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ЗАБЕЗПЕЧЕННЯ КОНКУРЕНТОСПРОМОЖНОСТІ МОЛОКОПЕРЕРОБНИХ ПІДПРИЄМСТВ В УМОВАХ ЄВРОІНТЕГРАЦІЇ

Обґрунтовано стратегічні напрями та програмно-цільові заходи забезпечення конкурентоспроможності підприємств молокопереробної галузі, а також механізм їх реалізації. З цією метою запропоновано кластеризацію технологічного процесу виробництва молочної сировини і її переробки та відстеження товарів у ланцюгах поставки молокопродуктів.

Ключові слова: конкурентоспроможність, молокопереробне підприємство, євроінтеграція, засоби зміцнення конкурентоспроможності, кластеризація, відслідковування товарів.

SUPPORTING THE COMPETITIVENESS OF DAIRY PROCESSING ENTERPRISES IN TERMS OF EUROPEAN INTEGRATION

In this article the strategic directions and program-targeted measures to provide the competitiveness of enterprises of dairy industry as well as the implementation mechanisms are analyzed. With this purpose, the clustering of the technological process of milk production, its processing and goods tracking in the supply chain of milk are suggested with using CPFR.

Key words: competitiveness, milk processing enterprises, European integration, means of strengthening competitiveness, clustering, goods tracking.

Problem formulation. The processes of European integration, with a direct impact on the economy of Ukraine, necessitate new strategies and mechanisms that can provide competitiveness in domestic and international markets of food, which would, at the same time, be consistent with the policy of strengthening of food security and the need to integrate the national economics into the world one.

The level of competitiveness of the dairy industry in Ukraine is low because of small-scale nature of milk production, the use of out-of-date technologies and equipment, poor quality, high energy and labor input of products, the discrepancy between the national standards of safety and food quality and the European products, inadequate system of quality control, low level of infrastructure development in this market segment, weak integration relationships between market players. However, the problem of competitiveness of dairy enterprises is updated in view of Ukraine's joining the free trade zone with the EU which can lead to a significant increase in imports of European dairy products, deepening of the crisis in the dairy sector and the reduction of food security of the country.

Analysis of current research outputs and publications. The theoretical basis of competition, its forms, the peculiarities of competitive environment, factors of competitive advantages, as well as the problems of providing the competitiveness of the economics are widely covered in the works of such

scientists as L. Antonyuk, Ya. Zhalila, V. Kozhevnikova, I. Kryuchkova, D. Lukyanenko, A. Mokiy, S. Pysarenko, Yu. Polunyeva, A. Poruchnyk, S. Sokolenko. However, the specificity of the field of economics has a considerable influence on the competitiveness of its businesses. The change of factors in marketing environment also significantly affects the process.

In some publications considerable attention is paid to using modern methods of strategic analysis of environment functioning milk processing enterprises [1, 2], on the basis of which submitted proposals about increasing competitiveness milk processing enterprises by improving the organization of manufacturing and labor, methods of technological control, implementation effective politics of resourcing. Technological aspects of improving the competitiveness of milk processing enterprises considered in [3]. Marketing aspects of improving competitiveness milk products considered in [4].

However, today we need a comprehensive approach to the issue of competitiveness milk processing enterprises in the market of European Union.

Article objectives. The aim of this paper is to study the mechanism of providing the competitiveness of enterprises of the dairy industry in terms of European integration with taking into account system approach.

Presentation of main materials demonstrate that domestic market of milk and milk products is characterized by a number of challenges, the most acute of which are the following: permanent reduction in the number of dairy cows; low level of mechanization of production processes and low productivity of livestock, causing high cost input of one product unit; poor quality of raw milk, which makes it impossible to produce qualitative and safe products by the companies of dairy industry, limits the ability of a wide range of diversification of goods and leads to low competitiveness of domestic dairy sector under the circumstances of further trade liberalization; lack of market infrastructure, which causes an increase in the cost of production, loss of products during transportation and storage.

Further development of the dairy market industry is hindered by the following factors: imperfect regulatory-administrative and institutional framework that would stimulate the production of dairy products; underdeveloped infrastructure of the market of milk and milk products; significant capital intensity of the dairy livestock sub-sector; moratorium on land sales, which reduces the investment attractiveness of the industry of dairy cattle; shadow market of dairy products.

