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FINANCIAL INCENTIVES TO INCREASE EFFICIENCY OF ACTIVITY OF AGRO-INDUSTRIAL COMPLEX

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Abstract. The relevance of the study is due to the feasibility of strengthening territorial food security through a competent import substitution policy in the industry, which will lead to an increase in the overall food security of our country.The analysis of indicators of the state of the food market and the provision of food to the population, the selection of the most optimal of them for making effective management decisions is an important task in developing a strategy for ensuring the country's food security. Therefore, the purpose of this article is to assess the increase in the efficiency of the agricultural sector of Kazakhstan. The article analyzes the statistical data of the Republic of Kazakhstan on ensuring food security in the country and the impact of financial incentives to increase the agricultural sector in Kazakhstan.The object of research is the system of functioning of the agro-industrial complex in the Republic of Kazakhstan.The theoretical basis of the study was the work of foreign and domestic scientists on the development of agribusiness. The formation, management and use of organization resources, management of socio-economic systems in the field of public catering. The information base of the study was composed of legislative and other regulatory acts of the Republic of Kazakhstan, statistical data of the Agency of the Republic of Kazakhstan on statistics, analytical materials, materials of scientific economic literature and periodicals, materials of scientific and practical conferences, data of electronic resources.

1. Introduction

Domestic agro-industrial complex remains a strategically significant core of the economy of our country, regardless of the difficulties of functioning. The production of essential products is concentrated here and this ensures food security.

Thus, the agro-industrial complex is distinguished by a high level of differentiation of areas of activity and complexity. Relations of all subjects, namely, there is a large reserve of optimization and ordering complex of values.

In his publications Golubev A.V. He believes that the main socio-economic goals of the development of the agro-industrial complex are:
- Achieving sustainable agricultural production growth;
- solution of the food problem of the state;
- providing people with non-food goods made from raw materials of the agricultural sector (Golubev 2015).

In his textbook "Agricultural Economics" Kovalenko N.Ya. describes the composition of the agro-industrial complex, which includes various areas, but despite their difference, they are closely interconnected, and for the productivity of the whole complex in general, the substantially effective functioning of all its elements, i.e. any industry (Kovalenko 2011).

The agro-industrial complex today, both in Kazakhstan and in Russia, has actually become one of the few industries in the economy that shows progress. And to a large extent, he began to act as a locomotive for the growth of the industrial sector (Sukhanova 2017).

Thus, having analyzed various points of view of researchers in this field, the author came to the conclusion that the agro-industrial complex is one of the most important sectors of the economy of any country. The importance of the agro-industrial complex consists not only in satisfying the needs of the population for food products, but also in the fact that it has a significant impact on improving the efficiency of national production.

2. Literature review

In the work "Economics" it was determined that resources are factors of production, while production resources are labor, land and capital. In the concept of "land" they included land used for agricultural or industrial purposes, as well as natural resources (Samuelson & Nordhouse 1999).

According to Popov N.A., the national economic system of the country is a single unified socio-economic system, including organically linked structure-forming components, the action of each of which mutually contributes to the development of both the remaining components and the entire system as a whole (Popov 2008).

Sharipov S.A. argues that today the intersectoral complex should be considered as a set of interconnected structures within industries in different areas of material production, as well as trade, united by similar process attributes. production, as well as the sale of finished goods (Sharipov 2007).

Volkova N.A., studying the economics of agriculture in her studies, describes that agriculture has a group of factors, these include labor, land and capital. Labor is a complex of physiological and intellectual capabilities of workers. Capital is the association of useful goods that are used in the manufacture of products and the receipt of raw materials from the rural sector. This includes transport, machine tools, warehouses, a variety of mechanical devices. The natural factor is the earth (Volkova 2013).

In science, there is no one approach to the description of the agro-industrial complex. So, a group of researchers believe that the agro-industrial complex is a complex intersectoral industrial and economic structure, the composition of which is explained by the union of agriculture and the associated industries (Volkova & Kovalenko & Makarova; Mura & Kljucnikov, 2018; Jermolajeva et al., 2017).

Popov. ON. He intends to consider the agro-industrial complex as an association of sectors of the national economy, where agriculture plays a key role. The researcher's interest is focused on the representation of the agro-industrial complex from the position of a holistic technological complex. This is manifested in the process of promoting a product from the first stage of production to its sale (Popov 2008).

In contrast to the points of view of the above authors, Sharipov. S.A. when considering the concept of "agro-industrial complex" also highlights the concept of "agri-food complex. Therefore, the scientist suggests understanding by the agro-industrial complex, along with the production of means of production, the food and processing industry, the food sector of the economy (agri-food complex) (Sharipov 2007).

