

The Development Status of the Agricultural Sector in Uzbekistan

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ABSTRACT: The article analyzes the current state and development trends of the agricultural sector of Uzbekistan. In particular, on the one hand, positive changes in the agricultural sector, namely the introduction of modern technologies, indicators of export and import of agricultural products, are analyzed. On the other hand, the main indicators of the industrial sector by types of economic activity, indicators of economic efficiency of industrial sector resources by types of economic activity, and indicators of investment in fixed capital by types of economic activity are considered. The article is based on the important role of state policy and support measures for the growth and development of the agricultural sector of Uzbekistan and the need to ensure environmental sustainability.

KEYWORDS: agriculture, export and import of products, industrial sector resources, efficiency.

INTRODUCTION

The agricultural sector is one of the most important sectors of the economy of Uzbekistan, serving as a source of raw materials for the country's population, food products, processing industry and service sectors, as well as ensuring the stability of Uzbekistan's export potential in foreign trade processes. In our country, farms, dehkan (private subsidiary) farms and enterprises carrying out agricultural activities operate in the agricultural sector. Agriculture, while satisfying the population's demand for food products and the processing industry's demand for raw materials, is considered one of the promising sources of strengthening the republic's export potential. The republic's food exports (2020) amounted to 6.7 percent of total exports. According to calculations, there is an opportunity to earn 7 times more from grapes, 6 times from cherries, and 5 times from walnuts than from cotton raw materials grown on one hectare of land. The agricultural base is being diversified by increasing the number of high- value fruit and vegetable crops. These crops are not only more profitable but also a source of well-paid seasonal work.

Analysis of literature on the topic

In our country, it is also necessary to develop the agro-industrial complex, ensure the population is provided with food products, cultivate agricultural goods, and produce food items. It is important to develop the processing industry, reduce the import of food products and increase their export. These issues have been studied in scientific research works by scholars such as Abduganiyev A.A. [1], Berkinov B.B. [2], Makhmudov N. [3], and Nazarova F. [4].

I.Ansoff defined strategic planning as an activity related to maintaining interaction with the external environment, which allows for achieving development goals in accordance with internal capabilities while remaining open to external demands by justifying the mission and objectives of the management object [5]. Modern conceptual strategic approaches are based on the perception of competition as a direct factor in the management process in realizing the potential of territorial-economic systems and their capabilities [6].

In addition to this, foreign researchers such as Wedowati E.R., Singgih M.L., Gunarta I.K. [7], Matthew N.O., Sadiku S.M., Tolulope J.A. [8], De Clercq M., Vats A., Biel A. [9], Panova A.V. [10], Bozsik N., Cubillos T.J., Stalbek B., Vasa L., Magda R. [11], Sandu I.S., Nechaev V.I., and Voiku I.P. [12] have conducted scientific research on ensuring food security, developing the food production and processing industry, and improving the food supply chain system.

According to the Resolution of the President of the Republic of Uzbekistan No. PQ-58 dated December 22, 2021 "On measures to further improve the system of research, strategic planning and management of reforms in the food and agricultural sector", a number of tasks have been set to further deepen reforms in the food sector in our country, reduce bureaucratic barriers, widely introduce innovative ideas, developments and advanced information and communication technologies, as well as ensure transparency at all stages of food production.

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Research methodology

The purpose of this study is to determine the economic efficiency of the country's agro-industrial complex based on an analytical study of its economic efficiency, vertical and horizontal analysis of the indicators of export and import of agricultural products. The advantages and disadvantages of the effective organization of a modern agro-industrial complex, the analysis of the place of the modern agroindustrial complex in the production of gross domestic product, and the identification of directions for its further development and formation. In the process of scientific study of the topic, statistical analysis, logic, analysis and research, various literature and articles were used.

Analysis and results

The need for assessing the economic activity of agro-industrial enterprises is that, on the one hand, it allows you to determine the total cost of all resources of the enterprise and at the same time study the structure and dynamics of the components of economic potential, and on the other hand, it allows you to compare the cost of resources with other economic indicators of enterprises. Today, the rapid economic development of the agricultural sector in Uzbekistan is explained by the high role of this sector in the country's economy, including in the gross domestic product.

