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## ECONOMIC POTENTIAL OF THE COMPANY: EVALUATION AND RESERVES OF ITS INCREASING: A CASE STUDY

Alma Baiguzhinova <sup>1</sup>, Rakymzhan Yelshibayev <sup>2</sup>, Vladimir Meshkov <sup>3</sup>

<sup>1,2</sup> Narxoz University, Zhandosov Street 55, Almaty 050035, Kazakhstan

<sup>3</sup> Plekhanov Russian University of Economics, Stremyanny per., 36, Moscow, Russian Federation

E-mails: <sup>1</sup> [alma.baiguzhinova@narxoz.kz](mailto:alma.baiguzhinova@narxoz.kz); <sup>2</sup> [rakymzhan.elshibaev@narxoz.kz](mailto:rakymzhan.elshibaev@narxoz.kz); <sup>3</sup> [Meshkov\\_vr@mail.ru](mailto:Meshkov_vr@mail.ru)

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**Abstract.** At present, one of the most important areas for improving management at the enterprise is the use of a mechanism adapted to modern conditions for assessing production and economic potential, which makes it possible to make an accurate diagnosis of the state of the enterprise's economy, to compare potential opportunities with real economic activity, and to choose directions for the further development of enterprises depending on predicted market conditions. In modern economic conditions, with the complete independence of economic entities and the growing role of resources, the goal of each organization is the optimal formation of the resource base. The principle of the current agricultural organization assumes a continuity of activity, which can be ensured by the presence and steady growth of the enterprise's potential. At present, one of the urgent problems not yet sufficiently developed in the theory and practice of the agrarian economy is the problem of quantifying the production and economic potential, analyzing the effectiveness of its use and practical application in the economic regulation of industrial production, in particular in the dairy industry. This article discusses the analysis of the capacity of the Kazakhstani dairy market, indicators of export and import of dairy products, which showed that it has potential growth reserves in terms of consumption and production. But the functioning of domestic milk processing enterprises is connected both with the long-standing problems of the industry, aggravated during the crisis, and with the current financial, sales problems that arise in the conditions of the Customs Union.

**Keywords:** production and economic potential; dairy industry; structure of potential; valuation methods; export; import

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### 1. Introduction

The position of Kazakhstan in the world and Eurasian economic system will largely depend on the level of competitiveness of its economy, provided by the introduction of a new techno-economic paradigm based on high-level technologies, the increasing role of science and innovation, and the quality of human potential. World trends in socio-economic development show that the most effective growth factors are manifested in an urbanized economy, the implementation of capital-intensive and knowledge-intensive industries requires concentration of

infrastructure and professionally trained personnel. At the same time, highly productive agriculture is possible with the use of industrial technologies and forms of management that most adequately meet local climatic conditions.

The nation's plan "100 concrete steps to implement the five institutional reforms" involves attracting strategic investors to develop the production of milk and dairy products (as part of the implementation of the 60th step) (Nazarbayev, 2017). In this case, the main task is to ensure the export of up to half of the products to the markets of the CIS countries for three years. The inclusion of this step in the national plan indicates the important role of the dairy industry in ensuring the country's economic development.

The functioning of domestic milk processing enterprises is connected both with the long-standing problems of the industry, and with the current financial, marketing problems that arise in the conditions of the Customs Union, therefore:

- a necessary state sectoral program for the development of milk production and processing, the popularization of dairy products;
- state support is needed so that Kazakhstan dairy plants can update technologies, modernize equipment, improve assortment and train personnel.

## **2. Research background**

One of the main tasks of the modern economy is to determine the real capabilities of economic entities. The study of scientific literature showed that the concept of "economic potential of the enterprise" does not have a clear definition. Most authors consider economic potential as a level achieved through resources actually involved in the production of products. A comparison of the characteristics of the existing terminology made it possible to clarify the concept of the economic potential of the enterprise, which takes into account all the identified advantages in the definitions proposed by scientists and reflects the characteristics of the subject of study.

Some authors in their publications note that the problem of providing the population with dairy products is one of the most important tasks of ensuring food security. Currently, manufacturers should pay attention to market niches, the development of which can be very promising. Such a niche, for example, is the market of milk and dairy products due to the fact that dairy products are important food products in the grocery basket of the population (Butsenko, Grigoryeva, 2018).

Others describe the problem of providing the population with dairy products and argue that it is exacerbated due to the fact that today in the whole world, including in Kazakhstan, there is a shortage of raw milk, increasing every year (Bélanger, Vanasse, Parent, 2016).

In the future the consumption of milk and dairy products will continue to outstrip the growth in production of whole milk (Smirnov, 2017).

It is assumed that the entire increase in milk production in the short term will be used only for domestic consumption, and the deficit will continue to be compensated by the supply of milk powder and vegetable fats, i.e. the shortage of raw milk from processors is covered by import, as some scientists describe in their articles the current state of dairy products (Akhmetov, Stratonovich, Fayzrakhmanov, 2018).

Under these conditions, import substitution is very important, because concerns the interests of both producers of milk and dairy products, and consumers. Domestic raw materials should be fully used for the manufacture of dairy products both at milk processing and agricultural enterprises. For this, it is necessary to stimulate production

and state support for producers, at least information, improve market infrastructure, and provide access to the market (Krapchina, Kotova, 2015).

