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Cluster Technologies as Instrument for Agrarian Regions Development

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Abstract

Based on the analysis of international and domestic experience of using cluster technologies in national economy the article highlights their positive effect on the regional socio-economic development and identifies existing constraints for applying them in Russia. The article specifically focuses on agro-industrial production and its role in regional development in the Russian Federation, showing how cluster technologies can change the dynamics of the agrarian regions. Using process approach to management methodology the authors present a conceptual framework of agro cluster and the main stages of building agro cluster embedded in a regional economic system. Consistent implementation of these stages will help convert agro-industrial complex into one of the key sectors of the national economy and to build agro-export potential of Russia.

Keywords: cluster, cluster technologies, agro-industrial complex (AIC), agricultural policy, agro cluster

1. Introduction

The processes of regional development being typical for the present economic situation require a management framework of area development which both, must be targeted at maximizing the potential of the area and ensure the positive dynamics of the national economy. The research of the regional development issues has led to providing rationale for one of the solutions for them-cluster technologies, which increase the competitiveness of the regions and promote innovational development of the area.

The leading authority on clustering in economics and on competitive strategy Harvard Business School Professor M. Porter (2002) considers formation of clusters in an industry strategically important for a country. He defines clusters as “geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate”(Porter, 2000). Among the examples of clusters is one of the most impressive of them-Silicon Valley, which comprises computer engineering and computer software companies, Stanford University and University of California. In some areas there were devised special projects with clusters forming a strategic core.

In his research M. Porter (2002) analyzed competitiveness of more than 100 industries in 10 countries. It appeared that the most competitive transnational companies tend to concentrate in one area of a country instead of being dispersed in different countries. However, the main observation of M. Porter was the following: the more developed the clusters are in a particular country, the higher the living standards and competitiveness of the firms are.

There have been other valuable insights on clustering in connection with regional development issues made by academics and economists. S. Rosenfeld (1997), exploring the influence of cluster structures on regional development processes, differentiated clusters from chain networks and pointed out interdependence of members-participants as the major criterion of a cluster.

M. Enright et al. (2000) identified cluster as a closely related group of firms-participants located in close proximity and considered it as an instrument for regional development. In this research the classification of clusters was extended with the group of “politically controlled clusters”, which do not have critical mass but are chosen by the government to be supported, and “desirable clusters”, which have neither critical mass nor any other advantages that could encourage stable development.

Some academics emphasize the importance of clusters as a means to increase the competitiveness of the region through increasing the competitiveness of the participants of the integrated structure. Thus, E. M. Bergman и E. J. Feser (1999) generalized the notion of a cluster identifying it as a group of commercial and non-commercial organizations for whom to be a part of the group is important in order to enhance their own competitiveness.

Similar position can be found in T. Andersson et al. (2004) who defined clusters as "process of joint location of firms and other agents within concentrated geographic area". A cluster in this research presupposes joint activities in a particular functional niche augmented by establishing close relations and operational alliances aimed at boosting collective competitiveness of the members. Among the characteristics of a cluster there were indicated the following: specialization, focus on innovation, multitude of participants and a life cycle.

Another important research that benefited the present study was that of A. Markusen (1996), who examined clustering in terms of cluster participants, their behavior, interrelations and local conditions and identified the following types of clusters:

- "marshallian" clusters, which include small firms from one industry and utilize economies of scale;

- "radial" ("hub-and-spokes") clusters with the dominant position of one or several vertically integrated firms with their suppliers;

- "satellite" cluster, which includes independent companies acting as suppliers for organizations outside the cluster;

- "state anchored" cluster with the dominant position of one or several government bodies.

On the practical side it has also been useful to learn about the findings of the researchers from the Research Institute of the Finnish Economy (ETLA). In Finland there was identified a cluster framework which consists of industries with stable flows of exports and foreign investments-forest industry, IT and telecommunications, steel industry, energy sector, business services, health care, mechanical engineering, food and construction industries (Hernesniemi, Lammi, & Yia-Antilla, 1995).

Summing up the international experience on using cluster approach it should be noted that due to industrial and national factors there is much variety and lack of universality. However, it is possible to point out some general characteristics of a cluster: research and development opportunities, skilled human resources, upgrading work force potential, access to specialized services, proximity to suppliers of resources and established relations with equipment suppliers, availability of capital, associated structures, the speed of forming networks, high level of entrepreneurial activity and proactive business environment, innovation and training, collective vision and management. In most cases there is much emphasis put on specialized personnel; that is why education and focused training of labour is a mandatory and most important element in running regional cluster programs.

Unfortunately, the use of cluster approach in area development management in Russia is limited. This stipulates the need for designing methods and ways of building clusters and their modes of operation adapted to particular areas, which in turn will contribute to positive economic dynamics and enhance competitiveness of area structures.

