

# Integration Processes in the Dairy Industry: Ukrainian Experience

Anatoliy G. GONCHARUK<sup>1</sup>  
Tetyana GAMMA<sup>2</sup>

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## ABSTRACT

*The purpose of this paper is to determine the main directions of integration processes in the dairy industry of Ukraine. Since Ukraine's independence, situation in the dairy processing deteriorated substantially, that adversely impact on an activity result of dairy enterprises and agriculture's milk producers. The paper presents a theoretical hypothesis about the need to create a vertically integrated agricultural formation to improve the competitiveness of dairy production and ensuring sustainable development of the industry.*

**KEYWORDS:** Dairy industry, Vertical integration, Sustainable development, Ukraine.

**JEL CLASSIFICATION:** O11, O13

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## INTRODUCTION

Modern enterprises are forced to operate in a volatile and dynamic market. Extensive ways and methods of economic development actually exhausted their possibilities. Thus, the development of mechanisms for sustainable development of enterprises that increase their efficiency and competitiveness objectively should be improved theory and practice of management. Ways out of the path of sustainable development is seen as follows:

- The basis of sustainable development should be entrusted with the development of scientific and technological progress and innovation. Due to the active implementation of scientific and technological progress leading countries have moved from the industrial age to a qualitatively new - post-industrial, so these economies become more intellectually rich and less source of raw materials;
- The development of integration processes in agro-food sector;
- Improvement of relations on both domestic and foreign agro-food market and infrastructure development.

Characteristics of the enterprise's position in the product market - is the first stage and integral part of the research of its competitive ability. The very important moment in formation of competitive ability is studying and analysis of market competitive environment of the enterprise. For that P. Doil (Doil, 1999) notes the following: «Organizations which do not pay proper attention to the markets, that are changing permanently, and do not follow market situation, are doomed "to be stranded"... Market of milk and dairy products is one of the markets, which will mostly feel changes in the

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<sup>1</sup> Odessa National Academy of Food Technologies, Ukraine, E-mail: agg@ua.fm

<sup>2</sup> Odessa National Economic University, Ukraine, E-mail: gamma\_t@mail.ru

sectorial situation, and insufficient attention to which will negatively be reflected on the competitive ability of the enterprise of this market. The Ukrainian dairy market, as Odessa one, particularly, is more and more short of qualitative raw materials, which is connected with negative tendencies of decrease of milk livestock and small-scale structure of milk production. However, milk and dairy products are the important segment of production market of the countryside, and demand for these products is always present.

## **1. LITERATURE REVIEW**

The issue of research of external environment and problems of the sector on the activity of milk processing enterprises, its competitive ability, are reported in the works of P.S. Berezivskyy, V.N. Zymovets, P.T. Sabluk, N.V. Sulyma, O.V. Morgun, V.A. Radchenko, N.V. Ovsiienko, O.O. Skibin, S.V. Vasylchak and others. This problem is very important for production security of Ukraine, that is why needs further studying.

The whole set of features of formation of competitive ability of milk processing enterprises due to its character can be divided in two groups: environmental – connected with specifics of the environment of milk processing sub-complex of agricultural sector of economy, where these enterprises are functioned, and level-sensitive – determined by the specifics of the level, on which competitive ability is considered (Cherevko, 2011).

Market transformation of economic relations influenced negatively on the structure of milk processing sub-complex both in Ukraine, and in its separate regions (Olefir, 2012).

## **2. ANALYSIS OF THE DAIRY INDUSTRY**

Production of dairy products and ice-cream in 2008 decreased by 7% as compared with 2007. It can not be affirmed that it has happened at the expense of decrease of external demand and import expansion, because during this period export increased from 180 thousand tons to 195 thousand tons, and import, on the contrary, decreased from 52 thousand tons to 45 thousand tons. The most probable cause of decrease in dairy products production is shortage of milk raw materials, which is difficult to compensate by import. Annual decrease of milk production has been continuing uninterruptedly since 2005. As the result of this, in 2006 production of dairy products decreased in 6%, in 2008 – in 7%, in 2009 – in 10%, in 2010 – in 2%, and in 2011 p. – in 7%.

The main cause of decrease in production of dairy products in 2011 was shortage of milk raw materials. Milk production in 2011 comprises 11093 thousand tons, when in 2010 – 11249 thousand tons. At the same time, demand for dairy products didn't decrease. For 2011, index of active volume of retail turnover for milk and dairy products comprised 103%, for rennet, melted and cottage cheese – 113%, for dairy butter – 112%.

The level of competitive ability of milk processing enterprises basically depends on the level of competitiveness of its products, which, in turn, depends on the quality of raw materials and structure source of raw materials. Results of their research are submitted in the table 1.

