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Using The Integration Processes To Improve The Efficiency Of Agricultural Production.

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ABSTRACT

The development of integration processes in the agro-industrial complex is an objective economic process associated both with the social division of labor and its specialization, and the need for interaction between specialized industries and types of agricultural and industrial production. The objective need to establish integration links in the agro-industrial complex arises from the very specifics of agricultural production and is determined by the raw nature of the products, seasonality and territorial disunity. The paper reveals the theoretical basis for the development of integration interactions of the territorial complex of agricultural production. The features and directions of development of mergers and co-operation in the region are considered, the main forms of integration are analyzed. The analysis of existing approaches and indicators used for the economic evaluation of integration processes. The choice of the most priority form of integration association for agro-industrial territories is grounded.

Keywords: integration processes, development, agro-industrial complex, agriculture

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INTRODUCTION

As part of the integration, there is an opportunity for centralized marketing activities, regulating supply and demand in the market, as well as organizing competitive production. In addition, it is possible to centrally accumulate funds for investing them in the neediest parts of the production. By themselves, agricultural producers are unattractive for large investors, but as part of agro-industrial associations and formations, their innovation and investment attractiveness increases many times over.

One of the features of the current stage of integration processes in the agro-industrial complex is that some agricultural organizations, being on the verge of bankruptcy, are not able to effectively carry out production without the participation of external investment resources and are simply forced to look for investors. Therefore, in a number of regions of the country, including the Krasnodar Territory, industrial organizations and banking structures with free monetary resources are involved in this process. By executing significant financial investments, investors, in order to more tightly record and control the use of the money invested by them, take control of agricultural production. As a result, this leads to the development of processes of centralization, consolidation of property and the emergence of a corporate form, which is formed by combining banking (or industrial) and agricultural capital [6].

Among the authors who propose the use of entropy accounting methods for economic evaluation of integration processes are A. Yu. Kazak, I. I. Grybyk, A. I. Khomenko, S. V. Komarov, A. V. Molodchik, V. G. Popkov, and others. In the modern economy, the behavioral paradigm increasingly prevails, the basis of which is the reflexive approach, which is explained by the increasing role of man in any system. The necessity and possible methods of taking into account the reflexive influence during economic evaluation are considered in the works of V. A. Lefevre, V. A. Filimonov, R. N. Lepy, V. E. Lepsky, N. Yu. Bukhvalova and other authors.

MATERIALS AND METHODS

Market integration indicators are criteria that characterize the scale and dynamics of the volume of mutual flows, the cross-border activities of economic entities and the degree of interpenetration of economies: indicators of the integration of the commodity market; service market integration indicators; labor market integration indicators; capital market integration indicators.

Scientists and practitioners for these purposes are invited to use a fairly wide toolkit of strategic analysis of a universal nature, and specifically designed for planning integration solutions. Thus, domestic and foreign authors recommend using SWOT-analysis [2], STEP-analysis, model of five competitive forces of M. Porter [7], BKG portfolio analysis matrix, GE-McKinsey, etc. [6], concept of strategic gap F. Kotler, life cycle balance matrix, step-by-step method of creating a WOFC integration plan, industry consolidation curve. These methods allow you to develop a common integration strategy, usually offering a specific set of options. In our opinion, a generalized assessment of the effectiveness of functioning in the planning and implementation of integration solutions can be presented as follows (Table 1).

Table 1: Criteria for an effective integration association in the region

Indicator	Unit of measurement	Reflexive control (ri)	Coefficient of significance (wg/wi)
Target performance	Composite index	Well/no	0-1
Cost effectiveness	Composite index	Well/no	0-1
Social efficiency	Composite index	Well/no	0-1
Integral business activity index	Composite index	Well/no	0-1
Corporate Performance Evaluation	Composite index	Well/no	0-1
Strategic effectiveness	Composite index	Well/no	0-1
Intercompany effectiveness	Composite index	Well/no	0-1
Marke tshare	%	-	0-1