The evidence of low competitiveness of domestic milk processing plants is testified by small competitive advantages of dairy products in foreign markets. As a result of the assessment it was pointed out that Ukraine receives competitive advantages in the trade of dairy products on the markets of developing countries (CIS, Asia and Africa). However, in the markets of developed European countries such benefits are very insignificant if not absent at all [6, p. 126 –128]. The main reason for a small share of exports of dairy products to the markets of developed countries is its inconsistency with European standards. Orientation of Ukraine only onto the markets of economically and technologically backward countries in Africa and some countries in Asia and the CIS may cause the conservation of technological backwardness or preservation of low competitiveness of domestic dairy products in foreign markets.

According to the results of the evaluation of the integral competitiveness of dairy processing enterprises in Lviv region and the sequence of the evaluation of competitiveness of dairy enterprises it was stated that the shortcomings of the competitive environment and obstacles to strengthening the competitiveness of dairy enterprises in terms of European integration are the following: imperfection of legal regulation of the market of dairy products; permanent reduction in demand for dairy products in Lviv region; reduction in the number of cows; irrational structure of milk production (97 % of milk is produced by private households and only 3% by farms, the fact that, as a result, negatively affects its quality); low quality of milk which comes to processing that the factors of its sort quality testify (bulk milk that goes to processing is constituted by the milk of second grade – 67.4 %, smaller amount is typical of the first grade milk – 29.7 %, only 1.9 % of milk is the milk of the highest quality); lack of mutually beneficial cooperation between research institutions and manufacturers of ready-made products which leads to technological backwardness of milk processing plants; low level of infrastructure development [7, p. 200–203].

Mechanisms of providing the competitiveness of the dairy sector enterprises are aimed at providing the population with qualitative and safe dairy products and minimizing the risks for domestic dairy enterprises in the context of enhanced cooperation within the boundaries of free trade zone with the EU. For the realization of the outlined directions that can provide the competitiveness of dairy enterprises it is advisable to implement the measures joined in groups: macroeconomic (measures of the legal, scientific and practical, organizational, economic, fiscal, informational policies aimed at creating an appropriate environment of the market of milk and milk products); measures of meso level (the ones that are developed and implemented by professional associations of domestic dairy producers to stabilize the situation in the dairy industry and ensure the competitiveness of the market); microeconomic (are embodied at the level of an individual processing enterprise to eliminate the reasons for its low competitiveness). Within the framework of this mechanism the implementation of target-oriented measures lies on: the macro level – Ministry of Agrarian Policy of Ukraine; the micro level – dairy plants. Implementation of the mechanism requires financial costs, labor and media means, but will help to achieve the following results: creation of clear mechanism for regulating the dairy market; increase in the number of dairy cows and increase of their productivity; improvement of the quality of raw milk and, accordingly, all dairy products; capacity utilization of milk processing enterprises; increase in the export potential of milk processing plants; providing people with high quality and safe dairy products; integration at the appropriate level to the WTO and deepening cooperation within the free trade zone with the EU; ensuring food security.

As international experience shows the most appropriate concept of providing the competitiveness of domestic enterprises of dairy industry is the clustering of the technological process of milk production and its processing, which presupposes the creation of cluster associations at four levels: local, regional, national, international [7, p. 199–202].

However, to enable the clustering processes of the dairy market subjects in Ukraine it is necessary to form a corresponding adjustment strategy of integration relations. According to the proposed strategy, the main objectives of integration and cooperation of the dairy market are primarily the protection of interests of the dairy market members, improvement of the quality of dairy products and strengthening of competitiveness of milk processing plants. However, measures to achieve these objectives can be divided into organizational and economic, legal and informational ones. The circle of members of cluster structures, according to the proposed strategy includes: private households that keep cows, farms, breeding farms, veterinary laboratories, research institutions and universities of agrarian orientation, innovative companies producing equipment for dairy processing, processing enterprises, enterprises producing packaging, transportation services, financial institutions, wholesale and retail trade, government agencies. Implementation of the clustering strategy in the dairy sector of Ukraine, among other things, will have the following results: protection of the interests of the market members of milk and milk products; facilitation of access to advanced logistics; minimization of transaction costs; improvement of the quality of raw milk; expansion of markets for dairy products, including access to international markets; improvement of the quality of dairy products and increase of their competitiveness in domestic and foreign markets.