Analyzing the general approaches to the essence of the production and economic potential, taking into account the well-known features of the functioning of agricultural enterprises in the dairy industry, some authors made it possible to determine the essence of the production and economic potential of agricultural enterprises in the dairy cattle breeding industry, as their ability to produce optimal competitive market (milk) volume corresponding to market demand with the efficient use of balanced-interacting production, labor, financial resources, state support resources, high organizational, managerial and marketing level from the perspective of the reproductive approach of productive systems the industry (Generalova, Dzhamalodinova, 2015).

Other authors describe the production potential, or production capacity, of an enterprise (or an individual industry) - as an opportunity expressed by the volume of production in physical terms, which depends both on the quantity, quality and ratio of resources, and on the level of their return. Elements of production potential, reflecting the specifics of a particular production, characterize the type of enterprise, and the level of return depends on the organization and production management system, as well as on the level of innovation of the technologies used, which, in turn, affects the formation of the organization's development strategy. Thus, the resource potential of an agricultural organization serves as a criterion in determining its production capabilities or production potential (of a separate industry), therefore, it is advisable to use the principle of assessing the effectiveness of resource potential according to a single criterion for classifying resources taking into account industry characteristics, this assessment is based on a resource-cost approach (Fedorova, Gorodov, Gorodova, 2017).

### **3. Materials and methods**

A number of authors, exploring the formation and use of the production potential of the enterprise, argue that for the effective use of the production potential in dairy cattle breeding, it is necessary to observe a number of principles:

- comprehensiveness - providing agricultural production with the necessary types of resources that are in demand for solving strategic development goals, respectively, violation of complexity, revaluation of individual resource elements or elements of the production process entail a production failure, and, consequently, a decrease in the economic efficiency of the agricultural organization;
- proportionality - compliance between the individual elements of production of optimal quantitative proportions of a certain structure, in particular proportionality is expressed in the choice of the right ratio between power and working machines, and, more importantly, in dairy cattle breeding, scientifically based proportions of nutrient content in feed are necessary, which act as the basis for obtaining genetically incorporated productivity of dairy cattle;
- normative - the application of scientifically based standards for the cost of resources for the maintenance of one cow and the production of 1 centner of milk;
- targeted use - the concentration of necessary resources on solving specific problems, taking into account all objective conditions, in particular the concentration of resources, as well as methods and forms of organization of production and management, which is expressed in the system of agriculture or industry;
- modeling - management of production potential in accordance with a certain model of the development of an agricultural organization, which allows us to predict the state of the economy of the organization in time to select the best strategy for the formation of the use of production potential, achieve a given goal with minimal resources. Mathematical models are necessary to develop the optimal strategy and tactics for achieving a given goal (Lepitanova, Romanov, Kosenko, 2015).

Based on the foregoing, to assess the production potential, it is advisable to apply an integrated methodological approach:

1. Assessment of the use of resource potential, ie, the assessment of resource supply and resource yield in the dairy industry.
2. Formation of an economic-mathematical model of production potential in the form of a regression equation for assessing the influence of various factors attributes on the production result, in our case, on the gross milk production, which is planned with the available resources and the production technology used, or by changing the technological chain.
3. Assessment of additional opportunities to attract elements of production potential that are at a minimum in order to optimize the production program based on the balanced use of resource potential (table 1) (Generalova, Dzhamalodinova, 2015).

**Table 1.** The system of absolute indicators of the production and economic potential of agricultural enterprises of the dairy industry

№	Indicator	Indicators
1	Technical and technological potential	1.1. The proportion of new highly productive breeds of cattle dairy direction 1.2. Fixed assets growth rate 1.3. The coefficient of physical depreciation of fixed assets 1.4. The coefficient of mechanization of production (milk) 1.5. The coefficient of automation of production (milk) 1.6. The proportion of marketable products (milk) of the highest quality
2	Innovation potential	2.1. The saturation coefficient of progressive and technological techniques in the dairy industry in the enterprise 2.2. The share of costs for innovation and research enterprise 2.3. The proportion of marketable products (milk) produced by new innovative technologies
3	Information potential	3.1. The share of costs for information services in total costs 3.2. The proportion of information fixed assets including computers in the total value of fixed assets 3.3. Extent of external advisory services
4	Labor potential	4.1. The proportion of workers with higher education 4.2. The proportion of highly skilled workers 4.3. Staff turnover rate 4.4. Share of bonuses in the annual income of one employee 4.5. The ratio of enterprise costs for continuing education, culture and leisure to the wage fund 4.6. The ratio of the average wage of agricultural workers in the dairy industry with the average wage in the region's industry
5	Financial and economic potential	5.1. The coefficient of financial independence (autonomy) 5.2. Investment ratio 5.3. Absolute liquidity ratio 5.4. Efficiency of using state support funds for the dairy industry of the enterprise
6	Organizational and management potential	6.1. Management efficiency ratio 6.2. The proportion of management workers in the total number of employees 6.3. Level of computerization of managerial work 6.4. Level of organization of labor and production
7	Marketing potential	7.1. Market share of the enterprise 7.2. Price competition coefficient 7.3. The effectiveness of the system of promoting goods on the market 7.4. The effectiveness of advertising
8	Foreign economic potential	8.1. The proportion of products (milk) of the enterprise for export in total sales 8.2. The share of foreign currency earnings in the total revenue of the enterprise
9	Natural resource potential	9.1. Land use ratio 9.2. The utilization rate of agricultural land 9.3. Arable land utilization ratio

Source: compiled and calculated by authors

From the point of view of economic efficiency, Fedorova argues that milk production should be beneficial for agricultural organizations, which is a prerequisite for ensuring expanded reproduction of the industry (Fedorova, 2017).

