



## AGRICULTURAL PRODUCTION TRENDS IN THE REPUBLIC OF UZBEKISTAN

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**Annotation:** this article reflects the production of agricultural products in the Republic of Uzbekistan and its regions, their economic-statistical analysis.

**Keywords:** fruits and vegetables, viticulture, agriculture, structural changes, investment, regional economy, economic-statistical analysis, agrarian reforms, socio-economic processes.

### INTRODUCTION

Uzbekistan is an agrarian-industrialized republic. The importance of agriculture in the country's economy is huge. Because 25.1 percent of the republic's gross domestic product and 95-97 percent of food products are produced in it. In order to develop agriculture at the level of the requirements of the laws of the market economy, deepening, improving the theoretical and methodological foundations of various forms of property and ownership, types of entrepreneurship based on them, and free market relations between them, which have the opportunity to operate freely in the network, investments attracting more and introducing scientific and technical achievements, new techniques, advanced technologies into production, full and effective use of limited land and water resources, fixed and variable capital and labor resources in the short and long term It is reasonable to determine ways to increase the amount of profit on the basis of clearly defining the costs, saving all costs, increasing labor productivity, and improving the system of motivating employees. When creating, developing, and introducing the scientific and practical bases of these issues, it is necessary to take into account the specific characteristics of agriculture and the national characteristics of our people.

In highlighting the directions, importance and content of the economic reforms implemented in the country's agriculture under state priority, we relied on the laws adopted by the Oliy Majlis of the Republic, works of the President, presidential decrees and decisions of the Cabinet of Ministers.

In recent years, consistent measures have been taken to reform the agrarian sector and introduce market mechanisms to the sector.

In particular, the cluster method of production in agriculture is established, and it is possible to process the raw materials grown and deliver them to the consumer in the form of finished products. However, the volume of agricultural areas divided into clusters is only 7.5 percent in fruit and vegetable cultivation.

Today, more than 80 types of agricultural products grown in our republic are exported to 66 countries of the world.

At the same time, in the field, especially in the development of fruit and vegetable growing and viticulture, effective market mechanisms have not been systematically established, the insufficient scientific approach leads to the fact that the existing opportunities of the sector are not fully used.

calculations, compared to raw cotton grown on 1 hectare, it is possible to earn 7 times more than grapes, 6 times more than cherries, and 5 times more than walnuts [1].

In order to ensure the implementation of the Decree No. PF-5853 of the President of the Republic of Uzbekistan dated October 23, 2019 on the approval of the "Strategy for the development of agriculture of the Republic of Uzbekistan for 2020-2030" fruit and vegetable and the need to increase the volume of production, processing, storage, service and export of high-value-added products in the field of viticulture, and the tasks of developing clusters are defined.

### ANALYSIS OF LITERATURE ON THE SUBJECT

In recent years, as in other sectors, several laws, decrees and decisions concerning the agricultural sector have been adopted, while sectoral programs and "roadmaps" have been developed and are being consistently implemented.

In particular, in the Decree of the President of the Republic of Uzbekistan dated October 23, 2019 "On approval of the strategy of agricultural development of the Republic of Uzbekistan for 2020-2030" No. PF-5853 [3] Nine priorities have been identified, one of which is the development of a transparent network statistics system.

Also, the President of the Republic of Uzbekistan dated August 3, 2020 "Further improvement of the national statistical system of the Republic of Uzbekistan and development measures" to the decision PQ-4796 [4] according to the statistics of the Republic of Uzbekistan in 2020-2025 National development strategy was approved.

In this decision, further improvement of the quality of statistical data, statistics to create complete databases of indicators, to make them international adaptation to standards, socio-economic and demographic areas introduction of modern methods of statistics is envisaged.

### RESEARCH METHODOLOGY

As a scientific-theoretical basis of this article, economic literature and scientific articles, researches of foreign and local economists on the development of agriculture, forestry and fisheries, their effective use, analysis of their written and oral opinions, economic conclusions, proposals and recommendations are given in the relevant directions by observing the processes. Economic-statistical, logical, scientific abstraction, deduction and other methods were used during the study of the topic.

### ANALYSIS AND RESULTS

Agricultural statistics are produced by the Statistical Agency under the President of the Republic of Uzbekistan on the basis of reports of enterprises and organizations, information of the Ministry of Agriculture, observations of agriculture and farms.

Since agriculture is an important sector of the economy, there is a great need for reliable and comprehensive national agricultural statistics.

According to this, from January 1, 2022, at the expense of the funds of the State Support Fund for Agriculture, through commercial banks, farmers, farms and other producers of products - fruits, grapes, vegetables, potatoes, rice for the cultivation of crops, greens and medicinal plants, leguminous and oil crops, up to 50% of the value of the crop is allocated loans for a period of 12 months with a grace period of 6 months at an annual rate of 14% [2].

