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## ІНТЕГРАЦІЙНІ ЛОГІСТИЧНІ МЕХАНІЗМИ ФУНКЦІОНУВАННЯ СИРОВИННОГО СЕКТОРУ РИНКУ МОЛОКА ТА МОЛОЧНИХ ПРОДУКТІВ

Актуальність. Актуальність даного дослідження полягає у розробці концептуальних засад використання інтеграційних механізмів в процесі функціонування сировинного сектору ринку молока та молочних продуктів. Дана проблема обумовлена сучасними негативними тенденціями скорочення сировинної бази молочного ринку, вкрай недостатнім впровадженням сучасних організаційно-економічних форм взаємодії сировинного сектору молочного ринку з виробничим та споживчим секторами, відсутністю державних важелів з комплексного впливу на взаємозв'язаний та взаємозбалансований розвиток складових логістичного ланцюга товароруху молочних продуктів.

**Мета та завдання.** Метою статті  $\epsilon$  дослідження інтеграційних механізмів товароруху на прикладі сировинного сектору молока та молочних продуктів.

**Результати.** В останній часи значно увага приділяється налагодженню ефективних взаємозвязків між секторами ринку молока та молочних продуктів. Разом з тим, залишається вкрай невирішеним питанням шляхи забезпечення рівноправних умов участі дрібних виробників молока у відтворювальному процесі на ринку.

В процесі дослідження було виявлено провідну зону логістичного розриву, яка склалась у відносинах між сировинним та переробним сектором. Передумовами виникнення даного логістичного розриву є перевищення часових нормативів постачань молочної сировини до молокопереробних підприємств, що призводить до погіршення якості даної сировини. Для подолання цього розриву було обгрунтовано необхідність авторського підходу щодо комплексного розвитку сировинного сектору ринку на засадах формування багатофункціональних кооперативів з завершеним відтворювальним циклом товароруху молочної продукції.

Основні складові даного підходу передбачають: створення крупно-товарних кооперативних ферм, запровадження власної переробки молока та виробництва готових молочних виробів, організацію власних збутових каналів. Імпліментація запропонованого варіанту використання інтеграційного механізму в систему товароруху молочної продукції має бути спрямована на підвищення результативності функціонування молочного ринку та досягнення взаємоузгоджених відносин між учасниками товароруху.

**Висновки.** В цілому проведене дослідження дає підстави зробити узагальнюючий висновок, згідно якого впровадження інтеграційних механізмів у відтворювальний процес на товарних ринках в першу чергу передбачає вдосконалення інституційного забезпечення даного процесу. Це обумовлює необхідність першочергової розробки та впровадження відповідних законодавчих та інших нормативно-правових актів, які будуть сприяти підвищенню результативності функціонування ринків.

**Ключові слова:** інтеграційні механізми, логістичні розриви, сировинний сектор ринку молока та молочних продуктів.

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## INTEGRATION LOGISTICS MECHANISMS OF FUNCTIONING OF THE RAW MATERIALS SECTOR OF THE MILK AND DAIRY PRODUCTS MARKET

**Topicality**. Actual task of adapting appears to the exciting integration mechanisms in solving the problems of organizing an efficient commodity movement across the scale of markets.

Aim and tasks. The aim of the article is to research the integration mechanisms of increasing commodity movement in the example of the raw materials sector of the milk and dairy products.

Research results. In the process of the research the integration mechanisms of functioning of the raw materials sector of the milk and dairy products market are considered. In the process of the research the integrationmechanisms of functioning of the raw materials sector of the milk anddairy products market are considered. At the same time, it's enough tobe completely happy with the nutrition of the hut, the protection of the right minds, and the participation of the other milk producers in the process of the market.

The author's approach in solving the issue of equal entry of small milk producers into the reproduction process consists in formation of multifunctional cooperatives with a complete reproductive cycle of dairy products commodity movement. Basic components of the approach provide: the creation of large-scale cooperative farms; introduction of own milk processing and production of readymade dairy products; organization of own sales channels.

The above listed issues of institutional provision of dairy cooperation demand systematic identification of perspective ways of legal support for the formation of multifunctional cooperatives with a complete reproductive cycle.

Conclusion. The conducted research gives grounds to make a generalized conclusion, according to which the introduction of integration mechanisms in the reproductive process in the commodity markets in the first place implies improvement of the institutional support of this process. This necessitates the urgent development and implementation of appropriate legislative and other regulatory acts that will support to improve the performance of markets.

