

THE CLUSTER FORM OF ORGANIZATION AND THE PROSPECTS FOR ITS APPLICATION TO PROVIDE THE SUSTAINABLE DEVELOPMENT OF COOPERATIVE ENTREPRENEURSHIP

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Abstract: As a promising model for the development of the system of consumer cooperation, territorial-production clusters that have been tested by world practice can play the role of overcoming the antagonism of interests between agricultural producers and processing enterprises. The association of producers leads to a chance for a more complete utilization of capacities and thereby less costs, which reduces the percentage of production risk, and the processing enterprises provide themselves with a reliable raw material base and a

guarantee for the sales of finished products. The cluster allows one to balance the cooperation and rivalry (competition) of the cluster's members, since "the cluster is jointly and severally liable to its customers". It is this principle that allows us to take this organizational form as the most promising one in terms of efficiency. Since it is not only the manufacturer of the final product who is responsible to the "buyer" in economic form, but all the institutional units of the cluster share entrepreneurial risks among themselves

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and receive a prize for these risks - profit. As criteria for the feasibility of forming a cluster, it is necessary to consider not only the economic effects achieved by combining the economic efforts of interested business subjects into a single production-distribution chain within which added value is created, but also the institutional structures of the non-economic sphere - educational, innovative, administrative and others. This form of integration becomes possible due to the flexibility of the cluster structure and the matrix-network principle of its functioning, which creates additional opportunities for the cluster to survive in conditions of fierce international competition.

Keywords: human resources, personnel policy in the system of consumer cooperation, quality of life of the population, consumer cooperation, regional base of labor reserve, regional system of consumer cooperation.

1. Introduction.

The rational interaction of economic entities horizontally and vertically will provide an integrated approach to the production and

1093
processing of agricultural products, as well as solve a number of acute social problems in the city and village. The deeper the specialization, the more demands are made on the nature and the separate forms of connection, the contraction of the individual phases of the reproductive process. The processes of integration and cooperation between different forms of management are of certain importance in order to reduce the prime cost and increase the competitiveness of agricultural enterprises. Consumer cooperation as a form of cooperation involves joint actions in the production and distribution of products, mutual and common protection of interests [Exploring the cooperative economy, report 2018]. Using cooperative and integration ties, the united partners reach high economic results in their management activity and achieve a synergistic economic effect when working on the final result.

Large cooperative groups with less costs manage to expand the range of products sold, to provide the necessary control of quality indicators. To maintain their reputation in the market, cooperatives provide a certain guarantee of quality and reliability of both products and services. The cooperative has to

make more rational use of the allocated funds for advertising their products.

The priority task in creating cooperative forms is to overcome the antagonism of interests between agricultural producers and processing enterprises. The association of producers leads to cost savings by reducing resource requirements, which allows a more complete capacity utilization and thereby less costs. In addition, the cooperative can protect the interests of its members from monopolistic pressure from supply and marketing, banking and other structures, as well as from other external interference in its activities.

Thus, the main signs of the unification of future partners into consumer cooperatives are: a common interest in joint activities to benefit each member of the cooperative; economic and management freedom of the cooperative members; collective and targeted influence on the effective use of cooperative objects.

2.Methods.

Research in the formation of cluster theory began in the last quarter of the 20th century. The pioneer of the cluster research can be considered M. Porter, who in his fundamental work

“Competition” established a connection between the enterprise’s competitiveness and its participation in the creation of national and global value chains as a member of the cluster [Porter M.E. 1990, Porter M. 2005]. Further, his theory was developed in the works of S. Goetz, E. Dahmen, M.D. Dvortsin, P. Krugman, Yu.V. Krupnov, D. Maylat, S. Rosenfeld, V. Feldman and others.

The theoretical core, which makes it possible to explain the laws of the world policy of clustering the economy, is considered the theory of "industrial districts" by J. Bekattini. The conceptual ideas of specialized industrial localization were laid in the research of A. Weber, U. Isard, A. Lesh, A.G. Granberg, N.N. Kolosovsky and others. The prerequisites for the formation of cluster-type economic organizations at different levels were investigated by R. Coase, F. Perru, J. Schumpeter and others.

A significant contribution to the development of a modern spatial theory of entrepreneurship development based on market cluster models was made T. Anderson [T. Andersson, Sylvia Schwaag-Serger, Jens Sorvik, Emily Wise Hansson 2004], E. Bergman and E. Feser [Bergman, E.M. and Feser, E.J.

