

DEVELOPMENT PACE AND ISSUES OF DAIRY PRODUCTS INDUSTRY IN KAZAKSHTAN

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For the purpose of Kazakhstan agro-industrial complex industrialization the government's action is focused on settling two basic tasks. The first is to ensure safety of food products, the second is to develop export-oriented production and diversify the export.

Keywords: industry, safety of food products, export

In the Message of the President N.A. Nazarbayev to Kazakstan people it was highly specified that "One of the main factors of developing countries (non-urban areas) is constant and dynamic development of agro-industrial complex".

It has been decided to continue developing such export-oriented investment projects as market-milk dairies, poultry farms, fattening farms, horticultural plant growing, agricultural equipment assembling manufactures, milk processing, developing grain export infrastructure and grain processing.

One of the main factors which is in great demand in the process of economics development and influences export and import exchange trends in terms of the state economics is stockbreeding, in particular milk and dairy products.

As regard to food industry milk and dairy products technology is developing well nowadays, there are many dairy plants in Kazakhstan and they are producing different kinds of dairy products. Food products are produced in accordance with established standards, undergo a state control. Milk is the most valuable food product which has no other analogs. There several reasons for this. As 95–98% of its components are ingested. And milk is the essential source of amino acids, macro and micro elements, vitamins. Milk is the most valuable product of the nature. Human organism consumes 98–99% of its nutritional value. We can see its nutritional qualities from the following data: 1 liter of milk consists 150 g of protein. It equals to protein in beef or 5 chicken eggs, or 1 kilo of bread. Half a liter of milk satisfies human's daily nutrient requirement for amino acids, and one liter of milk fully satisfies human's requirement for oil, calcium, phosphor, riboflavin, satisfies humans requirements for protein by half, satisfies 1/3 of human's requirements for ascorbic acid, retinol, thiamin. Milk positively impacts human's heart function. Milk and dairy products take the second place in provision of people with food. Therefore developing

dairy cow farms, establishing milk production and improving its quality, mastering different dairy products technology preserving original qualities of initial products is a primary objective of stock farmers, in particular, livestock specialists-zootechnicians. Effective use of nutrients in milk, preservation of protein in it within particular time period, methods of producing additional products, dependence of changeability of production and dairy products to seasons are related to one another.

To improve dairy production in our country it is necessary to develop pedigree cattle farming. In the Republic of Kazakhstan Industrial-innovative development strategy for 2003–2015 is improving usefulness of cattle farming products and its competitiveness have been put in the first place considering its actuality nowadays.

Cattle farming takes 40% of total agricultural products in the world, about billion people work in this filed all over the world. Cattle farming is one of intensive fields of agriculture. Within the recent 10 years the field has developed fast and demand for agricultural products will actively grow due to increase of population, improvement of their welfare and urbanization.

There are about 6,2 million herds in the republic. As of 1 January 2011 number of cattle has increased in the republic:

- herds –by 1,1%, i.e. up to 6 160,4 thousand animals;
- including cows – by 2,3%, up to 2 778,8 thousand animals;
- poultry – by 1,1%, up to 33 036,3 thousand.

Improving competitive ability of milk and dairy products is of great experiential significance in developing complex of domestic manufacturers, in supplying all groups of internal market consumers with high quality dairy products and in extending external economic relations. Settlement of these issues plays great role in developing county economics, improving health of population, improving their level of living, implementing scientific and technical progress achievements, ensuring safety of national products and improving competitive

industries and regions. Competitiveness indicators of the country are, first of all, improvement of people's living level and qualities, stability, clear future of the state, level of compliance with laws in the country and others. So, the higher competitive ability of goods and services the higher the efficiency of resource use and level of people's living.

Parameters describing competitive ability of milk and dairy products can be divided to quantitative and economic (setting selling prices) parameters. Buyer's first step starts from evaluating the quality of the product and its price.

Milk and dairy products are one of food products which supply human health with the most useful stuff. In foreign countries annual consumption norm of dairy products vary between 185–477 kilos.

