



## ECONOMIC AND STATISTICAL ANALYSIS OF AGRICULTURAL PRODUCTION IN THE REPUBLIC OF UZBEKISTAN

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### Annotation

The article discusses the reforms and structural changes carried out in the agricultural sector, as well as the issue of the service sector in the cultivation of agricultural products in our country and its economic and statistical analysis and further development of exports.

**Keywords :** agriculture, foreign trade, agricultural products, agrotechnics, exports, fruits and vegetables.

### Introduction

In the conditions of strong economic crises (financial and economic crisis, pandymia and crises caused by the Russian-Ukrainian crisis), which are taking place in the years ahead, economic reforms carried out in agriculture are not enough, and at present the need to move to new and new directions of further development of agricultural enterprises, to form new views is emerging. This will certainly lead to a further stabilization of the network, an increase in the cultivation of agricultural products, more efficient use of resources, the emergence of new jobs and ultimately serve as an important factor in ensuring agricultural development even during the economic crisis.

Because only 20.7% of the 20.2 million hectares of agricultural land in the Republic of Uzbekistan are irrigated lands. Over the past 15 years, per capita irrigated land has decreased by 24 percent (from 0.23 ha to 0.16). This situation was caused by the growth of the population, a decrease in the volume of water supply and the transition of lands intended for agriculture to other categories of the Land Fund. According to forecasts, over the next 30 years, irrigated land areas can again be reduced by 20 – 25%. Also, about 80% of the country's water resources are formed at the expense of cross-border water bodies. This situation determines the importance of regional cooperation for the sustainable management of Water Resources in Central Asia, in particular in the Republic of Uzbekistan. 70% of irrigation networks in the country do not have an anti-filtration coating, as a result of which part of the water is lost in the process of delivering to the field. The existing irrigation infrastructure, most of the





pumping stations, has been in use for more than 30 – 40 years and needs reconstruction or overhaul. Currently, drip irrigation is introduced in only 1.7% of irrigated land [5, 11].

Today, one of the priorities of the economy of Uzbekistan is the further deepening of reforms and structural changes carried out in the field of Agriculture, the effective use of land and Water Resources. The issue of increasing the competitiveness of the economy, comprehensive stimulation of farms and peasant farms, agrofirms and agricultural entities was in the attention of the leadership of the Republic of Uzbekistan. In particular, decree of October 22, 2012 “on measures to further improve the organization of farming activities in Uzbekistan and its development” PF-4478[1], decree of December 29, 2015 no PP-2460 “on measures to reform and develop agriculture in 2016-2020” [2] as well as “on measures to optimize the land plots given for the maintenance of farms” on December 15, 2015. Cabinet Law No. 362, this is the legal basis for our opinion[3]. To ensure the implementation of these regulatory documents and the strategy of actions of the Republic of Uzbekistan in five priority areas of development of the Republic of Uzbekistan for 2017-2021 [5] and priorities for the rapid development of Agriculture defined in the development strategies of new O'zbekistan for 2022-2026 [6] and the strategy for 2020-2030 for agricultural development of it is a sign of importance.

Analysis of literature on the topic.

The factors or problems that affect the development of Agriculture in our country have been studied by many researchers and have given their conclusions and suggestions on the rapid development of Agriculture in scientific works and articles. For Example, E.And The [7], T.Salimov[8], B.Nasimov[9], Q.X. These are the scientific articles of Jumaev[10-11]. Although all the above-mentioned researchers put forward ideas on the use of technologies in agriculture, increasing the yield of products and increasing export potential, in the assessment of economic development and structural and structural changes in agriculture in Uzbekistan and in the scientific research of others, the cultivation of the main types of agricultural products, the development of the agricultural and livestock sector in

Research methodology.

Our research was carried out with the aim of improving agriculture and its effective use, and tasks for the development of each territory of our Republic were determined. In the process of research, methods of comparison, grouping, economic-statistical and SWOT analysis were widely used. As a result of the study, the factors affecting the agrarian sector were analyzed and scientific and practical proposals were developed. It is envisaged that the developed scientific and practical proposals and





recommendations will be of great importance in the agrarian reforms carried out in our country, as well as in the development of targeted state programs for improving agriculture, and the more complete and effective use of the export potential of our country.

### **Analysis and Results**

It is known that in order to further increase the effect of the reforms carried out by the president of the Republic of Uzbekistan Mirziyoyev, to implement priorities for the development and liberalization of the economy, the state program “strategy of action” in five priority areas of development of the Republic of Uzbekistan for 2017-2021 shows how relevant and important the modernization and, “Priorities of the strategy for the development of Agriculture of the Republic of Uzbekistan for 2020-2030, namely: reducing the food participation of the population and increasing investment attractiveness; ensuring rational use of Natural Resources and environmental protection; development of Modern Public Administration Systems; Development of a system of Science, Education, Information and advisory services in agriculture; development of rural areas; development

In order to ensure the implementation of these legal and regulatory documents, comprehensive support for the rapid development of agriculture, export of quality grown agricultural products to foreign countries using advanced and effective innovative agrotechnical and agrotechnological tools, as well as an intensive method of development, and possession of an Uzbek brand in the world market have become one of the priorities of our economy. On the basis of a more complete and effective use of the export potential of our country, in-depth marketing research of world markets, it was determined to increase the volumes and types of export delivery of competitive new and processed agricultural products that are in demand in foreign markets. A significant increase in the export potential of the agrarian sector through the deepening of structural changes in agriculture is one of the most important tasks that are envisaged to be carried out in perspective.

