Peculiarities of elaborating the strategy for the meat market development in the regions of the Russian Federation

Anatoliy Timofeevich Stadnik, Sergey Aleksandrovich Shelkovnikov, Yvgeniy Vladimirovich Rudoy, Danil Maksimovich Matveev, Nikolay Valentinovich Grigoriev

Novosibirsk State Agrarian University, Dobrolyubova Street, 160, Novosibirsk, 630039, Russian Federation

Abstract. The research is dedicated to the theoretical and practical development of scientific and methodological principles, organizational and economic foundations of the strategic development of the meat market and the mechanism of its regulation. The concept of “strategic development of the market of meat and meat products” is introduced into scientific use. The methodical approach to improving competitiveness of meat production in the region is outlined. The technique of strategic market analysis of meat and meat products in the regions is elaborated, due to peculiarities of its development and government regulation.


Keywords: agriculture, meat and meat products market, competitiveness, livestock, government regulation

Introduction

Currently, the world market of meat products is considered as one of the fastest growing and promising areas of agricultural production. The problem of increasing the production of meat and meat products to fully satisfy the consumer demand for these products is important for Russia as well. The fact that in Russia there are regions with different climatic and economic conditions requires the development of measures for improving economic relations of the meat products subcomplex of agro-industrial complex (AIC). The situation is also aggravated by the fact that the economy is beginning to develop under Russia’s membership in WTO, determining new challenges for the meat industry.

It especially concerns the development of regional markets of meat products, their regulation, taking into account the specifics of running beef cattle, the level of provision of regional meat and meat products. Without development of regional markets and especially of those, whose few administrative areas are not potentially capable not only to satisfy their internal demand for meat and meat products, but also to export them to other regions of the country, the efficient functioning of the meat market is impossible.

Significant contribution to the study of the current state and issues of strategic management, the efficiency of interaction of economic agents in agriculture in a competitive environment belongs to such prominent scholars as Polukhin A.A, Bokusheva R., Hockmann H., Kumbhakar S.C, Liefert W.M, Liefert O. Their works served as the scientific basis for conducting researches on strategic directions of development of market subjects [1, 2, 3, 4].

The main part

In a broad sense, a development of the meat and meat products market implies a special type of changes that allows maintaining of the integrity and quality characteristics at a certain time interval. At the market, interests and relationships of many agents of the meat products subcomplex intersect. Among them, relationships between producers and processors of raw meat, trade and population deserve special attention. There is a constant demand for meat products from the population. The task of producers, processors and trade is to meet this demand. Compliance to the demand of the population is the most important criterion of effective development of the meat and meat products market in the region.

The conducted research on the meat industry indicates the continuing processes of forming the meat and meat products market both at the level of individual regions and at the level of the Russian Federation as a whole. Nowadays implemented approaches in the regional agricultural policy are quite extensive and include a variety of activities aimed at the development of the meat industry mainly through government support and regulation, which became an effective condition for the development of the meat market in the regions. The state regulation of the meat market is generally aimed at eliminating the flaws of the market mechanism, in particular, at eliminating the imbalance of supply and demand, import substitution, funding the development of marketing infrastructure, etc.

To ensure an integrated approach to the

http://www.lifesciencesite.com

lifesciencej@gmail.com
development of the meat and meat products market as a new category, it is suggested to use “the strategic development of the meat and meat products market”, which implies the process of selecting strategic guidelines and priorities for sustainable development of the meat market in the unity of the system “production-processing-marketing”, combined with the mechanism of management and organizational-economic regulation measures that enhance the competitiveness of meat products and its adaptation under dynamic changes in the environment.

This process should provide productive-economic and organizational interconnections and interrelationships aimed at the processes of production, exchange, distribution and consumption of meat and meat products and increase of social and economic benefits, as well as food safety of the regions and the country as a whole.

Strategic development of the meat market at the regional level must meet the following system imperatives:

- steady increase of efficiency and competitiveness of domestic meat production;
- focus on maximal mobilization of internal reserves of managing the meat products subcomplex AIC;
- organic combination of state regulation of the meat industry and creating conditions for a self-managed innovative activity of agribusiness;
- integrated and systematic solution of scientific, technical, economic and socio-environmental problems of AIC and rural areas of the region.