Keywords: integration mechanisms, logistic gaps, the raw material sector of the milk and dairy products market

**Problem statement and its connection with important scientific and practical tasks.** In the process of the researches of commodity markets topical appears the question of using the integration mechanisms as a condition for improving the efficiency of commodity movement. Under the integration mechanisms (merger, acquisitions, outsourcing, leasing, cooperation, Public Private Partnership, concession) in

accordance with this research, an interconnected system of legal, organizational, financial and other instruments, which provide the process of unification of economic entities or their separate parts (functions) is defined into a common system relations for the purpose of obtaining each of them additional economic benefits.

Therefore, the actual task arises to adapt the existing integration mechanisms in solving tasks of organizing the efficient commodity movement in the scale of markets that are not traced nowadays.

In connection with the above mentioned, an effective implementation of integration mechanisms into the process of commodity movement on the market implies the improvement of the appropriate institutional base, which will support to increase the efficiency of functioning of commodity markets.

Analysis of recent publications of the problem. Many scientific works of domestic scientists are devoted to the research to the problem of development and use of integration mechanisms of functioning of the raw materials sector of the milk and dairy products market. Basic statements of the functioning dairy products market are considered and analyzed in the works of N.S. Belinskoi, P.S. Berezivskogo, M.I. Butenka, S.V. Vasylchaka, P.I. Gaidutskogo, T.M.Gammy, T.L. Keranchuka, O.V. Morguna, Yu.A. Tarasovoi, N.V. Ovsiienko, P.T. Sabluka, N.S. Skopenka and etc. so, conjectural questions and problems of formation competitive relations on the market of dairy products were researched in works of M.G. Pavlychenko. Basic factors of development of the milk market were researched in works of V.M. Bondarenko. M.Yu. Sokolova and A.S. Ponomarenko dealt with the problems of state support for milk producers. Issues related to the activation of integration mechanisms, that provide support in solving existing problems in the raw materials sector, require further research.

Allocation of previously unsolved parts of the general problem. Modern research on the analyses of the market of milk and dairy products does not reflect sufficiently the problem of the influence of the logistics factor on the reproductive processes on this market. In particular, it concerns the determination of the role and place of integration mechanisms in increasing efficiency of functioning of the commodity sector of the dairy market.

**Formulation of research objectives (problem statement).** The aim of the scientific article is the research of integration mechanisms of the commodity movement on the example of the raw materials sector of milk and dairy products.

This aim allowed formulating the next tasks:

- to define the conditions of use of integration mechanisms in the system of reproductive cycles of the commodity movement;
  - to research implementation of integration mechanisms in the system of commodity movement.
  - to research logistic gaps in the commodity sector of the dairy market.
- to propose variants for the development of dairy cooperatives as a conducted component of reproductive function of the commodity movement in the market of milk and dairy products .

An outline of the main results and their justification. The implementation of integration mechanisms in the system of commodity movement should be aimed at:

- a) the realization of the general goals of improving the efficiency of commodity movement.
- ensuring equal conditions for participation in the commodity movement of small, medium and large market participants;
  - the formation full (completed) four sectors of the market;
- taking into account logistic types of commodity markets (markets with close logistical conditions of the commodity movement);
- b) to achieve the correspondence of the relations between the participants of commodity movement defined by criteria of interconnectivity:
  - mutually agreed the use of homogeneous parameters of goods (temperature regime, etc.);
- mutually agreed the use of different parameters of goods (according to the mission of each participant of the commodity movement);
- mutually agreed elimination of significant fluctuations between values of the parameters of the commodity movement.
- c) for the elimination zones of logistical gaps in the accordance to the expenses for the reproductive cycle of the commodity movement productions(disproportions in terms of commodity supplies, disproportions, connected with functioning of small, medium and large individuals of the markets, etc.).
- elimination of areas of logistical gaps, connected with new trends in the parameters of commodity flows: changes in the geography of commodity flows, output of products to foreign markets.

Thus, in the context of realization of common aims of improving the overall efficiency of the reproductive process of the commodity movement, the problem of ensuring equal conditions for the participation of subjects of the markets in the reproductive process is not least due to the fact that they have different opportunity to use market infrastructure: warehouse facilities, product refinement complexes, distribution centers, etc. One of the ways of solution the problem provides the use of integration mechanisms aimed at creating infrastructure facilities for general use.