Based on these tasks, let us dwell on today's results, which are achieved in the agricultural sector of the Republic. That is, “in 2020, the total volume of rural, forest and fish farm products (services) is 260.3 trillion. the sum (or 103.0% compared to 2019), including agriculture and livestock, hunting and services provided in these areas, is 251.8 trillion. sum (102.9 %), 6.7 trillion in forestry. som (101.7 %), 1.8 trillion in fish farming. sum (119.8%).

The share of Agriculture, Forestry and fisheries in GDP (YaQQ) was 28.2%. The impact of this network on the absolute growth rate of GDP is 0,8 f.p.ni organized. In





2020, the volume of agricultural, forestry and fisheries products (services) products amounted to 103.0% (in 2019, respectively, 103.1% compared to 2018), including 102.9% (103.0%), Forestry 101.7% (102.0%), fisheries 119.8% (136.1%), and services provided in these areas. The positive growth rate of the network in 2020 was achieved mainly through the recording of a higher growth rate of the following products compared to 2019: meat (in live weight) 102.1 %; milk 102.8 %; eggs 100.7 %; grain and legumes 101.7 %; vegetables 102.4 %; food crop 103.2 %; fruits and berries 104.0 %; grapes 102.2% and fish caught 118.4 % [12].

As of January 1, 2020, the number of farms amounted to 92.6 thousand, peasant (personal assistant) farms-5.0 million.tani, organizations carrying out agricultural activities amounted to 27.6 thousand. Farms account for 40.0 thousand in the direction of cotton and grain production, 31.0 thousand in horticulture and viticulture, 14.8 thousand in animal husbandry, 5.0 thousand in vegetable and horticulture, and 1.8 thousand in other areas.

As mentioned above, 96.7% of the total volume of agricultural, forestry and fishery products (services) corresponds to the contribution of Agriculture and livestock, hunting products and services provided in these areas, 2.6% - Forestry, 0.7% - fish farming. Analysis by household categories shows that 68.0% of the total volume of agricultural products corresponds to peasant (personal assistant) farms, 27.8% to farms, 4.2% to organizations carrying out agricultural activities. When analyzing the distribution of the share of agricultural products by regions in the cross-section of economic categories, it was observed that the highest indicators correspond to peasant (personal assistant) farms in all regions. For example, the share of peasant (personal assistant) farms in the cultivation of the main types of agricultural products is as follows: Meat (in live weight) 90.1 %; milked milk 94.3 %; potatoes 82.1% and vegetables 66.3 % [12].

In 2020, the highest volume of agricultural, forestry and fisheries products (services) in the region was Samarkand (33.6 trillion. sum), Andijan (27,1 trillion. sum) and Tashkent (25.8 trillion. sum) was recorded in the regions. On the contrary, to regions with a low volume, the Syrdarya region(8.7 trillion. sum), Republic of Karakalpakstan (10,4 trillion. sum) and Navoi region (11.9 trillion. sum) [3] if it is possible to cite, then in 2019 the highest volume of rural, forest and fish farm products (services) in the region is Samarkand (30.3 trillion. sum) and Andijan (24,4 trillion. sum) is coming to the regions. On the contrary, to low-volume regions, the Syrdarya region (7.3 trillion. sum), Republic of Karakalpakstan (8,1 trillion. sum) and Navoi region (10.3 trillion. sum) can be entered. In this regard, higher growth rates (102.5%) were observed in the regions of the Republic of Karakalpakstan (106.6%), Khorezm





(105.7%), Surkhandarya (104.6%), Bukhara and Jizzakh (104.3%), Fergana (104.2%), Andijan (103.4%). In Tashkent (93.8%), Syrdarya (101.2%), Kashkadarya (101.5%), Samarkand (102.2%) and Navoi (102.3%) regions, on the contrary, there was a low growth rate [12]. The leading position in the Republic in terms of the total volume of agricultural, forest and fishing products (services) of the Samarkand region is explained by the fact that this area has a high share among the regions in the cultivation of agricultural products such as meat, milk, potatoes, vegetables and grapes. On the contrary, it should be noted that the Syrdarya region has a small share among the regions in the cultivation of such agricultural products as meat, milk, eggs, potatoes and fruits and berries.

Our analysis showed that high growth rates of agricultural, forestry and fisheries products (services) by region were recorded in Surkhandarya (105.6 %), Fergana (104.8 %), Namangan (103.8 %), Kashkadarya (103.4 %), Navoi (103.2 %), Samarkand (103.1 %) regions. In Syrdarya (100.2%), Jizzakh (101.0 %) and Bukhara (101.6%) regions, on the contrary, there was a low growth rate [3]. The volume of products grown in agriculture by Regions and services provided is of course directly influenced by the cultivated areas planted in agriculture. That is, all agricultural crops planted for the harvest of 2020 have a crop area of 3373.4 thousand hectares (101.9% compared to the corresponding period last year), including grain and legumes 1619.8 thousand hectares (102.6 %), technical crops 1105.8 thousand hectares (100.6 %), of which Cotton 1050.7 thousand hectares (100.0%), potatoes 93.2 thousand hectares (103.9%), vegetables 224.2 thousand hectares (101.9%), food melons 60.6 thousand hectares (113.6%), feed crops 269.0 thousand hectares (100.5%), fruits and berries 341.1 thousand hectares (101.3 %), the vineyards accounted for 126.0 thousand hectares (104.8%) [12].