The market of fruit and vegetable and grape products was formed long ago, when producers exchanged some of the fruits, grapes and vegetables they grew for other types of products to satisfy their needs, and social labor began to be distributed. This exchange gradually acquired the character of a stable market [3].

The development of the commodity market of fruit, vegetables and grape products does not differ in essence from the development process of other market types. It was distinguished from other markets only by the unorganized nature of the participants of commodity-money relations and its operation. In this market, almost all consumers of fruit and vegetable and grape products participated as buyers, and producers and intermediaries of market relations participated as sellers. This unique feature is still reflected in the organization of market relations.

With the introduction of the market principles of economic management, the system of compulsory sale of fruit and vegetable and grape products to state organizations was canceled and the system of free purchases under the contract was introduced. In this way, the mutual economic interest of both producers and consumers-buyers was ensured [4].

It can be noted that with the introduction of this system, the production of fruit and vegetable and grape products in Uzbekistan began to acquire a stable character. This is also evidenced by the main statistical data of recent years (Table 1).

**Table 1**

**General dynamics of vegetable growing, horticulture and viticulture (in all economic categories) in Uzbekistan .**

Years	Vegetable farming			Gardening			Viticulture		
	may grain thous and hectar es	gross yield, thousand tons	fertility, s/to	field, thousand hectares	gross yield, thousan d tons	fertility, s/to	field, thousan d hectares	gross yield, thousa nd tons	fertility ' s/to
2010	173.0	6346.5	252.5	184.8	1710.3	92.6	108.7	987.3	90.8
2011	175,4	6994.0	263.7	193.1	1878.8	97.3	111.5	1090.2	97.8
2012	183.8	7767.4	265.6	196.0	2052.8	104.7	111.1	1206.0	208.6
2013	189.4	8518.4	270.9	201.3	2261.1	112.3	113.8	1322.1	116.1
2014	192.0	9286.7	268.3	217.6	2490.6	116.0	119.4	1441.2	120.7
2015	194.0	10129.3	271.0	214.3	2052.8	128.1	128.3	1579.3	133.1
2016	206.6	10184.0	271.1	279.6	2612.9	134.5	131.2	1613.1	142.3
2017	189.7	10219.9	253.6	221.0	2614.9	118.3	114.5	1625.5	157.0
2018	219.0	9760.3	237.1	222.5	2706.2	121.6	113.3	1589.8	157.5

2019	220.0	10215.1	235.6	232.2	2752.7	118.5	120, 2	1603 3	153.5 _
2020	222.8	10431.4	234.4	241.0	2812.6	116.7	128.2	1606.9	152.0
completel y _ _ growth*	49,8 _	4084.9	-18.1	56.2	1102.3	24.1	19.5	619.6	61.2
percentag e at the expense of	128.8	164.4	92.8	130.4	164.5	126.0	117.9	162.8	167.4

Source : calculated by the author based on the information of the State Statistics Committee of the Republic of Uzbekistan.

shows that vegetable growing, horticulture and viticulture have developed steadily in the republic . During this period, the area of vegetable cultivation increased by 49.8 thousand hectares or 28.8%, the area of perennial orchards increased by 56.2 thousand hectares or 30.4%, the area of vineyards increased by 19.5 thousand hectares , and horticulture increased the average yield per hectare increased from 92.6 centners in 2010 to 11.6 centners in 2020, as a result, the gross yield reached 2812.6 thousand tons and increased by more than 1.6 times . During the researched period, the gross harvest in viticulture increased by 1.6 times , and the productivity by almost 1.7 times .

According to our analysis, serious fluctuations in the average productivity of orchards and vineyards in some years are mainly due to natural and climatic conditions, and in unfavorable years, when fruit trees and grape seedlings are in bloom, there is frost, hail and rain. decreased due to work.

In order to give a true assessment of vegetable growing, horticulture and viticulture, information on the cultivation of vegetables, fruit and grapes per capita is the basis, because, as mentioned above, the level of meeting people's needs depends on the production in society and the activity of its specific sectors. is one of the main performance indicators.

Export of fruit, vegetable and grape products should become one of the important items of foreign currency earnings in Uzbekistan. Therefore, it is desirable to increase the productivity of fruit trees, vegetable crops and vines in the future (Table 2).

**Table 2**

**Average productivity of fruit and vegetable crops and vines in the regions of the Republic of Uzbekistan in 2020 , s/ha**

	Vegetables	Fruits and berries	Grapes
1. Republic of Karakalpakstan	234.4	105.8	90.2
2. Andijan	291.2	218.6	229.7
3. Bukhara	241.2	223.9	239.7
4. Jizzakh	225.5	71.9	77.1
5. Kashkadarya	251.8	103.8	119.3
6. Navoi	250.1	156.4	160.5

\* in 2020 than in 2010.

