Strategizing the Development of Food Markets in the Region by Employing Supply Chain Management: A Product-Territorial and Product-Spatial Approach

Natalia Leonidovna Kuzmina¹, Lyubov Leonidovna Tonysheva², Darya Vladimirovna Chumlyakova³

¹²³Industrial University of Tyumen, 625000, Tyumen, Volodarskogo St., 38

²professor-kuzmina@yandex.ru

Abstract - This article substantiates the need to strategize food markets’ development in the region as components of the region’s reproduction cycle of food products by using supply chain management. The authors suggest two approaches in terms of this development in the region. Within the framework of the product-territorial approach, strategies have been defined for the development of markets for individual food products in order to activate internal sources of forming product supply. Within the framework of the product-spatial approach, the need to develop strategic priorities for the development of local food markets to best meet the population’s food needs, taking into account inter-municipal socio-economic differentiation, has been justified. The scheme for the strategic supply chain management implementation of the local food markets’ development is based on embedding strategic objectives, priorities, and guidelines for their development in the strategies of the socio-economic development in the region and its municipal formations.

Keywords- food market, regional food market, supply chain management, regional economic space, inter-municipal socio-economic differentiation.

1. Introduction

Food markets, as components of the regional reproductive cycle of food products, constitute a system of economic relations between sellers and buyers on the sale and purchase of a high-value economic benefit—food products. On the one hand, the development of regional food production depends on the effectiveness of their functioning, which is especially important given the country’s import substitution policy, and on the other hand, meeting the food needs of the people in the region and consequently, their quality of life. Today, a number of problems that impede the development of food markets in the region still remain including the following: inadequate competitiveness of local goods, underdeveloped market infrastructure, the spatial imbalance between the level of socio-economic development of the region’s territories and the level of market development, etc. At the same time, the focus in the regions today is on resolving operational problems and current tasks to stimulate demand for local food products, improve trade infrastructure, support small business forms, etc. There is an underestimation of the role of strategic management of the development of food markets, the lack of reasonable strategic priorities and development goals of the markets embedded in the strategic guidelines for the development of the region and its municipal formations, which narrows the planning horizon of local producers and makes it difficult for the population to have unhindered economic and physical access to food products by supply chain management. The above-said confirms the need to substantiate the role of strategizing in achieving the goals of developing food markets in the region, clarifying approaches to strategizing the development of markets, and developing strategies for developing markets within these approaches.

2. Methodological Basis

There has been an increase in the number of strategic developments for the evolution of territorial objects of different levels and different spheres of activity in which the positional presentation of strategizing participants is involved. That necessitates the systematization and methodical alignment of actions that allow the placing of appropriate strategic accents in relation to the area being studied, particularly with regard to the functioning of the region’s food markets. This includes the following:

- A strategic analysis of the development of food markets, considering the principles and results that constitute its basis and the degree of compliance of
the state of markets with the socioeconomic situation of their localization area;
- A strategic synthesis of external and internal capabilities and limitations of the development of the strategizing object as a whole and an assessment of its positioning, considering the peculiarities of the functioning of local food markets due to the presence of inter municipal socioeconomic differentiation;
- A strategic goal-setting by building a “goal tree” with a reasoned rationale for the development factors and interests of strategic stakeholders and defining appropriate organizational goals for the implementation of actions to develop regional and local food markets;
- Justification of the strategy for the development of food markets in the region in the context of two approaches: product-territorial and product-spatial with the use of the corresponding methodical base;
- Strategic “development” of the program-project filling of the “tree of goals” for the development of food markets, considering their priority in the strategy of the socioeconomic development of the region and its municipal formations;
- Accentuation of actions in the development of the necessary mechanisms for implementing the strategy for the food markets development in the region for interconnecting and coordinating the interaction of all positional participants and existing forces in implementing strategic initiatives.

