

**FORMATION OF THE REGIONAL MEAT CLUSTER DEVELOPMENT
STRATEGY IN RUSSIA**

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Abstract

Research of the European clusterization experience confirms the evolutionary nature of development as one of the general factors of cluster effectiveness. The authors' aim consists in drawing up a strategic algorithm for the regional cluster promotion adjusted for Russian specificity. The ultimate goal of its implementation is the construction of effective meat production cluster infrastructure, close cooperative relations between the competing (either directly or indirectly) players. An important aspect of the work consists in promoting small and medium-sized business participation within the cluster at all stages of its formation and evolution

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1. Introduction

Business clusters' creation becomes one of the priority directions of regional economic development in the recent years. The cluster concept of the branch organization has shown itself in economic practice of different countries. In case of the developed western countries, processes of agglomeration and industrial clusterization occurred evolutionally; certain patterns of interaction developed simultaneously. In Russian conditions, as researches and the economic practice show, organic formation of clusters is hindered as the communications between the economic actors remain at the low level along with the existence of the administrative barriers and credibility gaps. At the same time, it is impossible to withdraw clusters and their subsequent advantages at the current stage of economic development, as the branch structure has proved itself inflexible and inefficient to meet all the requirements of innovative economy (Ding, 2006).

Business and management environment in Russia implies cluster formation according to continental model (with active participation of the state), in the course of mutually advantageous interaction of the regional authorities and business. The economic development policy based on the industrial clusters creation should be considered as an alternative strategy of economic planning. The cluster approach reflects an ultimate shift from traditional economic development programs (focused at a single enterprise), to the establishment of direct and indirect connections between the enterprises and branches (Polyutov, 2010).

The meat industry in the region under study remains at the high level of development even taking into account the unfavorable foreign trade policy change (i.e. Russia's accession to the WTO). Meanwhile, the market actors are rather isolated what hinders their success in the world meat market.

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The main objective of the work is to provide the programme of activities encouraging evolutionary cluster development. It should include three main stages: (1) Cluster environment analysis; (2) Cluster development policy-making and cluster infrastructure planning; (3) Introduction of a regional clusterization strategy, including efficiency monitoring and prognostication activities.

2. Cluster environment analysis in Russia

Up to date, Russia is investing heavily in meat production in order to become self-supporting (fig 1). Monthly beef exports (e.g. from Australia) seemed to be declining since 2008, but still unevenly (fig. 2 and 3).

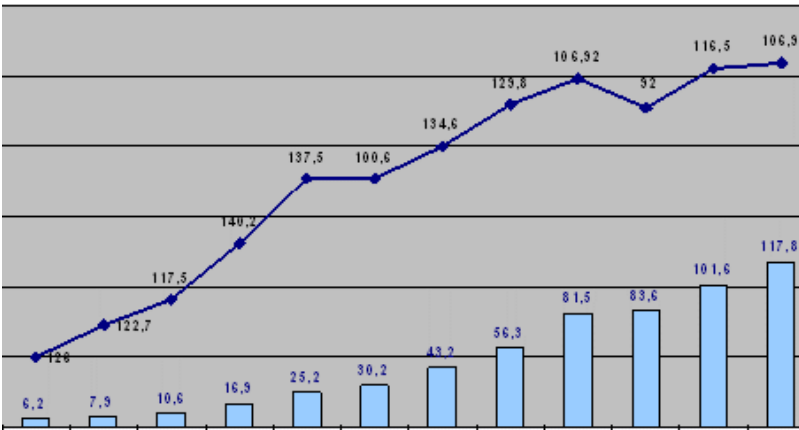
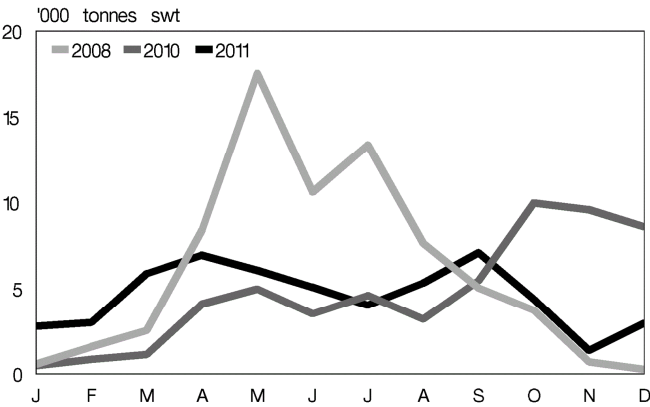


