



SUSTAINABLE DEVELOPMENT OF THE FOOD INDUSTRY AND CURRENT CONDITIONS OF ORGANIZATIONAL AND ECONOMIC FOUNDATIONS IN THE REPUBLIC OF UZBEKISTAN

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Abstract: *This research article analyzes the current state of development and organizational and economic foundations of the food industry. In addition, it provides proposals and recommendations of economists on the development of the food industry. Moreover, the article presents the organizational and economic analysis of the sustainable development of the food industry in the developing and developed countries. Furthermore, the article highlights the issues related to the continuation of national traditions in the cultivation of agricultural products in Uzbekistan, cultivation of products that are uniquely competitive in terms of natural location and in high demand in domestic and foreign markets.*

Key words: *transformation, degradation, export, drip irrigation, refinancing rate, letter of credit, insurance policy, nonresidents, financial leverage ratio, working capital, gross assets, receivables.*

Introduction

Interrelated internal and external trends in the process of agricultural transformation, which represent increasing strategic importance of agricultural development within the framework of aggravation of food problems throughout the world and in the country, require development of favorable experience in the industry with the application of the most advanced scientific and technological achievements. Moreover, there is a need to take into consideration objective assessment of the negative trends in agricultural production associated with the degradation of arable land and water scarcity.

One of the necessary conditions for improving organizational and economic framework for sustainable development of the food industry is formation of a system of indicators characterizing sustainable development of these industrial enterprises.

The issue of assessing sustainability of food industry enterprises has been considered by foreign economists J. Mill (1980), D. Medous (1994), M. Whitby, N. Ward (1994) and Russian economists E. Kostyukov (2003), N. Burmistrov (2011), D. Yeremenko (2004), S. Tolkacheva (2007) and A.A. Nastin (2011), A.V. Glotka (2008), R.R. Tokhchukov (2012), E. Galves-Nogales (2010), D. Kirichenko (2012) and others as an object of independent dissertation research and in reliance upon the results relevant conclusions and recommendations have been elaborated.

Literature review

The Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021 is considered the primary regulatory framework for the sustainable development of the food industry in the Republic of Uzbekistan.

*In compliance with the Resolution of the President of the Republic of Uzbekistan №PR-5969 “On priority measures to mitigate the negative impact of the coronavirus pandemic and the global crisis on sectors of the economy” dated March 19, 2020, tax rates for the use of water resources in the volume used for irrigation of agricultural lands have been reduced by 50 percent from the rates set in 2020 (Resolution, 2020).

In reliance upon the Resolution of the President of the Republic of Uzbekistan №PR-4406 “On additional measures for deep processing of agricultural products and further development of the food industry” dated July 29, 2019, beginning from August 1, 2019 the expenses of agricultural exporters on product certification are covered by the Export Promotion Agency of the Ministry of Investment and Foreign Trade of the Republic of Uzbekistan in accordance with the well-reasoned calculations of the Agency “Uzstandard”;

– there has been introduced the procedure for covering expenses on loans from the State Fund for Entrepreneurship Development under the Cabinet of Ministers of the Republic of Uzbekistan in the national currency in the amount not exceeding 10 billion UZS, at the rate of not more than 1.5 times the refinancing rate of the Central Bank of the Republic of Uzbekistan in the amount of 5 percent; for loans attracted in foreign currency in the amount not exceeding 10 billion UZS in equivalent – 40 percent of the interest rate set by commercial banks, but in the amount not exceeding 4 percent (Resolution, 2019).