The task of formation full (completed) four sector markets is considered by the presence of markets either with missing or undeveloped individual sectors [1]. So, under the undeveloped commodity sector, the share of import-oriented supplies of finished food products is increasing; at undeveloped manufacturing and infrastructural sectors, the share of export commodity goods is with low added value. Such markets will be captured by large, mainly foreign intermediaries (traders) in the absence of effective influence of the state on their activities [2]. As a result, the national economy incurs substantial losses. Own manufacture is shortened at the import of finished production, whereas in the export of commodity the country loses significant exchange earnings.

Separation of such goal as adaptation of commodity movement to logistic types of markets (markets with close logistical conditions of reproduction of commodity production [3]) is conditioned by modern tendencies, concentration of resources on leading processes in logistic chains. For the purpose of subject consideration of logistic types of markets, we have offered a system of parameters of their typology, which defines specific conditions of use of integration mechanisms (table 1).

Logistic types commodity markets and their signs

Table 1

№	Parameters	Type of the market	Logistic features of the market
	of typology markets		
1.	the scale of the market	Logistic markets	Commodity flow boarders are limited by the city or the lower administrative region
		Regional markets	Commodity flow boarders are limited by the district level
		National markets	Commodity flow boarders are limited by the country level
2.	Types of consumption	Mass demand markets	Presence of numerous small suppliers and consumers of products
	demand	Limited demand markets	Limited number of suppliers and consumers of products
3.	Stability of the	Markets with stable parameters of commodity flows	Stable connections in relations between sectors of markets in commodity nomenclature, the volume of deliveries
	commodity flow parameters	Markets with periodic insignificant changes in the parameters of commodity flows: in the commodity nomenclature and the volume of deliveries.	Commodity flows with variable assortments of products; insignificant decline the deliveries during the off-season periods
		Markets with periodical significant changes in the c parameters of commodity flows	commodity flows with periodic significant changes in the product nomenclature, volumes of deliveries (flows of seasonal consumption, short-term consumption)
4.	Saturation of markets with	Saturated markets	Market proposition exaggerates consumption demand; high competition for logistic service of commodity flows.
	commodity	Emerging markets	Expansion of geography and volumes of goods flows
	mass	Markets niches	Essential dominance of consumer demand over the parameters of commodity flows

The parameter of the scale of markets. The choice of this parameter is due to the fact that the expansion of the scale of markets, the conditions of communication between the components of commodity movement are changing. Thus, at the level of local markets the links between the components of the commodity movement are not crucial to its effectiveness (one type of transport, local area of consumption). However, in the process of the expanding the geographical boundaries of the markets, the role of communication is significantly enhanced. At the level of regional markets, the conditions of use of integration mechanisms takes into account such factors like presence the leading centers of realization products (regional towns), the development of wholesale markets in suburban areas, distribution centers, establishment of terminal organization of commodity movement [4]; at the level of national markets —

enhance of magisterial-nodal organization of commodity flows, the formation of completed reproductive cycles of the commodity movement, specialization in transit and foreign economic flows.

The parameters of consumer demand. The markets of mass demand are characterized with diversity of the commodity nomenclature, a wide range of prices for the products, the density of suppliers and consumers. Provision of integration connections for this type of markets should be directed to the objective needs to centralize the movement goods.

In turn, the type of markets of limited demand forms fundamentally another model of integration ties, which have to take into account the narrowed nomenclature of goods and, accordingly, the limited number of suppliers and consumers of production.

The feature of the stability of commodity markets. Markets with the parameters of commodity flows create the most favorable conditions for relations between participants of the commodity movement, when they are not subject to change. For this type of markets is advisable to direct integration mechanisms for the conclusion of long-term agreements, common planning of commodity deliveries etc. Markets with periodic insignificant changes in the parameters of commodity flows demand adjustments of routes for supply, plans of distribution of goods. Markets with significant changes in the parameters of commodity flows create cost conditions to ensure the stability of commodity movement. Conditions for introduction of integration mechanisms connected with the necessity to create flexible infrastructure, with reservation of logistical powers and etc.