Fig. 1: Dynamics of capital investment in meat industry in Russia



Source: DAFF

Fig. 2: Monthly Australian meat exports to Russia

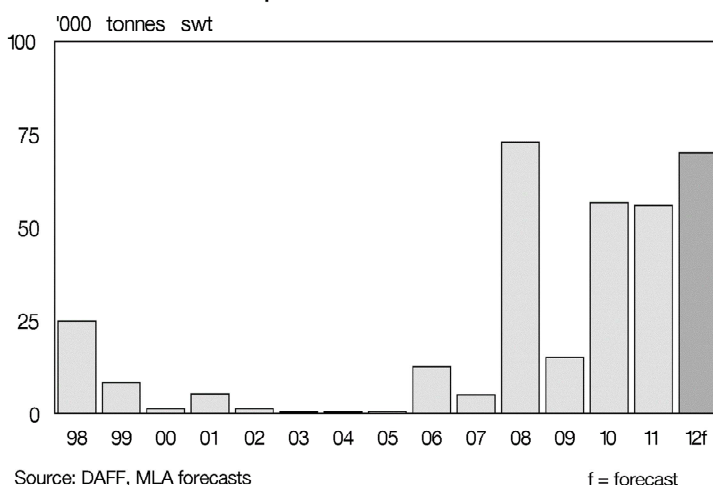


Fig. 3: Australian meat exports to Russia

The production of poultry meat together with the edible poultry by-products in the first quarter of 2012 increased by 20.7%, up to 826,000 tons, according to the data recently released by the Russian Federal Statistics Service.

Apart from that, total poultry meat production increased by 16.7%, which significantly exceeds the values predicted by analysts at the beginning of the year 2012.

Current poultry meat production accounts for the largest share of the meat market in Russia. By the end of the first quarter of 2012 the share of poultry meat in the structure of meat production in Russia amounted to 45% or 1,133,000 tons - the maximum value in the last twenty years. Also, the production of poultry meat held a new record: the growth rate in the sector (together with the by-products) exceeded more than twice the overall rate of growth in the Russian meat industry, which amounted only 8.1%.

Interestingly, the poultry meat accounted for about 85% of the increase in the meat production industry in Russia in the first quarter of 2012. According to Russian Federal Statistics Service, in the first quarter of 2012 poultry stock in all regions of the Russian Federation grew by 10.7% in comparison with the level of the forth quarter of 2011.

A few data on the meat production and consumption is provided in tables 1 – 4.

Table 1: Industrial meat production in Russia (2006 – 2010), millions of tons

	2006	2007	2008	2009	2010
Meat production, millions of tons	2,18	2,56	2,90	3,38	4,01
% to the previous year	-	17,2	13,2	16,6	18,6

Source: Russian Federal Statistics Service

Table 2: Meat production by sector (2006 – 2010), millions of tons

	2006	2007	2008	2009	2010
Industrial production	2,18	2,56	2,90	3,38	4,01
Shadow production	1,83	1,99	1,98	1,99	2,08
Total	4,02	4,55	4,88	5,37	6,09

Source: Russian Federal Statistics Service

Table 3: Meat consumption in Russia (2006 – 2010), kg/person a year

	2006	2007	2008	2009	2010
Sales, mln.tons	4,91	5,18	5,55	5,28	5,68
Population, mln.people	142,80	142,30	142,11	142,03	142,06
Meat consumption per person, kg/person a year	34,38	36,42	39,08	37,17	39,99