According to the information of the Milk Union nowadays domestic milk and dairy products cannot fully satisfy people's need in quality goods. Only 1/3 of produced raw materials are processed in the industry. Domestic enterprises supply with processed dairy products only 27% of consumers' need.

According to "Kazagrommarketinga" information and expertise center information annual consumption of milk and dairy products per capita in Kazakhstan is 260 kg, in Russia it is 305 kg.

Thus, in table 2 we can see that share of milk consumption rate in Kazakhstan is 63,5% (consumption rate of dairy products 260 kg, milk consumption rate is 164,92 L), in Belorussia it is 39,5%, in Kirgizstan it is 25,6%, sour cream consumption rate in Kirgizstan is 23%. In this table it is shown that dairy products consumption rate in Russia, Belorussia and Ukraina is in the same level, it depends on their geographical position. The lowest annual consumption rate of dairy products is in Kirgizstan, in total 184,8 kg, as consumption of milk and dairy products mostly depends on paying capacity. Kazakhstan is left behind Russia and Belorussia in terms of this.

In the Republic of Kazakhstan milk and dairy products are produced by agricultural enterprises, peasant farms and private enterprises. In 2006-2010 number of cows, volume of milk and dairy products produced increased in all categories of farms (table 3).

Table 1
Basis indicators of cattle farming development as of 1 January 2013 (in all categories of farms)

			2012	
			±	%
Production of cattle farming products				
Live weight cattle and poultry for slaughter, thousand tons	1 646,0	1 598,2	47,8	103,0
Cow milk, thousand tons	5 341,2	5 269,0	72,2	101,4
Chicken eggs, milion pieces	3 700,9	3 286,4	414,5	112,6
Cattle and poultry, thousand animals				
Herds	6 160,4	6 095,2	65,2	101,1
Including cows	2 778,8	2 717,2	61,6	102,3
Sheep	15 167,4	14 660,8	506,6	103,5
Goats	2 672,9	2 708,9	- 36	98,7
Pigs	1 356,1	1 326,2	29,9	102,3
Poultry	33 036,3	32 686,4	349,9	101,1

Table 2
Suggested consumption norm of dairy products per capita in foreign countries

Name of food product	Kazakhstan	Russia	Belorussia	Kirgizstan
Milk and dairy products, kg	260	305	304	184,8
Milk, L	164,92	53,28	120	47,28
Sour cream, kg	3,28	1,2	1,56	3,6
Curd, kg	3,28	7,56	9,84	9,12
Cheese, kg	3,28	1,8	2,4	-
Butter, kg	1,9	1,92	6	3,72

Table 3

Quantity of cows and volume of milk and dairy products produced in the Republic of Kazakhstan in 2006–2010

Indicator	Year					Changes in comparison with 2010, %	
	2006	2007	2008	2009	2010	2006	2010
Quantity of cows, thousand head	2376,2	2442,6	2569,0	2605,6	2675,4	112,6	102,7
Milk, thousand tons	4749,2	4926,0	5073,2	5198,0	5303,9	111,7	102,0
Processed milk and cream, tons	154412	179673	225816	258733	265508	171,9	102,6
Butter, tons	13040	19736	18596	19707	16598	127,3	84,2
Cheese and curd, tons	13033	14952	17042	17154	15473	118,7	90,2

Table 4

Milk production, import and export of milk products in Kazakhstan in 2006–2009, tons