1999], M. Inright [Enright, M. 1996], S. Fredrickson and L. Lindmark [Fredriksson, C. and Lindmark, L. 1978] and others.

The questions of the development and application of organizational forms of interaction and innovation in cooperative organizations are described in the works of O.V. Abramovich, G.A. Baklachenko, Yu.D. Bakhteev, I.A. Belalova, E.V. Bogushevich, S.V. Brykin, V.F. Vershinin, V.M. Volodin, N.G. Volodina, L.I. Guskova, A.F. Demchenko, I.N. Denisov, V.I. Dorokhova, L.N. Dubova, A.M. Emelyanov, S.B. Ismuratov, A.N. Rasskazov, I.S. Sandu, O.M. Selezneva, M.V. Seroshtan, V.M. Starchenko, V.A. Tikhonov, E.A. Tkachenko, Yu.A. Ugryumov, A.L. Chigrik, G.I. Shmelev, A.A. Shutkov and others.

Despite the presence of a large number of in-depth researches of domestic and foreign economists on the problems of the development of consumer cooperation, there are still issues that need to be addressed. First of all, it is necessary to modernize the administrative, organizational, economic and social basics of the system of consumer cooperation, while

1095
maintaining its identity as a market and socially oriented economic subject. We believe that as an innovative model for the development of the system of consumer cooperation, it is necessary to use a cluster approach that allows to provide and implement innovative developments and to quickly adapt to changes in the institutional environment. As a result, a special form of innovation is created - the “aggregate innovative product”, which is the result of the activities of several entities of the cluster and the leading university, which makes it possible to accelerate their distribution through the network of interconnections in the common regional economic space [Feldman M.P., Audretsch D.B. 1999; Baptista R., Swann P. 1998; Cluster policy in Europe: A brief summary of cluster policies in 31 European countries. 2008; Competitive Regional Clusters: National Policy Approaches. 2007; Malmberg A., Power D. 2005]. This form of integration is a special organizational and managerial tool that ensures the consolidation of the efforts of various stakeholders and increases the competitiveness of business subjects and the territory as a whole.

3.Main Part.

The organizational model of the cluster has certain competitive advantages in comparison with simple forms of cooperation in agriculture. The unification of agricultural producers into a cluster enables the members to achieve higher competitive advantages by making it possible to conduct more efficient internal specialization and standardization, to establish cooperative and combining relationships among the enterprises that make up the cluster, and to quickly introduce highly effective innovations [Gordon, I.R. and P. McCann 2000; Czamanski S., de Albas L. 1979].

The main mission of the cluster should be to contribute to the socio-economic development of the territory through the active involvement of entrepreneurs in this process. It is the cluster approach that gives the regional authorities a unique set of tools to build effective and mutually beneficial cooperation with business.

In addition, the cluster approach provides the opportunity for focused strategic planning of the development of the territory using various modern techniques, for example, foresight studies. The goal of the Foresight is

1096
precisely to stimulate the formation process of new cooperative ties between different business structures. Also, the Foresight is focused on the introduction of innovations that can change the vector of development of the territory in the future. Strengthening the economy of the region, clusters fulfill a social role - create favorable conditions for the growth of the level and quality of life of the population. Returning again to the Foresight research, social innovation is also the focus of this technique.

Thus, using Foresight research, authorities can provide information to cluster members about the vector of development of the territory, various markets and possible fluctuations in the economic conditions, which will help to quickly guide the cluster members and to equip them with the necessary information.

However, authorities need to remember that, while stimulating the process of cluster formation, it is necessary to use not only direct and directive methods of managing the formation and development of the cluster, but also indirect forms of support - self-organization tendencies. The cluster form can give positive results only if it is based on objectively formed

economic and social needs and expresses the requirements of economic development [Humphrey J., Schmitz H. 2000; Rosenfeld S.A. 1995; Rosenfeld S.A. 2005; Tinyakova V. I., Morozova N. I., Sivtsova N. F., Rastopchina J. L. 2018; Delgado M., Porter M., Stern S. 2014].

Creating favorable conditions for the development of the cluster, authorities should not confuse the nature of the economic cluster with special economic zones. Although, from the point of view of supporting their development, the same tools are used - special preferential conditions for doing business, financial budget support, etc. Thus, a number of researchers believe that the process of organizational and institutional formation of clusters is “the appearance of a special economic zone within the boundaries of a certain territory”. [Porter M., 2000].