7. Namangan	254.1	104.2	183.0
8. Samarkand	203.3	107.8	147.7
9. Surkhandar yo	270.5	95.2	93.0
10. Syrdarya	198.4	80.5	106.8
11. Tashkent	249.7	55.2	86.4
12. Ferghana	213.6	80.8	293.0
13. Khorezm	255.6	141.8	167.0
Average by Republic (x)	234.4	116.7	152.0

Source: Information of the State Statistics Committee of the Republic of Uzbekistan .

As can be seen from the above table, the average yield of crops differs significantly in the regions of the republic. For example, the average yield per hectare in vegetable growing in Andijan region was 46.8% higher than in Syrdarya region, in orchards in Bukhara region was 4.1 times higher than in Tashkent region, and in grapes in Fergana region was 3.8 times higher than in Jizzakh region.

These differences in average productivity are due to natural and climatic conditions and the human factor, and in some regions, little attention is paid to horticulture, vegetable growing and viticulture.

Our analysis shows that the low yield of fruit and grapes in the Republic of Karakalpakstan is largely related to the natural conditions of the lower part of the Amudarya and the Arolbay region, where the average annual temperature is low, and most importantly, it is dry. the negative effect of salt rising from the sea is great.

Increasing productivity is the main direction of further development of the republic's fruit-vegetable and grape complex, because in most regions there are opportunities to increase production due to timely application of processed agrotechnical measures and expansion of land areas.

Thus, the organizational and economic conditions of the activity of the fruit-vegetable and grape complex were formed for a long time on the basis of reforms based on market principles in the general socio-economic system of economic management. In the production of fruit and vegetable and grape products, there have been changes in the forms of economic management (Table 3).

**Table 3**

**The structure of fruit, vegetable and grape production in Uzbekistan according to the forms of economic management, in percentages compared to the end**

Indicators _	2000	2005	20 10 years	20 15 years	20 20 years
I. _ Vegetables					
Agricultural gi organizations performing their activities	20.1	9.1	0.6	0.9	2.5
Farms	4.9	13.7	35.1	34.1	35.2
Farms	75.0	77.2	64.3	65.0	62.3
Total	100	100	100	100	100
II . Fruits and berries					
Agricultural gi organizations performing their activities	36.8	21.8	1.1	2.2	3.4



Farms _	4.3	18.5	47.7	45.8	40.5
Farms	58.9	59.7	51.2	52.0	56.1
Total	100	100	100	100	100
III . Grapes					
Agricultural gi organizations performing their activities	62.3	39.4	0.8	1.6	2.5
Farms	4.7	13.9	56.4	53.4	41.2
Farms	33.0	46.7	42.8	45.0	56.3
Total	100	100	100	100	100

Source: calculated by the author based on the information of the State Statistics Committee of the Republic of Uzbekistan.

In 2020, the structure of growing fruit and vegetable and grape products changed, and the share of growing grapes on farms, which is a new form of farming in the agrarian sector, reached 41.2 percent.

The share of farms in the cultivation of fruit and vegetable and grape products has been stable. This is understandable, because the organizational and economic conditions of their activity do not differ much from the form of farming, which is recognized as the main producer of agricultural products. For example, the share of farms in the gross production of agricultural products in 2021 was 29.2 percent, and the share of peasant farms was 65.9 percent. The share of organizations carrying out agricultural activities was equal to only 4.9 percent [ 5,6 ] .

One of the main efficiency indicators in agricultural production is the yield of agricultural crops per hectare of land.

The analysis of the data on the productivity of fruit, grape and vegetable crops in the republic according to the forms of farming in Table 4 shows that, firstly, the productivity of fruit, grape and vegetables increased by 1 hectare; secondly, depending on the form of farming, there was a big difference in the yield indicators of these crops. According to the specified types of crops, the lowest yield was obtained in agricultural organizations of the company type, and the highest yield was observed in individual farmers' farms.