At the cross-section of the regions, the volume of products grown in agriculture and services provided is of course directly influenced by the cultivated areas planted in agriculture. That is, all agricultural crops planted for the 2020 harvest in the Republic accounted for 455.8 thousand hectares (13.5%), 340.7 thousand hectares (11.0%) and 371.6 thousand hectares (10.1%) in the crop area, respectively, while the lowest indicator was 89.7 thousand hectares (87 hectares) in Navoi, Namangan and Syrdarya regions, in addition to Tashkent it accounted for a thousand hectares (2.7%), 185.4 thousand hectares (5.5%) and 193.4 thousand hectares (5.7%). In comparison with the previous year, Tashkent, Syrdarya and Samarkand regions are leading with 108.4%, 106.5% and 103.9%, while Navoi and Fergana regions and the Republic of Karakalpakstan are in the last places with an indicator of 96.8%, 99.2% and 98.6%, respectively.





By farm categories, i.e., all agricultural crops planted for the 2020 harvest are 2,563.3 thousand hectares (75.98%), 473.4 thousand hectares (14.03%) and 336.7 thousand hectares (9.98%) respectively in the crop area (3,373.4 thousand hectares). When we analyze the regions in terms of crop production, all agricultural crops planted in farms for the 2020 year accounted for 345.7 thousand hectares (13.5%), 322.9 thousand hectares (12.6%) and 269.3 thousand hectares (10.5%) respectively, while the lowest indicator was 71.7 thousand hectares (12.6%) in Navoi, Syrdarya and Namangan regions, respectively 2.8%), accounted for 130.8 thousand hectares (5.1%) and 146.2 thousand hectares (5.7%). And in peasant (personal assistant) farms, the highest rate of all agricultural crops planted for the 2020 harvest was 68.4 thousand hectares (14.4%), 61.8 thousand hectares (13.1%) and 49.3 thousand hectares (10.4%), respectively, while in the Kashkadarya, Samarkand and Surkhandarya regions the lowest rate was 11.3 thousand hectares (87 hectares), Syrdarya, Navoi and Namangan regions, respectively there were hectares (2.4%), 14.6 thousand hectares (3.1%) and 29.1 thousand hectares (6.1%). The highest rate of all agricultural crops planted for the 2020 crop in Tashkent, Syrdarya and Kashkadarya regions was 86.5 thousand hectares (25.7%), 51.3 thousand hectares (15.2%) and 41.8 thousand hectares (12.4%) respectively, while the low rate was 3.4 thousand hectares (1.0%), 9.6 thousand hectares (2.8%) in Navoi, Samarkand and Namangan regions, respectively%) and we can see that it corresponds to 10.1 thousand hectares (3.0%) [12].

The analysis showed that in 2020, 7566.6 thousand tons (101.7 %) of grain crops, 3143.5 thousand tons (101.7 %) of potatoes, 10459.5 thousand tons (102.4 %) of vegetables, 2134.4 thousand tons (103.2 %) of foodbop melons, 2 864.0 thousand tons (104.0 %) of fruits and berries, 1639.2 thousand tons (102.2 %) grapes produced [3]. When we analyzed the total volume of agricultural, forestry and fisheries products (services) grown in 2020 in the leading areas, the share of agricultural products was 49.5%, that is, 123.6 trillion. sum (or 103.4% compared to 2019). Also, the share of livestock products in the total volume of cultivated agricultural products was 50.5%, that is, 126.2 trillion. sum or (102.1% compared to 2019) [12].

The consistent implementation of measures to increase the internal capabilities of the livestock sector, as well as the provision of systemic assistance to them by the state, made it possible to increase the number of head of livestock, replenish domestic consumer markets with livestock products. That is why in 2020, 2526.2 thousand t per living weight was introduced by all categories of farms. meat (2.1% more than in 2019), 11009.9 thousand t. milk (2.8% more), 7825.0 million.eggs in pieces (more by 0.7%), 35.7 thousand t. wool (1.5% more) was grown and 144085 t. fish (18.4% more) caught [12].





To date, the total number of large horned cattle in our republic (that is, as of January 1, 2021) has reached 13,188.7 thousand. Compared to 2020, in all categories of farms, the number of heads of cattle with large horns increased to 239.0 thousand (1.8%). From this, the total number of cows reached 4744.3 thousand. Compared to 2020, the number of cows in all categories of farms increased by 80.8 thousand (1.7%). The total number of sheep and goats reached 22,498.6 thousand. Compared to 2020, the number of sheep and goats in all categories of farms increased by -591.7 thousand (2.7%). The total number of heads of horses reached 254.0 thousand. Compared to 2020, the number of horses in all categories of farms increased by -6.9 thousand (2.8%). The total number of heads of poultry reached 90131.8 thousand. Compared to 2020, the number of heads of poultry in all categories of farms increased by -2272.1 thousand (2.6%) [12].

"According to the statistics committee, at the beginning of this year there were 90131,8 thousand head poultry, but in April it was 84 million. In 3 months, the head of the bird decreased by 7.1 percent or 6 million heads. Because, in poultry farming, poultry in the egg direction is used to obtain eggs for 1-1.5 years, and they are dated on the basis of a planned production map (technological card), slaughtering old mother chickens for meat and bringing new young chicks in their place, and maintenance work is organized. These processes are usually planned at the beginning of the year, during which there is a change in the number of heads of poultry. In particular, in the current year, there was a change (decrease) to 6 million heads compared to January 1, while in the corresponding period of the past 2020, a change (decrease) to 9.4 million heads was observed.