The feature of saturation the markets with mass. For the type of saturated markets is characterized by a situation in which there is high competition between proposition for effective supply of goods to the markets. In relation to this type of markets, conditions of use integration mechanisms connected with the necessity to shorten logistics costs for the commodity of movement. Emerging markets and the type of markets that corresponds to market niches differ in the significant predominance of consumer demand over supply. In these circumstances, the integration links between the components of the commodity flows provide the using of centralized forms of promotion and realization products with coverage of the commodity flows of all leading consumers.

The conformity of the relations between the participants of the commodity movement with the generally defined criteria of interconnectivity should be based on the leading criterion – the criteria of the coherence of the parameters of the commodity flow. The coherence of the parameters should have systematic character and is considered within all components of the commodity movement, represented in the sectoral model. The coherence parameters should be both homogeneous(temperature regime), and heterogeneous (parameter of complexity of the providing service, according to which each component of the commodity movement has its own set of services according to its mission in the chain of supplies). The coherence of relations depends on the types of contractual relations between the participants of the commodity movement, which we separate into four types.

1. Discrete – contractual type of regulation relations between the components of the commodity movement.

In this management system each participant enters into an autonomous contract for the supply of products with the next participant in the chain. Contractual relations between participants of the chain are not stable; there is often tendency of changing the partners. Whenever possible, one of the parties to the contract seeks to ensure more profitable conditions for itself, despite the losses of the partner. Whenever possible, one of the parties to the contract seeks to provide better conditions, despite the losses of the partner. It leads to a decrease in the effective performance of the whole chain of supplies. The given situation is objectively connected with:

- a low level of trust and lack of developed practice of mutually beneficial contacts between partners in the supply chain [5];
- significant number and heterogeneity of subjects, which form the commodity flows: subjects of material-technician ensuring, recycled enterprises, objects of the warehouse logistics, complexes of product improvement, transport companies, wholesale and retail trade, in the aggregate of which it is important to determine the common levers of concerted functioning;
- difficulties in using end-to-end logistics technologies: direct multimodal transport, technologies with the provision of heterogeneous conditions of the goods traffic etc.
- insufficient volume of investment supply schemes and their uneven distribution among the participants of the commodity movement.

The lack of coherent relations leads to unfair distribution incomes and conditions for the realization of products, the presence of extra intermediate branches, difficulties in the development of long-term common

projects for the development of logistics networks. Therefore, the orientation of integration mechanisms to ensure the mutual consistency between the components of the commodity movement should be complex in nature, with the coverage of the maximum number of participants.

2. Centralized - contractual type of regulating relations between the components of the commodity movement.

This level is inherent in commodity flows, which include a leading subject (the manufacturer of finished production, wholesaler or retailer), who is able to influence the conclusion of the agreement between participants, control their performance and ensure equal relations between them. A different kind of a centralized-contractual form of regulation is a mixed form, which covers the relevant contracts of relations between the leading participants in the commodity movement and the rest of the participants, more often in retail networks. The use of integration mechanisms for this type of regulating relations should be aimed at increasing the effective impact of the leading individuals to the rest of participants of the commodity movement.

3. Corporative type of regulation in the commodity movement.

The cooperative type is to create its own chains of the commodity movement as leading market subjects (holdings, FIG, TC), that cover all stages of the reproduction process from manufacture and supply to production of finished products and its realization to the last consumer.

Presence of its own raw material base, its own processing facilities, its own distribution centers and distribution networks allow reducing cost of the products and providing its quality through control at all stages of the manufacturing process. Besides that, the availability of its own chains gives an opportunity to react flexibly at the changes in the environment due to redistribution incomes among the chains, decline expenses for the performance of the individual operations etc. [6]. At the same time it should be noted, that corporative type of regulation, not paying attention at the relevant effectiveness, doesn't solve the problem of creation equal relations between all participants of the markets, as it only covers their piece of the part, which they will master, strengthening disproportions and disagreements with other participants. First of all to such markets we should refer the markets, which include smaller commodity manufacture: milk markets, fruit and vegetables production etc. In addition, regulatory levers, which the corporative type of regulation uses, as a rule, it isn't adjusted with the aims of the state policy according to diversification of the distribution markets, creation of common infrastructure facilities etc. That is why, the functions of integration mechanisms should be to smooth disproportions between the parameters of the commodity flows, which will master large, medium and small market participants.