Milk is one of the most important human foods. Many countries use mainly cow's milk. In Kazakhstan, the consumption of cow's milk is about 95% of the total amount consumed by the population. The world is growing in demand for milk with a high content of natural fat (> 4%) and protein (> 3.3%). Manufacturers get the maximum profit on innovative products, for example, on milk without lactose up to 30% (market share of about 10%). World milk prices are currently on the rise after a sharp decline in 2014, when prices fell below \$40.

As of the end of 2018, the price of milk was \$8.6. A strong influence on the cost is exerted by: feed prices and labor, natural disasters and agricultural policy.

The strategically advantageous location of Kazakhstan, coupled with rich natural resources, gives significant potential for the development of the dairy industry. Meanwhile, in neighboring countries with Kazakhstan, there has been an increase in the consumption of milk and dairy products. For example, according to the FAO, consumption in China grew by 7.6%, in India - by 3.3%, in the USA - by 2.7%, in South Africa - by 8.2%, in the EU - by 1, 8%.

Monitoring of the milk and dairy products market showed that up to 80% of imported dairy products on the shelves do not always comply with the Technical Regulations of the Customs Union (CU).

Milk is the food product of the vast majority of the population, as well as the basis for the preparation of a huge range of dairy and sour-milk products (cottage cheese, butter, cheese, yogurt, kefir, etc.) (table 2) (Data of the Kazakh-Grain Information Agency for 2017-2018).

**Table 2.** Dairy production for 2017-2018 in Kazakhstan, tons

Indicator	2018	2017	Annual growth
Liquid processed milk and cream	535501	481888	11,%
Cheese and cottage cheese:	27546	25192	9,3%
- cheese unripe or unrestrained and cottage cheese	18518	17653	4,9%
- low-fat cottage cheese	6435	7069	-9,0%
- fat cottage cheese	8826	7831	12,7%
Grated cheeses, powdered cheeses, blue cheeses and other unprocessed cheeses, except processed cheese:	7456	5918	26,0%
- hard cheeses	5048	4256	18,6%
- soft cheeses	496	310	60,0%
- brine cheeses	1013	843	20,2%
- cream cheese not grated and not in powder	1572	1621	-3,0%
Other dairy products	219142	215232	1,8%
- condensed milk and cream, with or without additives of sugar or other sweetening matter, not in solid forms	8259	9224	-10,5%
- fermented yogurt, milk and cream	198575	192895	2,9%
- koumiss	890	958	-7,1%
- shubat	1807	1619	11,6%

*Source:* compiled and calculated by authors

The production of other dairy products, including condensed milk and cream, as well as yogurts, kefir, ayran and other similar products grew by 1.8% year-on-year, to 219.1 thousand tons.

#### 4. Results and Discussion

In recent years, in the Republic of Kazakhstan, as a result of a focused agricultural policy, especially in the dairy cattle industry, some progress has been achieved in increasing milk production and animal productivity. According to the Agency of the Republic of Kazakhstan on Statistics, over the past five years (2014-2018), there has been a significant increase in the number of breeding dairy cattle. So, for the period under review, the number of pedigree dairy cows in the Republic of Kazakhstan increased by 23.1%. Scientific journals also note that the milk production of cows has also increased in pedigree farms where animals of foreign selection have been imported (Data of the Committee on Statistics of the Republic of Kazakhstan for 2014-2018).

According to the country's breeders, in the south-east of the republic, a new dairy type of brown cattle "Ak-Yrys" was created by crossing bulls of Schwitz breed with cows of the Alatau breed with an average milk yield of cows per lactation at the level of 5000-5400 kg with a fat content of 3.8% .

In the east of the country, using the bulls of the red-motley Holstein and Ayrshire breeds based on the cows of the Simmental breed, a new red-motley type "Ertys" was created and tested. The average milk yield in these animals is 5200-5600 kg with a milk fat content of 3.8%.

In the central regions of Kazakhstan, using the Holstein black-motley bulls, a new type was tested - Priishimsky and Sayram, the average milk yield of these cows is 5000-5200 kg per lactation with a milk fat content of 3.7-3.8%.

In the context of regions, the highest indicators, corresponding to scientifically sound recommendations of scientists, are in the Almaty region, where in 2018 the productivity of one cow was 2888 kg, North Kazakhstan - 2832, Kostanay - 2579, Akmola - 2662 kg (Table 3) (Data of the Committee on Statistics of the Republic of Kazakhstan for 2014-2018).

**Table 3.** The dynamics of the productivity of one cow in the context of some regions of the Republic of Kazakhstan for the period from 2013-2018.

Region	Year					
	2013	2014	2015	2016	2017	2018
Almaty	2357	2590	2686	2744	2839	2888
Kostanay	2453	2472	2493	2502	2520	2579
North Kazakhstan	2769	2789	2786	2804	2814	2832
Akmola	2303	2334	2498	2520	2618	2662

*Source:* compiled and calculated by authors

Thus, an increase in the productivity potential of breeding resources and an increase in the volume of sales of pedigree young stocks to commodity herds contributed to a significant increase in the average milk yield per cow in the republic.