**Table 1. Dynamics of cow livestock in Ukraine and in Odessa region**

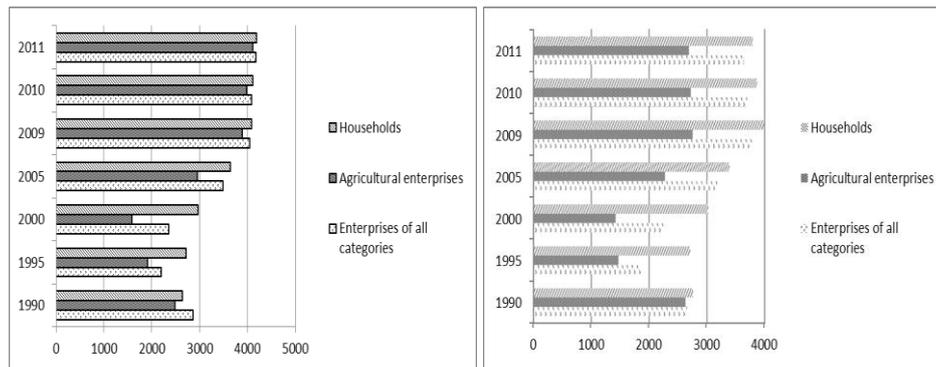
Population	Years							From 2011 to 2005, %
	2005	2006	2007	2008	2009	2010	2011	
<b>Ukraine</b>								
Cow livestock, thousand of head	3635	3347	3096	2859	2737	2631	2582	71
Including agricultural enterprises	866	764	679	624	605	589	584	67
Population's economies	2769	2583	2417	2235	2132	2042	1998	72
<b>Odessa region</b>								
Cow livestock, thousand of head	148	143	134	115	105	104	108	73
Including agricultural enterprises	33	29	24	21	18	16	15	45
Population's economies	115	114	110	94	87	88	93	81
Share of Odessa region in the whole livestock, %	4.1	4.3	4.3	4.0	3.8	4.0	4.2	X

Source: <http://www.ukrstat.gov.ua>, <http://www.od.ukrstat.gov.ua/>

The executed calculations certify tendencies to the decrease of cow livestock in agriculture – during the researched period it decreased in 30 %, meanwhile, its decrease has happened basically at the expense of decrease of number of agricultural enterprises twice both in Ukraine and in Odessa region. In population's economies we also observe the decrease of cow livestock. During 2005–2011 the share of Odessa region in cow livestock of Ukraine was almost unchanged at the level of 4 %. Reduction of cow livestock is accompanied with the decrease of specific weight of cow livestock in agricultural enterprises and correspondingly with increase of specific weight of cow livestock in population's economies.

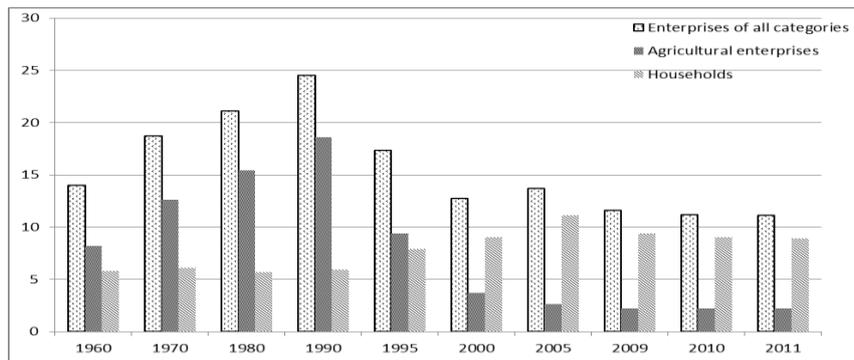
Totally opposite tendencies we can observe in the dynamics of cow productivity (see figure 1).

Results of data analysis, indicated on the figure 1, allow us to make conclusion that the productivity of milk herd in the economies of Odessa region is lower than in Ukraine in whole. Growth of the researched indicator in Odessa region happened basically at the expense of population's economies, where level of cow productivity is by 41 % higher than the level of cow productivity in the agricultural enterprises.



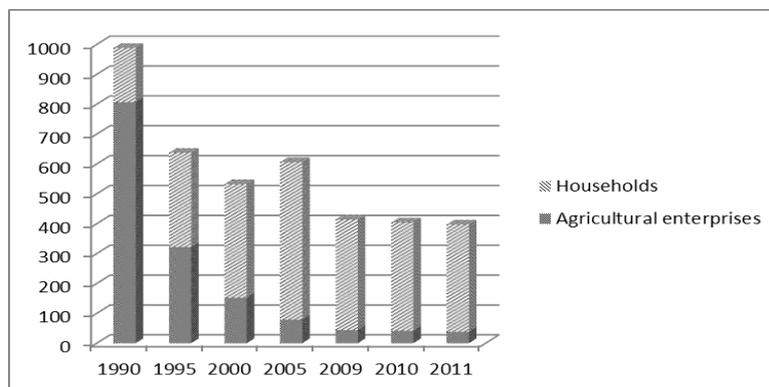
**Figure 1. Average annual milk yield from one cow in Ukraine (to the left) and in Odessa region (kg)**