The analyzed definitions of the concept of "agricultural complex" note such a significant feature as "the union or complex of industries", which, in our opinion, allows us to interpret the agro-industrial complex as an economic and legal system based on the functional relationship of industries in the economy. The economic and legal approach to the interpretation of the agricultural sector allows you to build a management mechanism on the positions of a system-value, environmentally responsible and cluster basis with the disclosure of strategic areas (Fillipova & Kolodina 2016; Musova et la., 2017; Kocisova et al., 2018; Moumen et al., 2019).

3. Methodology

The agro-industrial complex is one of the important sectors of the economy, which through the formation of the country's food security participates in ensuring the national security of the country, including industries for the production of agricultural products and their processing and bringing them to the consumer, and also provides agriculture and the processing industry with means of production.

In the structure of the agro-industrial complex, there are three main areas, or groups of industries and industries:
1 Agriculture (agriculture and livestock), forestry and fisheries.
2 Industries processing agricultural raw materials, food industry, light industry, cotton and wool.
The main tool to stimulate the accelerated development of the agro-industrial complex. It is a priority state support of investment projects aimed at import substitution within the framework of the State Program for the Development of Agriculture and the regulation of agricultural products, raw materials and food markets.

For the period from 1992 to 2017, the actual agricultural policy of Kazakhstan underwent a number of fundamental changes and resulted in several state programs:
1. The agricultural development program for 2000-2002;
2. The state program for the development of rural territories for 2004-2010;
3. The State Agricultural and Food Program for 2003-2005;
4. The agricultural development program for 2010-2014;
5. The program for the development of the agro-industrial complex in the Republic of Kazakhstan for 2013 - 2020 "Agribusiness 2020", approved by the Decree of the Government of the Republic of Kazakhstan dated February 18, 2013 No. 151 with separate sectoral master plans (The program for the development of the agro-industrial complex in the Republic of Kazakhstan for 2013 - 2020 "Agribusiness 2020" 2013);

6. The state program for the development of the agro-industrial complex of the Republic of Kazakhstan for 2017 - 2021 (Decree of the Government of the Republic of Kazakhstan "State Program for the Development of the Agro-Industrial Complex of the Republic of Kazakhstan for 2017 - 2021" 2018).

In addition to the State Program for the Development of the Agro-Industrial Complex of the Republic of Kazakhstan for 2017-2021 (hereinafter referred to as the Program for the Development of the Agro-Industrial Complex of the Republic of Kazakhstan), support for export potential through increasing the competitiveness of agribusiness entities is provided for in the Nurlyzhol State Infrastructure Development Program for 2015-2019. This program provides for the creation of an efficient transport and logistics infrastructure, ensuring the safety and quality of products through the development of laboratory facilities (Decree of the Government of the Republic of Kazakhstan "On approval of the State program of infrastructure development" Nurlyzhol" for 2015-2019" 2018).

Considering the agro-industrial complex in the Republic of Kazakhstan, the author carried out a SWOT analysis of the agro-industrial complex of the Republic of Kazakhstan, where nevertheless, at the moment there are still many unsolved problems that provide unfavorable incentives for the further development of this industry (The program for the development of the agro-industrial complex in the Republic of Kazakhstan for 2013 - 2020 "Agribusiness 2020" 2013) (Table 1).

Table 1. SWOT analysis of the agro-industrial complex of the Republic of Kazakhstan

Strengths	Weaknesses
- Kazakhstan occupies the ninth place in the world in terms of the area; - Kazakhstan occupies the second place in the world in terms of arable land per capita; - the presence of 1.4 million hectares of irrigated land; Kazakhstan is one of the largest exporters of grain and flour; - growing demand for food products in neighboring countries (CIS, Central Asia, China)	- low share of agricultural products in the country's GDP (4.8%); - low labor productivity against the background of a high share of employed (18% of the employed population) and a large rural population (43% of the total population); - low share of exports; underdeveloped trade and logistics infrastructure and the practical lack of electronic commerce; - low level of technology transfer; - scientific research is poorly focused on the needs of agricultural production; - the practical lack of private funding for research and technology transfer; - insufficient level of veterinary, phytosanitary and food safety; - high capital intensity; - long payback period; insufficient financing of the agro-industrial complex, including the lack of "cheap and long" money; - dependence on climatic conditions; - limited water resources and the formation of 44% of the runoff in the territory of neighboring states; - low level of competitiveness and profitability of agribusiness entities; - in the total volume of production a high share is occupied by uncompetitive products of low quality produced by personal subsidiary plots
Opportunities	Threats
- increase in production for all types of agricultural products; - creating conditions for the introduction of technologies and attracting investments, including large-scale digitalization of the agricultural sector; - expansion of the geography of deliveries and export volumes in promising sectors;	- instability of weather conditions, adverse changes in climatic conditions, deficit of water resources; - the spread of diseases of animals and plants, environmental pollution; - increased competition in international markets for certain types of products in connection with the entry into the WTO, EAEU;