Cluster is a special management tool that allows one to effectively transform economic reality, at the stage of formation of which certain preferences are required from the state, but we emphasize once again – only at the stage of formation.

The authors consider the cluster as a multi-level spatial formation, where

1097
at the horizontal level there is competition (rivalry) between cooperatives producing similar goods and services and operating within the same market. And at the vertical level - cooperation (collaboration), since in a cluster the overall success and development ability depend not only on the behavior of each individual subject, but to a greater extent on their group interaction [Tinyakova V.I., Morozova NI, Gunin VK, Kireeva OI 2019 ; Tinyakova V.I., Morozova N.I., Ziroyan M.A., Falkovich E.B. 2018].

The centrifugal force uniting the cluster members into a single whole can lie in shared values, principles and ideals of consumer cooperation, which include mutual assistance, mutual responsibility, solidarity, justice, social responsibility and care. These cooperative principles are not unique, but universal and are observed in various organizational and legal forms, but it is in consumer cooperation that a social setting is predefined, the material principle is connected with the moral; economic activity is subordinated to ethical ideas and values. The principles of cooperation can be developed, but it is impossible to ignore them or to force one to perform them. This understanding is

considered one of the pinnacles of the philosophy of cooperation.

In our opinion, the cluster in the agro-industrial complex is a production and distribution network of companies united with each other in a “technological chain”, within which added value is created. As a rule, the cluster includes procurement enterprises of consumer associations, which include a wide network of procurement points, warehouses and storage facilities, slaughter sites, processing enterprises, motor vehicles, milk carriers and livestock carriers. The purpose of these enterprises is to provide a stable market for agricultural producers. Procurement enterprises purchase pharmaceuticals, various types of herbs, mushrooms and berries, fruits and vegetables, products of cattle and small cattle and poultry from rural residents. The products procured from the population are processed in consumer associations with the subsequent sale of finished goods through their own cooperative distribution network.

In addition, the cluster should include not only procurement organizations, but also processing enterprises that produce the finished product. In other words, consumer

cooperation acts not only as a procurer, but also as a consumer of agricultural products. In a number of constituent entities of the Russian Federation, consumer associations began to equip modern workshops and enterprises for the processing of agricultural products and raw materials, and establish advanced technologies for the procurement, processing and marketing of agricultural products. The quality of the produced food has improved markedly. Manufactured food products are sold through the trading system and catering enterprises.

The financial core of the cluster are credit cooperatives, the main purpose of which is to provide the necessary amount of financial resources for the development of enterprises within the cluster. This becomes possible due to more flexible loan repayment terms (for example, by commercial products), as well as a lower interest rate on loans compared to banking. Credit cooperation makes credit attractive and affordable for agricultural producers. Without the development of financial and logistics infrastructure, a cluster cannot be viable. Cooperating business entities, being links in a single production process, maintain their independence, forming a