Source: <http://www.ukrstat.gov.ua>, <http://www.od.ukrstat.gov.ua/>



**Figure 2. Milk production in Ukraine, million t**

Source: <http://www.ukrstat.gov.ua>



**Figure 3. Milk production in Odessa region, thousand t**

Source: <http://www.ukrstat.gov.ua>

Analysis of statistic information on figures 2-3 certifies that decrease of cow livestock led to the imminent decrease of volume of milk production, meanwhile, specific weight of milk production by population's economies increased substantially, and for which it is rather

difficult to provide control over quality of raw materials and as the result, production of not higher quality is produced from it, or processing of this milk needs additional funds, which complicates maintenance of viability and, of cause, competitive ability of enterprises.

In 2010 a total volume of milk production in Ukraine decreased by 11.14% as compared with 2000. Commencing from 2006 we can observe a tendency to decreasing of volume of milk production, in 2010 milk production decreased by 638.4 thousand t, or by 3.11% as compared with 2009. For Odessa region this decrease comprised 53.7%. Years 2000-2004 were successful for Odessa region: during this period volume of milk production increased almost by 35%. Since 2005 milk production began decreasing and this year it was produced by 15.6% less than in the previous 2004. Generally during the period of 2005-2010, volumes of milk production decreased by 33.4%.

But dairy products - are strategically important products, which always in great demand in the market, that for the last years characterized by increase of fertility, culture of consumption, quality of sales and others. In order to correspond to the market expectation, milk processing enterprises in the conditions of shortage of raw materials, use milk of bad quality, or resort to falsifications, replacing animal fats by vegetable ones. Such fact, undoubtedly, leads to the quality loss of finished products and actually to the deception of consumers, and, as the result, to consecutive loss of competitive advantages on the market by the enterprise-producer. In spite of negative tendencies of decrease of cow livestock and milk production, productivity of milk herd increased and for ten years, average annual milk yield from one cow increased by 68.5%. The basic way of increasing of cow productivity is improvement of food supply, quality of feed and structure of food allowances (Lakishyk, 2008, p. 126).

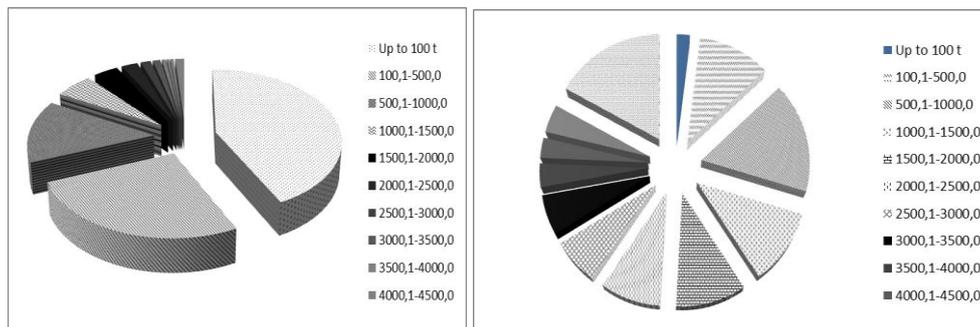
In our opinion, a share of large-scale production in the structure of milk production now is disproportionally low. In 2010, 112 million tons of milk was produced, including in agricultural enterprises – 2.2 million tons, and in population's economies – 9.9 million tons. Particularly in Odessa region market reforms, especially in 90-ies of previous century, led to the destruction of large number of large-scale agricultural enterprises, reduction of industries of feed production and deterioration of veterinary service of livestock complexes, which influenced on the reduction of production of unboiled milk and decrease of its share, which was submitted for processing.

In spite of the fact that intensity of reduction of production volumes in 2000 years slowed down, we can not observe positive trend in the dynamics of production of unboiled milk by this category of economies. It is connected with the fact that once powerful agricultural enterprises, which were specialized in milk stock-breeding, were reluctant to reorient into crop production due to symbolic amount of grants for milk production, inaccessibility of credit resources of commercial banks, usage of palm oil by the majority of small-scale enterprises for production of separate kinds of dairy products. The important booster for accretion of milk livestock in agricultural enterprises is high attractiveness of production of technical crops, especially those, which have energetic directivity, and also expansion of areas of crops even in that administrative regions, which traditionally are specialized in meat and milk stock-breeding.

Positive trends in the dynamics of production of unboiled milk in 2000 – 2005 happened due to increase of facilities in special farms. Unfortunately, quantitative improvement of situation didn't correspond to the qualitative one. In the majority of settlements of rural area there are no technical and technological preconditions for acceptance and storage of

unboiled milk, as it is required by hygiene and sanitary standards and technical regulations.