- high potential for the production and export of organic products; increase the area of irrigated land and increase their efficiency; - creating conditions for turning agricultural science into a driver of increasing labor productivity and competitiveness of agribusiness sectors; - deep processing of eggs and obtaining liquid and powder products.	- the risk of inefficient state regulation of the industry

Source: compiled by authors

According to the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, the gross domestic product in Kazakhstan in 2017 increased, according to preliminary data, by 4%, which is significantly higher than in 2015 and 2016, when the growth reached 1.2% and 1, 1% respectively. And we can talk about the recovery in the economy. GDP growth was to a large extent ensured by an increase in production in the mining industry - by 9.3%, in particular, due to an improvement in the external economic situation in the commodity markets (Data of the Ministry of National Economy of the Republic of Kazakhstan for 2014-2017) (see Table 2).

Table 2. Analysis of GDP and agriculture of the Republic of Kazakhstan (% to previous year)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
GDP	8	8	5	6	4	2	3	5
Agriculture	-11	23	-14	9	2	5	6	3

Source: compiled by authors according to the source of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

Gross agricultural output in 2017 increased by 2.9%. Growth was observed both in crop production (by 2.2%) and in livestock production (by 3.9%) (Table 3).

Table 3. Analysis of the agricultural sectors of the Republic of Kazakhstan (% to previous year)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture	-11	23	-14	9	2	5	6	3
Plant growing	-20	48	-22	10	-5	5	8	3
Livestock	4	-1	-5	2	5	4	3	5

Source: compiled by authors according to the data the Ministry of National Economy of the Republic of Kazakhstan

The volume of investment in fixed assets in the economy in 2017 increased by 5.5% (5.1% in 2016). As the National Bank of the Republic of Kazakhstan notes, amid growing positive expectations from business and the stabilization of inflationary processes in the economy, investment activity has been positive since the beginning of 2017. At the same time, about 55% of investments in fixed assets were directed to the industrial sector, primarily in the extraction of crude oil and natural gas, which occurred against the backdrop of rising world oil prices (Data of the National Bank of the Republic of Kazakhstan for 2017).

Investments in agriculture, forestry and fisheries in 2017 increased compared to the previous year by a significant 29.3% and amounted to 352.5 billion tenge. According to the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, the main grain-growing regions - North Kazakhstan, Kostanai and Akmola regions - allocated 145.6 billion tenge to the industry, which accounted for most of the investments in agriculture, forestry and fisheries (41.3%). In 2016, investment growth was also significant and amounted to

46.7%. Such an increase in investment in the industry is to a large extent due to the implementation of state agricultural support programs (Table 4) (Food Contract Corporation www.fcc.kz).

Table 4. Investments in fixed capital of the Republic of Kazakhstan, total

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture	4	25	15	3	19	-9	48	30
Fixed investment	-4	4	5	9	5	4	45	30

Source: compiled by authors according to the source Food Contract Corporation www.fcc.kz