Product name	Production				
	2007	2008	2009	2010	2010 compared to 2009, %
Processed milk and cream	197433	239532	220241	196250	89,1
Powdered milk and cream	4412	4124	3345	2834	84,7
Butter products	14982	17658	14379	12930	89,9
Cheese and curd	15936	15412	13698	11570	84,5
Concentrated milk and cream	9286	10852	7534	8043	106,8
Cultured milk products	92961	97765	91375	81863	89,6
Ice-cream	12543	12749	12200	11663	95,6
	Export				
Processed milk and cream	195,5	185,7	386,4	419,9	108,7
Powdered milk and cream	966	1835,8	13,8	1545	112
Butter products	966,4	488,5	604,2	510	84,4
Cheese and curd	1373,3	1235,5	957,4	1257,6	131,4
Concentrated milk and cream	247,3	4,5	56,2	511,4	9,1 ece
Cultured milk products	208,5	452,3	241,5	108,5	44,9
Ice-cream	38,7	44,7	86,6	248,4	2,9 ece
	Import				
Processed milk and cream	26638	26511	32084,9	38819,7	121
Powdered milk and cream	9338	11289,1	13363	10028,6	75
Butter products	7686,8	7151,5	5560,8	8825,5	158,7
Cheese and curd	10744,3	17706,7	18723,1	20201,3	107,9
Concentrated milk and cream	39472	41962	46338	36132,8	78
Cultured milk products	19948,3	28885,3	28078,3	29346,8	104,5
Ice-cream	12101,1	13266,8	11294,5	10111,3	89,5
	Share of import, %				
Processed milk and cream	11,8	9,9	12,7	16,5	129,9
Powdered milk and cream	73,0	83,1	80	88,6	111,1
Butter products	35,4	29,4	28,8	40,6	140,9
Cheese and curd	42,4	55,5	59,5	66,2	163
Concentrated milk and cream	81,3	79,4	86,1	82,8	96,1
Cultured milk products	17,6	22,8	23,6	26,4	111,8
Ice-cream	49,1	51,0	48,3	47	97,3

As we can see from Table 3 production of milk in all categories of farms in the republic increased by 11,7% and production of processed milk and cream increased by 71,9% from 2006 to 2010. Regarding quantity of cows in all categories of farms in 2008 2569,0 thousand heads, in 2009 2605,6 thousand heads, in 2010 2675,4 thousand

heads of cows were bred up. Compared to 2006 in 2010 quantity of heads increased by 12,6%.

Researches show that domestic producers of dairy products cannot fully satisfy needs of the market in milk and dairy products. In this regard import of milk products has increased lately (table 4).

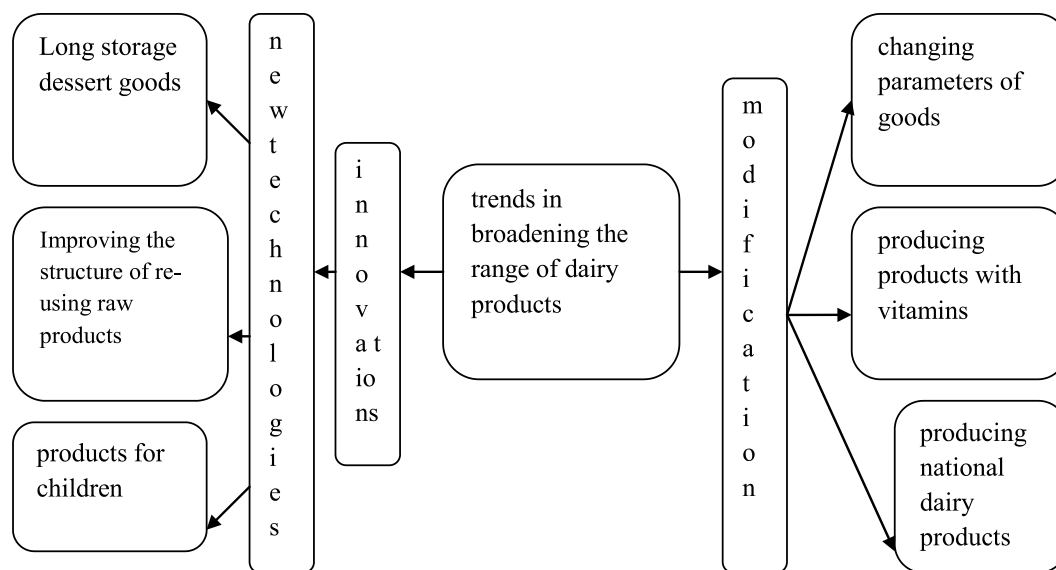


Fig. 1. Trends in broadening the range of dairy products

As we can see from Table 4 milk products import to our country is given in comparison of 2010 with 2007. During these years import of processed milk and cream products increased by 21%, import of cheese and curd increased by 7,9%, import of butter increased by 58,7%, import of cultured milk products increased by 4,5%. Besides, we can see that import of concentrated milk and cream, powdered milk and cream, ice-cream decreased. Main reasons of this is, firstly, low production capacity of milk enterprises, secondly, great demand for cheap sweet yoghurts and other dairy products from abroad (mainly, from Russia, Belorussia, Kirgizstan). Cheap dairy products from near and far abroad (yoghurt, hard cheese, curd etc.) are in great demand in internal market.