![Picture 1. Algorithm for an integrated approach of improving the competitiveness of meat production in the region](image)

Russia's entry to the World Trade Organization has highlighted not only the food safety of the country, but also improvement of the competitiveness of the livestock industry, which due to its technological lag and unfavorable climatic conditions, is not able to function effectively in the food market open for import. Lack of widespread and generally accepted evaluation methods of competitiveness of enterprises and the meat products subcomplex of the region in scientific literature required development of the author's approach. This approach involves passing several stages presented in Picture 1.

The first step is to identify the factors affecting the competitiveness of the meat products subcomplex of the region. From our point of view, these factors can be divided into natural and artificial. Based on the use of natural factors the primary competitive advantages of the meat industry are formed:

- climatic and biological conditions;
- benefits of economic and geographical, transportation and geographic location;
- availability of forage land;
- national and cultural characteristics of the population;
- existing production potential and benefits of traditional specialization in meat production.

The use of natural factors in shaping primary competitive advantages, based on its use, will aid in developing narrow specialization of the meat products subcomplex of the region and locating only individual links on its territory.

Artificial factors underpin secondary competitive advantages:

- potential possibilities for processing raw meat;
- presence of favourable conditions for agricultural cooperatives;
- level of infrastructure development;
- possibility of including producing units into external value chains;
- investment attractiveness;
- development of external communications and opportunities to enter new markets.

At the second stage, we directly assess competitiveness of meat production in the region (Table 1) [5].
Table 1. Indicators for assessing the competitiveness of meat production in the region

<table>
<thead>
<tr>
<th>Name of an indicator</th>
<th>Formula of calculating</th>
</tr>
</thead>
</table>
| Disclosure index of the meat market $(I_m)$ | $I_m = \frac{V_i}{Q + V_i - V}$,  
Where $I_m$ – disclosure index of the meat market; $V_i$ – volume of imported production; $Q$ – volume of domestic production; $V$ – volume of export of production |
| Index of competitiveness of meat production $IC_p$ | It is calculated by counting points for each indicator (productivity, per capita production, total cost, selling price, the retail price)  
1) it is necessary to assign rate points to each factor according to the average for the region.  
2) calculate points as an arithmetic average of competitiveness indicators value assessment |
| Index of competitiveness of an agricultural organization at the meat market $(I_{Ki})$ | $I_{Ki} = \frac{Y_{rpm}}{Y_{rp}},$  
Where $Y_{rpm}$ – return on sales of meat in the organization; $Y_{rp}$ – average return on sales of meat of researched organizations, taken together.  
At the same time indicators:  
$\leq 0$ – is due to uncompetitive industries;  
from 1 to 3 – average level of competitiveness in the region (the profitability of meat production and sales is not below the emerged in recent years rate of inflation and meets the conditions of simple reproduction);  
$> 3$ – high level of competitiveness in the region (more than that of an average level of profitability of the meat industry, which provides the possibility of its development). |

At the third stage, we determine priority areas of improving the competitiveness of meat production (Picture 2).

An important methodological issue of strategic meat market analysis is to determine the milestones and directions of sequential execution of an analytical research (Picture 3).

Identifying factors affecting the competitiveness of meat production and the assessment of its conditions contribute to the development of such management decisions that determine the effectiveness of strategic development of the meat market.

Currently, a strategic analysis serves as a resultative goal and as means to achieve the final result, it basically gives an answer to key questions regarding what the agri-food market is, and, in particular, meat market; determines its interregional and intergovernmental relations today and what they need to become in the future; what are its results and functions; what markets agricultural producers should enter and what they need to do to achieve their goals.
study of products movement from production to the final consumer. It allows to employ an ongoing analysis of the ratio of meat resources and their use, as well as to predict the further development of the situation at the meat market in the regions of the country and primarily the quantity of supplied and the quantity of demanded for different types of meat.

For example, in 1990 about 48% of meat produced in the Krasnoyarsk Krai of the Russian Federation accounted for beef, 32% pork, but in 2013 the situation changed radically. The share of cattle meat during this period decreased to 26.6%, while pork and poultry increased respectively to 42.0 and 29.6%.