In this regard, in order to improve the investment climate at the end of 2017, the Ministry of Investment and Development of the Republic of Kazakhstan approved the National Investment Strategy for 2018-2022 (Decree of the Government of the Republic of Kazakhstan National Investment Strategy Investment Promotion Program 2017).
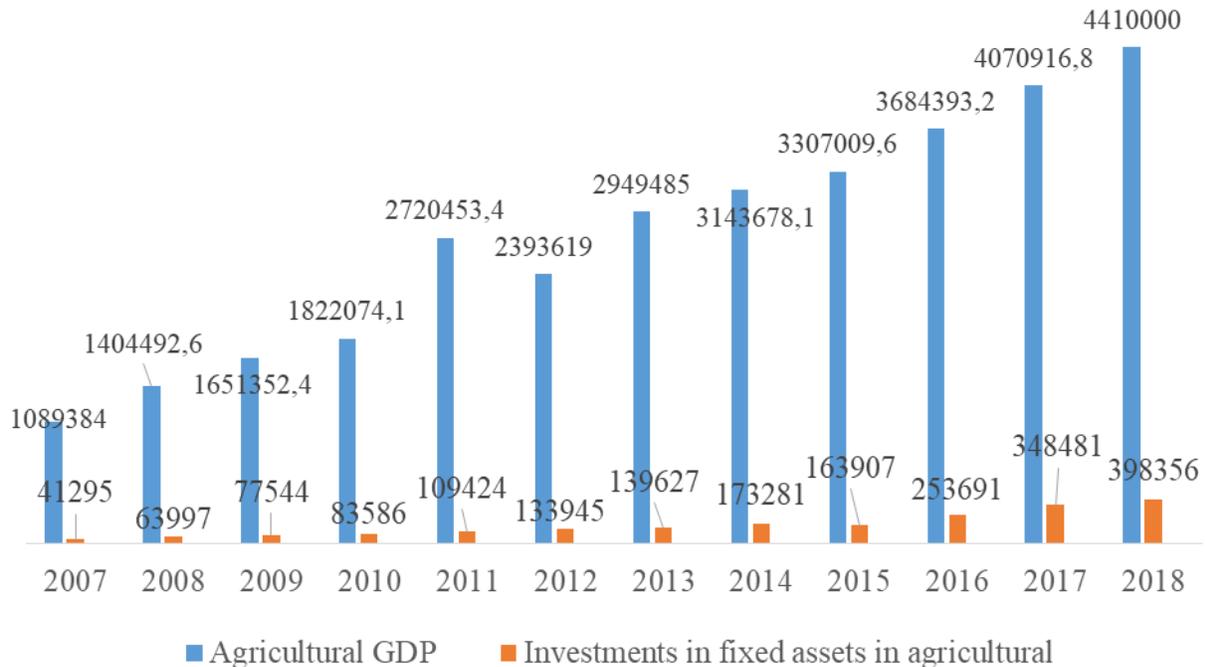

Figure 1. Indicators of gross agricultural output and investment in fixed assets over time, million tenge**.**
Source: compiled by authors

In accordance with the instruction of the President of the Republic of Kazakhstan, the strategy emphasized the need to attract foreign investment in non-resource sectors of the economy of Kazakhstan, as well as increase their export potential (Review of national programs and strategies for supporting the export of agricultural goods in post-Soviet countries. Food and Agriculture Organization of the United Nations 2018).

The study of the impact of fixed investment on production growth is a key issue in classical theories of economic growth (Figure 1).

In modern conditions, the task of conducting an operational predictive analysis of investment processes for the timely diagnosis of changing macroeconomic investment conditions by conducting model experiments based on the linear extrapolation method is no less acute.

When making forecasts using extrapolation, they usually proceed from statistically evolving trends in changes in certain quantitative characteristics of an object. Estimated functional system and structural characteristics are extrapolated.

4. Application functionality

We will build a model of forecast extrapolation using the actual data of the indicator of investments in fixed assets shown in Figure 1.

The linear trend equation will take the following form: $y = b\,t + a$ (Table 5).

Table 5. Least square equation calculated parameters

t	y	t^2	y^2	$t\,y$
1	109424	1	11973611776	109424
2	133945	4	17941263025	267890
3	139627	9	19495699129	418881
4	173281	16	30026304961	693124
5	163907	25	26865504649	819535
6	253691	36	64359123481	1522146
7	348481	49	121439007361	2439367
8	398356	64	158687502736	3186848
36	1720712	204	450788017118	9457215
Average value	215089	25,5	56348502139,75	1182151,875

Source: compiled by authors

For our data, the system of equations has the form:

$$\begin{cases} 8\,a + 36\,b = 1720712 \\ 36\,a + 204\,b = 9457215 \end{cases}$$

In the course of solving this system of equations, we obtain the equation of the trend model:

$y = 40809{,}786\,t + 31444{,}964$

The empirical trend coefficients a and b are only estimates of the theoretical coefficients β_i, and the equation itself reflects only the general trend in the behavior of the variables in question.

The trend coefficient $b = 40809.786$ shows the average change in the effective indicator (in units of measure y) with a change in the time period t per unit of measurement. In this example, with an increase of t by 1 unit, y will change on average by 40,809.786.

We will calculate the coefficient of determination:

$$R^2 = 1 - \frac{\Sigma(y_i - y_t)^2}{\Sigma(y_i - \bar{y})^2}$$

$$R^2 = 1 - \frac{10733372128{,}071}{80681793750} = 0{,}867$$

that is, in 86.7% of cases, t affects the change in y. In other words, the accuracy of the selection of the trend equation is high.