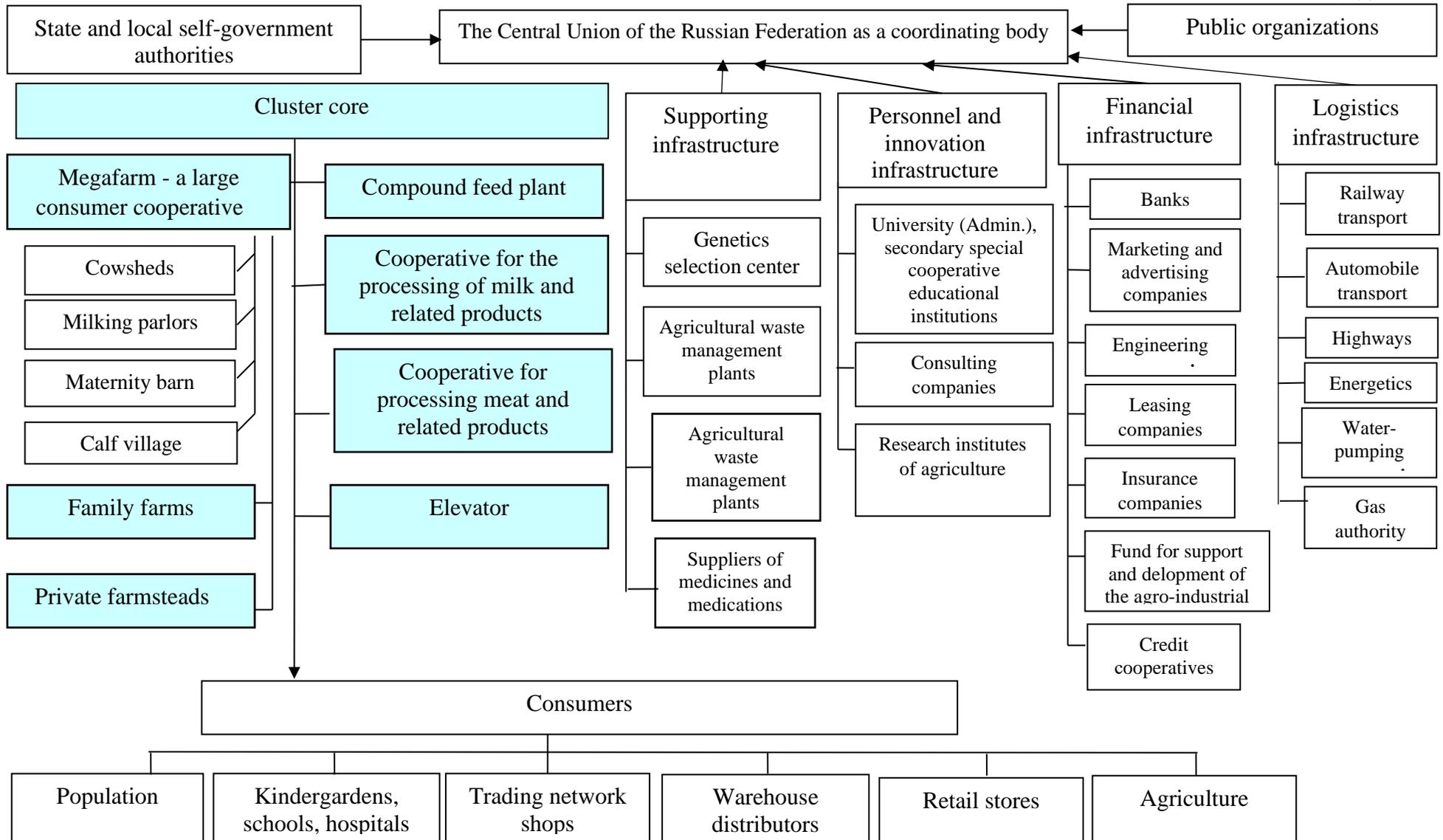
single economic mechanism, that provides a closed production and technological cycle.

A “growth pole” or core in the structure of an agro-industrial cluster is usually a large agricultural enterprise that successfully operates in the region. Around the core are concentrated medium and small farms, private subsidiary and peasant (farmers’) farms, household farms that produce agricultural products, which create a technological chain. Thus, they overcome the limited business activities

1099

of partners in consumer cooperatives, which allows to more fully use the potential of each member of the cooperative. A typical model of cluster formation in agriculture is presented in Figure.

The integral criterion of sustainability, flexibility and survivance of the cooperative sector of the economy is the multidimensional economic concept of “competitiveness” - the winner is the one who analyzes, controls and manages his competitive advantages [Wennberg K., Lindqvist G. 2010].



4.CONCLUSION.

The cluster today is one of the popular forms of association in foreign countries and demonstrates high adaptability to the challenges of the external environment, and also acts as a kind of initiator of changing the social structure of the regional economy, increasing the life quality of the population of a particular territory. In the “Concept of the Strategy for the Long-Term Socio-Economic Development of the Russian Federation for the Period until 2020”, the formation of territorial-production clusters is considered as one of the key directions of technological development that can provide a breakthrough for Russia on the world markets of technological products.

The cluster model will allow to carry out and introduce innovative developments for the subjects of consumer cooperation, thereby stimulating the creation of a special form of innovation - the “cumulative innovation product”, which is the result of the activities of several entities of the cluster and the leading university, which allows to accelerate their distribution through the network of interconnections in the common regional economic space

1101

. Similar tasks today face the Russian economy, which seeks to integrate into the world community.

ACKNOWLEDGMENTS.