Thus, the production of meat in slaughter weight in all categories of households on the edge decreased from 261.5 thousand tons in 1990 to 142.3 thousand tons in 2013, or 45.6%, including agricultural organizations where it decreased to 132.9 thousand tons (66%). Reduction of meat production in these categories of households has led to strengthening the role of private farms of the population in the formation of meat resources. As a result, the meat production, in this category of households increased by 12 tons (20%) during this period (Table 2).

Table 2. Dynamics of meat production in the Krasnoyarsk Krai of Russia (in slaughter weight), kt

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All categories</td>
<td>2613</td>
<td>1423</td>
<td>594</td>
<td>22.6</td>
<td>20.2</td>
</tr>
<tr>
<td>Agricultural enterprises</td>
<td>2014</td>
<td>481</td>
<td>763</td>
<td>37.8</td>
<td>48.9</td>
</tr>
<tr>
<td>Personal subsidiary plot</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Present (farm) holding</td>
<td>1.5</td>
<td>1.5</td>
<td>2.5</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Present (farm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All categories</td>
<td>1245</td>
<td>372</td>
<td>104</td>
<td>100.0</td>
<td>29.5</td>
</tr>
<tr>
<td>Agricultural enterprises</td>
<td>1007</td>
<td>275</td>
<td>67</td>
<td>42.3</td>
<td>19.8</td>
</tr>
<tr>
<td>Personal subsidiary plot</td>
<td>0.35</td>
<td>0.35</td>
<td>0.35</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Present (farm) holding</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Present (farm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All categories</td>
<td>87</td>
<td>90</td>
<td>72</td>
<td>60.0</td>
<td>57.2</td>
</tr>
<tr>
<td>Agricultural enterprises</td>
<td>60</td>
<td>57</td>
<td>72</td>
<td>60.0</td>
<td>57.2</td>
</tr>
<tr>
<td>Personal subsidiary plot</td>
<td>0.34</td>
<td>0.4</td>
<td>0.4</td>
<td>1.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Present (farm) holding</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Present (farm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All categories</td>
<td>379</td>
<td>452</td>
<td>511</td>
<td>100.0</td>
<td>87.8</td>
</tr>
<tr>
<td>Agricultural enterprises</td>
<td>281</td>
<td>306</td>
<td>372</td>
<td>100.0</td>
<td>99.5</td>
</tr>
<tr>
<td>Personal subsidiary plot</td>
<td>1.6</td>
<td>1.5</td>
<td>1.7</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Present (farm) holding</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Present (farm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conducted evaluation of livestock development in the agricultural organizations of Krasnoyarsk Krai of Russia shows a decrease of efficiency of meat production. Thus, the meat production of cattle, sheep and horses in recent years is unprofitable. As for poultry profitability, it decreased from 59.1% in 2005 to 6.4% in 2013, and pork, respectively, from 14.4 to 5.7%.

The Krasnoyarsk Krai does not provide itself with meat products completely, the self-sufficiency rate in 2013 was 0.69. The level of meat consumption, despite its growth, remains below the recommended nutritional standard of the Russian Academy of Medical Sciences (RAMS). In general, in 2013 in the Krasnoyarsk Krai it was 72 kg or 87.8% of the recommended norm. The share of own production of meat and meat products in the total volume of resources is very low - 68.7%. In 2013 meat products were imported totaling 5.0 billion roubles, or 66.2% of the total import of food in this region of the Russian Federation [6].

By the entry to WTO, the Russian Federation took a number of obligations related to the reduction of customs tariffs on meat and meat products. At the same time, quota arrangement as an advocacy tool for meat markets, which has proven effective in the Russian Federation will not be used at the end of the implementation period in 2020. The main risks that may entail serious changes are observed in meat production and processing. The greatest impact of imports is expected in pork production and pork market development [7].

After Russia's entry to WTO, meat import of different categories in September–December 2012 compared with the same period in 2011 increased by 10-12%, including pork – 30%. The increase in imports and an increase in domestic production contributed to lower purchasing prices for pork up to 50%. Key changes will occur in the meat market of Russia in connection with the violation of food relations and increased competition. So, in terms of prices, imported meat products on the Russian market are cheaper than domestic agri-food market in average: poultry – by 38.3%, beef – 33.1, pork – by 11.1%.

