

STATISTICAL STUDY OF TRENDS IN THE PRODUCTION OF VEGETABLE AND GRAPE PRODUCTS IN UZBEKISTAN

Nurxonov Nurkomil Qahromon oʻgʻli Kadrlar malakasini oshirish va statistik tadqiqotlar instituti "Makroiqtisodiy statistika va milliy hisoblar" kafedrasi 3-kurs tayanch doktoranti

Abstract:

This article describes the cultivation of fruits and vegetables and grapes in the country and its regions, their economic and statistical analysis.

Keywords: agriculture, agricultural production, farming, structural changes, investment, regional economy, economic and statistical analysis, agrarian reform, socio-economic processes.

Introduction

In the years that followed, consistent measures were being taken to reform the agricultural sector and establish market mechanisms for the industry.

To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared. However, the volume of agricultural fields allocated to classrooms accounts for only 7.5% of vegetables.

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

At the same time, the lack of systematic implementation of effective market mechanisms in the field, especially in the development of vegetables and vineyards, and the lack of scientific research, lead to the lack of full use of the existing capabilities of the network.

It is estimated that compared to raw materials grown on 1 hectare of land, there are 7 times more grapes, 6 times more than cherries, and 5 times more than firewood [1].

To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared. The need to increase storage, service and export volumes, the tasks of developing classroom activities are defined.

Accordingly, as of January 1, 2022, a farmer through commercial banks, funded by the State Fund for Agriculture, To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared [2].

The market for vegetables and grapes originated a long time ago when social labor began to be distributed, replacing some of the fruits, grapes and vegetables they ate with other types of

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products to meet their needs. This conversion has gradually become a stable market character [3].

The development of the commodity market for vegetables and grapes did not differ in the nature of the development process of other market types. It was distinguished only by the participants in commodity relations from other markets and the characteristics of its activities. In this market, almost all consumers of vegetables and grapes participated as buyers, while product manufacturers and market relations intermediaries, as vendors. This unique feature has long been reflected in the establishment of market relations.

With the introduction of market principles of farming, the system of compulsory sale of vegetables and grapes to government agencies was abolished, and a free procurement system was introduced under the contract. Thus, the mutual economic interest of both manufacturers and consumers has been ensured [4].

It can be noted that with the introduction of this system, the production of vegetables and grapes began to be stable in Uzbekistan. This is also reflected in the main statistics data from recent years (table 1).

Table 1 General dynamics of vegetables, gardening and vineyards in Uzbekistan (in all farm categories).

	•			urm catego			,		
	Vegetables			Horticulture			Vineyard		
Years	May- grain, ming gektar	gross yield, Thousands of t.	harvestin g, s/ga	field, ming gektar	gross yield, ming t.	harvesting, s/ga	field, ming gektar	gross yield, ming t.	harvestin g, s/ga
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
absolute growth*	49,8	4084,9	-18,1	56,2	1102,3	24,1	19,5	619,6	61,2
percentile in the account	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 data from the National Statistics Bureau of the Republic of Uzbekistan.

^{* 2020} Yilda 2010 yilga gazana.

The above data shows that vegetables, horticulture, and vineyards flourish in the republic. During this time, the vegetable area increased by 49.8 thousand hectares or 28.8 percent, the annual fruit area increased by 56.2 thousand hectares or 30.4 percent, The area of vineyards increased by 19.5 thousand hectares, from 92.6 cents in 2010 to 116.7 cents in 2020, resulting in an increase of 2812.6 thousand tons and an increase of more than 1.6 times. During the period being studied, the gross yield in vineyards increased by 1.6 times and yields by about 1.7 times.

Our analysis shows that in some years, serious distortions in the average yield of fruits and vineyards were mainly due to natural conditions, and in those years when fruit trees and grape seedlings bloomed at the same time, they decreased due to cold falls, hailstorms, and rainfall. To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared.

Exports of vegetables and grapes should become one of the most important ingredients of foreign currency in Uzbekistan. Therefore, it is desirable to increase the yield of fruit trees, vegetable crops and vine in the future (Table 2).