To assess the quality of the parameters of the equation, we construct a calculation table (table. 6)

Table 6. The calculated values of the quality assessment of the parameters of the equation

t	y	$y(t)$	$(y_i - y_{cp})^2$	$(y_i - y(t))^2$	$(t - t_p)^2$	$(y_i - y(t)) : y_i$
1	109424	72254.75	11165092225	1381553145.561	12.25	0.34
2	133945	113064.536	6584348736	435993788.786	6.25	0.156
3	139627	153874.321	5694513444	202986167.889	2.25	0.102
4	173281	194684.107	1747908864	458092995.369	0.25	0.124
5	163907	235493.893	2619597124	5124683228.94	0.25	0.437
6	253691	276303.679	1490114404	511333232.174	2.25	0.0891
7	348481	317113.464	17793425664	983922296.788	6.25	0.09
8	398356	357923.25	33586793289	1634807272.564	12.25	0.101
		1720712	80681793750	10733372128.071	42	1.439

Source: compiled by authors

Let us analyze the accuracy of determining estimates of the parameters of the trend equation:

Dispersion of the equation error.

$$S_y^2 = \frac{\Sigma(y_i - y_t)^2}{n - m - 1}$$

where m = 1 - the number of influencing factors in the trend model.

$$S_y^2 = \frac{10733372128{,}071}{6} = 1788895354{,}6785$$

Standard error of the equation.

$$S_y = \sqrt{S_y^2} = \sqrt{1788895354{,}6785} = 42295{,}3349$$

$$S_b = S_y \cdot \frac{\sqrt{\sum t^2}}{n\sigma_t}$$

$$S_b = 42295{,}3349 \cdot \frac{\sqrt{204}}{8 \cdot 2{,}2913} = 32956{,}259$$

$$S_a = \frac{S_y}{\sqrt{n}\sigma_t} = \frac{42295{,}3349}{2{,}2913\sqrt{8}} = 6526{,}312$$

We calculate the interval forecast model:

The calculation of the standard error of the predicted indicator is carried out according to the formula:

$$U_y = yn + L \pm K$$

where

$$K = t_a \cdot S_y \cdot \sqrt{1 + \frac{1}{n} + \frac{3(n + 2L - 1)^2}{n(n^2 - 1)}}$$

L - lead time; $y\ n + L$ - model prediction at the $(n + L)$ -th point in time; n - number of observations in the time series; Sy - standard error of the predicted indicator; Ttabl - table value of Student criterion for significance level α and for the number of degrees of freedom equal to n - 2.

According to the Student table we find Ttabl

Ttabl (n-m-1; α/2) = 2,447

Point forecast, $t = 9$: $y(9) = 40809{,}786 \cdot 9 + 31444{,}964 = 398733{,}04$

$$K_1 = 2{,}447 \cdot 42295{,}33 \sqrt{1 + \frac{1}{8} + \frac{3(8 + 2 \cdot 1 - 1)^2}{8(8^2 - 1)}} = 131205{,}99$$

398733,04 – 131205,99 = 267527,05 ; 398733,04 + 131205,99 = 529939,03

Interval forecast:

$t = 9$: (267527,05; 529939,03)

Point forecast, $t = 10$: $y(10) = 40809,786 \cdot 10 + 31444,964 = 439542,82$

$$K_2 = 2,447 \cdot 42295,33 \sqrt{1 + \frac{1}{8} + \frac{3(8 + 2 \cdot 2 - 1)^2}{8(8^2 - 1)}} = 140589,42$$

$439542,82 - 140589,42 = 298953,4$; $439542,82 + 140589,42 = 580132,24$

Interval forecast:

$t = 10$: (298953,4; 580132,24)

Point forecast, $t = 11$: $y(11) = 40809,786 \cdot 11 + 31444,964 = 480352,61$

$$K_3 = 2,447 \cdot 42295,33 \sqrt{1 + \frac{1}{8} + \frac{3(8 + 2 \cdot 3 - 1)^2}{8(8^2 - 1)}} = 151082,2$$

$480352,61 - 151082,2 = 329270,41$; $480352,61 + 151082,2 = 631434,81$

Interval forecast:

$t = 11$: (329270,41; 631434,81)

We perform hypothesis testing with respect to the coefficients of the linear trend equation:
1) t-statistics. Student criterion.
According to the Student table we find T_{tabl}

Ttabl (n-m-1; α/2) = (6; 0,025) = 2,447

$$t_a = \frac{a}{S_a}$$

$$t_a = \frac{40809,786}{6526,312} = 6,2531 > 2,447$$

The statistical significance of the coefficient a is confirmed. The estimation of the parameter a is significant and the trend y of the time series exists.

$$t_b = \frac{b}{S_b}$$

$$t_b = \frac{31444,9643}{32956,259} = 0,9541 < 2,447$$

The statistical significance of coefficient b is not confirmed.
2) *F*-statistics. Fisher criterion.
Coefficient of determination.

$$F = \frac{R^2}{1-R^2}\frac{n-m-1}{m} = \frac{0,867}{1-0,867}\frac{8-1-1}{1} = 39,1015$$

We find from the table $F_{cr}(1; 6; 0,05) = 5,99$
where *m* - number of factors in the trend equation (m=1).