In accordance with the Regulation № 163 “On the procedure for export of fruits and vegetables” approved by the Cabinet of Ministers of the Republic of Uzbekistan dated February 23, 2019:

– business entities have the right to export fruits and vegetables without a wholesale license. In this case, the procedure of taxation is provided, envisages payment of a single tax on export earnings of individual entrepreneurs. In this case, there is applied the procedure of taxation which provides for the payment of a single tax on export earnings of individual entrepreneurs;

– legal entities engaged in export activities, have the right to export fruit and vegetables without down payment, without opening a letter of credit, without a bank guarantee and without an insurance policy against commercial risks;

– from the date of execution of the customs cargo declaration on export operations, the term of occurrence of overdue receivables is set at 120 calendar days for fruit and vegetables;

– exporters have the right to export fruit and vegetables on the basis of invoices without concluding an export contract to the accounts of commercial banks of the Republic of Uzbekistan by bank transfers from non-residents of the Republic of Uzbekistan in foreign exchange, as well as cash in foreign or national currency (Resolution, 2019a).

It should be noted, that the Resolution of the President of the Republic of Uzbekistan №PR-3574 “On measures to radically improve the system of financing the production of raw cotton and grain” dated February 28, 2018 is being successfully implemented in practice.

Research methodology

The Russian economist L.Kolpakova has applied targeted programming technique in the development of methods for evaluating innovative technological processes in the field of food production

According to her opinion, any technology is characterized by various indicators and is accepted as criteria f_1, f_2, \dots, f_m . In each of these criteria, X assumes that probable decisions should be maximized.

In compliance with the targeted planning technique L.Kolpakova thinks that in R^m limited series it is recommended to provide U multitude ideal vectors. Here there is equality $U \cap Y = \emptyset$, and Y denotes multitude of probable vectors, i.e. $Y = f(X)$.

In addition, in the limited series R^m there is the function $\rho = \rho(y, z)$, and this function compares the distance between the vectors y and z in the pair of vectors y and z .

According to the targeted programming technique, $x^* \in X$ matter is selected to execute the following equation:

$$\inf_{y \in U} \rho(f(x^*), y) = \min_{x \in X} \inf_{y \in U} \rho(f(x), y)$$

In this equation the vector $f(x^*)$ denotes the best decision x^* and it must be at a minimum probable distance from the plural ideal vectors.

In such conditions, the choice of metric is made from the following parametric family:

$$\rho_a^{(s)}(y, z) = \left(\sum_{i=1}^m a_i |y_i - z_i|^s \right)^{1/s},$$

Here: $s \geq 1$ and $a = (a_1, \dots, a_m)$; $a_i > 0$ for all $i = 1, 2, \dots, m$.

In some cases, that is, when the technology is compared with 2 parameters $s=2$, и $a_i=1$, $i=1, 2, \dots, m$, the criteria are considered equally strong:

$$\rho^{(2)}(y, z) = \sqrt{(y_1 - z_1)^2 + (y_2 - z_2)^2}.$$

L. Kolpakova proposes to determine efficiency of the technological process option according to 4 criteria:

$$\rho^{(4)}(y^{(i)}, 0) = \sqrt[4]{\bar{y}_1^4 + \bar{y}_2^4 + \bar{y}_3^4 + \bar{y}_4^4}$$

here \bar{y}_i – modified values of criteria (Kolpakova, 2009).

I. Ansoff has described the strategy as a set of rules for making decisions that an entity follows in its operations. Based on its concept, the overall strategy of an enterprise determines how resources should be used, as well as makes decisions on the markets, development trends, competitive advantages, and expected synergies (Ansoff, 1999).

One of the essential indicators characterizing sustainability of the enterprises of the food industry is the financial leverage ratio.

The financial leverage ratio indicates in what extent an economic entity is self-sufficient with its funds.

Analysis and results

According to the official data of the State Statistics Committee of the Republic of Uzbekistan, in 2019, the enterprises of the republic manufactured the production in the amount of 331.0 trillion UZS. In comparison with 2018, the volume index of industrial production amounted to 106.6 percent. The main factor in the growth of physical volume of total industrial production is the growth in the manufacturing (processing) industry by 9.4%, electricity, gas supply and air conditioning by 0.3% and water supply, sewerage, waste management utilization by 6.3%, as well as the decrease in the mining and quarrying industry by 1.0% (www.stat.uz).

