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PROSPECTS FOR THE DEVELOPMENT OF THE FOOD INDUSTRY IN THE MEDIUM TERM

Abstract: *The article examines the prospects for the development of the food industry in the medium term. Also, annual growth rates of growth trends in the price index of food industry enterprises in comparison with the price index of food products in the consumer market and the structural composition of the multifactorial model for its assessment were developed.*

Key words: *mid-term perspective, assessment methodology, change, national methodology, competitiveness criteria, food industry, integrated assessment, global food index, food product, economic mechanism.*

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Introduction

In recent years, the reforms aimed at the development of the food industry in our country are aimed at improving the economic mechanism of enterprises operating in this field, technically and technologically updated the production processes, turning the food industry into the leading industries of the country, expanding the types of food products, and improving their quality. In particular, given that the population of our country has been increasing in recent years, the demand for food in the consumer market is also increasing, the development of the food industry in the coming years creates the need to improve the efficiency of the economic mechanism of enterprises operating in this area.

In recent years, due to the fact that priority is being given to reforms aimed at the development of the production of consumer products in the industry of our country, the development of the price index of production by enterprises has been having a downward trend. According to the analysis, in 2016-2021, the producer price index of products produced by food industry enterprises decreased by 7.7 percentage points, from 114.1% to 106.4%, respectively. In particular, the production prices of beverages decreased by 4.4% during the studied period (see Table 1).

Table 1. Growth trends of producer price index by food industry enterprises in Uzbekistan, in percentage [1]

Indicators	2016	2017	2018	2019	2020	2021	2016/2021
Manufacturing industry	114,1	135,1	129,0	124,8	108,7	114,9	121,1
including,							
Production of food products	114,1	107,0	127,6	119,6	106,1	106,4	113,5
Production of beverages	126,1	118,4	117,8	118,1	107,9	121,7	118,3

[1] Compiled by the author based on the information of the State Statistics Committee of the Republic of Uzbekistan

Production of tobacco products	119,8	113,9	123,9	76,9	146,4	116,8	116,3

At this point, it is appropriate to pay attention to the development trends of the consumer price index of food products. According to the analysis, in 2016-2021, the average annual growth trend of the general consumer price index in our country was 111.8 percent, while the consumer price index of food products has a higher growth than the above average, the average growth trend was 112.7 percent. (see Table 2). At this point, it should be noted that the growth trends of the product production price index of the food industry enterprises of our country are characterized by low annual growth indicators compared to the price index of food products in the consumer market.

Table 2. Growth rate of the consumer price index in Uzbekistan, in percentage [2]

	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**Average growth in 2016-2021**
Consumer price index	105,6	109,5	117,5	114,5	112,9	110,8	111,8
Including							
Goods	104,1	109,6	118,8	114,3	113,6	111,6	112,0
Food products	99,6	107,8	120,1	116,9	117,2	114,3	112,7
Non-food products	110,2	111,7	117,1	111,1	109,1	108,3	111,2
Services	111,6	109,0	112,1	115,5	110,6	108,2	111,2

The difference between the annual growth trends of the index of production prices of food industry enterprises and the index of food prices in the consumer market is characterized by a dynamic trend. According to the analysis, the growth trends of the consumer price index of food products in recent years have shown that the enterprises of the food industry have had higher growth trends compared to the index of production prices (see Figure 1). This situation indicates that reforms aimed at increasing the efficiency of the economic mechanism of food industry enterprises cannot have a sufficiently positive effect on the index of food products in the consumer market. It is also possible to conclude that the consumption price index of food products has grown higher than the production price index due to the increase in the need for food products in the consumer market due to the increase in the population of our country.

Taking into account the above circumstances, it will be possible to increase the volume of production of food products, improve the quality of products and reduce their consumer prices by developing scientifically based scenarios aimed at increasing the efficiency of the economic mechanism of food industry enterprises in our country. Taking into account this situation, in the context of the implementation of the Development Strategy of New Uzbekistan for 2022-2026, forecast indicators for the development of the economic mechanism of the food industry enterprises of our country were developed.
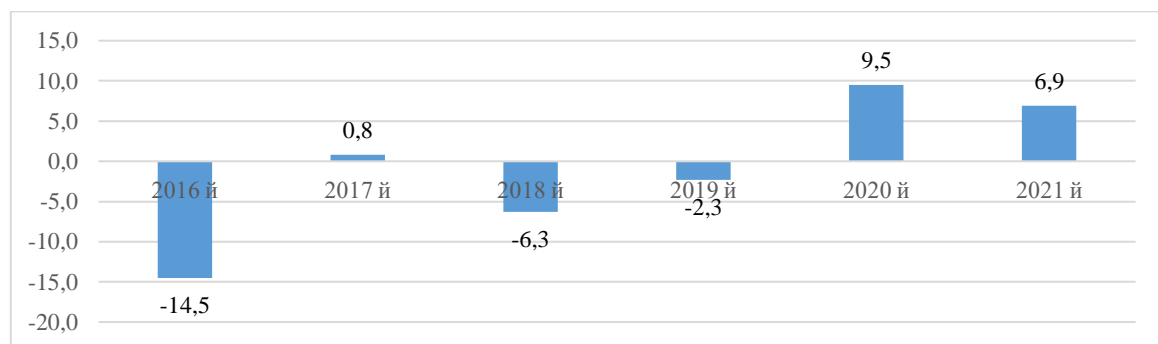
Figure 1. The difference between the production prices of food industry enterprises in Uzbekistan and the growth trends of consumer price indices of food products, in percentage [3]

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[2] Compiled by the author based on the information of the State Statistics Committee of the Republic of Uzbekistan
[3] Compiled by the author based on the information of the State Statistics Committee of the Republic of Uzbekistan

First of all, basic, inertial and mobilization scenarios aimed at increasing the volume of food products produced in the food industry in our country, including Andijan region, were developed. The developed forecast indicators were calculated based on the interpolation method using the MS-Excel program.

