

## **THE DEVELOPMENT OF MILK MARKET IN BELARUS**

**Abstract.** Problems of functioning of the market of milk in Belarus are considered. The market of milk has a top of priority in the Republic of Belarus. These goods are socially significant. The state strongly influences the processes occurring in the market of milk, however this influence should decrease in the future. The author considers also problems of formation of prices for milk and dairy products.

**Key words:** milk market, state intervention

### **Introduction**

Theoretical and practical discussions about ways of the further functioning of agriculture in Belarus, patterns of ownership and the organization of production are continued in the modern economic literature. Basically, directions of reforms are certain, priorities are allocated, the sequence and terms of transformations are coordinated. But there is a question: how much precisely and correctly these priorities are certain as well as all aspects of development of economy and development of society are considered. The analysis of economic system shows various problems, various planes, and some questions and problems have no unequivocal resolutions. The market of milk is analysed as a complex system: supply and demand, functional structure, organization of market structures. The market of milk and dairy products should be analysed at two levels: primary and secondary. The market of milk, as well as any other, possesses adaptive opportunities, but results of its work often miss the purposes of a state policy. The intervention of the state in markets should necessarily be considered separately. Now the market of milk in Belarus has own specificity which consists in the following:

- presence of many participants in the primary market (agricultural enterprises, farmers, peasants, etc.)
- milk has a short period of storage and a universal character of use
- milk production has a universal character, also processing and sale of dairy products have universal character. The local markets have priorities.

The market of milk has a top priority in Belarus. It is caused by its economic and social value among other grocery markets. The average share of milk production in the structure of commodity output of agricultural enterprises stays at 14.6 %. An average 26.9-

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30.4 % of consumption depends on milk. It is necessary to make 6-7 million tons milk for maintenance of food safety. The internal need makes 4.5 million tons. The milk production of 1.0-1.6 million tons is planned for making 78-90 thousand tons of animal oils and 34-44 thousand tons of fat cheeses. All this causes a need of studying and analysing conditions and prospects of development of milk market in Belarus.

**Supply in the milk market**

Steady enough demand for milk and dairy products is observed in the last years in the internal market. It is caused by low solvency of the population and opportunities of the market. The offer of milk is above demand of milk.

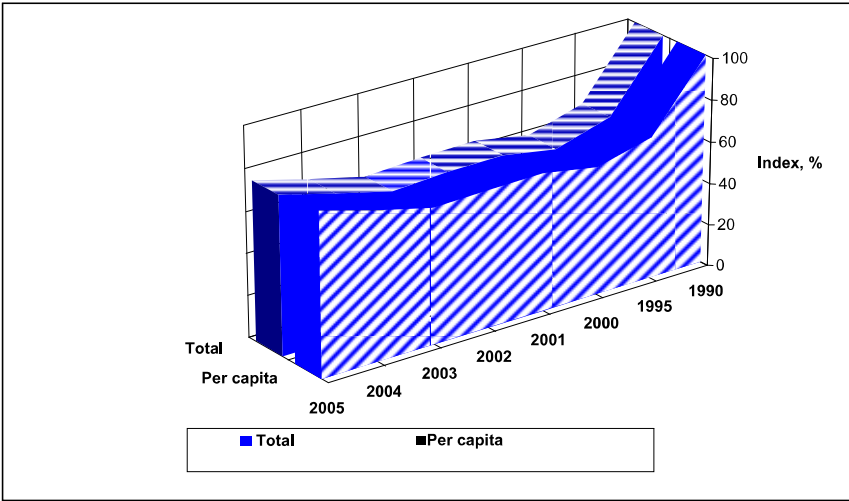
About 2300 agricultural enterprises, farms and personal part-time farms of the population produce milk in our country. Changes of volume and the level of production of milk in years beginning with 1990 can be seen in table 1.