Switzerland is a motherland cheese production. pedigree cattle products are used in Switzerland. Main focus is maintained on development of cattle breeding. this should be practiced in Kazakhstan as well. Their pastures are very fertile as well. there are several land fertilization projects throughout Kazakhstan. As the fertility of the land is directly related to quality of the products. In Switzerland cows are at grass on top of the mountains. Thyme, jeerah, orchids grow on top of the mountains. and the sun warms the cattle. This land is called Gruyer. In middle ages earls lived there. Grewer cheese was first made there. At the end of summer cows eat white clover, blue clover, and in the winter they have dried hay. In this region a cow eats 100 kg of grass and 85 liters of water, and daily norm of milk is 25 liters. Cows are milked with special equipment and checked for dangerous

bacteria. Bactericidal flora, acidity percentage is checked again in cheese factories. 400 liters of milk is needed to prepare 35 kilos of cheese in a factory. milk is delivered to factories twice a day. Products are strictly controlled. "Tranch care" knives are used in milk factories. At the end products are stamped "Gruyer". "Serak" curd is made of lactoserum-byproducts. Other byproducts serve as food for pigs. In total cattle is fed with 75 types of grass. Of course, quality of products is high as well. This experience should also be implemented in Kazakhstan, i.e. nowadays main issue in Kazakhstan is to increase heads of cattle and produce qualitative products.

"Sut" (milk) JSC in Pavlodar produces 250 tons of products a day. In his message to Kazakhstan people President Nazarbayev noted that by 2014 domestic goods should comprise more than 80% of food products in internal market. Main purpose is improving types and quality of goods and expansion of production volume. Starting from 2011 "Foodmaster" brand started to produce dairy products. Its products are consumed in many places including Atyrau region. Company specialists were trained at Milk University in France and got master degree in milk production. this enterprise produces more than 20 types of dairy products. In 2011 the enterprise shops were equipped with new equipment. "Foodmaster" is one of the first enterprises in Kazakhstan which implemented quality management system under food industry international standard ISO – 9001 – 2000. Milk packed in paper bag (tetrapak) by using high technology equipment will not spoil for 21 days.