Source: Russian Federal Statistics Service

Table 4: Import of meat (2006 – 2010), mln. tons

	2006	2007	2008	2009	2010
Import of meat, mln. tons	2,88	2,95	3,33	2,80	2,46
% to the previous year		2,4	13,1	-16,0	-12,1

Source: Russian Federal Statistics Service

There are some locations that are additionally important for red meat and poultry industry development in Russia, as they are situated close to the largest consumers. These are Far East, aiming for US and Asian markets, as well as Volga region and European South of Russia, aspiring to the European meat products market. As admitted by the economic authorities, the most preferable model for achieving such goals is a huge meat and meat products cluster.

3. Cluster development policy-making and a cluster infrastructure planning

Realization of cluster technologies assumes creation of new business clusters and support of the existing ones by means of local economic subjects' structure change, including configuration and specifics of their economic relations. Use of cluster technologies in the southern regions of Russia is especially urgent owing to the high heterogeneity and rather polycentric nature of economic environment. This will allow creating business clusters embodying the innovative territorial potential, with increased competitiveness and adaptability at the expense of decrease in transaction expenses of economic units' interaction and acceleration of innovations transfer process (Grushevsky 2009).

An algorithm of meat products cluster formation within a region should be based on studying the cluster competitiveness factors as a whole.

Among the fundamental factors, which define the success of clusterization processes, we should mention:

- 1) geographical proximity;
- 2) related and complementary branches concentration;
- 3) positive external conditions;
- 4) the competition and cooperation between the enterprises;
- 5) presence of highly skilled technical experts.

As the map (fig. 4) indicates, south of Russia has extended possibilities for the meat cluster formation.

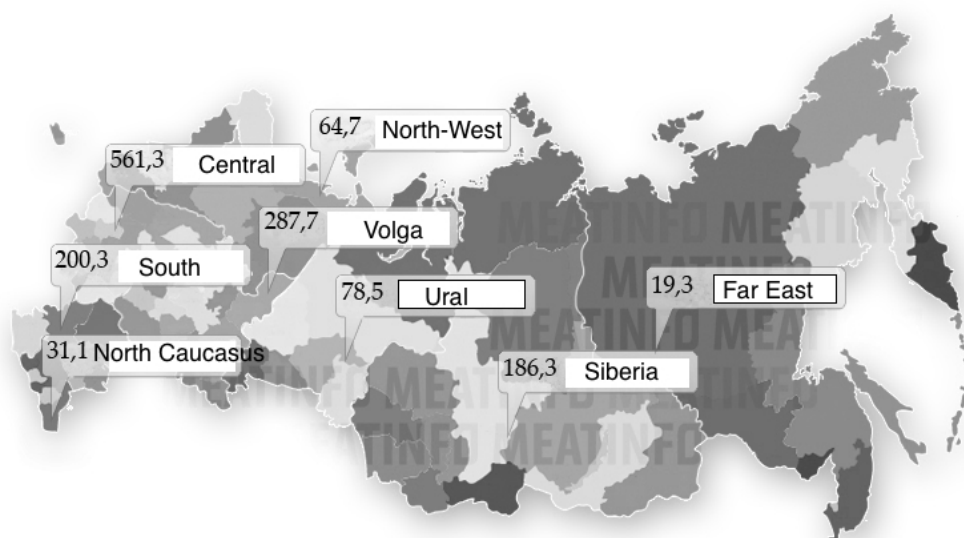


Fig. 4: Meat (pork) production regional map (source: meatinfo.ru)

Production of soybeans, which are one of the most important kinds of forage, is also concentrated in the European South of Russia (see map on fig. 5).



Fig. 5: Centers of soybeans production

The stages of preparation for the regional cluster creation include the following:

- 1) Specific industry's features revelation;
 - Specificity of economic activities' implementation;
 - Production process requirements;
 - Features of a production cycle, seasonality;
 - Potential investment advantages;
 - The state stimulation of industrial development (existing programs and long-term strategy of the trade development, subsidies).