According to EAEU experts on mutual trade published on the website of this international organization, the volume of exports of dairy products of the Republic of Kazakhstan to the territory of the Russian Federation in terms of milk amounted to about 20 thousand tons, the volume of Russian exports to Kazakhstan in terms of milk is approximately 300 thousand tons (Table 4) (Data of the Ministry of Agriculture of the Republic of Kazakhstan for 2016-2017).

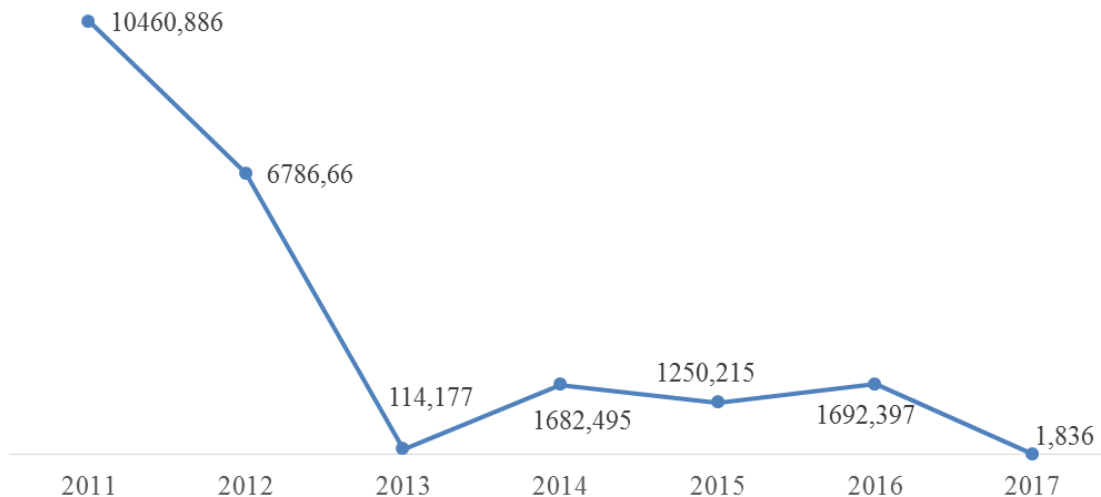


**Table 4.** Export of dairy products

Indicators	January-April 2016		January-April 2017		2017 volume to 2016 volume
	tons	US dollar	tons	US dollar	
Processed milk	2,5 thousand	1,3 million	4,5 thousand	2,5 million	75.7% increase
Sour-milk products	1,3 thousand	836 thousand	2 thousand	1,8 million	54% increase
Butter	33,3	92,5 thousand	121,7	285,5 thousand	3.6% increase
Cheese and cottage cheese	343,3	640,9 thousand	374,2	1,5 million	9% increase
Ice cream	67,6	146,6 thousand	45,5	106,3 thousand	decrease by 32.7%

Source: compiled and calculated by authors

In January-April 2017, the volume of processed milk export to Russia amounted to 3.7 thousand tons in the amount of \$ 1.87 million. Kazakhstan also supplied 1.6 thousand tons of dairy products for \$ 1 million, 71.9 tons of butter for \$ 271, 3 thousand and 286.3 tons of cheese and cottage cheese for \$ 1.2 million. For the same period, Kyrgyzstan sent: 258.6 tons of processed milk for \$ 212.2 thousand, 285.7 tons of dairy products for \$ 447.7 thousand, 49.8 tons of butter for \$ 14.2 thousand and 61.9 tons of cheese and cottage cheese for \$ 176.9 thousand. In addition, Kazakhstan exported 519 tons of processed milk to Turkmenistan. The ministry also announced the interest of enterprises in exporting dairy products to China. Thus, the export volume is 54.8 thousand tons, and the import volume is 574.0 thousand tons, and domestic consumption is 10.8 million tons. According to experts and the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan, the share of imports in the structure of consumption of milk processing products is from 10 to 40%. The main countries supplying these dairy products to the Kazakhstan market are: the Russian Federation, Kyrgyzstan and Belarus. However, in general, over the past two years, there has been a decrease in milk imports in US dollars (figure 1) (Data of the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan for 2011-2017). See Figure 1 below.



**Figure 1.** Dynamics of milk imports to the Republic of Kazakhstan for the period from 2011-2017, thousands of US dollars

Source: compiled by authors according to data of the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan for 2011-2017