3. Results

3.1 Approaches to strategizing food markets development in the region

The term “strategizing,” introduced into scientific use by the Nobel laureate in the field of economic management studies, O. Williamson, was initially translated as strategic planning [1]. However, meaningfully in English discourse, this term allows for a broader interpretation as "everything related to the process of developing and implementing a strategy.” Since the 80s of the 20th century, territorial strategizing has spread in developed countries, by which the local community understood the independent and volitional definition of goals and main directions of sustainable socio-economic development in a dynamic competitive environment with the consolidated participation of key economic entities of the territory [2]. Today, the term “strategizing” is becoming a full-fledged scientific category used in the process of researching complex economic systems (countries, regions) as the most appropriate tool for solving problems that create conditions for the prospective development of a territory based on strategic goals that can consolidate the efforts of the authorities, business of society. The issues of food market development strategy are raised in the papers by such scientists as [3, 4, 5]. The strategic approach to managing the development of markets is relatively new, although it is sufficiently developed in the writings of various authors regarding the markets of information and telecommunication services, energy, food, industry markets in general, etc. [6] justifies the need to manage local markets as factors of economic growth in the region. “The local market of products with regional utility is an indicator of sustainable economic growth by increasing the potential of domestic demand and strengthening the index of market power of regional producers in the context of openness of the national economy” [6]. In the authors' opinion, this view fits into the framework of the reproduction approach to the study of markets, according to which the regional economic system is a set of economic activities, and it is possible to establish that each type of market belongs to a specific type of economic activity. Indeed, food markets have a high "regional utility" for agrarian, agro-industrial and industrial-agrarian types of regions, which, given the uneven spatial development of regions, the strengthening of inter-municipal socio-economic differentiation, the emergence of external challenges and threats, necessitates ensuring sustainable socio-economic development of the region. Certainly, food markets have a high “regional utility” for agrarian, agro-industrial and industrial-agrarian types of regions, which, given the uneven spatial development of regions, the strengthening of inter-municipal socio-economic differentiation, the emergence of external challenges and threats, necessitates ensuring sustainable socio-economic development of the region.

At the same time, in the authors' opinion, there are two main approaches to strategizing the development of food markets in the region: product-territorial and product-spatial. The first one assumes that food markets in the context of various foods (milk, meat, bread, etc.) should have different strategic development priorities, which is primarily due to the different position of local producers' goods in the markets relative to imported ones. The second approach assumes the
substantiation of strategic priorities taking into account the uneven spatial development of food markets and its possible inconsistency with the level of socio-economic development of the regions of the region (Table 1).

<table>
<thead>
<tr>
<th>Approach name</th>
<th>Product-territorial approach</th>
<th>Product-spatial approach</th>
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<tbody>
<tr>
<td>The essence of the approach</td>
<td>The effective functioning of food markets in the region should provide incentives for the production of local competitive food products. Market development strategy should be aimed at strengthening the position of food products of local producers concerning imported products</td>
<td>Efficient functioning of food markets should ensure equal economic and physical access of the population of the region to food products, taking into account the existing inter-municipal socio-economic differentiation</td>
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<tr>
<td>The object of development strategizing</td>
<td>Regional markets for various food products (the boundaries of the markets coincide geographically with the boundaries of the region)</td>
<td>Local food markets in the region (markets boundaries are blurred: within a municipal formation, its part, several municipal formations)</td>
</tr>
<tr>
<td>Development strategizing objective</td>
<td>Activation of internal sources of formation of commodity supply in the food markets of the region</td>
<td>Complete satisfaction of the needs of the population in food in the context of inter-municipal socio-economic differentiation</td>
</tr>
<tr>
<td>Methodological tools for development strategizing</td>
<td>Practiced: - Strategic analysis (SWOT analysis); - BCG matrix to determine the position of local food products concerning goods from other regions on the market <strong>Authorial:</strong> - Criteria for the stage of development of the regional food market; - Criteria signs of development forms of the regional food market</td>
<td>Practiced: - Target tree method; - Statistical tools for assessing the variation of indicators characterizing the socio-economic development of municipal formations; - Methods of graphical visualization of data characterizing the spatial and strategic development of the region and food markets (cartographic, “web” diagram) <strong>Authorial:</strong> - Criteria of the phases of the economic activity cycle in the region’s space [7]; - Conceptual-logical model of managing the development of local food markets in the context of inter-municipal socio-economic differentiation [8]; - Methodology for assessing the balance of the spatial development of local food markets in the region, taking into account inter-municipal socio-economic differentiation [7]; - Matrix of spatial differentiation and development trajectories of the local food markets in the region [9]; - Analytical-hierarchical method of assessing the importance of strategic priorities and goals for the development of local food markets</td>
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3.2 Rationale for the development strategy of regional food markets