Figure 4 illustrates the grouping of number of agricultural enterprises in Ukraine and in Odessa region under the volume of cow milk production in 2011.

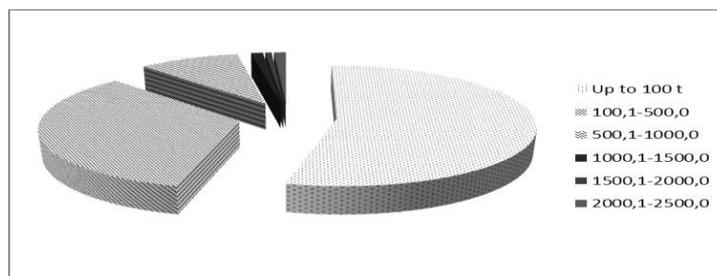


**Figure 4. Structure of agricultural enterprises of Ukraine (to the left) and Odessa region as for production volume of cow milk in 2011, % to the total quantity**

Source: <http://www.ukrstat.gov.ua>

The above mentioned picture shows that the biggest specific weight in the structure of agricultural enterprises in Ukraine and in Odessa region have small enterprises with production volume of unboiled milk up to 100 tons per annum: 42.7% in Ukraine and 54.1% in Odessa region.

The biggest specific weight as for gross milk yield in 2011 (17.1%) have large enterprises with production volume of raw milk more than 5000 tons per annum (see figure 5).



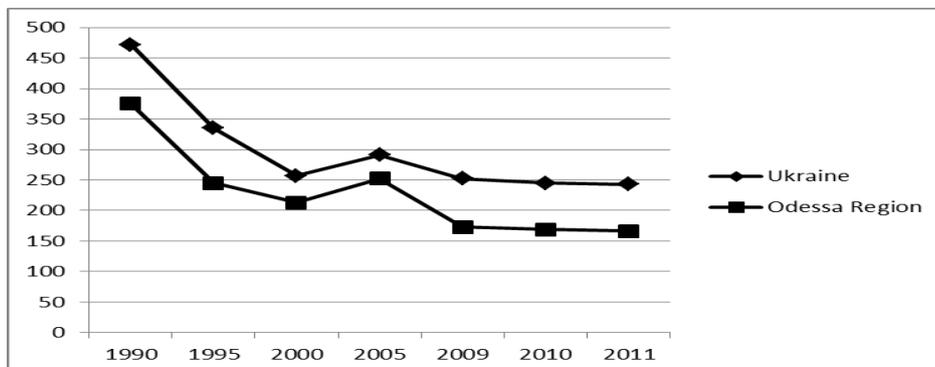
**Figure 5. Grouping of agricultural enterprises of Ukraine as for gross milk yield in 2011, % to the total quantity**

Source: <http://www.ukrstat.gov.ua>

But in the structure of enterprises` quantity they occupy only 1.3 %, when small enterprises, which are about half in the structure of agricultural enterprises of Ukraine, give only 2 % of gross milk yield.

World practice has proved practicability and efficiency of large-scale production, its advantages: mechanization and automation of feed and milking processes, highest level of selection work and veterinarian service, better control of products` quality, more perfect forms of products storage and other. Thus, it is reasonable to pay more attention to stimulation of just large-scale economy in the government development programs.

Change of milk production volumes led to the changes of its production per head (figure 6). According to the data of State Statistics Service in 2010, the level of consumption of dairy products comprised 64.5% from rational norm of consumption, which comprises 380 kg/year. Quantity of consumption of milk and dairy products per head is significantly decreasing due to decrease of paying capacity of the population and increase of prices of products sale. The basket of goods of Ukraine, which is approved by the Cabinet of Ministers of Ukraine, for able-bodied citizens as for whole milk consists of 60 kg/year per one person, milk with small content of fat – 65 kg/year, dairy butter – 5 kg/year, hard cheese – 5 kg/year, soft cheese – 10 kg/year, cream – 5 kg/year. (<http://zakon.rada.gov.ua>)

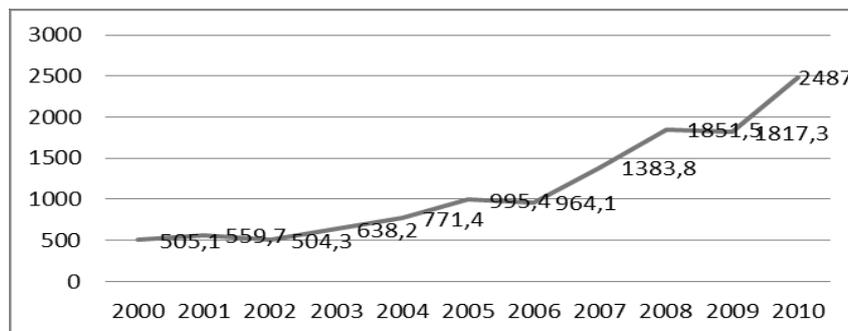


**Figure 6. Milk production per person, kg**

Source: <http://www.ukrstat.gov.ua>

Taking into consideration the fact that destruction of large-scale agricultural enterprises led to the increase of unemployed people in the countryside, milk production in the private farms was the factor of not only creation of raw materials base for expended reproduction of own economies, but one of the motives for receipt of profits. Endeavour to maximize profit at the expense of increase of volumes of unboiled milk sale, led to its massive falsification, which at the stage of milk product vertical decreased competitive ability of dairy products.