Since $F > F_{cr}$, the determination coefficient (and the trend equation as a whole) is statistically significant. In the course of the study of the constructed model, the time dependence of *Y* on time *t* was studied. At the specification stage, a linear trend was selected. Its parameters are estimated by the least squares method.

The statistical significance of the equation was verified using the coefficient of determination and the Fisher test. It was found that in the studied situation 86.7% of the total variability of *Y* is explained by a change in the time parameter.

It was also established that the model parameters are not statistically significant. An economic interpretation of the model parameters is possible - with each period of time *t*, the *Y* value increases on average by 40809.786 units.

However, the degree of reality of such forecasts and, accordingly, the measure of trust in them are largely determined by the well-reasoned choice of extrapolation limits and the stability of the "meters" in relation to the essence of the phenomenon under consideration.

Considering the current dynamics, it can be noted that at the end of 2018, the volume of capital investments in the agricultural sector reached 175.7 billion tenge - this is 8.2% more than a year earlier (and + 5.3% in comparable prices). More than half of all investments fell on the three main breadbasket of Kazakhstan:
- North Kazakhstan region of North Kazakhstan region (immediately 25.7%);
- Kostanay region (13.9%);- Akmola region (11.2%) (electronic source: www.energyprom.kz).

Note that it was these three regions that, according to the results of last year, provided 72% of the total gross harvest of grain and leguminous crops and immediately more than 80% directly of wheat. In total, more than 15,000 organizations engaged in agricultural activities are registered in Kazakhstan (excluding forestry and fisheries). This is 3.5% of all organizations registered in Kazakhstan (Figure 2).
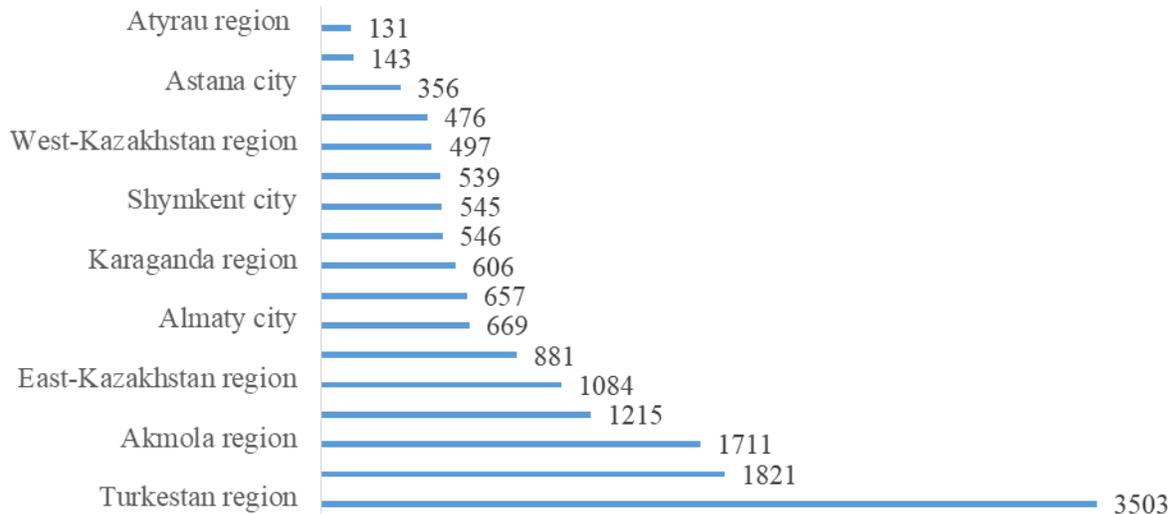
Figure 2. The number of enterprises by region for 2018.

Source: compiled by authors according to the data the Ministry of National Economy of the Republic of Kazakhstan

According to the Ministry of National Economy of the Republic of Kazakhstan for 2017-2018, investments in fixed assets of agriculture, forestry and fisheries indicate that the total value added of agriculture at the end of 2018 amounted to 557.3 billion tenge - this is 6.7% more than a year earlier, and 4% more in physical volume (Table 7) (Data of the Ministry of National Economy of the Republic of Kazakhstan for 2014-2017) (see Table 7).