Table 2 Average yields of vegetable crops and vine in the Republic of Uzbekistan in 2020, s/ga

	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. Jezreel	225,5	71,9	77,1
5. Kashgar	251,8	103,8	119,3
6. Navoi	250,1	156,4	160,5
7. Badakhshan	254,1	104,2	183,0
8. Samarkand	203,3	107,8	147,7
9. Surxandary	270,5	95,2	93,0
10. Syrdarya	198,4	80,5	106,8
11. Tashkent	249,7	55,2	86,4
12. Farg'ona	213,6	80,8	293,0
13. Khorezm	255,6	141,8	167,0
Average state-by-state (x)	234,4	116,7	152,0

Source: Data from the National Statistics Bureau of the Republic of Uzbekistan.

As the chart above shows, the average crop yields vary significantly in the regions of the republic. For example, the average yield per hectare of vegetables was 46.8 percent higher than in the province of Syrdarya in the province of Anchorage, 4.1 times higher than in the province of Bucharest in the province of Bucharest, and 3.8 times higher than in the province of Uzbekistan in the province of Fargo.

These differences in average yields are due to natural and climate conditions and the low emphasis on human factors and gardening, vegetables and vineyards in some provinces.



Our analysis shows that in many ways, the low yield of fruits and grapes in the Republic of Karakalpakstan is due to the natural conditions of the lower part of the Aegean Sea and the Aral Sea region, where the average annual air temperature is low, and most importantly, the salt rising from the drying sea has a significant impact.

Increasing crop yields is the main focus of further development of the regional vegetable and grape complex, as many provinces have the opportunity to timely use agricultural activities for product processing and to increase their land by expanding their fields.

Thus, the socio-economic conditions of the fruit and grape complex were long formed on the basis of reforms based on market principles in the general socio-economic system of farming. (Table 3) Jehovah's Witnesses would be pleased to discuss these answers with you

Table 3 Structure of the production of vegetables and grapes in Uzbekistan in terms of farming, at a percentage of the end

Indicators	iui iiig, ut u per					
And And	Indicators	2000	2005	2010	2015	2020
Organizations that carry out agricultural 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 Fruits and berries II 0 0 100 100 100 100 Organizations that carry out agricultural activities 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.Uzum 0 0 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	Indicators	and.	and	and	and	and
20,1 9,1 0,6 0,9 2,5	I. Vegetables					
Farms 75,0 77,2 64,3 65,0 62,3 Total 100 100 100 100 100 Fruits and berries II 36,8 21,8 1,1 2,2 3,4 Organizations that carry out agricultural activities 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.Uzum 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		20,1	9,1	0,6	0,9	2,5
Total 100 100 100 100 100 Fruits and berries II 0	Farms	4,9	13,7	35,1	34,1	35,2
Fruits and berries II 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.Uzum Corganizations that carry out agricultural 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	Farms	75,0	77,2	64,3	65,0	62,3
Organizations activities that carry out agricultural 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.Uzum 07ganizations that carry out agricultural 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
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.Uzum 0rganizations that carry out agricultural 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	Fruits and berries II					
Farms 58,9 59,7 51,2 52,0 56,1 Total 100 100 100 100 100 III.Uzum 0rganizations that carry out agricultural 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	, ,	36,8	21,8	1,1	2,2	3,4
Total 100 100 100 100 100 III.Uzum Organizations that carry out agricultural 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	Farms	4,3	18,5	47,7	45,8	40,5
III.Uzum Corganizations that carry out agricultural 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	Farms	58,9	59,7	51,2	52,0	56,1
Organizations that carry out agricultural 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
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	III.Uzum					
Farms 33,0 46,7 42,8 45,0 56,3		62,3	39,4	0,8	1,6	2,5
	Farms	4,7	13,9	56,4	53,4	41,2
Total 100 100 100 100 100	Farms	33,0	46,7	42,8	45,0	56,3
	Total	100	100	100	100	100

Source: Calculated by the author based on data from the National Statistics Bureau of the Republic of Uzbekistan.

In 2020, the structure of the production of vegetables and grapes changed, cultivating grapes in farms, a new form of agriculture, increased to 41.2 percent.