Table 1. Milk production in all categories of producers

| Production           | Year |      |      |      |      |      |      |      |
|----------------------|------|------|------|------|------|------|------|------|
|                      | 1990 | 1995 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| Total, thousand tons | 7457 | 5070 | 4490 | 4834 | 4773 | 4683 | 5149 | 5678 |
| Per capita, kg       | 732  | 497  | 449  | 485  | 481  | 474  | 524  | 581  |

Sours: <http://mshp.minsk.by/>

According to the data from the Ministry of Agriculture and Foodstuffs of the Republic of Belarus 732 kg of milk per capita was produced in 1990. This means that 15 years later in 2005 the milk production made 79.4 % of the 1990 level. Rates of recession and growth of milk production in the country are shown in figure 1.



Source: own elaboration on data <http://mshp.minsk.by/>

Figure 1. Changes in milk production in relation to the 1990 level

Sharp slump of milk production was observed in years 1990-1996. Then a period of relative stabilization has come. The increase in volume and level of production of milk is traced in the two last years.

Production efficiency of milk has decreased in Belarus since 1991. The greatest loss ratio was 20, 8 % in 1994. Unpredictability of production has been connected basically with high production expenses and a low level of procurement prices. Milk production has become profitable in the last two years owing to measures in this area, based on scientific development. Dairy production was most effective in territory of the western region of Belarus (Grodno, Brest). It is a zone of an arrangement of the largest milk processing factories, and also commodity markets. Milk produced in the agricultural enterprises, big farms and family farms should be advanced to and realized in the secondary market. In the primary market consumers of the raw milk are the processing enterprises like dairy combines, oil-cheese factories, dairy-canning combines etc. The dairy industry of Belarus is represented by 120 enterprises with a capacity of processing from 1.5 up to 781.3 tons per shift. The dairy branch has a share of about 20 % in the total commodity output of the food-processing industry. The slump in production of milk has resulted in a lack of raw material for the dairy industry; capacities of some dairy enterprises are filled in 40 % and less. Production of all kinds of dairy products has been reduced. So production of whole-milk has decreased by 47.7 % in relation to 1990, animal oils by 59.6 %, fat cheeses by 19.3 %. The quality of milk has a big influence on the condition of processing branch. Premium milk (from which it is possible to make competitive products) has made till recent times less than 50 % of volume of purchases of milk. In the last two years the quality of purchased milk has appeared as in table 2.

Table 2. Quality of milk bought from the agricultural organizations

| Area        | Quality characteristics |                |      |                |      | In quality grades, %: |      |      |      |      |      |           |      |
|-------------|-------------------------|----------------|------|----------------|------|-----------------------|------|------|------|------|------|-----------|------|
|             | basic fat content, tons | fat content, % |      | cooled milk, % |      | extra                 |      | I    |      | II   |      | low-grade |      |
|             |                         | 2005           | 2004 | 2005           | 2004 | 2005                  | 2004 | 2005 | 2004 | 2005 | 2004 | 2005      | 2004 |
| Brest       | 694742                  | 3.65           | 3.63 | 92.7           | 91.1 | 49.6                  | 43.4 | 44.4 | 49.2 | 5.5  | 6.8  | 0.5       | 0.6  |
| Vitebsk     | 423418                  | 3.62           | 3.63 | 52.8           | 50.4 | 35.0                  | 30.4 | 53.7 | 54.6 | 10.3 | 14.0 | 0.9       | 1.0  |
| Gomel       | 405563                  | 3.57           | 3.56 | 63.6           | 56.1 | 28.5                  | 25.3 | 60.9 | 61.6 | 9.3  | 11.3 | 1.3       | 1.8  |
| Grodno      | 547997                  | 3.53           | 3.54 | 75.6           | 75.8 | 44.6                  | 45.7 | 50.7 | 49.5 | 4.5  | 4.5  | 0.2       | 0.3  |
| Minsk       | 902809                  | 3.56           | 3.60 | 66.2           | 66.6 | 65.2                  | 55.6 | 26.2 | 32.0 | 7.7  | 11.0 | 0.9       | 1.4  |
| Mogilyov    | 392077                  | 3.59           | 3.60 | 51.1           | 42.9 | 31.4                  | 32.1 | 56.9 | 57.7 | 1.1  | 9.3  | 0.5       | 0.8  |
| Alltogether | 3366606                 | 3.59           | 3.60 | 69.4           | 67.0 | 46.5                  | 41.7 | 45.2 | 48.0 | 7.6  | 9.3  | 0.7       | 1.0  |

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At shows the data in table 2, the Minsk and Brest areas produces the best quality milk. Relative share of low-grade milk is the least in the Grodno region. The quantity of milk of low-grade was reduced in Belarus.