Table 7. Investments in fixed assets of agriculture, forestry and fisheries (billion tenge)

Indicator	2018	2017	Annual growth, %
Agriculture, forestry and fisheries	175,69	162,43	8,2
Crop and livestock, hunting and the provision of services in these areas	175,22	161,86	8,3
Growing seasonal crops	107,15	99,35	7,9
Livestock	47,28	43,75	8,1
Mixed farming	12,41	14,01	-11,5
Growing perennial crops	7,56	3,54	113,8
Ancillary activities in the field of crop growing	0,83	0,98	-15,7
Nursery production	0,00	0,02	-90,1
Hunting and trapping, including the provision of services in these areas	-	0,22	-
Fisheries and Aquaculture	0,27	0,49	-43,9
Forestry and logging	0,20	0,08	151,7

Source: compiled by authors according to the data the Ministry of National Economy of the Republic of Kazakhstan

In accordance with Strategy-2050, by 2022 it is planned to increase the volume of investments in fixed assets of the non-primary sector of the economy (excluding the state budget) by 1.46 times, and the volume of external

investments in fixed assets of the non-primary sector of the economy will increase 1.5 times (Strategy 2050 www.strategy2050.kz).

Gross agricultural output in the Republic of Kazakhstan in monetary terms shows growth over the past 5 years. However, growth dynamics are declining (Figure 3) (Data of the Ministry of National Economy of the Republic of Kazakhstan for 2014-2017).
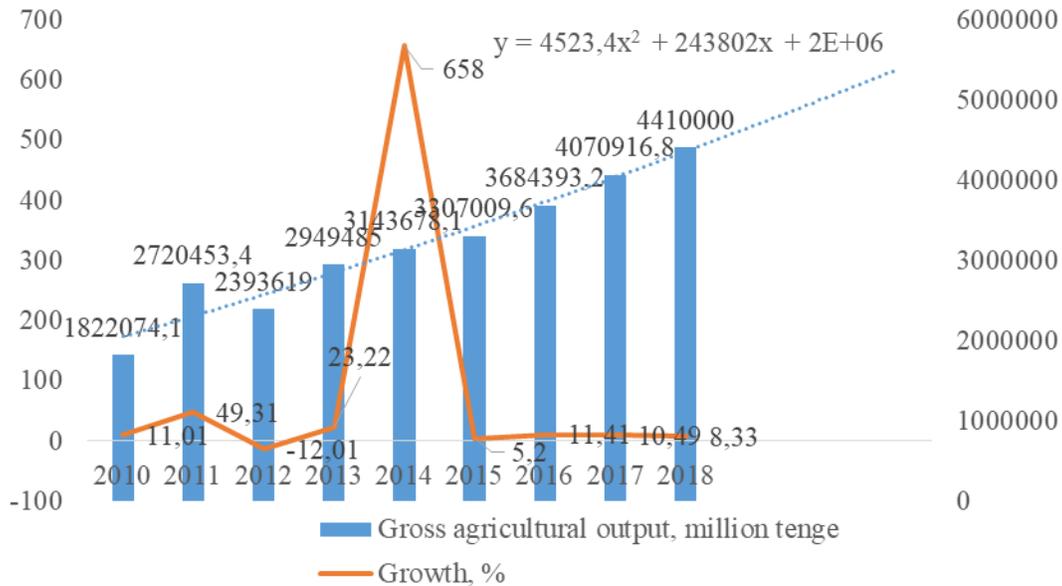

Figure 3. Gross agricultural output in the Republic of Kazakhstan for the period from 2010-2018, million tenge**.**
Source: compiled by authors according to the data the Ministry of National Economy of the Republic of Kazakhstan

In the framework of the State program "Digital Kazakhstan" for 2017-2020 the task is to introduce digital technologies to control food safety products coming to Kazakhstan from third countries, as well as exported from the country to other EAEU states (Table 8) (Decree of the Government of the Republic of Kazakhstan State program "Digital Kazakhstan" & Data of the Ministry of National Economy of the Republic of Kazakhstan for 2014-2017).