Table 1: The main socio-economic development of the Republic of Uzbekistan INDICATORS [13]

Years	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Interest right average
GDP (billion soun)	186829.5	221350.9	255421.9	317476.4	426641.0	532712.5	605514.9	738425.2	896617.9	1066569.0	1.19
Rural forest and fish economy (billions) soun)	81794.3	99604.6	115599.2	148199.3	187425.6	216283.1	250250.6	303415.5	345191.7	404648.6	1.17
Industry products volume (billion soun)	84011.6	97598.2	111869.4	148816.0	235340.7	322535.8	368740.2	456056.1	553265.0	655821.9	1.22
Transportation and communication (billions soun)	4195.1	4772.8	5579.4	7168.1	8648.6	9102.4	10303.1	11881.7	14478.7	17890.1	1.15
Services sector (billions soun)	68032.1	78530.4	97050.0	118811.0	150889.8	193697.8	219978.5	284388.1	366891.0	470286.5	1.21
Construction work volume (billion soun)	20060.4	25423.1	29413.9	34698.0	51129.3	71156.5	88130.3	107492.7	130790.9	149864.1	1.22
Rural forest and fish on the farm number of items (thousand	3528.9	3601.7	3646.7	3671.3	3537.2	3544.6	3499.2	3414.7	3438.7	4262.64	1.02

We used vertical and horizontal analysis methods to analyze the economic indicators in this sector. From the data in Table 1, it can be seen that in the studied period of 2014-2023, the growth of the agricultural, forestry and fisheries sector was observed, and the coefficient of interest was equal to 1.17.

In turn, this means that during this period, the average coefficient of interest on GDP in the country was also 1.19. In addition, it can be seen that the coefficient of interest in the industrial sector during this period was 1.22.

This also means that today the agricultural, forestry and fishing sector is growing rapidly and is considered to have a faster development and interest rate than all other major sectors. Considering that the average interest rate of the permanent population growth during the period under review was 1.02, the fact that the economic indicators of the agricultural sector are constantly increasing and at the same time the employment rate in this sector is also somewhat decreasing is certainly a good indicator.

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Table 2: The main indicators of the development of the agricultural sector in the Republic of Uzbekistan[13]

Years	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	The average rate of change of profitability
Rural forest and fish on the farm cultivated product size (billion soums)	81794,3	99604,6	115599,2	148199,3	187425,6	216283,1	250250,6	303415,5	345191,7	404648,6	1,17
Export food made food products volume (mln. US Dollar)	1675,6	1316,4	694,5	875,9	1097,8	1529,9	1443,8	1471,8	1823,5	1909,2	1,05
Imported food products volume (mln. US Dollar)	1509,9	1585,3	1439,7	1273,9	1581,6	1885,0	2159,6	2925,8	3953,2	4448,6	1,13

The following table 2 presents the main development indicators of the agricultural sector of the Republic of Uzbekistan, including data on food products exported and imported to our country.

According to it, it can be seen that the average coefficient of interest for the volume of food products exported from our country during 2014-2023 was 1.05, while the average coefficient of interest for the volume of food products imported into our country was 1.13. This indicates that in recent years, the volume of imported food products is 8 percent higher than the volume of exports.

According to the data in Table 3 below, the volume of investments in fixed capital in 2023 amounted to 187818.7 billion soums in the total industry, 100639.8 billion soums in the manufacturing industry, and 6522.9 billion soums in the food industry. The average annual volume of fixed assets used in the total industry amounted to 479885.9 billion soums, while this indicator was 20911.8 billion soums in the food industry. Also, the number of people employed in the industrial sector is 1828.8 thousand people, of which 1648.4 thousand people in the manufacturing industry, including 111.6 thousand people in the food industry.

Table 3: Key indicators of the industrial sector by types of economic activity[13]

Year	Volume of investments made, billion UZS			Fixed assets, billion UZS		Number of employed persons, thousand people		
	Total industry	Manufacturing industry	Food industry	Total industry	Food industry	Total industry	Manufacturing industry	Food industry
2010	4859,2	2334,9	225,3	25454,1	1748,3	1605,7	1339,1	84,8
2011	6214,1	3016,4	330,9	31090,7	2105,7	1640,7	1365,9	84,9
2012	8080,7	3714,7	372,9	38718,1	2458,1	1669,5	1393,7	85,4
2013	10368,0	4082,0	469,9	48608,9	2986,7	1703,1	1423,4	85,4
2014	13874,9	4780,7	618,3	58961,6	3654,2	1736,5	1448,2	81,8
2015	17738,4	5346,2	622,8	68185,6	4562,8	1768,7	1476,2	84,4
2016	19605,5	8992,1	651,8	94809,8	6465,9	1802,4	1507,7	89,1
2017	32877,7	12238,1	1181,3	115516,5	8954,6	1826,8	1599,9	91,4
2018	59821,6	25741,2	2685,5	169675,4	11230,4	1802,9	1598,3	95,6
2019	96065,3	50990,2	3729,0	221267,5	12895,2	1821,5	1612,9	106,8
2020	94178,9	55943,3	4472,8	282254,0	14988,3	1809,5	1597,7	113,9
2021	98516,5	52427,8	4932,0	354306,3	16958,6	1883,3	1659,2	111,2
2022	117317,9	67818,3	4202,6	420348,6	18935,2	1810,6	1630,1	110,5
2023	187818,7	100639,8	6522,9	479885,9	20911,8	1828,8	1648,4	111,6

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According to the analysis, the volume of investments in fixed capital in 2010-2023 (annual average) in the total industry amounted to 54809.8 billion soums, which increased by almost 38.7 times in 2023 compared to 2010. Also, the volume of investments in fixed capital in the average manufacturing industry amounted to 28433.3 billion soums, which increased by 43.1 times in 2023 compared to 2010, while the volume of investments in fixed capital in the food industry during the same period amounted to 2215.6 billion soums, which increased by 29.0 times in 2023 compared to 2010.