Today, 8 million Head young chicks (from 1 day to 90 days) are bred in the Republic after sanitation work at large poultry enterprises, these chicks are not recorded in statistical reports. The volume of egg production increased by -5 percent in the Tashkent region, the price of eggs in these regions by 7 percent due to a decrease in Sirdarya by -4 percent, and by 3.6 percent in the Republic. Another factor to the reduced egg production is the cold winter days. The bird's childbearing temperature should be 20-22 degrees, and in severe cold winter days, egg production decreases due to a decrease in temperature, and this is a natural process. For information, we can mention that 45% of the Republic's poultry farms accounted for the population, 55% for the population. In 2020, a total of 7.8 billion consumption eggs were produced (the norm per capita was 208 units, and the eggs produced were 227 units), while in 2021 it is planned to increase this figure to 8.1 billion units (236 units per capita) (an increase of 103.8 percent). 3 breeding farms are planned to be established in





kashkadarya and Surkhandarya regions, and 60,000 breeding mother chickens will be established at these enterprises”[6].

We will also evaluate the Agriculture of our country by analyzing each of the regions in our republic. As a result of structural changes in the agrarian sector, according to the results of the previous year 2021, the total volume of agricultural, forestry and fisheries products (services) amounted to 317781.6 billion. including the sum, agriculture and livestock, hunting and services provided in these areas amounted to 307515.0 billion. sum, Forestry 7581.5 billion. som, fishing farm 2685.1 billion. made up the sum. Or 96.8% of the total volume of products (services) of Agriculture, Forestry and Fisheries corresponded to the contribution of Agriculture and livestock, hunting and services provided in these areas (96.7% in 2020), 2.4% Forestry (2.6 %), 0.8% fisheries (0.7%). The highest volume of agricultural, forestry and fisheries products (services) in the region is Samarkand (41206.1 billion. sum), Andijan (32030.4 billion. sum) and Tashkent (30712.7 billion. sum) was recorded in the regions. In contrast to the low-volume regions of Syrdarya region (10512.0 billion. sum), Republic of Karakalpakstan (12339.3 billion. sum) and Navoi region (15224.5 billion. sum) can be quoted[12].

The share of Agriculture, Forestry and fisheries in GDP (YAQQ) was 26.9%. The impact of this network on the absolute growth rate of GDP 1,1 f.p.ni organized. Analyzing this indicator in the section of regions, it is possible to cite Navoi region (15.0 %) if the highest share falls on Jizzakh region (53.4%), but rather on the territory with a low share. The growth rate of agricultural, forestry and fisheries products (services) was 104.0% compared with the corresponding period last year, including agriculture and livestock, hunting and services provided in these areas were 103.9%, forestry was 101.5%, fisheries were 121.4%. The positive growth rate of the network in 2021 was achieved mainly by the fact that the following products recorded a high growth rate compared to the corresponding period in 2020. Meat (in live weight) 104.8 %, vegetables 104.1 %, potatoes 104.7 %, grapes 105.5 %, fish caught 120.7 %. Analyzes by household categories indicate that 65.9% of the total volume of agricultural products corresponds to peasant (personal assistant) farms, 29.2% to farms, 4.9% to organizations carrying out agricultural activities. When analyzing the distribution of the share of agricultural products by regions in the cross-section of economic categories, it was observed that the highest indicators correspond to peasant (personal assistant) farms in all regions. The share of peasant (personal assistant) farms in the cultivation of the main types of agricultural products is as follows milk milked 93.8 %, meat (live weight) 89.3 %, potatoes 74.7 %, vegetables 60.7 %, eggs obtained 60.5 %[12].







The highest indicator on the share of farms in the structure of agricultural products produced was noted in the Samarkand region (38.0 %), the highest share of peasant (personal assistant) farms in the Navoi region (75.4 %), the highest share of organizations carrying out agricultural activities in the Tashkent region (12.1%). The minimum indicator for the share of farms in the structure of agricultural products was observed in the Tashkent region (16.9 %), the minimum share of peasant (personal assistant) farms was observed in the Syrdarya region (55.1 %), the minimum share of organizations carrying out agricultural activities was observed in Kashkadarya and Namangan regions (3.1%).

The largest share in the structure of the total cultivated agricultural products in the Republic fell to Samarkand (14.0%), Andijan (12.6%), Fergana (10.5%) and Bukhara (9.3%) regions. Analyzing the growth rate of agricultural products produced in the regions, high growth rates were recorded in Namangan (105.2%), Surkhandarya (105.2%), Khorezm (104.6 %) and Samarkand (104.5 %) regions.

Due to the increase in the volume of future cultivation of food crops in the Republic and the expansion of the scale of the types of cultivated varieties and the implementation of systematic measures on this basis to fully satisfy the population's demand for food products, in 2021, 7540.9 thousand t by all categories of farms. grain crops (1.2% less than in 2020), 3292.3 thousand t. potatoes (4.7% more), 10859.3 thousand t. vegetables (4.1% more), 2281.1 thousand t. melons (6.9% more), 2852.5 thousand t. fruits and berries (1.4% more), 1695.1 thousand t. grapes (by 5.5% more) were grown. When the composition of grain crops grown in total was analyzed in 2021, the main part of the total volume of their cultivation, or 81.9%, was grain crops with spikes. Of the total cultivated grain crops, 6.9% accounted for corn, 3.9% for rice, 5.4% for legumes and 1.9% for other grain crops. When the composition of grain crops grown in total was analyzed in 2021, the main part of the total volume of their cultivation, or 81.9%, was grain crops with spikes. Of the total cultivated grain crops, 6.9% accounted for corn, 3.9% for rice, 5.4% for legumes and 1.9% for other grain crops. The largest volume of cultivation of grain crops is 6 112.0 thousand t. or 81.1% of the total volume of cultivation was recorded on farms. The minimum volume is 657.5 thousand t. or 8.7% of the total volume of cultivation was observed in organizations carrying out agricultural activities[12].

