### STATISTICAL ANALYSIS OF AGRICULTURAL SECTOR DEVELOPMENT INDICATORS IN UZBEKISTAN.

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#### Аннотация

Ушбу мақолада аграр соҳа, яъни ҳозирги даврда озиқ-овқат маҳсулотлари етиштириш масалалари. Қишлоқ хўжалигида таълим, илм-фан, инновацион фаолият. Аграр сохада илм-фан ютуқлари ва илғор технологияларни хамда янгича иқтисодий муносабатларни амалиётга кенг жорий этиш. Ўзбекистонда ЯИМ ва қишлоқ, ўрмон ва балиқ хўжалиги махсулотларининг статистик тахлили ёритилган.

### Абстрактный

В данной статье рассматривается аграрный сектор, то есть вопросы выращивания продуктов питания в современную эпоху. Образование, наука, инновационная деятельность в сельском хозяйстве. Широкое внедрение научных достижений и передовых технологий и новых экономических отношений в аграрном секторе. Приведен статистический анализ ВВП и продукции сельского, лесного и рыбного хозяйства Узбекистана.

#### Abstract

This article deals with the agrarian sector, that is, the issues of growing food products in the present era. Education, science, innovative activity in agriculture. Broad implementation of scientific achievements and advanced technologies and new economic relations in the agricultural sector. The statistical analysis of GDP and agricultural, forestry and fishery products in Uzbekistan is covered.

Калит сўзлар: аграр соха, иктисодиёт, драйвер, ЯИМ, аграр иктисодиёт, аграр сектор, агробизнес, ресурс, инвестиция, экспорт.

Ключевые слова: аграрный сектор, экономика, драйвер, ВВП, аграрная экономика, агробизнес, ресурс, инвестиции, экспорт.

Key words: agricultural sector, economy, driver, GDP, agrarian economy, agribusiness, resource, investment, export.

Increasing food production is a matter of life and death in today's growing world population. Due to the global climate changes occurring on the earth, the productivity of agricultural crops is being damaged in the following years. According to the UN Food and Agriculture Organization (FAO), 86 countries in the world cannot provide their population with food products. Especially in the context of the pandemic, the crisis of the world economy had a negative impact on the agricultural sector.

In the agricultural sector, which is the real "driver" of the economy in our country, about 27% of the employed workforce (2020) and 25% of the gross domestic product (2021) will be contributed by this sector.





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The volume of production of agricultural products in our republic in 2021 at current prices is 303.4 trillion. amounting to soums, the growth rate compared to 2020 was 103.9%.

But at the same time, there is a need to ensure deep integration of education, science, innovative activities and production in agriculture and to form effective management links of this system.

According to Table 1 in Uzbekistan, in 2010, 26.9% of the GDP was created in agriculture, forestry and fishing, and in 2021, this figure decreased by 1.9% to 25.0%. In the same period, while the volume of GDP increased by 1.91 times, the gross added value (GVA) created in the agricultural sector increased by 1.62 times, and the coefficient of advancement of GDP was 1.179 times or 117.9 percent (1.91:1.62).

The rate of additional growth of the volume of products produced in our republic during 2010-2021 is equal to 61.9% in agriculture, forestry and fisheries, and 62.3% in agriculture, and its contribution to the agricultural sector is 94.2-96.6%. (Table 1

Table 1 GDP and agricultural, forestry and fishery products in Uzbekistan volume and dynamics

Voium	e and uy	namics							
	GDP volume,		Gross added value		Agricultural, forestry		Agricultural product,		The share
	billion, soums of agriculture,		riculture,	and fisheries products,		billion, soums		of	
Years			forestry and		billion soums				agricultural
			fisheries, billion, soums						products in
									agricultural
	At the In the		At the In the		At the	In the price	At the	In the price	, forestry
	current	price of	current	price of	current	of 2020	current	of 2020	and fishery
	price	2020	price	2020	price	01 2020	price	01 2020	products,%
A	1	2	3	4	5	6	7	8	9
	_							-	
2010	78936,6	338906,	21251,3	97372,	32746,5	168252,0	30856,7	160197,9	94,2
		0		9					
2011	103232,	364324,	30658,6	103312	48068,3	178851,9	45285,9	170130,2	94,2
	6	0		,7					
2012	127590,	390191,	36954,7	110544	58549,3	191192,7	55750,0	182379,6	95,2
	2	0		,6					
2013	153311,	418674,	42636,8	117619	69391,3	203620,2	66435,3	194416,6	95,7
	3	9		,4					
2014	186829,	447563,	53613,2	124676	85101,7	216041,1	81794,3	206664,8	96,1
	5	5		,6					
2015	221350,	479788,	64680,3	132281	103302,	229219,6	99604,6	219271,4	96,4
	9	1		,9	0				
2016	255421,	508095,	74779,0	140483	119726,	243202,0	115599,2	233085,5	96,6
	9	6	,	,4	7	·	·	·	,
2017	317476,	530451,	90983,9	142169	154369,	246120,4	148199,3	235416,4	96,0
	4	8	, .	,2	4	,	, .	,	
2018	424728,	559096,	113660,	142595	195095,	246858,7	187425,6	235887,2	96,1
	7	2	7	,7	6				7 3,2
2019	529391,	590964,	130306,	147016	224265,	254511,4	216283,1	243671,5	96,4
	4	7	9	,1	9				, -
2020	602193,	602193,	151279,	151279	261892,	261892,2	250250,6	250250,6	95,6
	002173,	002173,	6	,6	201072,	201072,2	230230,0	230230,0	75,0
2021	734587,	646755,	183518.	157330	317781.	2722670	2024155	260010.4	95.2
2021	_	-				272367.9	303415.5	200010.4	95.4
	7	3	5	.8	6				