The acute problem for milk producers is a price diktat of milk processing enterprises. Artificially lowered prices deprive livestock breeders of stimuli to increase of production volumes and improving of production (figure 7).



**Figure 7. Dynamics of average prices of realization of milk and dairy products by agricultural enterprises**

Source: <http://www.ukrstat.gov.ua>

For ten years a price for dairy products has grown by 392%. From one side, a system of stocking prices is an important stimulus of agricultural producers for increase of production and sale to milk processing enterprises.

Prices on milk should not only provide compensation of costs on its production, but also stimulate further increase of its production, assist in rising of profitability level of livestock breeding. From the other side, prices for dairy raw materials – direct costs of milk processing enterprises, but commodity producers can not significantly raise prices for production due to low purchasing power of population.

According to the above mentioned numerical material, price situation on the native market of milk and dairy products for the last time was far from stable. If until recently prices have varied basically due to seasonality of milk production (particularly, in December purchasing prices can exceed the June ones in twice), and until recently they are affected by global pricing tendencies, first of all, connected with the growth of demand on agricultural product and different aggravation of energetic crisis - improvement in prices on forage agricultural crops (a share of breeds in costs structure of livestock breeding exceeds 70%), fuel and lubricants and dairy products (Agriculture of Ukraine for the year 2010, (2011), Kyiv: State Statistics Committee of Ukraine).

The only way is formation of zones of raw materials purchase with the purpose of decrease of costs on transportation. The majority of plants are integrated with milk producers, but the unfavorable market leaves the question about provision with raw materials on 100%, especially in winter, unsettled.

Decrease of production volumes of unboiled milk and deterioration of its quality caused a chain reaction of decreasing of facilities also in other sections of dairy products vertical. Production volumes of milk processing enterprises, which functioned almost in each district center in pre-crisis period, became closing. Proportionality of development of regional agricultural center, particularly, dairy production sub-complex, became destroying gradually.

Information certifies about the tendency to the decreasing of production level of basic varieties of dairy products by the enterprises of Odessa region as compared with 2003. But in 2006 a level of production of the majority of dairy products raised.

So, the level of production of cheese and cultured milk foods in 2006 as compared with 2003 has raised by 85% and 37% correspondingly. In 2010 as compared with 2003 production of milk of different processing decreased by 44 %, dairy butter by 30.4%, unfermentable fresh cheese – by 14.3%, fat cheese – by 9.1 % and cultured milk foods – by 37.3%. A tendency to decrease of production of basic kinds of dairy products is certified by significant decrease of number of milk processing enterprises, particularly in Odessa region.

For the last ten years, a number of enterprises, which deal with processing of dairy products, has decreased by 66%.

A sharp decrease took place in 2006-2008, when during 2 years, 23 milk processing enterprises terminated its activity. It is connected with the fact that just in this period, notably since 2005, a sharp decrease of enterprises for production of raw materials, i.e. large livestock farms took place. Correspondingly, milk volumes, sold to milk processing enterprises, decreased significantly. They should buy milk in other regions that required more expenses. Not all enterprises met such competition and were reluctant to terminate its activity temporarily or for good.

Thereby, a situation in the milk market of Ukraine and Odessa region remains unstable. Decrease of cow livestock, production volumes of milk and dairy products, excess of consumption over production and increase in prices on dairy products lead to weakening of competitive ability of milk processing enterprises. But, according to evaluations of specialists, a milk market of Ukraine has a significant potential for growth. Increase of livestock of pedigree cows and usage of innovative technologies of production of milk and dairy products, establishment of integrated formations and developed marketing activity will lead to increase in demand, decrease of prime cost and, correspondingly, increase of competitive ability of milk processing enterprises.

The development of perspective directions of investment provision of the enterprises of milk processing sub-complex of Odessa region should make a start from the basic directions of development of agricultural sector and the results of retrospective analysis of investment activity of the enterprises of dairy products sub-complex of this region. Change of dominants of governmental policy in the sphere of agricultural sector and dairy products sub-complex, in particular caused by joining the WTO by Ukraine, excessive expansion of Ukrainian market by foreign producers, permanent increase of disparity of prices on the industrial production and production of agricultural sector, high level of deterioration of physical infrastructure of the enterprises of milk processing sub-complex.