The leader among the regions for the cultivation of grain crops was taken by the Samarkand region. Its share in the total volume of grain crops is 11.0 %. At the same time, a high share was recorded in Kashkadarya (10.6%), Fergana (10.3%), Surkhandarya (9.3%), Jizzakh (9.2 %) and Andijan (8.7 %) regions. A low share in the total volume was observed in the Navoi region (3.3 %) and the Republic of





Karakalpakstan (3.6%). High growth rates were recorded in Surkhandarya (103.7 %), Tashkent (103.5 %), Bukhara (103.0 %), Fergana (102.9 %) and Syrdarya (102.0 %) regions.

Among the household categories, the largest volume of growing vegetables is 6587.4 thousand t. or 60.7% of the total volume of cultivation was recorded in peasant (personal assistant) farms. In the periods indicated in relation to 2020, an increase of 8.0% was recorded in farms, 1.2% in peasant (personal assistant) farms and 22.1% in organizations carrying out agricultural activities. The main part of the content of vegetable cultivation among the regions is occupied by the Samarkand region, its share was equal to 16.1%. The high share was also recorded in Andijan (15.1 %), Fergana (10.9 %), Surkhandarya (9.8 %) and Tashkent (9.7 %) regions. Low indicators were observed in the Republic of Karakalpakstan and Navoi region (2.8%). High growth rates were recorded in Samarkand (106.9 %), Namangan (106.5 %), Surkhandarya (105.2 %) regions and the Republic of Karakalpakstan (105.1%) [12].

The largest volume of potato cultivation is 2459.4 thousand t. or 74.7% of the total volume of cultivation was recorded in peasant (personal assistant) farms. Compared to the corresponding period of 2020, there was an increase of 20.4% in farms and 0.8% in peasant (personal assistant) farms. The highest share of the total volume of potato cultivation fell on the contribution of the Samarkand region (20.4%). In addition, high potato cultivation indicators were also noted in Andijan (12.1%), Tashkent (11.6%), Surkhandarya (10.5%), Fergana (9.9 %) regions. The lowest indicators of the share of potatoes in the total volume of cultivation fell on the contribution of Syrdarya (1.9 %) and Navoi (2.5 %) regions. During the current period, high growth rates were recorded in Jizzakh (110.1 %), Samarkand (107.4 %), Andijan (105.5 %), Namangan (105.4 %) and Surkhandarya (104.5 %) regions.

The largest volume of cultivation of melon products is 1165.1 thousand t. or 51.1% of the total volume of cultivation was recorded on farms. Compared to the corresponding period of 2020, there was an increase of 12.5% in farms, 1.4% in peasant (personal assistant) farms and 6.6% in organizations carrying out agricultural activities. The largest share of the total volume of cultivation of melons fell on the contribution of Surkhandarya region (14.1%). At the same time, high indicators were also noted in Jizzakh (11.8%), Syrdarya (11.4%), Bukhara (8.0%), Andijan (7.8 %) and Kashkadarya (7.8 %) regions. Also, the minimum share in the total volume of the melons fell on the contribution of Tashkent (2.4 %) and Navoi (4.3 %) regions. During the current period, high growth rates were recorded in Namangan (131.3 %), Samarkand (115.0 %), Fergana (114.5 %), Khorezm (109.5 %), Kashkadarya (108.5 %) regions and the Republic of Karakalpakstan (108.0%).





The largest volume of fruit and berry production among farm categories is 1567.4 thousand t. or 54.9% of the total volume of cultivation was recorded in peasant (personal assistant) farms. Compared to the corresponding period of 2020, there was an increase in farms by 5.5%. The largest share in the total volume of grown fruits and berries by region fell on the contribution of Andijan (23.0 %), Fergana (13.0 %), Samarkand (12.6 %), Namangan (10.4 %) and Bukhara (9.2 %) regions. At the same time, the minimum share in the total volume of fruits and berries was observed in the Syrdarya region (1.5 %) and the Republic of Karakalpakstan (2.2%). High growth rates were recorded in the Republic of Karakalpakstan (106.9 %), Syrdarya (105.7 %), Kashkadarya (105.6 %), Surkhandarya (104.9 %), Namangan (104.8 %) regions.

The largest volume of grape cultivation is 920.9 thousand t. or 54.3% of the total volume of cultivation was recorded in peasant (personal assistant) farms. Compared to the corresponding period of 2020, there was an increase of 10.7% in farms, 1.6% in peasant (personal assistant) farms and 6.8% in organizations carrying out agricultural activities. About a third of the total volume of grapes grown fell on the contribution of the Samarkand region (35.5%). The high share was also recorded in Bukhara (12.1 %), Fergana (10.6 %), Namangan (8.1 %) and Surkhandarya (6.1 %) regions. Also, the minimum share in the total volume of grape cultivation was observed in the Republic of Karakalpakstan (0.7 %) and Syrdarya region (0.8%). Higher growth rates compared to 2020 were recorded in Kashkadarya (110.2 %), Samarkand (108.4 %), Surkhandarya (107.1 %) regions and the Republic of Karakalpakstan (106.2%) [12].