- 2) Territorial specificity revelation
 - Geographical (e.g. climatic) characteristics of the territory in aspect of compliance to the requirements of industrial development revealed earlier;
 - Proximity to key suppliers and consumers; logistics;
 - Detection of competitive advantages of the territory;
 - Assessment of available infrastructure of the region;
 - Administrative business regulation in the region;
 - Availability of the engineering and scientific personnel.

3) Market research of the business environment in the region;

- Analysis of regional economic statistics;
- Key consumers;
- Key suppliers;
- The number of potential participants of a cluster;
- Presence of SME (small and medium business);
- Demand for the final product;
- A forecast of development in the “territory-industry” framework.

4) Cluster infrastructure creation;

- Bridging with regional universities and scientific research institutes (cooperation programs, employment of experts, work practice, active introduction of scientific attainments);

- Creation of co-working centers;
- Providing information exchange between the enterprises (organization of seminars and conferences, modernization of communication channels, ensuring the transparency of business activities).

5) Motivation of potential participants, the pilot projects launching.

6) Missing factors (production, internal demand, environment) implementation.

Methods of cluster technology, proceeding from the above-stated logic, represent the following: quantitative and qualitative change in the structure of the local economic units, systemic creation or transformation of its internal organization and environment, competition and variety (Grushevsky, 2009).

4. Regional clusterization strategy

Regional clusterization strategy should be modeled and implemented in following stages (fig. 6).

As the scheme on the fig. 6 indicates, the most important component of the work consists in threats and possibilities evaluation, i.e. SWOT analysis.

SWOT-analysis of Volga region agriculture and food production allows us stressing the following positive and negative features:

- Strengths
 - high growth internal market;
 - relatively advantageous geographical conditions for agricultural activities implementation;
 - considerable rural population density, which is an important source of cheap workforce;

- relatively (according to Russian standards) developed transport and food production infrastructure.
 - Weaknesses
- low efficiency in most sectors and often insufficient (according to world standards) quality of raw materials and final products;
- low level of competitiveness;
- insufficient market consolidation;
- farming activities have small specific weight in total agricultural production.
 - Opportunities
- high potential of the future internal Russian market growth;
- considerable government support of agriculture on the state level (national project “Agriculture complex development”), as well as on the local level;
- increase in the world prices for grain and other agricultural products.
 - Threats
- WTO terms and clauses;
- climatic change.