Table 8. Dynamics of import and export of animal and vegetable products, finished food products for the period 2012-2017

Indicator	Unit	2012	2013	2014	2015	2016	2017
import	million US dollars	4257,8	4619,4	4335,9	3393,1	3081,3	1646,2
export	million US dollars	2984,6	2733,4	2637,7	2136,2	2150,0	1667,9
import share	%	9,2	9,5	10,5	11,1	12,1	10,7
export share	%	3,5	3,2	3,3	4,6	5,9	4,3

Source: compiled by authors according to the data the Ministry of National Economy of the Republic of Kazakhstan

According to the data presented in table 8, there is still a trend towards a decrease in the volume of imports of basic food products in the Republic of Kazakhstan, in favor of an increase in domestic production. Regarding Kazakhstan, I would like to note that the low level of labor productivity in agriculture of the republic, the high level of depreciation of agricultural machinery (up to 70%), the imperfection of the technologies used, the small commodity production (75% of gross output falls on households and peasant farms) do not allow

intensive agricultural production, to ensure the most complete use of material, labor and other resources, to comply with environmental requirements. These factors reduce the competitiveness of the domestic agricultural sector, which, under the conditions of the WTO and the EAEU, can lead to the dominance of imports of foreign products, crowding out local producers from the sales markets and the risks of transferring the country's agriculture to its natural state. Today, 25% of the working population is employed in agriculture, which is of great importance for the country (Overview of the food industry of the Republic of Kazakhstan 2018).

It is obvious that the sustainable development of the agro-industrial complex and ensuring food security can be achieved only on the basis of a new paradigm of scientific and technical development of the agricultural sector, based on new knowledge and an innovative economy (Chuprov, 2016; Reiff et al., 2016).

To increase production and increase exports, it is necessary to revise the development of the agricultural sector:
- increase the availability of financing for agribusiness entities - investment subsidies, interest rate subsidies;
- given the long payback period, measures and financing should be provided for longer periods;
- optimal taxation;
- improving the use of land and water resources;
- accessibility of markets and export development;
- agricultural science;
- technology transfer and development of competencies of agribusiness entities;
- technical equipment and intensification of production;
- quality of public services and digitalization;
- rural development.

In the framework of the Address of the Head of State to the people of Kazakhstan "New Development Opportunities under the Fourth Industrial Revolution", the country's agro-industrial complex has been given the task of dramatically increasing labor productivity and increasing the export of processed agricultural products by at least 2.5 times over 5 years (Nazarbayev 2018).

Conclusions

The agricultural sector of the economy appears to be the part of the national economy with which the country's economic stability and independence begins, since more than two-thirds of the consumer market is formed due to food and goods produced from agricultural raw materials.

For the development and improvement of productive forces, it is necessary to ensure the formation of a favorable, "economically equivalent" market environment at the state level, in which the economy becomes susceptible to investment, and business entities have and expand investment opportunities and incentives for renewing fixed capital and building it up at the expense of own and borrowed funds, including foreign capital. To a large extent, this can be achieved by introducing a new, adequate market system of the economic mechanism of management, taking into account the specifics of agriculture (Kim & Abdishova 2017).

Investment processes in agriculture are subject to general economic laws, but are manifested taking into account the specific characteristics of the agricultural business. Features of agriculture, unlike industries, require a comprehensive analysis and consideration when forming the material and technical base and investment policy in the industry.

For Kazakhstan, the main condition for ensuring food security is the intensive development of agricultural and food industries, which will allow the agricultural sector to become a leading sector of the economy, which, ultimately, should contribute to the growth of the country's self-sufficiency in food. Given the importance of this

issue, the agricultural sector is given one of the main directions in the strategic policy of our state. The basis for enhancing food security is, above all, improving the functioning of the domestic agribusiness and its basic industries by:

- mobilization of the potential of our own agro-industrial production, capable of guaranteeing reliable provision of the country's population with domestic food, primarily its basic types, regardless of the situation on the world food market;

- the formation of competitive food markets, the creation of a legislative framework and infrastructure for their effective development, the protection of domestic agricultural producers from unhealthy competition and the unfavorable situation on world markets for agricultural products, raw materials and food;

- ensuring the optimization of intersectoral economic relations in order to achieve such a ratio of prices for agricultural and industrial products, which would stimulate the growth of expanded reproduction, especially in agriculture;

- improving the system of short-term, medium-term and especially long-term lending, ensuring the availability of loans for the bulk of agricultural producers, creating relatively favorable economic conditions for the attractiveness of investments and the growth of investment activity in agricultural production;

- creating a system of reliable guarantees of the quality of food supplied to the domestic market by ensuring tight control over the technologies applied throughout the food chain and, especially, for imported products;

- increasing and rational use of food resources by increasing the technological level of agricultural production and stimulating the introduction of resource-saving and environmentally friendly production technologies;

- the formation and development of large-scale specialized zones for the production of the main types of agricultural products, the elimination of various barriers and administrative restrictions on the movement of agricultural products, raw materials and food within the country.

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