Source. Author's calculation based on the information of the State Statistics Committee of Uzbekistan





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meets the demand of the population for food products, and the processing industry for raw materials, and is considered one of the promising sources of strengthening the export potential of our republic.

The export of fruit and vegetable products of our republic made up 6.7 percent of the total export (2020). According to calculations, cotton grown on 1 hectare is from grapes

7 times, 6 times more than cherries, 5 times more than walnuts [1].

It should be noted that today the agricultural base is being diversified by increasing highvalue fruit and vegetable crops. Apart from being more profitable, these crops are also a source of well-paid seasonal work.

The volume of export of agricultural products in 2020 increased by 1.8 times compared to 2016 and reached 1 billion. amounted to a dollar. And the export geography increased from 43 to 77 countries[5].

During the years of independence, important works on agricultural reform were carried out. Agriculture is one of the most "capricious" sectors of the economy, and its activity is closely related to climate and weather conditions. Unlike mineral raw materials, renewable resources are produced in agriculture. It is also very important in this respect. The share of agriculture, forestry and fisheries in the gross domestic product in 2021 was about 27 percent.

In recent years, agricultural production has risen to a new level due to the wide implementation of scientific achievements and advanced technologies, as well as new economic relations.

One of the important reforms implemented was the systematic introduction of market relations in the sector and the creation of an additional value chain in agriculture, the establishment of a modern and efficient method of agrocluster and cooperation.

In the last six years, 122 cotton-textile farms, 152 fruit farms, 64 grain farms, 35 rice farms, 7 clusters of medicinal plants and 11 cotton-textile cooperatives were established [4].

The state support system for the agricultural sector has been improved, and the amount of investments made by international organizations in 2020 will reach 500 million. It is equal to the US dollar and has increased by more than 4.7 times compared to 2016.

In order to ensure food security, the areas of cotton and grain were reduced, new intensive gardens and vineyards were established, and additional crops of vegetables and pulses were planted. Such large-scale reforms are bearing fruit today. In 2021, compared to 2020, 6.9% more potato products, 4.7% more potatoes, 4.1% more vegetables, 1.4% more fruits and berries, and 5.5% more grapes were grown [5].

The adoption of the 2020-2030 strategy for the development of agriculture of the Republic of Uzbekistan, which includes the programmatic tasks to be implemented in the near future and in the future, has opened a unique new annals in the development of the agricultural and food industry of our country [5].

The growth rate of production in the agricultural sector increased by 1.1 percent in 2021 compared to 2020, or increased by 1,011 times and amounted to 4 percent, amounting to 317.8 trillion at current prices. Soum products were produced. As a result, 26.9 percent of the country's gross added value was created in a specific field[5].

Thanks to the economic reforms in the field of agricultural production in Uzbekistan, clear shifts have been achieved, and a multi-farm economy has been formed in the countryside. However, the process of organizing production in this area has not ended, the search for new optimal forms of economic management continues. In the following years, at the initiative of

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the President, the cluster and cooperation system began to work, but it has not been able to show itself in full.

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At present (2021), if we take into account that 29.3% of all agricultural products are grown on farms, 5.2% on agricultural activity organizations and 65.5% on farmers' (personal assistant) farms, it becomes clear that there is a need to increase attention to the latter sector. 5].

Important problems in the agrarian economy include selection and seeding, strengthening of breeding activities in order to increase the productivity of crops and livestock, fight against agricultural pests, grow ecologically clean products, reduce damage to the environment, develop rural infrastructure and increase the attraction of investments for these purposes. possible

Agriculture makes up a quarter of our economy, and at its core lies the well-being of our people, price stability, and the reserve of new jobs.