In the structure of manufacturing industry, the share of food production in 2018 accounted for 13.3%, and its physical volume index constituted 98.5%, while in January-December 2019, the share of food production amounted to 13.3%. The share of the physical volume index increased by 7.9% compared to 2018 and amounted to 34 483.2 billion UZS. As a result of a number of measures aimed at attracting foreign investment in the Year of Active Investment and Social Development in the Republic of Uzbekistan, “Asia Oil Integral” LLC has invested 1.85 million UZS in the program of organizing the production of sunflower oil in Bukhara region. The development of the physical volume index of the food industry in Bukhara region increased by 6.6% and the volume index of the food industry of the republic increased by 7.9%.

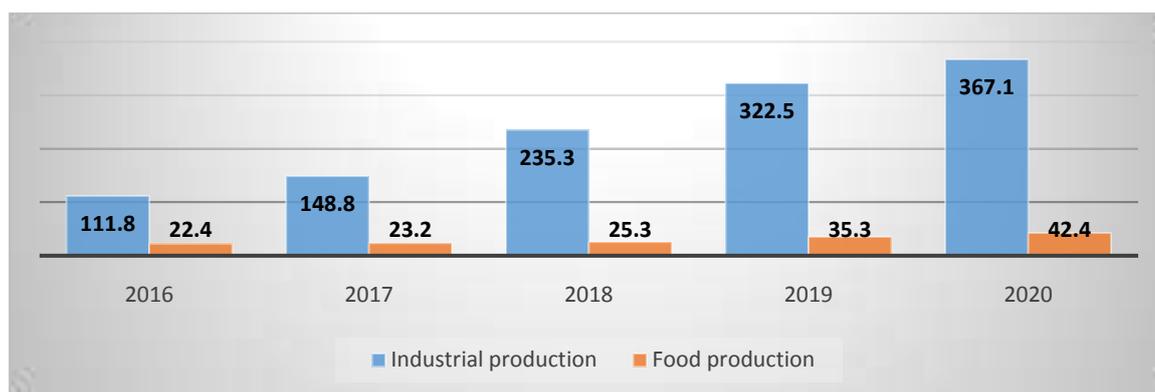


Figure 1. The volume of industrial and food production in the Republic of Uzbekistan, trillion UZS

As it is obvious from Figure 1, in 2016-2020, the volume of industrial production and food production in the country demonstrated a growing trend.

In addition, the growth rate of food production in 2020 was significantly higher than in 2016. In 2020, the largest share in the structure of industrial production fell to the share of manufacturing industry, which accounted for its share in total industrial production (83.0%). The main factor in the decline in the physical volume of total industrial production in 2020 was a reduction in mining and quarrying - by 21.9% and in water supply, sewerage, waste collection and disposal - by 7.9%. In addition, there was 7.1% increase in manufacturing (processing) and 12.5% growth in electricity, gas, steam and air conditioning.

In January-December 2019, the share of food production in the manufacturing industry was 13.9%, and its physical volume index was 110.9%. In January-December 2020, the share of food products was 13.9%, the volume index increased by 8.7% compared to the same period last year and amounted to 42 388.2 billion UZS. Compared to 2018, the share of non-food products in the structure of consumer goods decreased from 69.0% to 68.0%.

In the structure of food production, wine and vodka and beer accounted for 7.1% (7.3% in January-December 2018). The highest share in the total volume of food production in the country fell in Tashkent (21.4%), Tashkent region (16.4%), Samarkand region (9.3%), Kashkadarya region (6.5%) and Fergana region (6.4%).

The analysis of the food-processing enterprises is presented in the table below.