- 4. The type of state adjustment in the commodity flows through logistics centers (LC) [7]. The leading features of this level of regulations are next:
- LC oriented for the solution of common state problems of the commodity markets;
- LC give the complex of different services in warehousing, finishing, packing, distribution, transportation of products, etc. on the principal "one window";
- LC creates by functional specialization and its connections (transport-logistic, wholesale-logistic, production and logistic, other types of LC), that ensure logistics services to subjects of equal markets united by related nomenclature: for example, as a part of agro-productive markets, these are the markets for fruit and vegetables products.
- LC provide services on conditions of "common use", which ensures centralized service to different customers on the one rule, in particular, for the large, medium and small subjects markets [8].

Positive foreign experience of creation networks in LC points to the necessity in development relevant State Program and Law about creation general public and regional networks of LC, normative provision of the single information system of regulation by the schemes of the commodity movement, implementation into the legal field of regulatory acts, directed to attract foreign investors for the development LC, allocation of land etc. [9].

The condition for the use of integration mechanisms is the elimination of areas of logistical gaps – essential divergences between present and necessary (expedient) characteristics of relations between separate components of the commodity movement, the elimination of which provides state intervention. Compliance with this condition is explained by the fact that the efficiency of the goods movement is determined by the weakest link in the chain.

Areas of logistical gaps lead to significant deceleration of the reproductive process, create disproportions among the sectors, complicate the perspectives of the diversification of the sale markets, and limit the magnification of the commodity export significantly.

A fragment of manifestations of the zones of logistical gaps and the reasons for their occurrence is shown in table 2.