The executed research showed that efficiency of work of processing enterprises, its economic stability; depend on the fixed relations with producers of agricultural production, stability of raw materials base. It will lead to the necessity of improvement of economic mechanisms of regulation of these enterprises` activity. The problems of formation of mutually favorable conditions between milk producers and milk processing enterprises are aggravated by incompleteness and inconsequence of institutional reforms in this sector. Motivation of such partnership remains weak. But further development of producers of raw materials and processing enterprises depend on the settlement of this problem (Gamma, 2004).

Milk processing enterprises with the purpose of stabilization of raw materials base are trying to establish long-term relations with agricultural commodity producers. The system of economic relations between agricultural milk producers and milk processing enterprises should be such that can regulate not only distribution of profit, but also directions of its effective development, namely a system of partner relations.

In practice, the partnership between agricultural producers and processing enterprises means organic association of interests, directed to obtaining of high final results in joint activity. In such conditions cooperation of agricultural production is developed, high-yielding technologies of milk production and processing are formed, specialization of enterprises is deepened, technical and technological maintenance of economic structures is improved, transport works are optimized, loading of production facilities of milk processing enterprises and production volumes of dairy products are increased.

A producer of agricultural products, its processor and seller of provisions, act as a direct participant of product passing from the field or farm to the consumer. The cost of food products is formed in the inseparable chain "field-shop" and its price is calculated. Cost of goods is determined by the expenses on its production, processing and sale, and price for consumer – upon the influence of factors and market relations. Cost of manufactured goods is formed in the environment of difficult economic system of logistical support of productive and financial services, from one side, and competitive struggle in the market – from another side.

In this chain “production-processing-sale” the problems of compliance with the principle of equity in distribution of economical results between participants of integrated process, which often develops into antagonisms, always occur. The first problem consists of the fact that addition to retail percentage to food products, especially energy resources, exceed in some times the increase of prices for agricultural products in the countryside for the last twenty years, the second one – that proposals for distribution of economic results between participants are not in favor of agricultural producer. Unbalanced exchange between agricultural and processing enterprises of dairy sector is caused by excessively low prices for raw materials which lead to the rapture of intersectoral relations and slacking back of dairy production.

Due to the above mentioned problems of production of milk and dairy products in dairy product sub-complex of Ukraine, a tendency of consecutive intensification of vertical integration in dairy sector is clearly drawing nowadays. First of all it is characterized by the direction of investments of large milk processing enterprises, especially with foreign capital, to the development of dairy livestock breeding and improvement of technologies of milk breed cows with the purpose of shortening of deficit of milk raw materials, raising of its quality level and provision of higher level of loading of productive facilities. Provision of the process of effective functioning of basic elements of milk processing industry can be done by creation of a definite milk processing vertical, to which agricultural enterprises and private population`s economies as producers of milk and milk processing enterprise with its productive infrastructure can join it on equal rights.

Experience of other countries shows that integration in the dairy industry - an objective process associated with the need to improve trade and competitiveness of dairy products both in the domestic and global markets. In most developed countries the stage of production, processing and sales combined in a single sub complex. For example, is like in the UK, Italy.

The essence of integration regardless of the entity can be defined as the internal integrity (unity) system or as a state of connectedness differentiated initially separated parts (Porter, 1998).

In the Ukrainian economic literature integration, including agriculture is seen as cooperation partners on a contractual basis and on the basis of a single property. There is a separation of economic phenomena contents close cooperation of two kinds of definitions - vertical integration and vertical coordination. Under vertical integration of producers associations understand one process through various mechanisms under a single ownership. Vertical coordination is due to the cooperation of producers on a contractual basis. Ukrainian experience, including operation of dairy sub complex, argues that vertical coordination is rarely yields positive results. No milk producers or processors in most cases do not adhere to its commitments and does not take into account the interests of each other. Therefore, when deciding on their integration, we can talk only about the merger of economic entities on the basis of joint ownership.

That's how to understand this form of social production overseas economists. Specifically M. Porter treats vertical integration as a combination of clearly defined technologically production, distribution, marketing and other economic processes within a business enterprise. (Porter, 1998)

The paradigm of vertical integration phenomena studied in detail by many experts also highlighted in specialized sources. Repeatedly named the advantages of vertical merger, the

main stimulus to which it is possible to reduce operating costs and increase their profits, gain the effect of scale (lower costs per unit of output in the allocation of fixed costs to increasing the volume of output) and economies of diversity (combination several types of production, use the same resource or technology simultaneously in several processes or focus on additionally in the nature of demand).