Table 1

Structure and dynamics of current assets at JSC «TOSHKENT YOG - MOY KOMBINATI»* (in percent)

Structure of current assets	Years					Change in 2020 in relation to 2016, percent
	2016	2017	2018	2019	2020	
Cash	25,1	31,4	28,0	0,1	0,4	- 24,7
Accounts receivable	27,4	18,8	14,2	27,6	28,8	1,4
Inventories	47,5	49,6	57,8	72,3	70,8	23,3
Short-term investments	0,0	0,0	0,0	0,0	0,0	x
Working capital – total	100,0	100,0	100,0	100,0	100,0	x

* Compiled by the author on the reporting data published by the results of 2016-2020 at JSC «TOSHKENT YOG - MOY KOMBINATI».

It can be seen from Table 1 that in 2016-2019 there was a tendency in a decrease of the share of cash in the total current assets of JSC “TASHKENT YOG - MOY KOMBINATI”, and in 2020 the figure accounted for only 1.4 percent. This is a negative situation in terms of ensuring the liquidity of this enterprise.

The table shows that in 2016-2019 there was a tendency to increase the share of inventories in the total current assets of JSC “TASHKENT OIL - MOY KOMBINATI”. This is due to the decrease in the share of cash and receivables in the current assets of this company during this period. The growth trend of gross assets in JSC “TASHKENT YOG - MOY KOMBINATI” in 2015-2018 is justified by the growth rate of working capital and long-term assets during this period. In 2017, compared to 2014, the growth rate of working capital of this enterprise amounted to 172.8%, while the growth rate of long-term assets in this period was equal to 219.3%. When we look at the composition of working capital of JSC “TASHKENT YOG - MOY KOMBINATI” in table 1, it has become obvious that relatively high share in working capital is receivables and inventories

This demonstrates that the share of cash in the structure of working capital is low and is a negative situation in terms of improving the practice of financing working capital. In 2015, the receivables of JSC “TASHKENT YOG - MOY KOMBINATI” decreased compared to 2014. This is justified by the slowdown in receivables turnover during this period.

In 2018, the amount of receivables in JSC “TASHKENT YOG - MOY KOMBINATI” decreased significantly compared to 2017. This has happened due to the fact that the turnover of receivables has accelerated.

In 2015-2018, there was a growing trend in the volume of inventories in JSC “TASHKENT OIL - MOY KOMBINATI”. This fact demonstrates that the turnover of inventories has slowed down. Analysis of the composition of current assets of JSC “TASHKENT OIL - MOY KOMBINATI” shows that their structure has changed in terms of value, while at the same time the percentage of working capital has not changed significantly.

The structure of available assets illustrates that joint stock companies have an alternative response to the changing environment.

For example, in 2018, inventories increased by 59.5 percent compared to 2014, by 55.4 percent in 2015, while there was the decrease in total receivables by total current assets by 37.9 percent in 2018 is due to the relatively stable level of inflation and payment system of joint stock companies.

It should be noted, that it is compulsory to develop the regulatory framework necessary for the management of production, material and financial flows in joint-stock companies, without which nowadays it is impossible to raise the efficiency of economic activity.

Table 2**Structure and dynamics of the sources for financing current assets at JSC «TOSHKENT YOG - MOY KOMBINATI»[†] (in percent)**

Financing sources	Years					Change in 2020 in relation to 2016, percent
	2016	2017	2018	2019	2020	
Equity	60,3	68,1	71,7	77,1	85,3	25,0
Short-term loans of commercial banks	39,7	28,6	26,6	19,3	13,4	- 26,3
Cash received from the sale of securities	0,0	0,0	0,0	0,0	0,0	-
Other sources	0,0	3,3	1,7	3,6	1,3	1,3
Sources for financing current assets – total	100,0	100,0	100,0	100,0	100,0	x

According to the data presented in Table 2, the largest share in the total sources of working capital of JSC «TASHKENT YOG - MOY KOMBINATI» is represented by its equity. This is due to the low level of use of loans extended by commercial banks to the company and the lack of practice of raising funds through the issuance of securities.

The data in Table 2 illustrate that the share of the company's equity in the total volume of working capital financing sources increased by 25.0 percentage points in 2020 compared to 2016. This has resulted in the significant decrease in the share of loans of commercial banks in the total volume of working capital sources during this period.