Table 2

Potential zones of logistical gaps and the reasons for their occurrence

M-	Potential zones of logistical gaps and the reasons for their occurrence  © Potential gaps of logical gaps  Causes of logistic gaps gaps			
<b>№</b> 1.	Potential areas of logical gaps Causes of logistic gaps areas  The area of manifestation of zones of logistical gaps connected with the increased costs for servicing of goods flows			
1.	Areas of logistic gaps are conditioned with	a)lack of transport means;		
	exceeding of regulatory terms of the commodity	b) dispersed placement of suppliers or consumers:		
	supply.	c)absence of through-line system of scheduling the commodity movement.		
	Areas of logistic gaps are conditioned with the	a) lack of the centralized system of management of the commodity movement;		
	presence of unnecessary links in the composition	b) lack of logistics providers of the 4 – PL level;		
	of the commodity movement.	c) lack of conditions for the equal entrance of small manufactures into the logistical		
	·	chains of the commodity movement( price barriers, quality problems of goods).		
	Areas of logistic gaps are caused by discrepancy	a) preferential use of the services of small logistics firms and companies of 3 – PL		
	of levels of concentration commodity flows to	level;		
	economically expedient volumes of the	b) lack of terminal organization of the commodity movement.		
	commodity movements	c) lack of specialized large cargo rolling stock;		
	Areas of logistic gaps are caused by the	a) small-scale commodity nature of production;		
	difficulty of accessing infrastructure facilities	b) lack of funds to create its own channels for promotion and sales of production.		
	service.	c) a limited portion of links of public use		
2.	The area of manifestation of zones of logistic gaps connected with the discrepancy of the parameters of commodity flows to the			
	requirements of sales of production			
	Zones of logistic gaps are conditioned with the	a)lack of centers of the monitoring market conjuncture;		
	discrepancy of the parameters of the commodity	b) problematic questions of functioning retail trade;		
	flows to mass demand.	c) lack of developed network of local food markets;		
	Zones of logistic gaps are caused by the	a) lack of capacity to sort products;		
	discrepancy of the parameters of commodity	b) lack of capacity to pack and label products;		
	flows to the requirements for the consumer	c) lack of capacity in uniting products in commodity parts;		
	quality of products.	d) lack of through-line technologies with complying conditions of commodity		
		movement delivery.		
	Zones of logistic gaps are caused by the	a) imperfection of methodological base of scheduling the commodity supply in the		
	discrepancy of the parameters of commodity	conditions of instability assortments, geographical and commodity boundaries of the		
	flows to periodic changes in geography of	markets;		
	consumer demand.	b)lack of flexible logistic infrastructure;		
		c) lack of distribution centers of "rapid response" for geographical changes of		
2	The area of manifestation of zones of logistic as	manifestation in short-term demand.		
٥.	<ol> <li>The area of manifestation of zones of logistic gaps connected with low level of adaptation of commodity flows in measures of state regulation of commodity flows</li> </ol>			
	Zones of logistic gaps are caused by the low	a) difficulties of flexible adaptation in serving movement of products which have		
	level of adaptation commodity flows to state	undergone production refinement (adaptation to changing routes, volumes of		
	support of increase of added value of products,	deliveries etc.);		
	their sales etc.	b) lack of through-line system of planning the commodity movement during the		
		seasonal deliveries;		
		c) difficulties with the entering the consumer markets for new products (the necessity		
		of additional expenses to establish the connections with markets, food networks etc.)		
	Logistics gaps zones are caused by the low level	a) difficulties in forming export-oriented chains of commodity movement (ensuring		
	of adaptation commodity flows to state measures	equal conditions for the entering the foreign chains of commodity movement,		
	with the strengthening of export of commodity	achieving the appropriation ecological parameters of products to the measures of		
	markets.	foreign markets);		
		b) difficulties in engaging strategic investors in the development of logistics centers		
		and other logistics infrastructure.;		
		c) difficulties in attracting leading distributors to centralized distribution and sales of		
L.		food products.		
4.	The area of manifestation of logistic gaps zones co	onnected with problematic issues of contractual relations between the participants of the		
		commodity movement		
	Zones of logistics gaps are caused with the	a)increasing the quantity of contractual relations in the chain of supply;		
	conclusion contracts of supply on the conditions	b)lack of common control in performing the contracts between all participants of the		
	of EXW 9 the producer gives to the consumer	supply chain;		
	the finished good at the stock [10, 11].	c) tendency of changes partners;		
	Zones of locistics come are analizing during d	d) probability of conclusion of unequal contracts.		
	Zones of logistics gaps are conditioned with the	a) inability of terminating contracts in the case of negative impacts on their		
	conclusion long-term contracts between the	performance;  b) increasing the risk of loss of profit as a result of continued focus on the same		
	participants of the commodity movement	b) increasing the risk of loss of profit as a result of continued focus on the same partner;		
		c) inability of the conclusion agreements with another partners.		
	Zones of logistics gaps are conditioned with the	a) imperfection of methodological approaches to the selection of suppliers;		
	conclusion of direct contracts.	b) difficulties in agreeing on the optimum size of commodity batches of products.		
	Zones of logistics gaps are conditioned with the	a) the imposition by the food networks to products suppliers additional contracts with		
	conclusion of contracts between small suppliers	providing fictitious support services on the promotion of goods;		
	and trade networks.	b) increasing the number of goods suppliers , probability of breach of contractual		
	and made not not not.	term;		
		c) difficulties in determination and complying optimum number of goods suppliers.		
		-/ in determination and complying optimizin number of goods suppliers.		

So, the use of integration mechanisms in the reproductive cycle of the commodity movement has multidimensional character, covers relations between all sectors of markets, makes essential impact on the effective performance of the functioning markets and doesn't need their state support.

One of the acute problems of use integration mechanisms in the system of the commodity movement connected with provision equal conditions of participation of small subjects of the markets in the reproduction process with reasons of small flows of goods, difficulties of their realization, absence of effective state support.

Such markets can include markets of milk and dairy products. The need for equal entry of small subjects into the reproduction process is caused by: the possibility of the development in a long-term perspective, economy of expenses on the scale of the commodity movement, improving the access to modern technologies, new sales market.

Therefore, in the dairy market the problematic area of logistics gap appeared in the relations between the raw material and processing sector (Fig.1).

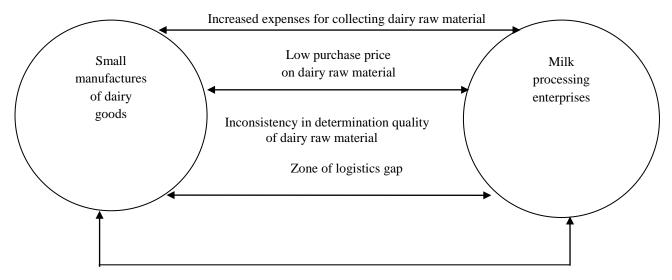


Fig. 1. Typical zone of logistics gap between producers of dairy raw material and milk processing enterprises (made by authors)

In relation to the manufacturer of dairy raw material, the zone of logistic gap is conditioned by non-compliance with the European standards of quality of dairy raw materials, which includes in a low proportion of extra milk and higher class. It is connected with the range of reasons, namely non-compliance with animal care; insufficient number of milk collection points; lack of quality control; cooling and storage of raw material etc. The main advantage of such dairy production – that is its cost, which is 30-40% lower than the value of milk in agricultural enterprises.