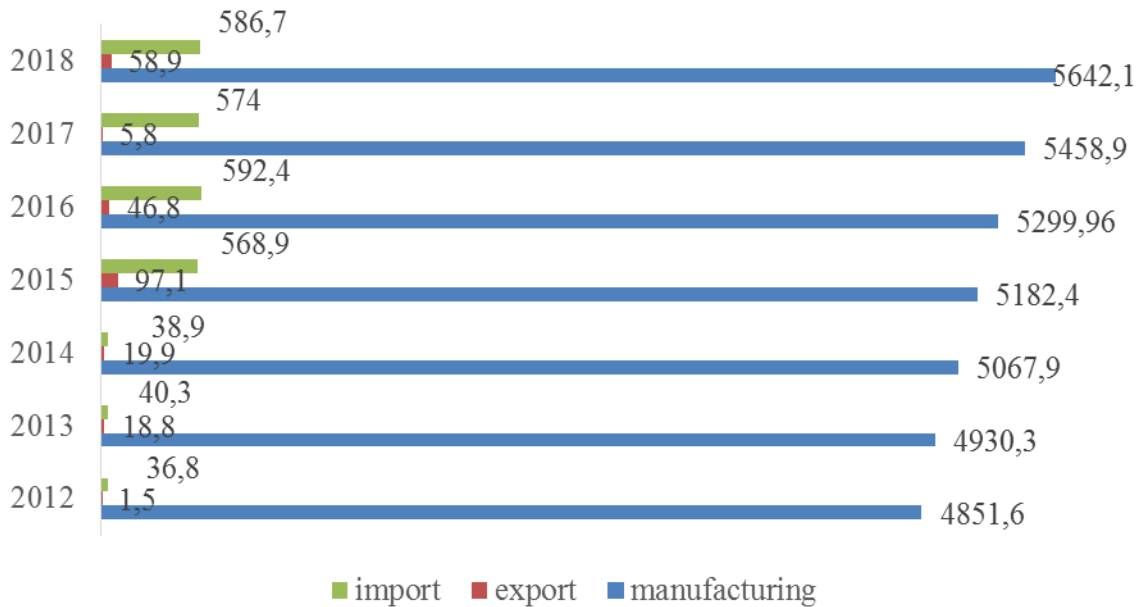
According to the academician of NAS RK Zh.Zh. Suleimenova, “there is a very big difference between the imports and exports of dairy products of the Republic of Kazakhstan, since imports of dairy products strangle Kazakhstan producers. Kazakhstan's producers will be forced to lower prices for domestically produced dairy products, and consumers of the final product will lose high-quality dairy products on the market and will be forced to consume foreign products, which after its production will be on the way to sales for a long time ” (table 5).

**Table 5.** Market capacity and consumption of milk and milk products in the Republic of Kazakhstan for 2015-2017, thousand tons

Indicator	2015	2016	2017
Stocks at the beginning of the year	531,4	402,3	371,1
Production	5182,4	5341,6	5503,4
Export	97,1	46,8	54,8
Import	568,9	592,4	574,0
Market volume	6282,7	6336,3	6448,6
Per capita consumption, kg / year	237,0	238,9	241,2
Need, thousand tenge	1130,9	1112,7	1085,8

Source: compiled and calculated by authors

Let us analyze the impact of imports and exports on milk production in the Republic of Kazakhstan. Figure 2 shows the statistics needed to build a two-factor regression model.



**Figure 2.** Dynamics of production, import and export of milk in the Republic of Kazakhstan for 2012-2018, thousand tons

Source: compiled by authors



We introduce the following notation:

$y$  – milk production (thousand tons);

$x_1$  – milk imports (thousand tons);

$x_2$  – milk export (thousand tons).

We will evaluate the parameters of the two-factor regression equation using the Regression analysis tool (Data Analysis in Excel). As a result of the data approximation, the following multiple linear regression equation was obtained:

$$y = 4945,573 + 1,094x_1 - 2,865x_2$$

The multiple correlation coefficients is equal, which indicates a close relationship of the resulting trait with two factor traits at the same time.

Check the statistical significance and reliability of the obtained regression equation and its coefficients. From the data of the regression analysis execution protocol, we have that the observed value of the Fisher criterion is  $F_{obs} = 7,788$ . The critical value of the Fisher test at a significance level  $\alpha = 0,05$  and number of degrees of freedom  $k_1 = m = 2$ ,  $k_2 = n - m - 1 = 4$  (where  $n$  – number of observations,  $m$  – number of factors) is  $F_{crit.}(0,05; 2; 4) = 6,944$ . Because  $F_{obs} > F_{crit.}$  ( $7,788 > 6,944$ ), then we can conclude about the statistical significance and reliability of the obtained regression equation (Sedelev, 2017).

Let us analyze the obtained regression coefficients:

- with an increase in milk imports by 1 thousand tons, milk production will increase by 1,094 thousand tons;
- an increase in milk exports by 1 thousand tons entails a decrease in milk production by 2,685 thousand tons.

One of the indicators with which you can evaluate the measure of the response of one variable to a change in another is the coefficient of elasticity. In our case, it will show the ability to change the volume of milk production depending on changes in the volume of imports and exports.

We define the aggregate average elasticity coefficients:

$$E_{yx_1} = -6,19\% , \quad E_{yx_2} = -0,59\% .$$

Having analyzed these elasticity coefficients, we obtain the following conclusions:

- 1) with an increase in the volume of milk imports by 1% of the average level, the volume of milk production increases by 0.073% of its average level with a constant volume of exports;
- 2) with an increase in the volume of milk exports by 1% from the average level, the volume of milk production decreases by 0.023% from its average level with the same volume of imports.

Thus, we can conclude that for domestic producers it is more advantageous to satisfy the domestic dairy market, and then export their products abroad. This is due to the fact that the main task of producers in the country is to withstand competition from foreign companies, increasing the supply of high-quality goods at affordable prices and, accordingly, increasing innovative activity in the field of technologies for the production of milk and dairy products.

To do this, it is necessary to ensure a growing demand for milk by increasing domestic production and technological modernization of equipment and the technological process for the production of milk and dairy products. The main competition is expected from the EurAsEC member countries. A number of measures can be proposed here. One of them is the attraction of foreign investment in the country's agriculture.

According to the analysis of the Dairy Union of Kazakhstan, the market in this segment for many years shows an increase in consumption by an average of 5.2%.