Ukraine's joining the World Trade Organization, the desire to join the European Union requires the adaptation of conditions of Ukrainian companies to union rules. One of these requirements is tracking of goods in the supply chain. It is necessary to improve the customer service, provide oversight for product, and exclude violations in its movement in the chain. Products racking is now a market demand as customers increasingly required to adapt the parameters of the product to their individual needs.

To distinguish the product from its competitive equivalents allows personification, which is, providing characteristics consistent with the expectations of the customer. This complicates the organization of the production, supply and distribution logistics. On the other hand, it provides full customer satisfaction, resulting in increased sales. However, this requires proper identification of customer needs. In a situation when a company already produces the product, its tracking allows accurate determining of all the parameters that are particularly significant for the customer and excluding of those for which the customer does not want to pay. This reduces the costs associated with customer service, while increasing its level.

Tracking of goods is important primarily for food. In a situation when some of the components of the product were characterized by inappropriate settings, manufacturer, analyzing its movement in the supply chain should reach individual consumers as soon as possible and remove this production batch from the market.

Such decisions require the establishment of appropriate tools for the identification and supervision of the goods and the related database of consumers. It is required by directive 178/2002/IS, which introduces the need to track selected products in the supply chain. The directive imposes a duty:

- to track the movement of a product, i.e. the path or paths that a specific unit passes through all the stages of the supply chain, as it moves between the parties,
- to track the origin of products, localized within the supply chain, with the aim of further probable withdrawal from the market, as well as complaints analysis.

Tracking of goods is not only a requirement of law, but also an integral part of the quality system implemented at the enterprise or supply chain. It means that each successive link in the movement of raw materials, and later intermediates, controls its quality. Appropriate tracking the origin and the possibility of a clear identification of the location of raw material limits significantly the costs associated with servicing claims and returned goods.

One of the last reasons of goods tracking is eliminations of causes of disturbances in the movement of raw materials and products in the supply chain. The purpose of tracking in this case is not the product installation location, but continuous analysis of the movement of products through the supply chain and the time of sale of the ready-made product to the final customer. Elimination of disturbances in the movement of goods through the supply chain is very important because it is associated with the creation of a stock of goods. Undue forecasts and problems with suppliers are the main causes of major stocks.

Each of the companies in the chain of movement of goods tries to defend itself against unexpected request by creating evaluation example and by storing goods. As a result, there appear significant amounts of inventory in the whole supply chain and directly proportionally increase the costs of holding reserves [5, p. 54]. One of the possible solutions to this problem is the so-called information feedback, which means to track goods in which the stock is replaced by the information on the actual consumption of goods.

As a way of adaptation of Ukrainian milk processing enterprises to the EU market requirements, we propose to apply the concept of collaborative planning, forecasting, and replenishment (CPFR).

Conception of CPFR envisages co-operation of enterprises in a logistic chain, in three spheres of activity: planning, prognostication and filling up the supplies. The most value for the idea of co-operation has a stage of general prognostication of sale however. In fact the size of the retained ware-house supplies depends on quality of prognoses, and also the level of customer service is related of it.

This conception is already well-known in the world, however none of the trade network is not using it on the territory of Ukraine. Simulation model named the system of co-operation presents an excellent approach to the set collaboration. It leans on: common acceptance of decisions, general goals and plans of actions, wide range of mutual concordances, considerable exchange of information, common creation prognoses of sale and orders, addition to the supplies by a producer on the basis of general "frozen prognoses".

Prognostic co-operation of partners in conception of CPFR touches two sizes that are determined: prognoses of sale to the consumers through the trade network, and also prognoses of the orders declared a retail mediator to the producer. For each of these prognoses it is necessary to set the limits of the jointly realized process. For this reason first of all partners must define initial conditions that do possible comparison of the created prognoses. During research the special attention should be paid on three aspects:

1. Organizational level for those general prognoses will be created. A certain level is crucial for a degree of aggregating data that is used for prognostication, and must be common for both partners, so, that prognoses could be compared. It is important, that a producer and trade network chose one of the possible levels of general prognostication that can touch the distribution center of network, region or shop (department).

