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PROCESSES OF CONCENTRATION AND COOPERATION IN THE DAIRY SUBCOMPLEX

Abstract. The future of dairy branch belongs to major concerns producing milk, in which high parameters of milk yields are achieved and wider opportunities for modernization of production exist. Indisputable advantage of scale enjoyed by large production units over the small-sized ones is an objective law which has world recognition. Besides when reforming the branch it is necessary to create a range of large corporate enterprises which will be based on modern market relations and various forms of management. Various cooperation-integration structures are being created in the republic today. They unite several enterprises within the limits of one area, and the interregional and republican specialized complexes both.

Key words: milk production, economic efficiency, Byelorussia

One of the main tasks of the state is to provide the population with foodstuffs. Strategy of social and economic development of the Republic of Belarus requires the development of conceptual bases of formation of the national markets for foodstuffs with allowance for the main internal and external interests of the state. The resolution of the food problem is still one of the basic priorities of the government of the country. Effective functioning of agriculture is possible only in the event that all its branches achieve significant successes in the development. In the last years an economic stabilization of agriculture as a whole and of its separate parts (subcomplexes) has been planned. One of the components of agricultural and industrial complex is the dairy subcomplex which provides the population with important and irreplaceable foodstuffs.

Milk and dairy products are an integral part of each person's diet, being present daily on the table in each house. According to the medical dietary standards one person should consume annually 380 kg of milk and dairy products [Ekonomika... 1996, p. 218]. In Belarus this parameter in the last 5 years varied between 268 kg. and 302 kg. of milk and dairy products, though the production of milk per capita exceeds this quantity (figure 1).

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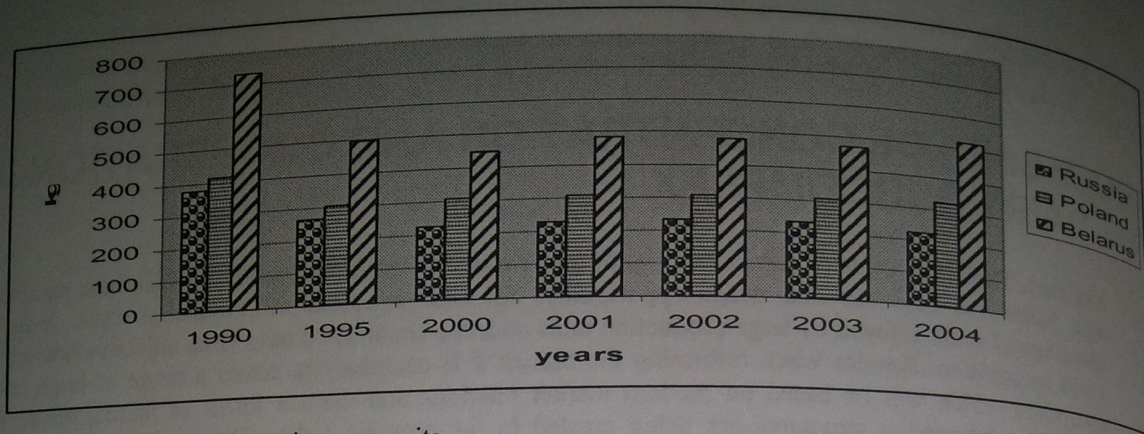


Figure 1. Dynamics of milk production per capita.

Producing more than 5 million tonnes of milk a year Belarus completely meets the country needs for dairy products and has an opportunity of an expansion on the foreign markets.

As milk and dairy products are one of the major foodstuffs, they should be accessible to all sections of the population. It assumes low enough cost of dairy products. Reduction of the price on milk is possible only with an effective functioning the dairy subcomplex and first of all dairy cattle breeding as a supplier of raw material.

One way of improvement of functioning of the dairy branch is the deepening of its concentration. Grouping of agricultural enterprises in the Grodno region by a mid-annual number of heads in the dairy herd testifies to it (table 1).

Table 1. Grouping of the agricultural enterprises in the Grodno region by a mid-annual number of cows in the herd, in 2003-2005.

Group	Mid-annual number of heads in the cow herd	Number of firms	Yield of milk, kg/cow/year	Expenses on 100 kgs of milk		Level of profitability, %
				forage, quintals of fodder units	labour, manhours	
1	below 400	33	2674	1.27	7.2	2.8
2	401-600	78	2881	1.21	6.6	7.5
3	601-800	64	2946	1.24	6.3	9.4
4	801-1000	28	3703	1.09	4.8	20.8
5	1001-1500	18	3666	1.09	5.2	19.1
6	more than 1501	6	5220	0.98	2.8	51.2
Average		227	3306	1.16	5.6	15.8

According to the data in table 1 it is clear that the production efficiency of milk depends on the size of the herd. It is visible that the best parameters of development of dairy cattle breeding are observed in those enterprises where the scale of operations is larger. According to table 1 a number of positive tendencies can be observed with an increase of the mid-annual number of livestock in the herd, among which an increase of efficiency of the dairy herd, a

reduction in the expenditure of forages and labour per unit of production and also an increase of the level of profitability of milk production.