Livestock farmers in the East Kazakhstan, Turkestan and Almaty regions are becoming leaders in milk production (Figure 3) (Data of Kazagrommarketing JSC for 2018).

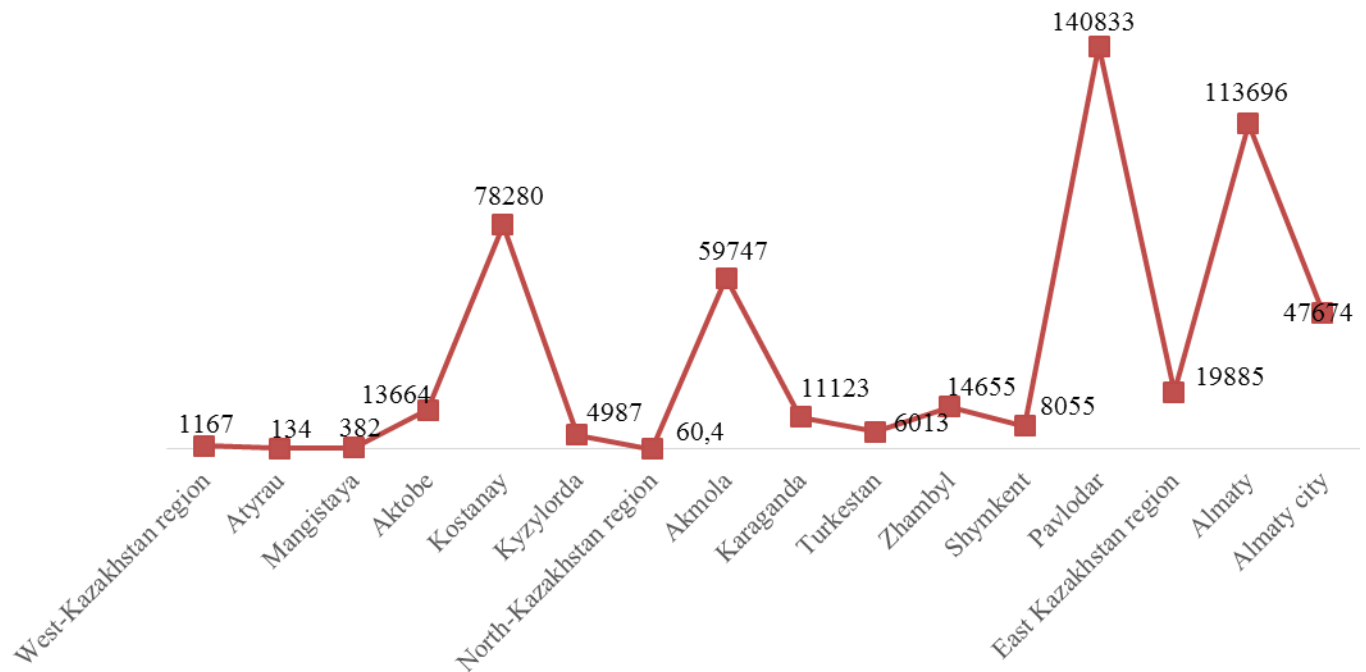


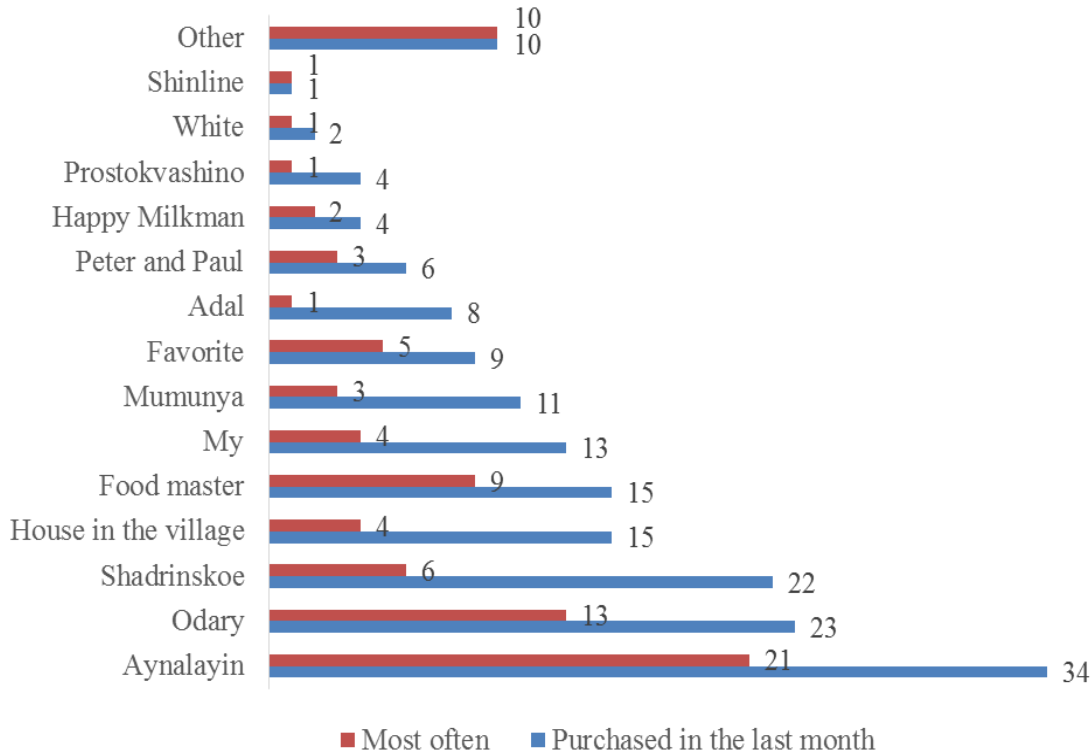
Figure 3. Dairy production by region of the Republic of Kazakhstan for 2018, tons