The above-mentioned cases can be considered negative in terms of improving the practice of working capital financing.

Table 3**Structure of equity of JSC «TOSHKENT YOG - MOY KOMBINATI»[‡] (in percent)**

Structure of equity	Years				
	2016	2017	2018	2019	2020
Charter capital	41,7	27,0	29,5	32,1	33,5
Added capital	0,0	12,7	0,0	15,1	14,7
Reserve capital	34,7	1,2	0,4	37,2	17,2
Retained earnings	23,6	59,1	70,1	15,6	34,6
Targeted revenues	0,0	0,0	0,0	0,0	0,0
Equity-total	100,0	100,0	100,0	100,0	100,0

According to Table 3, JSC «TASHKENT YOG - MOY KOMBINATI» has a relatively high share of the charter capital and retained earnings in its assets in 2020.

This is justified by the following reasons:

1. The administration of the company pursues a policy of continuous increase in the amount of the charter capital.

The charter capital is considered a stable source of financing for enterprises. In addition, the charter capital plays a significant role in ensuring the solvency of enterprises.

[†] Compiled by the author on the reporting data published by the results of 2016-2020 at JSC «TOSHKENT YOG - MOY KOMBINATI».

[‡] Compiled by the author on the reporting data published by the results of 2014-2018 at JSC «TOSHKENT YOG - MOY KOMBINATI».

Therefore, the administration of the enterprises maintains the policy of continuous increase of the charter capital.

2. Retained earnings are the absolute exemption of the enterprise's profit.

The reserve capital is generated to cover possible losses in the enterprise's activity.

Reserve capital covers losses incurred by enterprises and some liabilities are paid when the amount of revenues from the sale of products decreases. In this regard, the relatively high share of reserve capital in the volume of the equity of enterprises is considered a favorable factor.

Conclusion and proposals

- Deliver regular trainings and sessions on agricultural marketing and agricultural cooperatives, rural areas development and processing, management and marketing of agricultural products among agricultural producers, specialist engaged in processing and related agribusiness entities.

- Due to the seasonal nature of the activities of agricultural producers and enterprises, their ability to finance the export of agricultural products will be limited. This enables the government to finance export of agricultural products through financial support and loans extended by commercial banks.

- The decrease in the share of receivables in the volume of working capital of JSC "Tashkent Moy-Yog Kombinati" has caused an increase in the share of cash in the volume of working capital during this period. This is a positive development in terms of improving working capital financing practices.

- JSC "TASHKENT YOG - MOY KOMBINATI" has a relatively high share in the charter capital and reserve capital. This can be justified by the following reasons:

1. The administration of the enterprise is pursuing a policy of continuous increase in the amount of the charter capital.

The charter capital is a stable source of financing for enterprises. In addition, the charter capital plays an essential role in ensuring the solvency of enterprises. Therefore, the administration of the enterprise is pursuing a policy of continuous increase in the amount of the charter capital.

2. Reserve capital is generated to cover possible losses in the enterprises's activities.

Reserve capital indemnifies for losses incurred by enterprises and some obligations are paid when the amount of revenues from the sale of products decreases. In this regard, it is a favourable situation that the reserve capital has a relatively high share of enterprises in its equity.

- Net profit is a significant economic category that characterizes financial stability of any small business entity. In turn, stability of the amount of net profit is interrelated with the amount of costs associated with the activities of the entity. In particular, an increase in the cost of purchasing raw materials results in the decrease in net profit. Therefore, enterprises try to purchase as much raw materials as possible at relatively low prices. Moreover, the government is making attempts to prevent the increase in costs associated with the purchase of raw materials through the implementation of localization programs, ensuring stability of prices for products and services of natural monopolies. However, such factors as rising inflation and rapid devaluation of the national currency cause an increase in the amounts of expenses of enterprises.

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