This work was supported by the RFBR grant, project No. 17-02-00182-OGN "Institutional Model of Innovative Development of the Consumer Cooperative System"

REFERANCES

- Exploring the cooperative economy, report (2018) [Electronic media]. Access mode: <https://monitor.coop/en/online-library/resources> (In English)
- Porter M.E. (1990). The Competitive Advantage of Nations. New York: Free Press (In English)
- Porter M. (2005). Competition. M.: Publ. house «Vilyams», (In Russian)
- Andersson T., Sylvia Schwaag-Serger, Jens Sorvik, Emily Wise Hansson (2004). The Cluster Policies Whitebook, IKED. (In English)
- Bergman, E.M. and Feser, E.J. (1999). Industrial and Regional Clusters: Concepts and Comparative Applications”, Regional Research Institute, WVU. (In English)
- Enright, M. 1996 Regional Clusters and Economic Development: A Research

- Agenda”, in Staber, U., Schaefer, N. and Sharma, B., (Eds.) *Business Networks. Prospects for Regional Development*, Berlin: Walter de Gruyter. (In English)
- Fredriksson, C. and Lindmark, L. (1978). *From Firms to Systems of Firms – A Study of Interregional Dependence in a Dynamic Society*’, in Hamilton, F.E.I. and Linge, G.J.R. Eds. *Spatial Analysis, Industry and the Industrial Environment*, vol. 1 - Industrial Systems, John Wiley & Sons, London. (In English)
- Feldman M.P., Audretsch D.B. (1999). *Innovation in Cities and Regions: Science based Diversity, Specialization and Localized Competition*. *European Economic Review*. 43: 409-429. (In English)
- Baptista R., Swann P. (1998). *Do firms in clusters innovate more?* *Research Policy*. 27: 525 - 540. (In English)
- Cluster policy in Europe: A brief summary of cluster policies in 31 European countries*. 2008. Oxford Research AS. January, URL: http://clusterpolisees3.eu/ClusterpoliSEPortal/resources/cms/documents/2008_01_Oxford_Cluster_Policy_Report_-_31_European_countries.pdf
- Competitive Regional Clusters: National Policy Approaches*. 2007 Paris: OECD Publishing, (In English)
- Malmberg A., Power D. (2005). *How do firms in Clusters Create Knowledge?* *Industry and Innovation*. Vol. 12. 4: 409 – 431.
- Gordon, I.R. and P. McCann (2000). *Industrial Clusters: complexes, agglomerations and/or Social Networks*. *Urban Studies*, 37: 513-33. (In English)
- Czamanski S., de Albas L. (1979). *Identification of Industrial Clusters and complexes: a comparison of methods and findings*, *Urban Studies* 16: 61-80. (In English)
- Humphrey J., Schmitz H. (2000). *Governance and upgrading: linking industrial clusters and global value chain research*. IDS Working Paper 120 Institute of Development Studies. (In English)
- Rosenfeld S.A. (1995). *Industrial-strength strategies: regional business clusters and public policy*. Washington, The Aspen Institute Community Strategies Group. (In English)
- Rosenfeld S.A. (2005)/ *Industry Clusters: Business Choice, Policy Outcome, or Branding strategy?* *Journal of New Business Ideas and Trends*. 3 (2): 4-13 (In English)
- Tinyakova V. I., Morozova N.I., Sivtsova N.F., Rastopchina J. L. (2018). *Territorial Subjects Development*

Planning System Modification for Improving Life Quality of the Population. *Revista Publicando*, 5 No 15. (2): 1472-1482 (In English)

Delgado M., Porter M., Stern S. 2014 Clusters, convergence, and economic performance. *Research Policy*. 43(10): P. 1785 - 1799.

Tinyakova V. I., Morozova N.I., Gunin V. K., Kireeva O. I. (2019). Revival of the system of consumer cooperation in Russia; sustainable development of the territory and growth of quality life. *Amazonia Investiga*. 2019. T. 8. Nº 18. C. 351-358. (In English)

Tinyakova V.I., Morozova N.I., Ziroyan M.A., Falkovich E.B. (2018). Monitoring of human resources and a new educational structure for training specialists as key factors to reactivate the system of consumer cooperation in Russia. *Amazonia Investiga*. T. 7. Nº 17: C. 353-359. (In English)

Wennberg K., Lindqvist G. (2010). The effect of clusters on the survival and performance of new firms. *Small Business Economics*. Vol. 34, Issue 3: 221 - 241