Source: compiled by authors

For 2018, almost 750 thousand and 805 thousand tons of products were produced in these regions. According to the Ministry of Agriculture, over the past year, about 5.5 million tons of milk has been produced in the Republic of Kazakhstan, of which 80% is produced in personal farm households. At the same time, the share of processing from the total production volume is 35%, or 1.68 million tons.

According to official figures, today in Kazakhstan there are 148 milk processing enterprises. Of these, 5.4% are large, 29% are medium and 65.5% are small. Over the past five years, seven new enterprises have appeared: two in the Akmola region, one in the Aktobe region, one in Almaty, one in East Kazakhstan and one in the South. The total capacity is 1.8 million tons of milk per year, of which 72.6 thousand tons accounted for opened over the past five years. The total workload is 60%; in 2015 this figure was 58%. Domestic enterprises provide the domestic market with dairy products by 92% with a total demand of 5.77 million tons. Kazakhstan processed milk covers 95.6% of the demand, dairy products - 86%, butter - 66%, cheeses and cottage cheese - 56%.

There are no clearly defined leaders on the Kazakhstan market - each company is strong in its segment (Figure 4) (Report on market research in the industry by code General classifier of types of economic activity 10.51 “Milk processing and cheese production”).



**Figure 4.** Analysis of preferred brands of milk in Kazakhstan in 2018

Source: compiled by authors

So, for example, the leaders in ultra-pasteurized milk are:

1) domestic manufacturers:

- “RaimbekAgro LLP with the Ainalayyn brand”, which occupies about 30% of the market;
- LLP “Agroproduct” (the leading brand “Mumunya” - 20% of the market);
- LLP “RG BrandsKazakhstan” - (“Mine” - 14%);
- JSC FoodMaster Company, which was acquired in 2004 by the French company Lactalis, which is Europe’s second largest producer of dairy products, (brands Korovyе, Domashnoye and a share of about 10%),

2) foreign manufacturers:

- “Wimm-BillDann” - Kyrgyzstan (“Village House” and “Merry Milkman”);
- Unimilk - Russia, which have approximately 8% of the market.

In the pasteurized milk segment, market shares are relatively evenly distributed among Kazakhstani producers, and the leaders in this sector are:

- FoodMaster with 29% (including 14% of Pavlodar Sut JSC, which was acquired by FoodMaster in 2008);
- LLP “DEP” (Kostanay), occupying 14%;
- Vostok-Milk LLP accounts for 12%;
- JSC “APK” Adal - 10%.

In 2010, Danone joined these enterprises, the world's largest producer of dairy products with a global market share of 12%, investing 21 million euros (4.2 billion tenge) in the construction of its first plant in Kazakhstan with a capacity of 24 thousand tons dairy products manufactured under the brands "Activia", "Rastishka" and "Danone".

Analyzing the Almaty region, according to 2018 data, there are about 15 milk processing enterprises with various levels of processing capacity and technological, stock and raw materials equipment. Meanwhile, the resource potential of raw milk in the Talgar, Ili and Enbekshikazakh districts amounts to 62.38-107 thousand tons per year, according to general estimates.

The following enterprises operate in the consumer market of the city of Almaty:

1 FoodMaster JSC - takes the greatest opportunities for the supply of raw materials, the network of procurement points which cover more than 170 farms in Almaty, Turkestan and Pavlodar regions. With a processing capacity of up to 45 thousand tons of milk per year, the company processes about 38 thousand tons of raw materials.

2 Raimbek Agro LLP - occupies the second position in the region in terms of milk procured and processed, the processing capacity of which is up to 17 thousand tons of milk per year.

3 JSC "APK Adal" - which accounts for no more than 5 thousand tons of milk, the remaining enterprises process significantly smaller volumes of raw materials and, accordingly, occupy the lowest positions in the total production. The level of consumption is a very important indicator for the dairy market of Kazakhstan.

4 Smak LLP.

Over the past 10-15 years, milk consumption in the Republic of Kazakhstan has doubled, however, the level of milk consumption is three times lower than the norm (the medical norm is 340 kg per person annually). If the consumption level continues to grow and reaches the recommended medical norm, say, by 2020, then, with the help and protection of the state, this will give Kazakhstan producers a chance to develop and strengthen their positions in the dairy market.

According to the calculations of J.J. Suleimenova (calculation of the profitability of milk production using the example of a milk producer from Northern Kazakhstan), income / profit per head amounted to 837.62 tenge, profitability threshold - 128.32 tenge, marginal income per 1 kg of milk - 33.91 tenge, and income / profit per 1 kg of milk without taxes - 0.15 tenge, which allowed us to draw the following conclusions:

- the company at a given price level works profitably;
- feeds account for the largest share of expenses;
- without subsidies, the company would be unprofitable;
- at this level of milk prices, it is unprofitable for an enterprise to invest in new production (low return on equity);
- at a given level of milk prices, but using external financing, the company's profitability would be negative;
- to stop production is also unprofitable (losses occur in the amount of 190.76 tenge per head).