The largest share in the total livestock products grown in the Republic fell to Samarkand (11.8 %), Kashkadarya (11.4 %), Tashkent (10.2 %) and Bukhara (9.5 %) regions. Analyzing the growth rate of livestock products produced in the regions, high growth rates were recorded in Andijan (106.3%), Tashkent (106.1%), Jizzakh (105.3 %) and Bukhara (104.5 %) regions. The consistent implementation of measures to increase the capacity of livestock, as well as the provision of systemic assistance to them by the state, made it possible to increase the number of head of livestock and replenish domestic consumer markets with livestock products. In 2021, 2640.4 thousand t in live weight by all categories of farms. meat (4.8% more than in 2020), 11286.9 thousand t. milk (2.8% more), 8053.1 million. eggs (3.5% more) were bred and 173866 t. fish (20.7% more) were caught. Based on the results of the analysis of data on meat production by farm categories in 2021, the largest volume of meat production was 2357.4 thousand t. or it should be noted that 89.3% of the total volume of cultivation is recorded in peasant (personal assistant) farms. In the indicated periods, the minimum volume of meat production is 134.0 thousand t. or 5.1% of the total volume of cultivation was observed in organizations carrying out agricultural





activities. Compared with the corresponding period of 2020, in 2021 there was an increase of 32.8% in farms, 2.4% in peasant (personal assistant) farms and 28.0% in organizations carrying out agricultural activities. The highest share in the total volume of grown meat fell to the Kashkadarya region (11.8%). The high share was also recorded in Samarkand (11.6 %), Tashkent (10.5 %), Bukhara (10.4 %), Jizzakh (8.6 %) and Surkhandarya (7.6 %) regions. Low indicators were observed in the Syrdarya region (2.6 %) and the Republic of Karakalpakstan (4.4%). In 2021, high growth rates were recorded in Andijan (113.5%), Samarkand (106.7%), Namangan (104.7%), Tashkent (104.6 %) regions and the Republic of Karakalpakstan (104.5%).

The largest volume of milk production among farm categories is 10590.6 thousand t. or 93.8% of the total volume of cultivation was recorded in peasant (personal assistant) farms. The minimum volume at the end of 2021 is 108.6 thousand t. or 1.0% of the total volume of cultivation was observed in organizations carrying out agricultural activities. In the periods indicated in relation to 2020, an increase of 13.1% was recorded in farms, 2.1% in peasant (personal assistant) farms and 27.9% in organizations carrying out agricultural activities. The highest share in relation to the total volume of milk production fell to the Samarkand region (11.8%), as well as in Kashkadarya (11.1%), Khorezm (9.5%), Fergana (9.5%), Bukhara (9.0%), Andijan (8.8 %) and Tashkent (8.6 %) regions. The lowest share in relation to the total volume of milk production was observed in the Syrdarya region (3.3 %) and the Republic of Karakalpakstan (3.7%). Higher growth rates compared to 2020 were recorded in Kashkadarya (105.8 %), Tashkent (104.6 %), Syrdarya (104.1 %), Jizzakh (103.6 %) regions of the Republic of Karakalpakstan (103.6%).

Compared to other categories of farms, the largest volume of egg production is 4875.5 million. 60.5% of the volume of grain or total cultivation was recorded in peasant (personal assistant) farms. In 2021, the minimum egg production volume was 1203.8 million. 15.0% of the volume of grain or total cultivation was observed on farms. Compared to the corresponding period of 2020, there was an increase of 14.8% in farms, 1.2% in peasant (personal assistant) farms and 3.1% in organizations carrying out agricultural activities. The highest indicators of egg production compared to other regions corresponded to the contribution of the Tashkent region, and its share was 18.0%. The high share was also recorded in Samarkand (16.7 %), Andijan (9.0 %), Namangan (7.9 %), Fergana (6.9 %) and Surkhandarya (6.5 %) regions. Syrdarya region (2.3 %) and the Republic of Karakalpakstan (4.4 %) were noted as a territory with a low share of the total volume of egg production. Higher growth rates compared to 2020 were observed in Jizzakh (123.6 %), Syrdarya (110.0 %), Bukhara (106.8 %), Samarkand (106.4 %) and Khorezm (104.8 %) regions.





In the process of analyzing fishing indicators by household categories, the main part of the volume of caught fish is 82193 t. or 47.3% of the total hunted volume was recorded in organizations carrying out agricultural activities. The minimum fishing volume according to the results of 2021 is 10091 t. or 5.8% of the total hunted volume was observed in peasant (personal assistant) farms. Compared to 2020, there was an increase of 38.0% in farms, 3.1% in peasant (personal assistant) farms and 9.3% in organizations carrying out agricultural activities. The largest share between the regions in relation to the size of the fish caught in general corresponded to the Khorezm (17.9 %) region. At the same time, a high share was noted in the regions of Samarkand (12.6%), Andijan (10.2%), The Republic of Karakalpakstan (8.3%), Navoi (7.8 %) and Jizzakh (7.5%). The minimum share in relation to the total volume of fish caught during the analyzed period was observed in Surkhandarya (2.9 %), Syrdarya (3.4 %) and Kashkadarya (3.7 %) regions. Higher growth rates compared to 2020 were recorded in Samarkand (172.7 %), Bukhara (161.3 %), Khorezm (143.0 %), Namangan (128.0 %), Kashkadarya (119.5 %) and Surkhandarya (110.7 %) regions[12].

