting its own food needs with its own production needs. The United States is the world's largest exporter of agricultural products. Important food and fodder crops such as wheat, oats, soybeans and fruits have a large share in world trade. The rapid development of the agro-industrial complex of the United States is explained not by subsidizing agricultural exports, but by increasing the efficiency achieved through the introduction of advanced technologies, the transition of agriculture to innovative development. Increasing food adequacy for the U.S. population is achieved through assistance to the poor through government food programs [9]. Today, a number of developed countries are leaders in exports and imports. However, food products do not account for a significant share in exports and imports of these countries. Food products make up the bulk of exports and imports of developed countries. It should be noted that the very high share of food imports in the country makes the country's food security dependent on the situation on world markets. The most important area of Japanese public policy is also research funding. The state was also forced to undertake funding for the application of research results in agriculture, research institutes, local research centers and agricultural development centers, and farmers' training courses. In general, the Food and Agriculture Organization of the United Nations plays an important role in ensuring food security in the world. The FAO (Food and Agriculture Organization of the United Nations) has developed emergency measures in 58 countries around the world. If we refer to the experience of the CIS countries in the framework of the world experience in ensuring food security, we can see the following picture [10]. The main document for planning food production in Russia is the "National Security Strategy of the Russian Federation until 2020." However, the concept of state policy in the field of food security is enshrined in the Federal Law of the Russian Federation "On Food Security". The law defines the main directions of the state policy of the Russian Federation in the field of food security. [10]. Today, the issue of food security is more important than ever. Measures to address food insecurity in the regions are ineffective. Thus, foreign experience in food security confirms the priority role of the state in solving the problems of agriculture and food security. In order to legally improve the framework of food security in Uzbekistan, on March 25, 2019, the National Program for Food Security in the nation for 2019-2024 was enacted. Sustainable growth of the socioeconomic status of society, improvement of the health and life of people, maintenance of national security and independence, and so on all point in the direction of ensuring food security in the country.



**Figure 1: Regression analysis of cotton production over the years**



**Figure 2: Regression analysis of food production over the years**

### 3.4 Major problems



To assist agricultural producers and offer the populace with high-quality food items, the nation is taking focused, strategic actions in this regard. In the meanwhile, the nation's food security continues to face a variety of issues. Including:

- Diversification in the sector remains weak, the level of innovation and resource efficiency are also low.

- A single state program has not been created, and the distribution of food items to the public has been carried out throughout time within the framework of authorized plans for the development of the agricultural sector at different levels.

- The sequence of work in an integrated system and the method for coordinating the operations of the ministries, agencies, and organizations engaged in food security in this region are not completely developed.

- The country's food security assessment lacks indicators for measuring the population's condition of food security.

- The material and technical base of food production is very low

- There is no cooperation in the food industry

- Primary statistics are often inaccurate due to the difficulty of keeping accurate records of the informal food market. Even if it is clear, this information does not serve to make future-oriented regime decisions.

#### **4. Conclusions and suggestions**

As a result of research, we are convinced that there are problems in several areas of the industry, and these problems have a direct negative impact on the development of the food industry.

In order to overcome these problems, in our opinion, it is advisable to take the following measures:

- It is necessary to increase the level of diversification, innovation and resource efficiency in the industry;

- A single state program should be adopted to provide the population with food products and improve the technical equipment of food industry enterprises, raising their supply on a leasing basis to a qualitatively new level;

- Create a system to coordinate the operations of ministries, agencies, and organizations engaged in ensuring food security, as well as the flow of work within it.

- Calculate the nation's food safety assessment indices to ascertain the population's degree of food security. ;

- It is necessary to improve cooperation between food processing enterprises, agricultural firms, farms, food (farmers) markets, commercial banks, transport organizations and other enterprises of market infrastructure;

- It is necessary to apply the benefits provided by the program of localization of production of components and materials for finished products on the basis of industrial cooperation to enterprises producing machinery, equipment and machinery.

It should be noted that the comprehensive implementation of the above measures will contribute to the development of the food industry in filling the domestic consumer market with domestically produced food products, the rapid establishment of compact processing enterprises in rural areas equipped with modern high-efficiency equipment and technology.

## 5. Reference:

1. D.N.Saidova, I.B.Rustamova, Sh.A.Tursunov. "Agrarian policy and food security." Study guide. T.: "Academy of Sciences of the Republic of Uzbekistan Main Library" Publishing House, 2016. –257 p.
2. Abulqosimov H.P., Rasulov T.S. Food security in Uzbekistan supply lines. Risola. - T., "Science and technology", 2015. <https://daryo.uz/k/2018/04/30/ozbekiston-food-security-rating-ranked-64th-in-the-world>
3. Higher education of the President of the Republic of Uzbekistan Shavkat Mirziyoyev Address to the Assembly. 28.12.2018.
4. A.A. Isadjanov, R.M. Kenjaboeva, —Food safety: modern trends and national priorities. Scientific article. — Economics and Scientific electronic journal of innovative technologies. № 1, January-February, 2015.
5. Ensuring food security - the need of the hour - People's word. 05 October 2019y.
6. Resolution of the President of the Republic of Uzbekistan dated January 28, 2020 No. PP-4575. On measures to implement the tasks set in the Strategy of Agricultural Development of the Republic of Uzbekistan for 2020-2030 in 2020.  
<http://ftp.fao.org/docrep/fao/Meeting/018/k6050r.pdf>
7. The position of the del in the area of prodovolstvennoy bezopasnosti and nutrition in world - 2018. Increasing resistance to climatic conditions v tselyax obespecheniya prodovolstvennoy bezopasnosti and nutrition. Rome, FAO.  
<http://www.fao.org/3/I9553ru/i9553ru.pdf>
8. Food Security Ratings of Dunè Countries [Electronic source] Center for Humanitarian Technologies. - Access mode:<http://gtmarket.ru/ratings/global-food-security-index/info>
9. Official site of the Statistics Committee of the Republic of Uzbekistan. - Access procedure: <http://stat.uz>.<https://stat.uz/uz/statinfo/ishlo-kh-zhaligi-vaekologiya/yshlo-kh-halyhy/2393>