In order to select strategies for the development of regional food markets within the framework of the product-territorial approach, it is necessary to carry out a strategic analysis of their functioning, including an analysis of the opportunities and threats of development, an assessment of regional consumer demand and its potential, an analysis of regional product offer and its potential, determination of the form and stages of development market, determining the capacity of regional food markets, etc. Analysis of the regional food markets performance in the Tyumen region showed that the markets for eggs, pork and potatoes are now at the stage of maturity (the potential of supply of locally produced goods exceeds the potential demand in the market); the markets for bread and bakery products, beef, poultry meat, lamb, milk and dairy products - at the growth stage (supply potential is lower than the potential demand); fruit and vegetable markets - at the stage of formation (the potential of supply is significantly lower than the potential of demand). Besides, a strategic analysis was carried out for each food market, including the construction of BCG matrices to determine the position of local products relative to products from other regions and a SWOT analysis that identifies the strengths and weaknesses of markets, as well as
opportunities and threats to their development. Thus, an analysis of the strategic position of local commodity producers in the regional market for eggs and egg products showed that their products on the BCG matrix occupy the position of “dairy cows”, products of enterprises from other regions are located in the “dogs” field and do not pose a direct threat to them (Fig. 1).

**Figure 1. The BCG matrix for the market of eggs and egg products of the Tyumen region**

The SWOT-analysis of the functioning of the regional market for eggs and egg products of the Tyumen region yielded the following results (Table 2).

<table>
<thead>
<tr>
<th>Strengths (S)</th>
<th>Weaknesses (W)</th>
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<tbody>
<tr>
<td>- Significant experience of local enterprises in the market;</td>
<td>- Increase in the prime cost of eggs;</td>
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<td>- Production volumes of local products exceeding the needs of the region;</td>
<td>- Reducing the profitability of local enterprises;</td>
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<tr>
<td>- Poultry performance and safety indicators feed consumption in line with world standards;</td>
<td>- Depreciation of cages at the production sites of local enterprises;</td>
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<td>- Non-seasonal nature of production;</td>
<td>- Obsolescence of the production base of the local poultry industry;</td>
</tr>
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<td>- Using modern technology by local enterprises;</td>
<td>- Lack of space for further expansion of production</td>
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<td>- Provision of sufficient resource potential for uninterrupted supply of products to the market;</td>
<td></td>
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<td>- Active marketing and sales policy of local producers;</td>
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<td>- Customer commitment to local brands</td>
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<tr>
<th>Opportunities (O)</th>
<th>Threats (T)</th>
</tr>
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<tr>
<td>- Growing consumption trend of processed eggs;</td>
<td>- Dumping by competitors and retail chains;</td>
</tr>
<tr>
<td>- High customer loyalty to local products;</td>
<td>- Reduction of product consumption due to market saturation and crisis;</td>
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<td>- The emergence of an empty market niche due to the introduction of a food embargo;</td>
<td>- Fluctuations in the grain market and other components of animal feed;</td>
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<tr>
<td>- Import substitution program;</td>
<td>- Rising prices for imported equipment and technologies, vaccines, and vitamins;</td>
</tr>
<tr>
<td>- Population growth in the region</td>
<td>- The rapid modernization of large poultry farms from other regions;</td>
</tr>
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<td></td>
<td>- Deterioration of the economic situation in the country;</td>
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<td></td>
<td>- Increased rates of local taxes and taxes of constituent entities of the Russian Federation;</td>
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<td>- Adverse changes in the monetary policy in the country</td>
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Similarly, a strategic analysis was carried out for other food markets.