Taking into account the influence of the meat products subcomplex AIC, at the level of development of rural areas food security of the country, as well as the level and quality of life, management of the new conditions should be carried out jointly by public authorities and representatives of agribusiness. This will provide an opportunity to shift attention from the existing predominantly extensive approach to increasing the volume of all kinds of meat of its own production to development of the most competitive pork and poultry subsectors.

Prospects for achieving the strategic objectives of the meat production in Russia, having long-term economic growth potential, are largely determined by attracting investments. However, the research has shown that the main problems in the implementation of investment activities in the meat industry are: reduction of rural producers’ own investment capacity due to reduced profitability of production; poor development of collateral base to attract credit resources; high level of investment risk compared with other sectors of agriculture under WTO; limited information of potential investors on investment objects.

Currently, agricultural organizations in
Russia are experiencing an acute need in investments for upgrading the fixed assets and the expansion of production and the introduction of modern production technologies. In most regions, there is still a high level of physical deterioration of agricultural machinery and technological lag. This situation under functioning of WTO presents a serious threat to the development meat products subcomplex of the Russian Federation.

One of the areas of stimulating capital inflows of foreign investors is to create conditions to maximize the level of investment activity in the beef cattle industry. Currently, the most popular forms of state support of investment activity in the agribusiness are the following forms: subsidizing of a part of bank interest rates on investment loans and reimbursement of expenses for purchasing agricultural machinery.

Studying international and domestic experience allowed determining the basic economic tools that can stimulate investment activity in the livestock industry. The main ones are: the acquisition of cattle compensation in the amount of 90% of the cost and / or subsidies for 1 kg of beef sold at the rate of 80 roubles / kg [8, 9, 10].

Government support and regulation should ensure the dynamic development of the meat and meat products market, stimulate demand and supply of high quality food and thereby increase the profitability of agricultural producers and processors of raw meat, i.e. must serve the interests of agricultural producers, processors and consumers of meat products.

Conclusion

Performed analysis showed that region-members of the Siberian Federal District of the Russian Federation are at different levels of socio-economic development, thus have different opportunities for the development of the meat market. These possibilities are limited by established during lastyear’s economic and industrial potential of agricultural production, climatic conditions, the degree of development of market infrastructure, etc. The main factors, limiting the development of the meat market in Siberia, are: low agricultural climatic potential (almost half below average in Russia); unfavourable weather conditions (drought in 2012 in most regions of the Siberian Federal District); lack of economic incentives and technical and technological modernization of the AIC (the profitability of agricultural enterprises – 4.9% and including subsidies – 14.2%); low investment attractiveness of the meat industry in agriculture, due to a decrease in investments and a high level of agricultural accounts payable; unstable price situation in the agricultural food market (for example, in 2008-2012 the price ranged from 3000 to 10000 roubles per 1 ton of wheat); low share of agriculture in the final price of food (no more than 16%); low wages in agriculture in comparison with other sectors of the economy (about 45%).

Results

1. Identifying factors affecting the competitiveness of meat production and evaluating state influence the development of management solutions help to improve the effectiveness of the strategic development of the meat market. The developed methodical approach for improving competitiveness has allowed determining the achieved level of competitiveness, advantages and disadvantages of agribusiness, which must be considered when determining the main directions of development of the livestock industry, using the elaborated indicators.

2. Russia’s entry to WTO stressed the urgency of adopting a number of measures aimed primarily at the innovative development of the industry, the increase of the investment attractiveness of the beef cattle subsector, meat and meat products market regulation, creation of conditions for equal competition and promotion of domestic livestock products to foreign markets.

3. Specifics of breeding beef cattle cause a long payback period, which can make up to 15-20 years. In this context, a new approach to government support is needed. According to the authors, the most attractive means of stimulating investment activity in breeding beef cattle is to compensate for the acquisition of breeding stock in the amount of 90% of the cost, which will not only significantly reduce the payback period of the investment projects, but also serve as an impulse for the development of livestock breeding in Russia.

Corresponding Author:
Dr. Stadnik Anatoliy Timofeevich
Novosibirsk State Agrarian University
Dobrolyubova Street, 160, Novosibirsk, 630039, Russian Federation

References