RESULTS AND DISCUSSION

One of the features of the current stage of integration processes in the agro-industrial complex is that some agricultural organizations, being on the verge of bankruptcy, are not able to effectively carry out production without the participation of external investment resources and are simply forced to look for investors. Therefore, in a number of regions of the country, including the Krasnodar Territory, industrial organizations and banking structures with free monetary resources are involved in this process. One of the most vivid examples of integration is the banking structure of OJSC AKB "Stela-Bank", Rostov-on-Don, which in 2005 initiated the creation of the "Step" group of companies of the "Stela" concern. In the Steppe Group of Companies in cooperation with the Israeli company SAE Afikim, in 2009 the implementation of the Dairy Production investment project was launched. Until the end of 2011, investment funds of more than 930 million rubles were disbursed. In 2012-2013 GC "Step" plans to reconstruct four farms with 1000 heads each. At each farm, a parallel parlor will be installed by the Israeli company Afimilk. The profitability of milk production was almost 50%.

An example of vertical integration is OJSC South Sugar Trust, which is part of a large agro-industrial holding company of the Russian Federation GC Dominant and is the management company of 11 organizations for the production and processing of agricultural products, which have 41 thousand hectares of arable land, about 19 thousand heads of cattle, including - 7.5 thousand cows.

The main field of activity of the OJSC Southern Sugar Trust is the production of whole-milk and sour-milk products, as well as hard, soft and processed cheeses. The products are manufactured in factories located in the Krasnodar Territory - Syrodel CJSC (Art. Starominskaya St.), SSK Leningradsky CJSC (Leningradskaya Art.), Bryukhovetsky MKK CJSC (Bryukhovetskaya Art.), PM Pavlovskoye OJSC (Art. Pavlovskaya).

Table 2: Indicators of LLC Caloria by processing raw materials supplied by Bursmark LLC, according to the tolling scheme

Indicators	Years				Average
	2014	2015	2016	2017	
The amount of milk supplied by the customer, tons	2312	1987	2016	1892	8207
The number of produced products, tons	1732	1645	1720	1704	6801
The total cost of manufactured products, thousand rubles	44960	68458	85236	83658	282312
Cost of milk processing, thousand rubles	20365	32698	41365	40365	134793
Profitability of processing milk from a customer, %	17,2	16,8	19,2	19,6	18,1
Net profit of a processing enterprise, thousand rubles	3502	5493	7442	7912	23349

In our opinion, for the successful implementation of integration projects, you can borrow the experience of foreign farmers. In many countries, small-scale milk producers are united in cooperatives, jointly determine the needs of milk production and dictate to processors fair, in their opinion, prices, which ensures a high standard of living for the rural population. In Norway, dairy cooperatives produce 99% of the total amount of milk, in Brazil - 39%, in Poland - 75%, and in Slovenia - 72%.

In Pakistan in the late 1980s, Nestle opened a large network of cooperatives to collect milk. Currently, Nestle collects milk from more than 140 thousand farmers in an area of 100 thousand km² in the state of Punjab in the amount of \$ 120 million per year.

Of interest is the system of agricultural production in Denmark, built on family farms and their cooperation. There, a law was passed long ago that established general rules on the most important issues of social and industrial rural life and determined the behavior and activities of a family farm, a farmer, a cooperative, local governments, the Ministry of Agriculture and the government of the country. Processing cooperatives received priority on the food market in lending and taxation.

Another way to integrate relations and relationships is tolling, i.e. processing of raw milk on a give-and-take basis when raw materials and finished products are the property of the customer.

Since when tolling the production process of dairy production and sales is divided between partners, then compared to the full production cycle option in one enterprise, the enterprise management systems of each participant in the production process are greatly simplified. One of the most successful examples of integration relations under the tolling scheme is the cooperation of LLC Caloria, which is located in the Kanevsky District, and the Krasnodar firm of LLC Bursmark (Figure 1).