Taking into account the strategic analysis of the functioning of the regional food markets of the Tyumen region, the strategies of their development were determined (Fig. 2).

### 3.3 Strategic management of the local food market development in the region

The strategic management of the development of local food markets (LFM) in the region within the framework of a spatial approach implies consecutive implementation of a number of stages discussed below.

1) Identification of the spatial potential of the trajectories of the strategic development of LFM based on assessing the balance of the spatial
development of markets, taking into account inter-
municipal socio-economic differentiation. At this stage, 
the zoning of the polarized economic space of the 
region is carried out whereby municipal formations 
were grouped into economic zones (denoted as “new 
development zone,” “growth zone,” “core,” and 
“depressive zone”). The typology of municipalities was 
determined in a similar manner, in terms of the level of 
development of food retail trade. Based on the 
identification of compliance (or inconsistencies) of the 
socio-economic situation of a municipal entity with the 
level of development of LFMs on its territory, taking 
into account the effect of negative and positive factors, 
the emergence of “poles” and growth points in the 
economic and social sphere of municipal formations,

the spatial potential of development of LFMs and 
trajectories of their strategic development was 
determined, allowing this potential to be realized [8].

2) Development and selection of strategic directions for 
the development of LFMs based on identifying and 
coordinating the interests of stakeholders. The main 
stakeholders in the development of decision makers 
include business structures, the population and 
government bodies, and local governments. At the 
same time, it is necessary to determine the expectations 
of the stakeholders and the degree of their influence on 
the strategic choice, ensuring the relative balance of 
their interests. The interests of stakeholders should be 
balanced when building a “tree” of strategic goals for 
the development of local food markets [9].

![Diagram showing recommended regional development strategies for food markets in the Tyumen region.](image-url)

Figure 2. Recommended regional development strategies Of the food markets in the Tyumen region. 

3) Realization of strategic actions for the development of 
LFMs by embedding strategic goals, priorities, and 
guidelines for their development in the strategy of 
socio-economic development of the region and its 
municipal formations (Fig. 3). The selected strategic 
goals, priorities, and benchmarks should be 
incorporated into the strategies for the socio-economic 
development of the region and its municipal 
formations. The implementation of strategic actions
pertaining to LFM should be carried out using a program-project approach.

Figure 3. Diagram of implementation of the strategic management of the local food markets development of the Tyumen region:

A - authorities; P - population; B - business community; 1 - integration of development goals of LFM in the strategic goals and objectives of the region; 2 - integration of strategic goals and development priorities of LFM in the target vector; moreover, main objectives of the development direction of the municipal formation (taking into account the potential and development path of LFM); 3 - a portfolio of projects for the development of LFM.

The implementation of procedures for the strategic management of the LFM development in the region is intended to ensure the achievement of a spatial balance between the demand and supply of food products.

4. Discussion

The strategic approach to managing the development of markets in practice is relatively new, despite extensive research on the development of information and telecommunication services, energy, food, and industrial markets in general [10, 11, 12, 13]. Moreover, Zinina, Pashina, and Sokolova specifically examined the issues pertaining to food market development strategizing.

The current analysis of the extant findings related to the strategic management of market development did not, however, reveal an unambiguous approach to the definition of the object, objectives, and tools of strategizing. This necessitated a substantiation of the author's approach to strategizing the development of food markets in the region, to enhance domestic sources of commodity supply (local production), as well as to ensure the fullest possible satisfaction of the population’s food needs, taking into account inter-municipal socio-economic differentiation [14,15].

5. Conclusion

Food markets are the most important component of the reproduction process in the region, whereby the effectiveness of local food production and the efficiency of the supply chain depend on the effectiveness of their development. In the presence of numerous external and internal threats, it is necessary to focus on the development of long-term goals, priorities, and directions for the development of food
markets in the region through the implementation of strategic procedures.

The application of the proposed approaches to strategizing the development of food markets in the region—product-territorial and product-spatial—will allow for achieving the two main goals: activation of internal sources of formation of commodity supply in the food markets of the region, and the most complete satisfaction of the population’s need for food products in the context of inter-municipal socio-economic differentiation.

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