In order to evaluate the position of Andijan region in the development of the country's food industry, based on the method of calculating forecast indicators developed above, basic, inertial and mobilization forecast indicators were calculated for the increase in the production volume of regional food industry products. Table 3 below shows the results of the correlation-regression analysis conducted in 2010-2021 to determine the internal relationship between the indicators of the production volume of food industry products in the Andijan region and the time factor. According to the calculations, the internal correlation between these two factors was significantly strong, and the correlation coefficient representing it was equal to 0.81. This indicator was found to be 0.1 lower than the national average.

Table 3. The results of the regression analysis conducted in order to assess the relationship between the production of food industry products and the time factor in Andijan region[4]

Indicators	The value of indicators
Multifactor R	0,899268
R-squared	0,808682
Normalized R-squared	0,787425
Standard error	4474,693
Period of observations	11

Also, the interpolation method used in the calculation of forecasts developed for the republic was used to determine the basic, inertial and mobilization scenario indicators for the development of the volume of food products in Andijan region. Information about the statistical values necessary for the calculation of prognostic indicators is given in Table 4 below.

Table 4. Statistical values of forecast indicators of food industry production volume in Andijan region[5]

Statistical indicators	The value of statistical indicators
Alpha	1,00
Beta	0,00
Gamma	0,00
MASE	3,48
SMAPE	0,23
MAE	5 275,36
RMSE	5 528,83

According to the results of the calculation, the results of forecast indicators for the production of food products in Andijan region are characterized by the fact that they are significantly higher than the indicators of the republic. This situation indicates that the region is a regional "growth point" for the development of the country's food industry. According to the basic scenarios for the development of the production volume of food industry products in An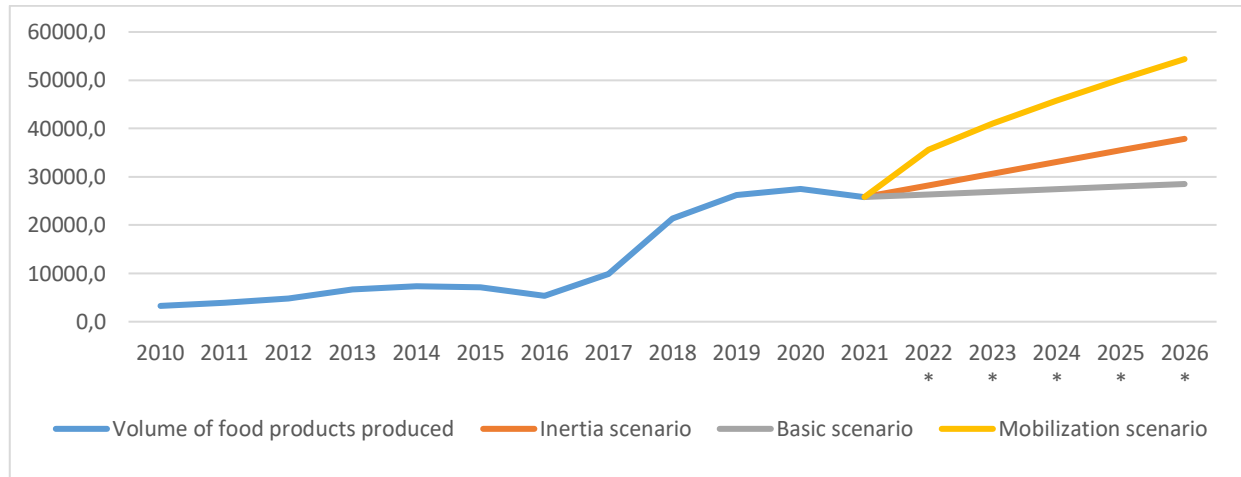dijan region presented in Figure 2, the volume of products produced in the food industry of the region may increase by 1.1 times in the medium-term perspective. This indicator was found to be 10% higher than the base indicators for the republic.

According to the inertial scenarios, it was found that in the medium-term perspective, the increase in the production volume of food industry products in Andijan region is 15% higher than the indicator for the republic, and it can increase by 1.5 times in the forecast period (see Figure 2).

[4] Compiled by the author
[5] Compiled by the author

Figure 2. Forecast indicators on the development of the production volume of food industry products in Andijan region, in billion soums [6]

According to the mobilization forecast indicators, it was determined that the production volume of food industry products of the region will increase by 2.1 times in the medium-term perspective. According to calculations, this indicator is 40% higher than the national indicator.

Table 5. Equations for calculating forecast indicators for the development of the production volume of food industry products in Andijan region[7]

Scenarios	Calculation formulas
Basic	$y = -35{,}408x^2 + 2596{,}3x - 2806$
Inertia	$y = 44{,}359x^2 + 1620{,}6x - 742{,}83$
Mobilization	$y = 190{,}67x^2 - 47{,}896x + 2549{,}8$

In table 5 above, the equations for calculating basic, inertial and mobilization forecasts for the development of the production volume of food industry products in Andijan region were given.

In our opinion, during the development of state programs aimed at the development of the food industry of our country in the following years, based on the calculation of scientifically based forecast indicators for the development of the food industry in each region, regions with high development potential such as Andijan region, based on the determination of territorial "growth points" - priority should be given to the development of the food industry. Through this, the effectiveness of the use of the development potential of the food industry of our country will increase, and the economic mechanism of enterprises operating in this field will be improved.

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