Wider use of digitization technology in production processes is one of the issues that deserves special attention in the agricultural sector.

In this regard, as President Sh. Mirziyoev noted, "If there is no digitalization, there will be no real statistics in the field. Without proper information, agro-services will not develop, the farmer does not know when what he sows will get more income. Therefore, this process should be accelerated."

The strategy of agricultural development for 2020-2030 at the initiative of our President envisages priority goals such as ensuring food security of the population, creating a favorable agribusiness environment, rational use of natural resources, increasing the investment attractiveness of the sector, while fully providing the domestic market and increasing the volume of agricultural production. the tasks of doubling and increasing the volume of exports have been set[2].

One of the most important issues in the branches and sectors of the economy is the formation of the added value chain and determining its size.

It is known that added value is created in all economic entities of the national economy, and their sum constitutes the gross added value (GVA) indicator of industries and sectors. If we add the amount of net taxes on products to this indicator, the main macroeconomic indicator of the country - gross domestic product (GDP) - is formed. The share of net taxes in GDP in 2010-2021 averaged around 9.8 percent, in 2010 it was 12.0 percent, and in 2021 it was 7.2 percent.

In the statistical practice of our republic, since 2016, in connection with the transition of economic activities to IFUT-2, a state-wide classifier that conforms to international standards, forestry and fishery sectors were added to the agricultural network, and as a result, section "A" named "Agriculture, Forest and Fish" economy was created. .

Due to the use of international classifications in the statistical system of our country, the share of industries and sectors is determined in relation to the gross added value of industries along with the ratio to GDP. However, it is not possible to directly determine the indicator of added value in individual economic entities on the basis of available statistical data. In particular, in 2021, the weight of the "A" section in the GNI of industries was 26.9 percent, but the data on the share of agriculture, and especially farms, is not provided in the statistical collections. However, the fact that farms are the main economic entities producing agricultural products requires the determination of the added value created by them. Therefore, we recommend determining the indicator of added value created in them in the following way. First, we



IBAST | Volume 3, Issue 1, January

determine the share of agricultural products in the "A" section, then multiplying the volume of GNI of the "A" section by the defined share, we determine the amount of added value created in agriculture. During the periods under analysis, the volume of agricultural products produced by farms increased by 33.7 percent (74946.1:56060.7), and in 2021 at current prices will reach 88900.7 billion. soum, or its share in all categories of farms is 29.3 percent, which has decreased by 7 percentage points compared to 2010. As a result of the transformation of farms into a multi-sectoral sector, it can be explained that the increase in the volume of industrial products processed by them had an effect on this indicator. (Table 2). Table 2

We multiply the obtained result by the weight of farms in the gross agricultural product and calculate the added value index created in them. The volume, weight and dynamics of these indicators in the following years are presented in Table 2 below. As can be seen from the data in the table, the share of added value created in farms in the chain of "A" section is 33.3 in 2010, 2015, 2020 and 2021, respectively, in 2020 estimates; 29.9; 27.0 and 28.3 percent, and 10.4 percent in the GNI of all industries; 8.9; It was 7.3 and 7.1 percent. When determining the dynamics of all indicators in 2020 estimates, their annual growth rates were taken as a basis.

	The volui	me of farm	Share of	Added va	lue created	Added	value
	products,	billion,	farms in	in agriculture, billion		created	in farms,
Years	soums		agricultur	soums		billion soums	
	At the	In the	al	At the	In the	At the	In the
	current	price of	productio	current	price of	current	price of
	price	2020	n, %	price	2020	price	2020
A	1	2	3	4	5	6	7
2010	11201.0	56060.7	36.3	20018.7	92580.6	7266.8	32398.2
2011	15714.2	57854.6	34.7	28880.4	98320.6	10021.5	33435.0
2012	18397.5	61441.6	33.0	35180.9	105399,7	11609,7	35508,0
2013	21325,7	64145,0	32,1	40803,4	112356,0	13097,9	37070,3
2014	24620,1	66197,7	30,1	51522,3	119434,5	15508,2	38256,6
2015	30620,8	68514,6	30,7	62351,8	126720,0	19142,0	39595,5
2016	34271,1	70227,4	29,7	72236,5	134703,3	21454,2	40585,4
2017	43358,1	64960,3	29,3	87344,5	136050,4	25591,9	37541,5
2018	48667,0	60478,1	26,0	109227,	136322,5	28399,2	34951,2
				9			
2019	60394,7	66828,3	27,9	125615,	140821,1	35046,8	38621,0
				8			
2020	70570,7	70570,7	28,2	144623,	144623,3	40783,8	40783,8
				3			
2021	88900,7	74946,1	29,3	174709,	149829,7	51015,2	42823,0
				6			



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**IBAST** ISSN: 2750-3402

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