Benefits of vertically integrated systems are not indisputable. It is known that the division of labor increases its performance. Disclaimer division of labor and specialization, the union of all operations within the process chain of a company can reduce efficiency and lead to increased costs per unit of output. With the increasing scale complexity of the company is the management process, which leads to increased management costs. The disadvantages also include easing the flexibility to change partners. In situations where the decision all participants vertical chain will be fully coordinated, each participant will no longer be forced to improve the opportunities he now offers the market because no one will do more attractive offers.

Another negative aspect of vertical integration - is to increase investments in one sector, which increases the risk (all capital concentrated in one area that can enter into the crisis). This type of integration consumes capital resources that have opportunity costs within the enterprise, while the agreement with independent now need investment capital outside sources.

The company, integrating, depriving themselves of access to technological achievements suppliers or buyers will no longer run in a free market and they will no longer be an incentive and desire to the development of know-how.

Integration firm limits on freedom of choice of suppliers, which may cause a decrease in competitiveness.

Vertical integration leads to problems associated with the necessity of balancing capacity at each stage of process chain. Despite the same vertical nature of governance, the parties may be different structure, technology and nature management. Failure to understand the essence of managing different business areas can cause significant loss of integration and can be a major risk factor in decision making.

At the microeconomic character flaws are negative aspects that affect the macroeconomic level and impact on society. This is due to the creation of barriers to entry and monopolization of power supplier firms. Vertical integration that combines intermediate suppliers and producers of final products at any stage of the process chain reduces actual and potential competition in the markets of both intermediate and final products. The markets finished product vertically integrated firm has an advantage in cost, thus enhancing monopoly power. Reducing the number of economic agents may lead to instability of the market, price wars, and the desire to cut back on the volume of sales of competitors. Vertical integration in a small number of suppliers reduces the market and pushing other manufacturers are also involved in product integration, even if it is necessary to give effect scale.

The dominant argument for allowing vertical integration should be to increase the efficiency and competitiveness of the new structure, regardless of the geography of markets in which it operates, but only on condition that it does not interfere with competition.

In dairy sub complex milk producers are the foundation, the base around which the rest of the operating vertically. At the same time, production of raw milk is the weakest link in the vertical chain. Therefore, the initiator of vertical integration should act as a dairy company more financially stable structure.

In a weak and unstable financial condition, low availability of production resources, lack of own and external funding is not available vertical integration appears to farmer's milk source of funding, and thus development. For processors, this form of social production is creating a custom resource base and hence essential basis for future sustainable development. The success of this operation and mutual benefit associations provide only if the adjustment rational and effective management along with substantial financial injection in agricultural production.

Primarily this is due to the need to introduce mechanisms for resource, its technological and organizational renewal, investment, protection of domestic producers, crisis inter disparities, eliminating the intermediary influence the construction of closed loop production, processing and sale of products entering foreign markets products and capital, innovation and infrastructure.

Creating a model of agricultural holdings dairy sector, which provides expanded reproduction through investment, innovation, competitive sub complex formation, characterized by the following criteria: production of quality products that can meet the food security and to realize the export potential of the country, the introduction of scientific and technological achievements and effective of resource potential, development of agricultural market infrastructure, rational land use, energy-saving technologies to achieve business performance and improve the standard of living of workers.

The special feature is the ability of agricultural holdings based on synergy effects to provide increased profits, implement new production system and cover the whole cycle of production, processing and sales and deliberately playing field for new technological, organizational and economic basis.

Objective technical and economic advantages holdings: high productivity, cost savings, greater opportunities for the rational organization of production, use of technology, science and progressive practice. Unlike other manufacturers they are able to dictate their own rules on both domestic and foreign food markets and attract long-term investment.

Consider the benefits associated with vertical integration. The most significant advantage of vertical integration is the cost savings that occurs in the process of co-production, marketing, procurement, monitoring and more. Such cost savings may be due to:

- economies of scale combined operations. Efficiency in this case is achieved by combining the technology with excellent manufacturing operations. Applying this step in the manufacturing process can reduce the number of steps of the manufacturing process, reduce administrative and transport costs.
- saving on internal control and coordination through integrated location adjacent units. A stable supply of raw materials or the ability to provide a regular supply to better manage production planning, delivery schedule and maintenance requirements for fixed assets. Changes in style, design and product introduction of new products is much easier and faster to coordinate within the integrated structure. Consequently, the economy under control can reduce downtime, the need for storage and inventory control staff.
- economies of information. Due to integrated operations reduces the need for collection of certain information about the market, thereby decreasing the cost of obtaining information. The total amount of expenditure on market surveillance and forecasting market conditions can be distributed to all participants in an integrated structure, while not integrated economic unit, these costs will be reimbursed all its departments.

- savings in market transactions. Through integration is possible to save the cost of sales, pricing policy development, negotiation and conclusion of agreements on the market.
- economies of vertical integration is different for different enterprises in the industry because of their different strengths and weaknesses, and the strategy of each of them.