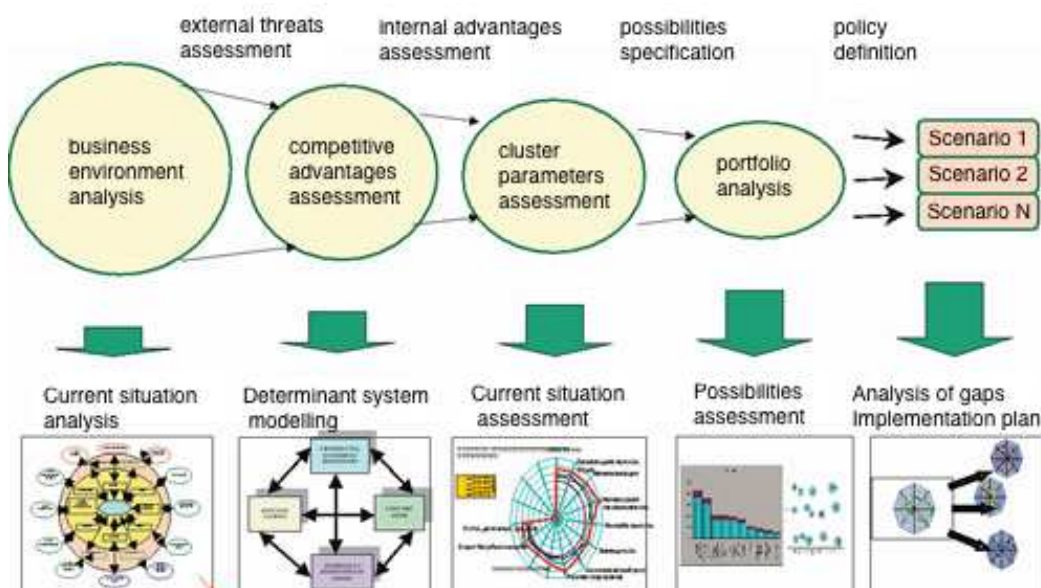


Fig. 6: Regional clusterization strategy implementation

Thus, in a number of sectors of Volga region economy owing to historical factors and taking into account industry specifics there are satisfactory conditions favoring the development of cluster initiatives.

Cluster structures, despite their certain formal similarity to territorial scientific and industrial complexes of the Soviet Union's non-market economy, are nonconventional for Russian businessmen and state (regional, municipal) authorities. Therefore it is very important to provide success of entrepreneurial activities, followed by positive feedback and support of such initiatives.

In the conditions of the limited resources, absence of historically developed traditions of government-business collaboration it is necessary to choose precisely the sector to start clusterization processes. The meat production industry seems to be the closest to formation of cluster structure and relations system (since it is the closest to the world level). The competition within this industry for the Russian agriculture producers owing to the WTO clauses tends to become global.

5. Conclusion

Strategy of regional development can be planned and implemented only in case the interests of authorities and business are interfaced. The cluster provides additional possibilities to both parties. The analysis of internal and external cluster parameters allows arranging internal and external threats to its development and carrying out an appraisal of a cluster's competitive advantages within the selected system of indicators. For a detailed assessment of a cluster's current state the indicative approaches focused on the main directions of development strategy can be used. Transition of a cluster to the new higher level of competitiveness is provided at the expense of investment projects realization.

As previous practice indicates, public authorities and local government in the southern regions of Russia are inclined to creation of hierarchical structures where economic activity fades in the absence of constant external impulses; nevertheless, in regional business communities the opposite tendency is observed. The same researches showed that high heterogeneity, polyhierarchy, policentricity and policulture of economic space, ethnoeconomic variety and practice of the decentralized decision-making in a number of regions could become a factor of successful cluster technologies realization.

References

- Andrade, C., Pinho, C., Pinho, M. (2010). Exploring Regional Convergence: Evidence From 19 European Countries, 1991-2008. *Applied Econometrics and International Development*, 10 (2).
- Ding, H. (2006). The determinants of Innovation: An Empirical cross-country study of 43 countries for 1998-2002. *Applied Econometrics and International Development*, 6 (1).

Grushevskaya, D.V. (2009). Business cluster development within the economic space of southern Russia regions. Abstract of thesis on candidate of economic sciences, Volgograd. 26 p.

Orlov, S.V. (2010). Economic and Legal Foundations of clustering in Russia. Kaliningrad MIA Law Institute Bulletin, 3: 76-80.

Polyutov, A.A. (2010). Market infrastructure creation in an industrial cluster. Transport business in Russia, 2: 54 – 56.

Popkova, E.G. et al. (2009). New Quality of Economic Growth Concept. JEPA 2009 Papers, Center for National University of Finance and Management, Tokyo: 1-11.

Popkova, E.G. et al. (2010). Economic growth in the context of developing economies. Proceedings of the conference Problems of development of worldwide economy in after crisis period. Graduate School of Management, France: 75-80.

Popkova, E.G. et al. (2011). Underdevelopment whirlpools. The analysis of the economic growth disproportions in the Russian regions. LAP LAMBERT Academic Publishing GmbH & Co.

Popkova, E.G., Romanova, M.K., Akopova, E. S. (2012). Towards the strategies of regional clustering: The role of SMEs. International Symposium on Business, Economics and Financial Applications (ISBEFA). [Preprint].

Romanova, M.K. (2011). Intellectual spillovers in cluster as a factor of R&D cost-effectiveness. Proceedings of the V International Students' Scientific-Practical Conference, Novosibirsk, 2: 238-244.