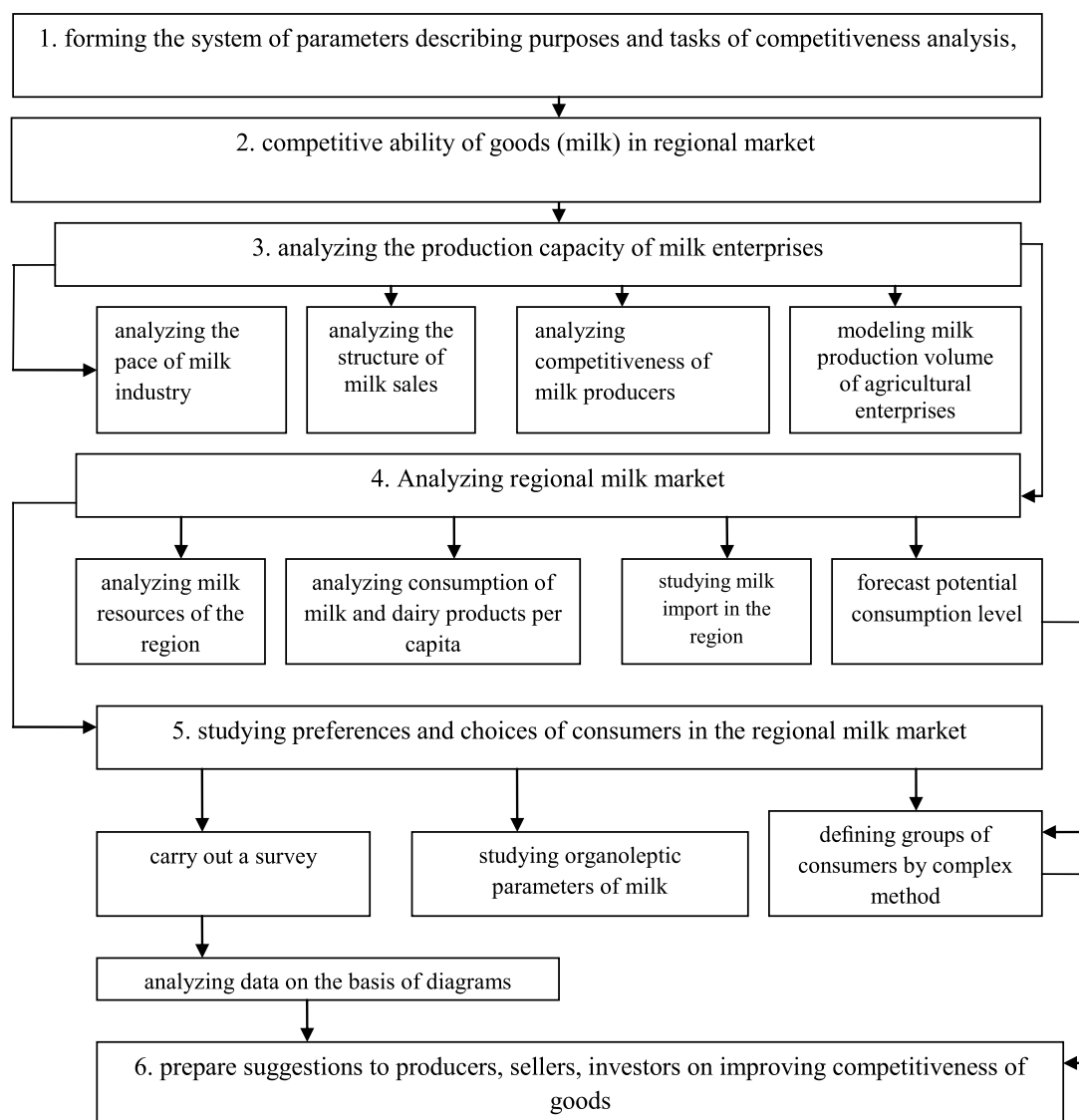


Fig. 2. Process of analyzing competitive ability of milk and dairy products in the regional market

First of all, it does not cause any harm to people's health, secondly, these products can be imported to far abroad countries. Besides, it is planned to buy "CIP" equipment to qualitatively wash packing. We need to contribute to usage of this equipment in Kazakhstan.

Currently, most dairy product enterprises in Kazakhstan produce only one type of product and processing technology of produced products is not well-established yet.

Another trend in improving the competitiveness of milk and dairy products is to broaden the range of products. Trends of broadening the range of milk and dairy products are shown in fig. 1.

To define the competitive ability of milk and dairy products it is necessary to carry out market researches showing the system of its parameters. In this regard we would like to present the process of analyzing competitive ability of milk and dairy products in regional market consisting of several stages (fig. 2).

As you can see from fig. 2 when conducting complex analysis of regional milk and dairy products market factors which directly impact competitive abilities are studied, they are actual competitors, actual and potential consumers and dairy products in the market.

Currently, milk supply in Kazakhstan is better. But low productivity of cows and

small range of goods produced by farms result in low productivity overall, consequently, dairy products suppliers try to increase prices and profits are very small. As a result, their products become very expensive in comparison with countries where salaries and pension benefits are very high. That is where the point is. Besides lots of competitive goods are entering our open market, which is bad for domestic producers.

Overall, population of the republic is fully supplied with milk and dairy products in accordance with national consumption rates. In 2010 each Kazakhstan citizen consumed 300 kilos of milk and dairy products on the average (according to Reprocessing and agrarian food market department of the RoK Ministry of Agriculture).

Thus, competitiveness is a multisided concept influenced by many different factors. Competitive product is a type of product which satisfies buyer's needs in the most optimal way. But if the market is full it may not be realized.

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