Another potential benefit is possibility of a breakthrough in technology. Joint participation in research and development creates savings related costs and to some extent reduce the technological risk.

Heavy periods of the economy or specific sectors are accompanied by low aggregate demand. Integrating businesses to some extent mitigates this adverse effect on the business entities providing supply and demand. It is clear that the amount of the offer and such a demand will be limited.

When the entity has to deal with powerful suppliers or customers who receive income from a higher opportunity cost of capital, it is advantageous to integrate, even if the integration does not give him any more benefits. Balancing market impact through integration partners can not only reduce the cost of supply or increase the selling price, but also allow business entity to operate more efficiently regardless of the actions of external suppliers or buyers.

Vertical integration enables business entity to enhance the ability to differentiate itself from others by offering greater added value, which was under the control of management. If by integrating entity received at least one of the benefits he received a competitive advantage over nonintegrated entity. These benefits may take the form of lower costs, higher profits or lower risk. The creation of such benefits can be seen as creating entry barriers.

Through vertical integration entity can increase your total return on investment, if the structure of production, which is integration, promises return on investment greater than the opportunity cost of capital. Thus integration sets the entry into profitable business.

Large-scale integration competitors could significantly restrict the entity to many sources and profitable customers, retail outlets. In this case, before now there is not an integrated perspective of the struggle for the remaining suppliers or customers that may be minor compared with clients integrated structures.

Thus integration can be seen as protection against deprivation of access to suppliers or buyers.

Creating integrated structures implies the emergence of a number of problems that can be characterized as some disadvantages.

The costs of overcoming mobility are barriers on the way to the adjacent businesses in obtaining access to distribution channels and the availability of commodity differentiation between units integrated structure.

Creating a vertically integrated structure increases the total amount of fixed costs due to the increase in control levers. With the decline in aggregate demand for products, the cost will be higher than non-integrated production entity.

Vertical integration implies that the success of the unit depends to some extent on the ability of its internal supplier or buyer to conduct a successful competition. Due to changes in technology, product design, strategic management failures or problems may lead to a

situation in which the supplier provides internal roads, poor quality or wrong product or service, or domestic purchaser or distribution channel is losing ground in the market, and hence its attractiveness as a buyer. This weakening of the flexibility of partners makes it necessary to switch to another service provider or customer. This is due to the greater costs than in the case of relations with independent buyers or suppliers.

Integration strengthens specialized assets, strategic relationships, thereby creating a common entry barriers.

Vertically integrated entity forced himself to invest in separate units, while at the conclusion of agreements with independent enterprises such investment costs would be absent. It is clear that vertical integration is economically justified if the return on investment will be higher than the opportunity cost of capital. In addition, the integration can reduce the flexibility of the distribution by its investment resources. The need to finance current operations and certain contingencies not profitable units integrated structures lose their ability to invest in other areas and have a chance to "get caught up" in low-income business.

Getting access to technology can contain significant risk where numerous third party suppliers or buyers do research or have a specific know-how that is difficult to copy. Even if an integrated part still buying or selling goods on the open market, it could risk the deprivation of access to technology as vying with their suppliers or buyers.

To avoid problems of excess demand or excess production capacity integrated entities shall be maintained in a certain balance. If there is a disparity integrated structure must either sell some of its products (or buy some of the resources) in the open market or sacrifice their market position. Foreign buyers or suppliers are reluctant to enter into an agreement with this structure because they do not want to find yourself in a secondary position or strengthen the position of his opponent. On the other hand, if the excess production can easily be sold on the open market, the risk of imbalance of power is negligible.

Issues associated with the establishment and operation of agricultural holdings is to ensure the effective operation of the structural units forming mutually beneficial relationships between economic integration processes and appropriate regulatory framework.

The effectiveness of integrated structures in general be determined by how efficient business within this portfolio and how well organized the interaction between these elements, providing additional benefits through joint activities.

## **CONCLUSIONS**

Thus, as a result of the study identified the main problems in the functioning of enterprises of the dairy industry of Ukraine and Odessa region:

- lack of high-quality raw milk;
- agriculture milk producers are mainly represented by small and medium farms who are unable to produce raw milk in sufficient quantity and appropriate level of quality, which adversely affects on the competitiveness of domestic dairy products;
- in recent years, significant price disparity has developed in the industry, resulting in many agricultural producers are not profitable to produce milk. It is much more profitable to breed meat breeds of cows, than to invest in the

maintenance of existing and development of new breeds of dairy cows. Many agricultural enterprises are closed, or repurposed their activities.

Vertical integration - this is the organizational form of the relationship of agriculture milk producers, dairy companies and resellers, that can solve all these problems.

Thus, a vertical integration of enterprises of milk processing sub-complex will allow overcoming of antagonism of interests between agricultural and processing enterprises on mutually favorable conditions, and that the determined priorities should be presented to the agricultural producers through its leading role in the cycle of food production.

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