The share of farmers in the production of vegetables and grapes has been steady. This is understandable, of course, because the socio-economic conditions of their work are not much different from the farming form of farming, which is recognized as the main product growers in agriculture. For example, in 2021, the share of farms in gross domestic product was 29.2 percent, and the share of farmers was 65.9%. The share of agricultural organizations was only 4.9%[5,6].



Table 4 Average yields of fruit, grapes and vegetable crops in the country, s/ga

Indicator	2005 and.	2010 and.	2015 and.	2020 and.
I. Vegetables				
On average, in all farm categories	215,8	252,5	271,0	234,4
We tested:				
organizations that carry out agricultural				
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				
On average, in all farm categories	62,3	92,6	128,1	116,7
We tested:				
organizations that carry out agricultural				
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
Grapes III				
On average, in all farm categories	64,7	90,8	133,1	152,0
We tested:				
organizations that carry out agricultural				
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 xozyaystvo Republic of Uzbekistan 2006. Tashkent, 2007.; Agriculture of Uzbekistan 2010-2021 Statistical collection. Tashkent, The State Statistics Committee of the Republic of Uzbekistan.

One of the main indicators of productivity in agricultural production is the yield of agricultural crops at the expense of an acre [1 ha].

An analysis of data on fruit, grape, and vegetable crop yields in the republic, depending on the forms of farming in Table 4, shows that first, fruit, grape, and vegetable yields grew to a total of 1 hectare; Second, depending on the form of farming, there was a big difference in the productivity of these crops. The lowest yield by the specified types of crops was obtained in agricultural organizations of the type of partnership, and the highest yield was observed in individual farms.

Agricultural organizations and other forms of farming, primarily among individual farmers, have a particularly large difference in fruit and berries yields due to a lack of proper quality care for fruit seedlings and the failure to take into account and control the product in an appropriate manner. Therefore, the difference in fruit yields between agricultural organizations and individual farms increased by 4.2 times, for example, by 2020 and by 1.9 times from farmers. Crop yields across all three types of vegetable and grape products are high in farmers. This advantage is mainly due to the quality care of vegetables, fruits and grape seedlings in individual subsidiary farms of citizens.

From the point of view of meeting the personal needs of agricultural members for vegetables and grape products, personal subsidiary farms meet the basic requirements at this stage of socio-economic development of rural areas and can still operate as an area of long-term labor use. At the same time, industrial and other unhealthy farming types are developing, consumers



of agricultural products, and the population of the city are growing. (Matthew 24:14; 28:19, 20) Jehovah's Witnesses would be pleased to discuss these answers with you.

To increase the volume of vegetables and grapes produced in our country, it is necessary to expand export opportunities to foreign countries.

In the years that followed, according to table 5, the volume of exports of these types of products shows that by 2020 there will only be an increase in fruits and berries compared to 2015. Over the years, the growth rate in export volumes has also been uneven.

Table 5 Export volume, composition and dynamics of vegetable products (mln. IN USD)

Product	Years						
Types	2015	2016	2017	2018	2019	2020	year 2015, %
Fruits and berries	321,0	217,4	254,4	357,7	406,8	353,9	110,2
change rate, %	-	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
change rate, %	-	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
change rate, %	-	40,6	112,2	112,7	124,5	84,2	-

Source: Author calculation based on data from the National Statistics Bureau of the Republic of Uzbekistan.

According to preliminary estimates, exports of vegetable products in the republic by 2021 were 957.3 million. The equivalent of USD was 94,9% for 2020 and 5,8% in total exports [7].

As a result of the forgotten, it is necessary to expand the classroom and cooperation system in order to further develop the vegetable and vineyard network, create an added value chain in the industry, and improve export safety.

To further improve the activities of the vegetable and vineyard industry, it is aimed at expanding the provision of financial assistance (leasing, privileged loans) to subsidiaries for the necessary new technologies and technologies, the construction of modern storage facilities for products by agrofirms on the basis of foreign credit lines, and the allocation of privileged credit lines from commercial banks to representatives of these sectors it's suitable.

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