In relation to dairy processing enterprises in the country, there is lack in sufficient quantity of dairy raw material. Also, there is some conflict of interests in the determination of the selling price of milk. Processors seek to minimize the purchase price of raw material, while farmers are set to increase it to cover the cost of keeping animals. Also, remote places of purchase of raw materials prevent to provide enterprises with milk before its processing. The rational organization of collecting and transporting should relate to availability of own raw material areas of collecting milk in the consistence of milk processing enterprises. The optimum distance of milk delivery to processing enterprises should be up to 80-100 km.

Prolonged milk collection routes from numerous small producers, increased transportation costs make participants of milk processing sector to lower purchase prices to maintain profitability of production. In its turn, low purchase prices reduce the interest of peasants to produce dairy raw material, which further exacerbates its shortage, leads to a reduction in the number of cows and the underutilization of dairy processing facilities.

The above noted, the zone of logistic gap creates objective preconditions for the consideration ways of enlarging commodity proportions of dairy raw material by using of integration mechanism of cooperation.

Under cooperation (in the context of this research) we shall consider the uniting of small commodity producers of raw material sector into cooperatives at the aim of effective and equal entry into reproductive

cycles of the commodity movement, primarily in relations with the more technically equipped processing sector.

At the same time, the legal norms of association of producers in dairy cooperatives, as the practice shows today, does not create conditions for equal relations of the raw materials and dairy sectors. It is explained that the legislation does not consider cooperatives as a component in ensuring efficiency of the reproduction process (effective legal norms are worked out like a variant of uniting into cooperatives of small milk producers, which creates difficulties with the control over the process of milking the cows, the compliance of the quality of dairy raw material leads to reduce purchase prices.

The author's approach to solve the issue of equal entry of small milk producers in the reproduction process is to form multifunctional cooperatives with a complete reproductive cycle of dairy commodity movement. The main components of this approach include: a) the creation of large-scale cooperative farms; b) introduction of own milk processing and production of finished dairy products; c) the organization of its own distribution channels.

The above listed problematic issues of institutional dairy institutional support require systematic identification of promising areas of legal support for the formation of multifunctional cooperatives with a complete reproductive cycle.

**Conclusions and prospects for further research.** The reproductive function of markets allows us to orient the integration mechanisms of commodity-movement towards solving problems on a scale of markets, which is not clearly traced today.

The implementation of integration mechanisms in the commodity movement system should be aimed at: a) the realization of the general goals of improving the efficiency of the commodity movement; b) to achieve the conformity of relations between the participants in the movement with the defined criteria of interconnectivity; c) to eliminate the areas of logistical gaps between components of the goods movement.

One of the acute problems with the use of integration mechanisms is to ensure equal conditions of small individuals of the market in the reproduction process. In the system of agro-food markets, the two most widespread types of manifestations of logistical gap zones are separated, which are created by small producers. The first type of logistic gap areas is inherent in the relationship of small producers with the members of the processing sector (increased costs of raw material collection, which forces the members of the processing sector to give priority to large suppliers). The second type of logistic gap areas is inherent in the relations between the entities of the commodity and infrastructure sectors, which is caused by the lack of modern warehouses for storage at small producers, sorting, packaging of products, and formation of commodity lots. As a result, retail chains (supermarkets) have a preference for direct food supply contracts with large producers.

As part of the dairy market, the area of logistics gap has developed in the relationship between the raw material and processing sectors. It is associated with cases of exceeding the time limits for the supply of dairy raw materials to dairy processing enterprises, which is due to the concentrated placement of small milk producers.

On the whole, the conducted research gives grounds to draw a general conclusion, according to which the introduction of integration mechanisms in the reproduction process in the commodity markets in the first place implies improvement of the institutional support of this process. This necessitates for the priority development and implementation of appropriate legislative and other legal acts that will contribute to improve the effective performance of markets.

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