It is necessary to create enterprises, where the mid-annual number of livestock is more than 1500 heads. In these farms the least labour and forage input per unit of production (2.8 man-hour and 0.98 quintals of fodder units) is observed. They also have the best milk yield per cow (5220 kg annually) and economic efficiency in the branch. In 2004, for example, the level of profitability of milk production in these enterprises reached on the average 56,2 %.

With a concentration in the branch grows as well a controllability of production and the problem of labour organization on a high level is better solved. The following data testify to the benefit of concentration of dairy cattle breeding. About 5.5 thousand milkmaids work in the Grodno region. They serve 168 thousand cows. It means that one milkmaid serves 30 cows. It is about 10-20 times less than, for example, in an agricultural production cooperative "Oktiabr - Grodno". This enterprise is included in the sixth group by amount of cows. Application of new technology and progressive methods of dairy cattle breeding yield good results.

Research results show that the most advanced enterprises in milk production are those which first adopted new technologies. The timely reconstruction of dairy farms has allowed them to essentially lower the losses in milk production and to make profits in this branch earlier than in the other enterprises. Now in such enterprises a big number of dairy cattle is concentrated and also the best parameters of development of dairy cattle breeding are achieved.

Indisputable advantage of large scale production over a small-sized one is an objective economic law which has a world recognition. Besides during reforming the branch it is necessary to make functioning of the large corporate enterprises be based on the modern market relations and various forms of management.

Preconditions for inter-firm economic cooperation are specialization and concentration; they are primary in relation to it. If the inter-firm economic cooperation does not remain passive it actively influences deepening of specialization and increase of concentration by involving even more and more enterprises in this process, by expansion of interrelations and forms of co-operation between them and by a concentration of capital and creation of co-production.

If the level of specialization is low farms offer a small supply of commodities, so there is no material basis for production ties between them and, consequently, for cooperation. Such economy will experience difficulties in the development of all branches on a modern engineering-technological basis, and inevitably will result in their backlog and a decrease of efficiency.

Various cooperation-integration structures are created in the republic today. They unite some enterprises within the limits of one area, and also into both interregional and republican specialized complexes.

At the regional level it is expedient to develop a deepening in kind specialization of the agricultural organizations, a concentration of production, a rational division of labour and location of branches for the purpose of the best adaptation of agriculture to the local conditions and of more productive and effective utilization of resources. It is required to carry out mechanisms of inter-firm economic agro-industrial cooperation and integration, a selection of enterprises – integrators. Also there is a need of formation of raw material supply zones and specific product cooperation-integration associations, including the agricultural enterprises and manufacturers processing the initial raw material as well as the marketing and distribution firms and in some cases financial structures.

Enterprises - integrators are meant to become large agricultural organizations that have cattle-breeding complexes, processing and trading - marketing enterprises. The sizes of raw material supply zones and subsequently the number and structure of the enterprises included in branch association should be defined by capacities of processing and marketing structures and the requirements of the market.

Organizational dairy subcomplex consists of:

- agricultural enterprises producing milk,
- enterprises processing milk,
- organizations selling dairy products.

The above listed parts of a dairy subcomplex today function isolated from each other. In most cases their economic interests do not coincide and sometimes they are even opposite. Processing enterprises do not participate in the formation of a raw-material base. Many problems arise during the purchase of milk especially from the peasant farms which produce 35 % of its general volume.

In such situation gain in value the questions of organizational development of a dairy subcomplex in a direction of optimization of its structure. One of the solutions to this problem is formation of the dairy agro-industrial organizations. The structure of agro-industrial economic organization includes the agricultural enterprises producing milk, factories for its processing and organization trading dairy products. The income of the joint activity is distributed among

participants with allowance for expenses in each of them in production of finished goods. It means that all economic subjects in the association work together on the eventual result.

When functioning in structures of agro-industrial dairy associations their participants receive higher economic benefit. Advantages of joint activity are a reduction of tax payments, economizing on the costs connected, for example, with the conclusion of negotiations on selling goods, an opportunity for formation of centralized funds, an acquisition of resources for realization of joint investment programs etc.

For the purpose of strengthening raw-material bases of processing factories in a dairy subcomplex a process of their integration is carried out by combining the economically solvent enterprises with unpromising ones. Thus, the last are liquidated as legal persons and their sources of raw material are transferred at the disposal of the well working subjects.

So it is possible to say that the future of dairy branch belongs to major concerns producing milk in which high parameters of milk yield are achieved and more opportunities for modernization of production exist. The use of new high technologies reduces labour inputs for service of cattle, reduces the inputs of resources for in a unit of production. This reduces the product cost and also increases the profit from its realization. The integrated structures of a regional level are capable in their turn to achieve an essential decrease in industrial costs, to react operatively to the changes of market conditions, to raise the level of capacity utilisation and the efficiency of acquisition of labour and financial resources. Cooperation reduces dependence on intermediaries, solves the problem of coordination of interests of agricultural producers, processing enterprises and trade firms, softens the disproportion between the prices for the agricultural products and the retail prices of foodstuffs. Cooperation can become one of the basic ways of increase of the level of production which does not require big investments.

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