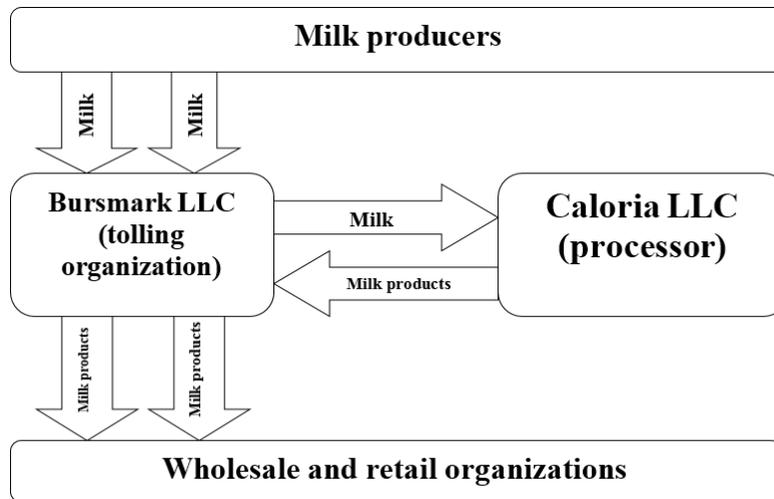


Figure 1: Scheme of tolling integration the Caloria LLC and Bursmark LLC

However, there are frequent cases of both horizontal and vertical integration, when the owner completely gets rid of the dairy herd and changes its direction of activity, i.e. finds a more profitable investment. In this case, according to the authors, it is necessary to intervene with government agencies that should legally or financially interest new owners in the development of dairy cattle breeding.

A further promising direction for the development of integration links for individual milk producers and processors is the creation of cooperative dairy processing organizations, which would be owned and shared by both raw material producers - owners of private farms, and milk-processing workers. Here you can take an example from Europe because in such “dairy” countries like Holland, Finland, Denmark, Sweden, the industry is dominated by cooperative, peasant-owned, processing enterprises. And where cooperation is not very developed, as a rule, private and cooperative factories, which are in healthy competition, are working within reach of the farmer, and the producer always has the choice and opportunity to sell his milk where it is more profitable.

All the above examples of the development of integration links in the dairy product subcomplex of the agro-industrial complex most often have a positive impact on the work of integrated enterprises. This is especially effective in the case of the accession or absorption of agricultural milk producers by processing organizations that are interested in their own, i.e. constant raw material base. In this case, the processing organization in the winter period provides itself with raw materials, and agricultural producers are guaranteed sales in the summer period of “big milk”. For the successful development of the processes of cooperation and integration in the agricultural sector and their positive impact on the functioning of the dairy product subcomplex, it is necessary to:

- develop a system of administrative regulation of the development of integration links in the dairy product subcomplex, which should include a set of measures that contribute to the preservation and development of the dairy cattle breeding sub-sector in the integrated formations being created;
- to develop a movement to create cooperatives uniting individual milk producers, small farms and organizations for the collection of raw milk, because only in this case can they become full participants in the dairy market and effectively defend their interests;

- to create conditions for processing organizations and village administrations for the purchase of dairy cows and their transfer to the population with the condition of guaranteed delivery of marketable milk;
- to contribute in every way to the development of tolling operations in the dairy subcomplex, which will lead to the transfer of the center of gravity of financing operations with raw materials and finished dairy products to tolling companies;
- to develop integration links between large retail chains and dairies, as well as create conditions for processing organizations to develop their own brand trade.

CONCLUSION

According to the authors, an integrated economy in the dairy product subcomplex is the main way of ensuring the parity of economic relations between agricultural organizations and other milk producers with their partners - the organizations of the processing industry and trade organizations. Moreover, the created integrated formations should be presented not just as a union or merger of enterprises, but as a combination of their technological and economic interests.

Activation of integration processes will allow combining and concentrating investment resources in the dairy product subcomplex in order to increase the efficiency of their use for innovative modernization of production and production of competitive dairy products.

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