In addition, the annual average volume of fixed assets used in the total industrial sector during 2010-2023 was 172077.4 billion soums, which increased by 18.9 times in 2023 compared to 2010. Also, the volume of fixed assets was 9204.0 billion soums, which increased by 12.0 times in 2023 compared to 2010. According to statistical observations, in the industrial sector in 2010-2023, an average of 1765.0 thousand people were employed annually, which increased by 1.1 times in 2023 compared to 2010. Also, during the same period, an average of 1521.5 thousand people were employed annually in the manufacturing industry, which increased by 1.2 times in 2023 compared to 2010. increased by 1.3 times. In particular, the average annual number of jobs in the food industry during this period was 95.5 thousand people, which is 1.3 times more than in 2010.

This indicates that the construction industry has invested the most compared to other sectors. The high coefficient indicator may be due to several factors. In particular, the developed infrastructure, state policy aimed at modernizing infrastructure, stimulating investments in the construction of roads, bridges, buildings, energy and communication facilities. Increased demand for housing. With the growth of the population and the improvement of living standards, the demand for housing and commercial facilities is increasing, which attracts investments in this segment. Due to the cyclical nature of the industry, construction is often subject to fluctuations, and investments increase during periods of economic growth. The average interest coefficient of the agriculture, forestry and fisheries sector is 1.16, which indicates a high level of investments in this sector (Table 4).

Table 4: Investments in fixed capital by types of economic activity (at current price index) [13]

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average coefficient of change in profitability
Total	1,00	1,19	1,14	1,41	1,72	1,58	1,07	1,14	1,11	1,32	1,23
Including:											
Agriculture, forestry, and fishing	1,00	1,17	1,06	1,27	1,31	1,53	1,21	1,20	0,89	1,18	1,16
Mining and quarrying	1,00	1,39	0,74	1,98	1,13	1,25	1,17	0,92	1,07	1,18	1,11
Manufacturing	1,00	1,12	1,68	1,36	2,10	1,98	1,10	0,94	1,29	1,40	1,30
Electricity, gas, steam, and air conditioning supply	1,00	1,33	1,21	2,01	2,81	1,37	0,53	1,69	1,05	1,45	1,21
Water supply, sewerage, waste management, and remediation activities	1,00	1,03	1,61	1,34	2,75	1,46	0,91	1,58	1,18	1,43	1,31
Construction	1,00	1,31	0,88	1,53	1,79	2,83	1,40	1,80	0,90	1,49	1,33
Transportation and storage	1,00	0,89	1,55	1,10	1,33	1,66	1,01	1,13	1,29	1,22	1,18
Accommodation and food service activities	1,00	1,07	1,95	0,59	3,12	1,55	0,98	1,58	0,52	1,37	1,06

This indicator may be related to the following: Agriculture is often a priority for the state, which provides subsidies, incentives, and other support measures to encourage investment in this sector. At the same time, the growth of agricultural exports. Increased demand for food in the world market, increased export supplies can stimulate investment in agriculture. In addition, the development of innovative technologies in this sector. The introduction of new technologies that increase productivity, optimize processes and reduce costs also attracts investment in agriculture. Thus, Table 4 presents data on changes

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in the level of investor interest in each sector, which allows us to understand which sectors were the most attractive in different periods. This data can be used for a deeper analysis and identification of additional factors affecting the investment attractiveness of sectors. In general, analysis of data on investments in fixed capital provides valuable information about the state of the economy, investment attractiveness and factors affecting the development of various sectors.