Thus, the level of milk production must be raised by establishing breeding services in the country, which makes it possible to increase the growth potential of productivity of breeding animals. The milk market in Kazakhstan grew over the half-year by only 0.85%, when annual consumption growth averages 5.2%, and this already shows a low level of milk production in the country.

The large difference between the indicators of import and export shows that domestic producers are largely uncompetitive; therefore, to improve productivity, a clear development of subsidizing the costs of producers is necessary.

The level of milk consumption by the population of Kazakhstan is three times lower than the medical norm, and, in connection with this, the growth in milk production is very low. To meet the quality requirement, market

participants must apply the requirements of the technical regulation of the Customs Union, which means the application of the EAEU requirements. This, of course, will lead to a five-fold reduction in the supply of raw milk, since up to 90% of the private household plots do not correspond to bacterial contamination ( $> 500$  thousand /  $\text{cm}^3$ ), and more than 50% of the raw materials in summer are collected collective farm milk, which is not available in winter.

## **Conclusions**

The most important role in ensuring the quality and safety of finished dairy products belongs to the quality of the feedstock - milk.

The production and economic potential of agricultural enterprises in the dairy industry is the ability to produce an optimal volume of competitive products (milk) that meets market demand with the efficient use of balanced interacting production, labor, financial resources, government support resources, a high organizational, managerial and marketing level from the perspective of the reproductive approach of productive forces industry enterprises.

The main directions for improving it are:

- breeding work to form a productive herd;
- providing the herd with complete feeds and the development of new effective feeds with biological additives and fillings;
- equipping farms with modern milking installations, coolers, storage tanks, other equipment and its competent use;
- harmonization of domestic regulatory documents that define the requirements for raw milk, as well as methods for assessing its performance with international requirements and standard;
- strict observance of the terms and conditions of storage of transportation of raw milk to dairy enterprises, correct and timely primary processing of milk;
- creation and implementation of a system for the collection, delivery, evaluation and payment of raw milk from individual distributors and farmers;
- development and implementation of settlements with suppliers of an optimized pricing system that takes into account the quality of milk.

The share of milk delivered for processing in the total global production volume is 62%, while this indicator in Kazakhstan is only 27%. However, the processing enterprises are unprofitable in the total mass, they need cost optimization. The share of feed in the cost is 40-60% in Europe, 70-90% - in arid countries.

Feeding costs are closely related to farm management skills. The prime cost of milk and, importantly, its quality is the key to the competitiveness of the industry. Thus, the cost of milk in Kazakhstan is \$ 19/100 kg of milk, which is incomparable with the countries of Europe, North and South America. Despite the fact that Kazakhstan almost completely provided itself with the main line of food products, import dependence on several types of goods still remains on the domestic market.

For example, poultry, sugar and milk. However, each such “dependence” is explained by a whole set of reasons. Thus, the widespread milk production is hindered in our country, first of all, by the shortage of large professional farms and model farms of medium and small dairy businesses. After all, dairy farming is an entire art, under which a huge and complex infrastructure is brought.

The main challenges facing Kazakhstan's dairy business in Kazakhstan:

- distorted statistics;

- personal subsidiary plots (LPH);
- the dispersion of small producers in the vast territory of the republic;
- weak business of the production of related items, for example, the same packaging, according to the regulations of the Customs Union (CU).

The necessary conditions for the development of agribusiness in the dairy industry are as follows:

- 1) Low cost of feed production.
- 2) High genetic potential of animals and compliance with technology of keeping.
- 3) Availability of markets.

The main directions of development of agribusiness in the dairy industry are as follows:

- 1) Construction of 20 industrial-type dairy farms with a nominal capacity of 1,200 milking heads, or a total capacity of 24,000 milking heads.
- 2) Construction of 2,000 mini family-type dairy farms, which will contain 187,000 milking heads with a total milk yield of 689 thousand tons of milk per year.
- 3) Increase in capacity and modernization of 100 existing dairy farms, on which the growth of the dairy livestock will be 23.3 thousand heads, which will ensure an increase in the milk output by 74 thousand tons.
- 4) An increase in the productivity of the existing livestock and the volume of milk produced in agricultural enterprises and personal subsidiary plots by 750 thousand tons.

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**Alma BAIGUZHINOVA** is PhD student of the Narxoz University, Almaty, Kazakhstan. Research interests: economics and finance, entrepreneurship, investment, innovation.

**ORCID ID:** [orcid.org/0000-0002-3414-2213](https://orcid.org/0000-0002-3414-2213)

**Rakymzhan YELSHIBAYEV** is Candidate of Economic Sciences, Associate Professor of Narxoz University, Almaty, Kazakhstan. Research interests: tourism economics, commercialization, scientific and technological progress, entrepreneurship, marketing.

**ORCID ID:** [orcid.org/0000-0001-7119-7400](https://orcid.org/0000-0001-7119-7400)

**Vladimir MESHKOV** is PhD, Associate Professor of Plekhanov Russian University of Economics, Moscow, Russian Federation. Research interests: entrepreneurship, innovation, market conditions, marketing.

**ORCID ID:** [orcid.org/0000-0001-6539-0159](https://orcid.org/0000-0001-6539-0159)

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