Fruits and berries among agricultural organizations and other forms of economic management, primarily among individual farms

**Table 4**

**Average productivity of fruit, grape and vegetable crops in the republic, s/ha**

Indicator	2005	20 10 years.	20 15 years.	20 20 years.
I. Vegetables				
Average in all economic categories	215.8	252.5	271.0	234.4
Including:				
agricultural gi organizations performing their activities	168.1	178.6	196.2	174.2
farms	181.6	214.8	261.7	207.6
farms	230.7	260.1	277.3	245.6
II . Fruits and berries				
Average in all economic categories	62.3	92.6	128.1	116.7

Including: agricultural gi organizations performing their activities	36.8	48.1	61.1	44.7
farms _	50.5	76.3	99.0	83.7
farms	92.2	132.4	183.8	188.2
III . Grapes				
Average in all economic categories	64.7	90.8	133.1	152.0
Including: agricultural gi organizations performing their activities	50.5	64.1	77.5	76.4
farms	51.0	86.3	108.3	108.2
farms	94.7	140.6	189.0	229.2

Source: Selskoe hozyaystvo Respubliki Uzbekistan 2006. Tashkent, 2007.; Agriculture of Uzbekistan 2010-2021. Statistical collection. Tashkent, State Statistics Committee of the Republic of Uzbekistan.

a particularly large difference in yield is due to inadequate quality care of fruit seedlings and inadequate accounting and control of production. Therefore, the difference in the productivity of orchards between agricultural organizations and individual farms, for example, in 2020, increased to 4.2 times, and the difference from farms to 1.9 times. Productivity indicators for all three types of fruit and vegetable and grape products are high in peasant farms. This advantage is mainly due to better care of vegetables, fruit and grape seedlings in private auxiliary farms of citizens.

From the point of view of satisfying the personal needs of the members of the agricultural economy for fruit, vegetable and grape products, private auxiliary farms meet the basic requirements at this stage of socio-economic development of rural areas and can still function as a field of employment for a long time. . At the same time, industry and other non-agricultural types of economy are developing, the number of consumers of agricultural goods, and the number of urban residents is growing. The ever-increasing task of meeting the need for fruit, vegetable and grape products can be solved on the basis of specialization that allows the cultivation of these products on farms, the use of advanced technologies and rational forms of labor organization in this process.

In order to increase the volume of fruit, vegetable and grape products grown in our republic, it is necessary to expand the opportunities for export to foreign countries.

5 , the volume of exports of this type of products in the following years , we can see that in 2020, compared to 2015, only fruits and berries have a growth rate. The growth rate of exports has been uneven over the years.

**Table 5**

**Volume, composition and dynamics of export of fruit and vegetable products (in millions of US dollars)**

Product	Years	2020
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types	2015	2016	2017	2018	2019	2020	compared to 2015, %
Fruits and berries	321.0	217.4	254.4	357.7	406.8	353.9	110.2
rate of change, %	-	67.7	117.0	140.6	113.7	87.0	-
Vegetables	479.2	183.6	217.7	307.7	471.3	400.0	83.5
rate of change, %	-	38.3	38.3	141.3	153.2	84.9	-
Grapes	350.0	142.1	159.5	179.7	223.7	188.3	53.8
rate of change, %	-	40.6	112.2	112.7	124.5	84.2	-

Source : author's calculation based on the information of the State Statistics Committee of the Republic of Uzbekistan.

According to preliminary data, the export of fruit and vegetable products in our republic in 2021 will be 957.3 million. equal to the US dollar, compared to 2020, it was 94.9 percent and 5.8 percent of the total export volume [7] .

Based on the above, it is necessary to further develop the fruit-vegetable and viticulture industry, create a value-added chain in the sector, and introduce a wider cluster and cooperation system in order to increase the export potential.

To expand the provision of financial support (leasing, preferential loans) to economic entities to acquire the necessary new equipment and technologies in order to further develop the activities of the fruit and vegetable and viticulture sector and increase their efficiency, to establish modern storage facilities for products by agricultural companies on the basis of foreign credit lines, it is desirable to ensure the separate allocation of preferential credit lines from commercial banks to representatives of this sector.

### CONCLUSIONS AND SUGGESTIONS

In conclusion, it can be said that the results of the reforms implemented in agriculture are expressed in fast, accurate and truthful statistical numbers. The truthfulness and transparency of the statistical numbers will help the government to develop targeted measures aimed at reforming agriculture.

Since agriculture is an important sector of the economy, there is a great need for reliable and comprehensive national agricultural statistics. Based on this, the following scientific proposals and practical recommendations were developed in order to improve the statistical calculation of the results of reforms implemented in the agrarian sector:

- ensuring that the national agricultural statistics system is reliable and comprehensive;
- organizational and methodological foundations of agricultural observations further improvement;
- constantly analyzing trends in agriculture to go



- to ensure the completeness of registration results, to create the necessary infrastructure and introduce new technologies (for example, mobile devices, geolocation information systems, etc.) for their timely and high-quality implementation;

to develop and implement a plan of measures in the field of personnel training in order to increase the capacity and qualifications of participants in agricultural registration ;

- in order to further increase the quality, reliability and transparency of indicators of agricultural statistics, it is recommended to introduce the method of calculating data by net quarters.

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