From the analysis of the data in Table 5 below, it can be seen that the distribution of the volume of food products grown in our country in the studied years 2014-2023 by ownership forms is presented. From the data in this table, it can be seen that on average 29.6 percent of the volume of food products grown during the analyzed ten years

Table 5: Volume of food produced by ownership forms distribution (thousand tons) [13]

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average coefficient of change in profitability
Farming enterprises (or farms)											
Grain crops	6487,4	6588,3	6640,4	5733,1	5155,9	6257,5	6256,2	6131,2	6344,6	6599,8	1,00
Potatoes	541,6	554,4	544	429,3	411,6	499,8	633,5	766,1	908,2	994,1	1,05
Vegetables	2990,5	3150,7	3328,8	2995,2	2637	3179,7	3674,3	3959,7	4040,5	4173,4	1,03
Fodder melons (or edible gourds)	841,1	907,2	1013,5	953,4	673,6	884,6	1035,7	1199,7	1312,7	1418,2	1,04
Meat	55,3	58,3	62,1	69,3	109,5	125,7	112,2	137,3	170,2	178,9	1,11
Milk	308,6	328,4	352,7	337,7	397,3	462	519,8	564,8	629,6	706,7	1,08
Eggs (million pieces)	543	613,6	656,7	695,3	1079,5	1142,8	1048,9	1078,7	1198,3	1329,8	1,09
Household plots (or personal subsidiary farms)											
Grain crops	1460,6	1482,9	1514	1436,6	1216,6	879	788,4	748,1	731,5	795,7	0,94
Potatoes	1835,8	2010,8	2232,2	2347,6	2464,3	2539,8	2438,8	2462,8	2461,8	2498,6	1,03
Vegetables	5681,5	6153,2	6790,9	7090,9	7006,3	6815,4	6507,3	6569,3	6742,1	6924	1,02
Fodder melons (or edible gourds)	825,9	915,3	999,3	1059,1	1147,6	1153,7	1051,9	1019,7	997,9	1016,3	1,02
Meat	1800,2	1920,7	2051,3	2145,9	2236,5	2230,9	2302,7	2357,8	2360,1	2406,6	1,03
Milk	8064,6	8635,3	9278,8	9641,8	9995,8	10156,5	10372,2	10590,9	10862	11104,7	1,03
Eggs (million pieces)	2726,9	3105,5	3528,2	4020,8	4335,1	4491,6	4817,9	4875,9	4805,9	4912,8	1,06
Organizations engaged in agricultural activities											
Grain crops	102,5	102,3	106,9	118,8	163	300,5	591,5	755,3	914,4	1031,1	1,23
Potatoes	21,9	21,6	13,3	16,8	36	50,1	71,6	56,8	73,2	81,4	1,08
Vegetables	81,9	86,1	64,3	133,8	117	220	249,8	321,1	380,3	456,3	1,14
Fodder melons (or edible gourds)	29,1	31,1	32,1	18,5	15,8	30,4	46,8	65,8	110,1	119	1,09
Meat	50,8	54,4	59,1	71,6	84,5	117	104,7	140	195,6	247,7	1,16
Milk	58,4	64,1	71,9	68,4	73,3	95,8	84,9	118,5	135,6	157,3	1,09
Eggs (million pieces)	1680,1	1816,3	1967,6	1616,6	2044,7	2136,8	1914,4	1833,8	2125	2244,9	1,02

While farms accounted for 63.5 percent of the total food production during this period, dekhkan farms accounted for an average of 63.5 percent, and organizations engaged in agricultural activities accounted for the remaining 6.4 percent.

The above analysis shows the importance of the food industry in the economy of our country. However, it does not

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quantitatively express the impact of the agro-industrial complex on the economy, in particular the manufacturing industry and industry as a whole.

CONCLUSION AND SUGGESTIONS

To develop the agro-industrial complex in Uzbekistan, it is necessary to implement measures within the following priority areas:

- modernization of the agro-industrial complex and food security including restrictions on the use of outdated technologies, encouraging the introduction of advanced technologies in food processing, ensuring food safety, and promoting the development of this sector to continue to improve the legal framework for regulating the activities of the organization in accordance with the requirements of the times;
- automation of production processes and digital technologies
- increase efficiency through implementation;
- introduction of new and environmentally friendly technologies, for example, food applying new methods in storing and processing products;
- compliance of products with international quality and safety standards to provide;
- organize constant product quality control and auditing;
- food waste recycling and reuse development of technologies;
- production using environmentally friendly technologies and materials
- use;
- new, innovative and with high added value to the market release of products;
- production of health-promoting and dietary products;
- effective use of local raw materials and their types expansion;
- application of biotechnology in the production of raw materials;
- optimize and improve the efficiency of the product delivery system increase;
- improving raw material supply chain management;
- training a skilled workforce and regularly improving their skills
- to go;
- special programs for the development of small and medium-sized businesses and
- use of aids;
- exploring new markets for food exports and develop a strategy to access them;
- creation and development of national food brands;

In conclusion, it can be said that today the rapid economic development of the agro-industrial sector is explained by the increasing role of this sector in the country's economy, including its share in the gross domestic product. In our opinion, the above-mentioned directions will contribute to the sustainable and innovative development of the agroindustrial complex, and at the same time. the use of the horizontal analysis method implemented by us in analyzing the economic indicators of this sector will create the opportunity to obtain high results and a clear picture.

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