As of January 1, 2022, when analyzing data on the number of heads of large-horned cattle by household categories, it should be noted that 6.5% of large-horned cattle correspond to the contribution of farms, 92.0% to peasant (personal assistant) farms, 1.5% to organizations carrying out agricultural activities, respectively, 14.2% from the total number of sheep and goats belong to farms, 79.9% to comes, also, of the total number of horses, 22.5% corresponded to farms, 73.1% to peasant (personal assistant) farms, 4.4% to organizations carrying out agricultural activities, 17.0% from the total number of poultry fell to farms, 57.7% to peasant (personal assistant) farms, 25.3% to organizations carrying out agricultural activities. As of January 1, 2022, in all categories of farms: the total number of cattle with large horns reached 13,555.8 thousand heads. The number of heads of cattle with large horns increased by 401.5 thousand heads (3.1 %) compared to the corresponding period in 2021. 92.0% of the head number of large-horned cattle corresponded to peasant (personal assistant) farms. The largest share of the total number of large-horned cattle fell to the Kashkadarya region (12.4%). The high share was also recorded in Samarkand (12.2 %), Bukhara (9.5 %) regions and the Republic of Karakalpakstan (8.7%). At the same time, the lowest share in the total number of cattle with large horns was observed in the Syrdarya (3.5 %) and Navoi (3.9 %) regions. Compared with other regions, the highest growth rates compared to 2021 were recorded in Syrdarya (104.3 %), Samarkand (103.7 %), Andijan (103.5 %), Tashkent (103.4 %) and Kashkadarya (103.3 %) regions.





In all categories of farms: the total number of sheep and goats reached 23,074.3 thousand heads. The number of sheep and Goats Head increased by 615.5 thousand heads (2.7 %) compared to 2021. 79.9% of the head number of sheep and goats corresponded to peasant (personal assistant) farms. The largest share of the total number of sheep and goats in the regions fell to the Kashkadarya region (21.2%). At the same time, a high share was recorded in Samarkand (11.0%), Surkhandarya (10.7%), Navoi (10.0 %) and Bukhara (10.0 %) regions. The minimum share of the total number of sheep and goats was observed in the Syrdarya (1.6 %) and Khorezm (2.0 %) regions. In comparison with other regions, the highest growth rates compared to 2020 were recorded in Khorezm (105.0 %), Syrdarya (103.8 %), Kashkadarya (103.5 %) regions and the Republic of Karakalpakstan (103.1%).

The total number of poultry reached 89734.4 thousand heads. The number of poultry heads increased by 144.7 thousand heads (0.2 %) compared to 2021. 57.7% of the number of poultry heads corresponded to peasant (personal assistant) farms. The largest part of the total number of poultry by regions fell to the Tashkent region (17.3%), as well as high indicators were recorded in Samarkand (15.1%), Fergana (9.6%), Andijan (9.6 %) and Kashkadarya (6.9 %) regions. By Regions, the minimum number of poultry in the total head fell to the Syrdarya (3.4 %) and Navoi (3.6 %) regions. Compared with other regions, the highest growth rates compared to last year were recorded in Syrdarya (119.0 %), Surkhandarya (103.6 %), Navoi (103.0 %), Bukhara (102.5 %), Samarkand (102.5 %) and Andijan (102.4 %) regions.

### **Conclusions and Suggestions**

Based on the results of the above analysis, we can give the following suggestions and conclusions on the further development of exports of fruit and vegetable products grown in our country: to achieve a reduction in the cost of products due to the involvement of innovative technologies and techniques in the process of Reproduction of fruit and vegetable products; frequent Organization of international; providing the country's domestic market with fruits and vegetables for 12 months through the organization of refrigerants intended for the storage of fruits and vegetables in all regions of the Republic; introduction of modern advanced drying technologies and modernization of existing fruits and vegetables grown in the Republic; introduction of the organization for quality monitoring of fruits and vegetables exported to foreign countries and In conclusion, it is intended to increase the country's export potential and the well-being of the population as a result of the cultivation of environmentally friendly, high-yield agricultural products through the use of more competitive, modern methods of Agriculture.





The main goal of the development of Agriculture of the region is to improve the quality and quality of agricultural products grown with the best use of the existing potential, increase the share of exports and strengthen the direction of their processing on an industrial basis

The main directions are: effective use of arable land; development of new lands in regions where there is an opportunity; development of livestock by building large complexes; development of horticulture, taking into account the relative advantages of the region.

To increase the yield of cotton-grown areas, complex measures should be developed to improve the reclamation of the Earth. At the moment, as an alternative to it, in such regions it is necessary to place other types of crops from cotton, which are resistant to waterlogging and salinity, which require relatively little labor.

It is estimated that in such areas, fairy-tale vegetables suitable for the natural and climatic conditions of the region are grown, from the 3rd year, 5-10 million per hectare. it will be possible to earn around the sum. This indicator is 2-3 on fodder crops and oil crops, respectively mln.so 8-10 on mni, orchards and intensive Gardens mln.so mni, 25-30 on the cultivation of fruits and vegetables in greenhouses due to the application of alternative energy types other than natural gas mln.so makes up M. In most districts on such areas, it is recommended to grow fodder crops (6760 ha or 85.5 percent of the total area). This allows to increase the volume of production of livestock products by improving the supply of livestock feed in the region. It is planned to allocate 1085 hectares, or 13.7% of the total area, for the cultivation of fruit gardens and vegetable crops.

The main directions of agricultural development are: viticulture; fruit growing; the cultivation of agricultural products of tomorrow; the cultivation of oil crops; livestock; beekeeping; fishing.