In 2005 the Ministry of Agriculture and Foodstuffs, committees, associations and organizations worked on fulfilling a state and branch programme "Quality" for years 2004-2006. Systems of quality were introduced and certificated on the basis of international standards ISO 9000 in 31 milk processing enterprises. According to the state programmes in 2005 financial assets of 46310.5 million dollars were used in modernization of dairy industries, in reconstruction and technical re-equipment of dairy-commodity farms 83063.3 million dollars, in the cattle-breeding complexes 31767.9 million dollars. The processing enterprises are giving big attention to introduction of the newest modern technologies and compounding of food stuffs, updating and expansion of assortment of production, increase in release of new kinds of food products with the improved consumer properties and longer periods of storage. Food stuffs are production with a raised biological value (dairy products, products with additives of iodine, aluminous additives, a complex, fruit, vegetables, spices, lactose). That allows to supersede imported products (yoghurts, vegetative oil etc.) in the domestic market.

The organizations of processing branches of Ministry of Agriculture and Foodstuffs mastered a release of 1573 new kinds of foodstuff. Relative share of new production has made 8.4 % of the total production volume.

Work is constantly spent on perfection of the laboratory control over quality of products. Laboratories of the enterprises are provided with the necessary equipment, devices and reagents for performance of control over the quality of production. Inspectors of production are proceeding according to schemes of the laboratory control, coordinated by the territorial centres of hygiene with respect to the physical and chemical, microbiological, radiological parameters which are stipulated by the technical normative legal certificates. Industrial laboratories of some meat and milk processing enterprises are accredited on technical competence and independence.

The programme of perfection of agriculture of Belarus supposed a creation of the grocery agro industrial formations. They include the agricultural enterprises, factories of milk processing, the trade firms. The income of joint activity is distributed among participants (proportionally to expenses of each of them on production of finished goods). Some attempts of creation of such groups were made in the last years in Belarus. However these attempts not always were successful. For today the experience of Open Society "Grodnomolkombinat"

with reorganization of APC «Berestovichanka» to enterprise "Agromir" is noteworthy. Capital investments are significant in this enterprise (only in 2004 investments of 233.1 million dollars were required). It has yielded positive results. It has allowed to raise production efficiency of milk.

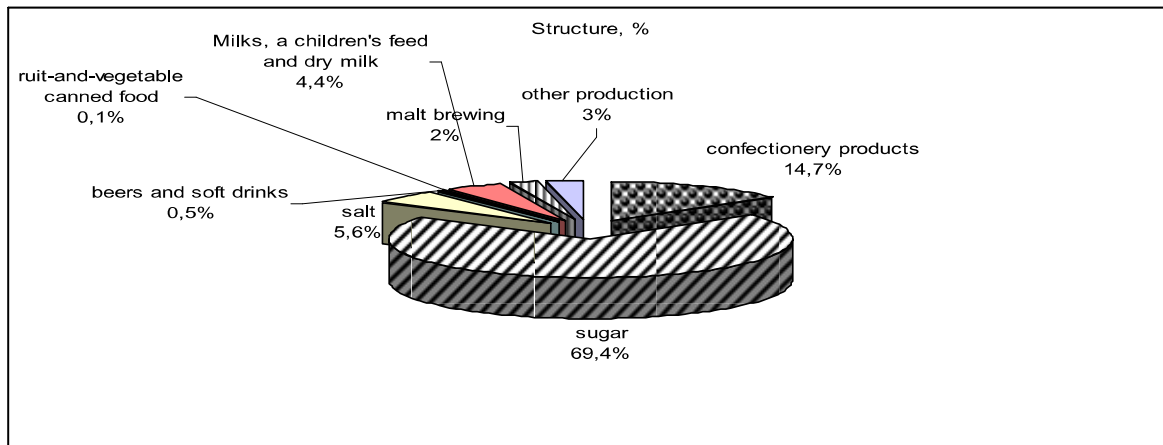
Therefore it is necessary to form procurement zones around milk factories. It will help to receive a growth of milk production volumes and milk production efficiency. This zone should include the specialized agricultural organizations of milk production (with a herd of 1000 and more cows per farm of and yield of not less than 4000 kg of milk per cow per year). Also an organizational reorganization of dairy branch is required.