2. Criteria of selection of exceptions for the created prognoses and determination a procedure for work with them. In the jointly created prognoses there can be the so-called "exceptions", that touch products common prognostication of that is not embraced in a complete range or for that the envisaged limitations. In their case partners must thoroughly define an order, so that each of parties knew, what belonged to her. Exceptions can also present the prognoses of partners, for that certain divergence is impermissible. To be able to distinguish such exception, it is necessary first of all to set possible maximum

divergences that are worked out by different partners. Selection of exceptions hallmarked both for the prognoses of sale and prognoses.

3. Time. Partners within the framework of the general system of prognostication must define time unit for that there will be the created prognosis. It is a necessity, because in case of trade network and producer here are substantial divergences. Those prognoses could be however compared; they must behave to the same time unit. Most useful is, thus, creation of prognoses for a week's data. An aggregating level is so small, that does possible the effective using of the created prognoses for planning of procurement deliveries to the network. At the same time it does not require the daily sending of the detailed data by partners that would contact with the high charges the process of prognostication. Thus certain level of aggregating finds also confirmation in practice, because in the most inculcated projects of general prognostication the accepted time unit was exactly a week. With the element of time the necessity of determination of period of prognostication associates also. In fact every prognosis is put on clearly set time is certain in the future. In co-operation the 10–13-a week's period of prognostication (mostly accepted 12 weeks) operates in prognostication (for the necessities of CPFR) usually. Substantial is also determination of frequency of the carried out adjustments partners. Conception of CPFR mortgages weekly adjustment of the created prognoses of sale and orders, that does possible a rapid reaction on any changes on the market.

Using the idea of co-operation in the sphere of prognostication, sides must define the model of the set collaboration. It is thus expedient to apply the model of dual co-operation that mortgages the equipollence of cooperating partners. In this approach each of partners generates an independent prognosis and passes her to central unit in that differences are analyzed between prognoses, having regard to before the concerted spheres of exceptions. In future partners determine the concerted prognosis as "one number" jointly

A large value for economic activity of enterprises on the European market integrations have: vertical, horizontal and mixed, that can be defined by the name strategies of co-operation (to alliance) in niches that is used mainly by small and middle firms for protection or development of existent market position. Systematization of integration in accordance with economic degrees belongs to the most ponderable and widespread forms of collaboration of firms within the framework of the European market:

- horizontal integration – consists in the collaboration of enterprises of the same industry with the enterprises of the same economic level; this is understanding of direct competitors or even of those who give suggestions from the same industry (for example, general purchases, distribution and advertisement)
- vertical integration – means a collaboration between enterprises that behave to the different economic levels; in case of initiative from the side of subsupplier deal with making progress co-operation (franchising), when a consumer goes out with such initiative, talk about reverse co-operation (for example, agreements of sale between trade business concerns and their suppliers)
- diagonal (conglomerate) integration – comes forward then, when co-operate enterprises, that behave to different industries (mostly in the field of an account, treatment of information, market researches, transport and warehousing, set employers).

Strategy of eurointegration provides success on the European market foremost for small and middle enterprises that are milk processing enterprises in Ukraine. Integration comes forward mostly in a functional, regional and strategic plane. A regional collaboration takes place in case of appearance of understanding only at the certain set regional market, for example, general sale and logistic at the local market. Integration can also come forward in functional spheres, for example, in a supply, selling off, to marketing, controlling, and also researches.

Strategic integration acceptable, as a rule, only in the separate spheres of collaboration, i.e. common: researches and development, supply, distribution of separate product, sponsoring. Integration of enterprises on territory of the European market comes forward mostly in next spheres: eurosupply, eurologistic, eurodistribution, production, researches and development, euroadvertisement. Within the framework of European Union there are possibilities of the use of the system of information (BC – Net, ESPRIT, SPRINT) and advising, mainly for small and middle enterprises that do possible strategic integration process.

Conclusions and further research prospects. The research shows that the implementation of mechanisms that provide the competitiveness of dairy processing enterprises of Ukraine, which is based on the clustering of technological production process of raw milk and its processing will allow to enhance the competitiveness of enterprises, overcome the crisis in the domestic dairy sub-complex and ensure food security in view of joining the free trade zone with the EU. Tracking of goods in the supply chain of mil, as well as using conception CPFR, would also help to solve these problems,. However, while elaborating measures to improve the competitiveness of enterprises it is necessary to take into account the changes in other factors of marketing environment of enterprises, not only European integration, which will be the subject of further research.

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