## REFERENCES

1. O`zbekiston Respublikasi Prezidentining "O`zbekistonda fermerlik faoliyatini tashkil etishni yanada takomillashtirish va uni rivojlantirish chora-tadbirlari to`g`risida"gi PF-4478 sonli Farmoni. 2012 yil 22 oktabr. [www.lex.uz](http://www.lex.uz) (O`zbekiston Respublikasi qonun hujjatlari milliy bazasi portali).
2. O`zbekiston Respublikasi Prezidentining "2016-2020 yillarda qishloq xo`jaligini isloh qilish va rivojlantirish choralari to`g`risida"gi PQ-2460 sonli Qarori. 2015 yil 29 dekabr. [www.lex.uz](http://www.lex.uz) (O`zbekiston Respublikasi qonun xujjatlari milliy bazasi portali).
3. O`zbekiston Respublikasi Vazirlar Mahkamasining "Fermer xo`jaliklarini yuritish uchun berilgan yer uchastkalari maydonlarini maqbullashtirish chora-tadbirlari





to'g'risida"gi 362-sonli Qonuni.2015 yil 15 dekabr. www.lex.uz (O'zbekiston Respublikasi qonun hujjatlari milliy bazasi portali).

4. O'zbekiston Respublikasi Prezidentining «O'zbekiston Respublikasi qishloq xo'jaligini rivojlantirishning 2020 – 2030 yillarga mo'ljallangan strategiyasini tasdiqlash to'g'risida» 2019 yil 23 oktyabrdagi PF-5853-son Farmoni (O'zbekiston Respublikasi qonun hujjatlari milliy bazasi portali).

1. 5.2017-2021 yillarga mo'ljallangan O'zbekiston Respublikasini rivojlantirishning beshta ustuvor yo'nalishi bo'yicha Harakatlar strategiyasi “Xalq bilan muloqot va inson manfaatlari yili”da amalga oshirishga oid Davlat dasturi bo'yicha ilmiy-uslubiy risola. 2017-yil. www.uza.uz. (O'zbekiston Milliy axborot agentligi).

5. O'zbekiston Respublikasi Prezidentining “2022-2026 yillarga mo'ljallangan Yangi O'zbekistonning taraqqiyot strategiyasi to'g'risida”gi PF-60-son farmoni. 28.01.2022.

6. E.Ergashev “Agrar tarmoq xo'jaliklarini rivojlantirishning o' ziga xos xususiyatlari va omillari”// “Iqtisodiyot va innovatsion texnologiyalar” ilmiy elektron jurnali. №5, 2015 yil.(3-6 betlar).

7. B.Salimov, M.Yusupov “Chuqur tarkibiy o' zgarishlar va modernizatsiya orqali qishloq xo' jaligini jadal rivojlantirishning ustuvor yo' nalishlari”// “Iqtisodiyot va innovatsion texnologiyalar” ilmiy elektron jurnali. №2, 2017-yil.(2-5 betlar)

8. B.Nasimov “O'zbekistonda qishloq xo'jaligi tarmog'ining innovatsion faoliyati samaradorligi”// “Xalqaro moliya va hisob” ilmiy elektron jurnali. №1, 2018 yil.(3-5 betlar).

9. Q.X.Jumaev Qishloq xo'jaligi tarmog'ini innovatsion rivojlantirishning statistik tahlili. Davlat statistika qo'mitasi huzuridagi Kadrlar malakasini oshirish va statistik tadqiqotlar institutining “O'zbekiston statistika axborotnomasi” ilmiy elektron jurnali. 2020 yil, 2-son.

10. Q.X.Jumaev Qishloq xo'jaligi mahsulotlarini yetishtirishning iqtisodiy-statistik tahlili. Davlat statistika qo'mitasi huzuridagi Kadrlar malakasini oshirish va statistik tadqiqotlar institutining “O'zbekiston statistika axborotnomasi” ilmiy elektron jurnali. 2021 yil, 4-son.

11. Xurramovich, J. Q. (2022). Statistical assessment of agriculture. Web of Scientist: International Scientific Research Journal, 3(11), 864-869.

12. Jumaev, Q. X. (2021). Economic analysis of the development of main sectors of agriculture. Asian Journal of Multidimensional Research, 10(10), 1186-1194.

13. Arzikulov, O. A. (2021). Artificial intelligence to increase the efficiency of small businesses. ISJ Theoretical & Applied Science, 08 (100), 412-415.

14. Арзикулов, О. А. (2020). Значение малого бизнеса и частного предпринимательства в Узбекистана. Экономика и социум, (4), 157-160.







15. Arzikulov, O. A. (2019). The role of small business in developed countries. Экономика и социум, (12), 30-33.
16. Ali o'g'li, Arzikulov Otabek. "Statistical study of direct maintenance of small business activities in the regions." EPRA International Journal of Economic and Business Review (JEER) 10.6 (2022): 30-33.
17. Арзикулов, Отабек. "Статистическая оценка экономической активности малого бизнеса в регионах." Экономика и образование 23.1 (2022): 187-192.
18. O'zbekiston Respublikasi Davlat statistik qo'mitasi. Qishloq, o'rmon va baliq xo'jaligi 2020-2021 yilgi va 2022 yil yanvar-iyun oylari (dastlabki ma'lumot) ma'lumotlari.
19. <https://www.lex.uz/docs/4567334>.
20. [www.uzagroexport.uz](http://www.uzagroexport.uz) "O'zagroeksport" aksionerlik jamiyatining ma'lumotlari.