### **Demand in the milk market**

As it was marked earlier, rather a stable demand for milk and dairy products is observed in Belarus. The internal need makes 4.5 million tons milk. Demand of milk is below its consumption. Rates of falling of the supply are above rates of decrease in internal consumption. Demand of milk has fallen 1.5 times. Supply of milk has been reduced more than 1.6 times in the domestic market. Export deliveries have decreased to 30 % in comparison with the level of 1990. Consumption of dairy products has been reduced from 428 kg down to 257 kg per capita (in comparison with 1990 to almost 40 %). Consumption of milk in Belarus is traditional. It is based on the division of labour which has developed in due time.

The most important market of dairy production in Belarus is the internal market. The most significant from external markets is the Russian market. Export of dairy products is characterized by positive dynamics. The butter prevails in the commodity structure of export (33-45.7 %).

The analysis of export of production of the enterprises which are a part of the concern "Belgospisheprom" has shown that the foreign trade turnover of the enterprises in the concern for 2004 amounted to 473.3 million US dollars and the rate of growth 115.5 %. Commodity structure of export is as following: confectionery products 14.7 %, malt 2.3 %, a children's dry dairy feed and dry milk 4.4 %, salted food 5.6 %, beer 0.5 %.



Source: own elaboration on data <http://mshp.minsk.by/>

Figure 2. Structure of export by concern " Belgospischeprom"

One of basic problems of the milk market is the mechanism of formation of the milk and dairy products prices. The state exerts a big influence on the price level. Regulation occurs at two levels. First level is the purchase of milk from the agricultural enterprises. Second level is the sale prices of milk and dairy products from the processing enterprises. There are restrictions on establishment of the trading extra charge on these products in retail. Such mechanism of price control is connected with the social importance of milk and dairy production. The state pursues some purposes. First purpose is covering by prices of the costs of milk production in the agricultural enterprises. Second purpose is availability of the milk products to the population of Belarus. The milk prices have been raised by 19.6% since spring 2006. One ton of premium milk will be bought for 133 dollars now, the first grade for 107 dollars, the second grade for 84 dollars, not high-quality milk for 56 dollars. Limits on purchase prices of meat, milk and other socially significant food stuffs are increased by 0.6 % in Belarus. The Ministry of Economics has approved new upper limits on purchase prices for these goods. Ministry of Agriculture and Foodstuffs considers the established increase of the prices insignificant. Procurement prices of milk have been increased by 5 % since March 2006. Purchase prices on dairy products rose only once during the past three months. The existing order of price control always prizes someone involved in the milk and dairy production. It is the agricultural enterprises i.e. direct producers of milk, or the processing enterprises, or the buyers.

## Conclusions

1. The Belarus market of milk and dairy products represents a complex multilevel system. The mechanism of system functioning is insufficiently adjusted and demands improvement its now. In particular it needs regulation of the relations between the milk

manufacturers, the processing enterprises and trade. The basis of it is a creation of grocery agro industrial formations.

2. The state intervention is applied to the milk market in Belarus. However, any market possesses adaptable opportunities. The state intervention should be limited to this market. The agraricultural policy should be directed to a reduction of the state influence on the milk market.

3. It is necessary to consider interests of all participants in the market (producers of crude milk, processing enterprises and buyers) when the milk price level is established. The basic criterion of efficiency of the state actions should become the availability of products to the consumer.

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