2. Trends in Cluster Technology Development in Russia

There is sufficient evidence that cluster structures, formed in a region, stimulates the economic dynamics processes, contribute to regional competitiveness and ensure innovational regional development. They boost the entrepreneurship in the region as high level of specialization which a cluster is characterized by, encourages new firms targeted at particular market niches to be established. Moreover, numerous horizontal integration links lower the cluster barriers to entry for the new participants.

Overall economic stability of organizations-participants of a cluster is achieved through access to resources, knowledge and technology transfer, partner relations, formation of a specific type of ownership on different facilities to provide their more efficient exploitation. The increase in stability of regional economic agents in turn lays down the foundation for positive dynamics of the social and economic development of the area. This leads to higher regional budget tax revenues, improvements in region's material and technical base and the region becomes more attractive for investments. It also becomes possible to accumulate integrated knowledge base through exploiting potential of fundamental science, research and technological development, production and distribution.

At present the traditional industry-based approach in Russian regional economy management is becoming inefficient as of paramount importance become the interrelations of firms and organizations from different industries. That is why it is necessary to be in control of relationships to ensure cluster approach. This improves

the interaction efficiency of not only technologically connected organizations, but also promotes partner relationships between business, state, trade associations, research and educational institutions.

Under the conditions of limited opportunities for Russian regional authorities to exercise their vitally important functions of area strategic development, allocation of productive forces, interaction between industries and balancing regional economic structure, cluster technologies can become the foundation for regional economic policy effectively integrated in national economic system.

These days cluster-based area development approach is finding more support in Russia. In 6 regions there are already functioning clusters which are listed in The European Cluster Collaboration Platform (ECCP) (ClusterCollaboration.eu) (Table 1).

The institutional platform for cluster development in the regions is actively taking shape even though the national policy in this sphere has not been defined yet. Among the examples can be named Centers for Cluster Development in Tatarstan, the Astrakhan, Voronezh, Tomsk, Kurgan regions; Centre of Innovational Development and cluster initiatives of the Samara region. However, neither these initiatives nor the scale or speed of building cluster structures are sufficient for Russia to score high in cluster development ratings.

Table 1. Russian clusters in the European cluster collaboration platform (ECCP)

Region	Cluster	Industry
The Penza Region	The Penza confectionary cluster	Agrarian and Food industries
	Biomedical cluster of the Penza Region	Biotechnology
	The Penza innovation cluster of universal components and metering systems	Electronics, Electronic engineering
	The Penza glass cluster	Optics, Photonics
	The Penza travel industry cluster	Tourism
	Furniture cluster of the Penza Region	Timber industry, Furniture manufacturing
Republic of Tatarstan	Sinarskiy pipe manufacturer	Plastic industry
The Samara Region	The Volga automotive cluster	Automotive
The Sverdlovsk Region	The Ural pharmaceutical cluster	Chemistry
	The Yekaterinburg medical cluster	Health care, Medical equipment
	The Ural IT-cluster	IT technologies
	Ural locomotive engines	Transport infrastructure
The Tomsk Region	“Fluoride technologies” cluster	Chemistry
	“Solid-state microwave electronics” cluster	Electronics, Electronic engineering
	“West-Siberian Atomic Industrial Alliance” cluster	Energy sector
	IT technologies cluster	IT technologies
	Timber cluster	Timber industry, Pulp and paper industry, Furniture manufacturing
The Kaluga Region	Innovational area cluster “Pharmaceuticals and medical equipment”	Health care, Medical equipment
	Non-commercial Partnership “Kaluga Pharmcluster”	Biopharmaceuticals

It is worth mentioning that the speed of cluster formation in different countries is different and this is reflected in the rating based on the database on assessing Global Competitiveness Index (World Economic Forum) (Table 2).

The above given data shows that the Russian position has considerably weakened: in 2009-2010 the country ranked 90-th, whereas at present its rating has lowered down to 124-th position. According to 7-band scale of quantitative rating of cluster development level in different countries, where ‘1’ means that there are no well-developed clusters in the country, and ‘7’-they exist in many areas, Russia has scored not higher than 3.2 over the past 5 years.

Table 2. Comparison of cluster development level for Russia based on the data of global competitiveness index-GCI

Country	2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	Rating	Rating position	Rating	Rating position	Rating	Rating position	Rating	Rating position	Rating	Rating position
Russia	3.0	90	3.2	87	32	92	3.0	114	3.1	124
Brazil	4.2	29	4.5	23	4.5	25	4.5	28	4.5	26
Germany	4.9	11	5.0	12	4.9	13	5.1	8	5.4	4
India	4.6	20	4.2	29	4.2	31	4.5	29	4.9	16
Italy	5.4	3	5.5	1	5.4	1	5.3	2	5.5	2
China	4.7	16	4.7	17	4.7	17	4.6	23	4.6	24
Kazakhstan	3.3	76	3.2	85	3.3	85	3.1	110	3.1	126
USA	5.4	2	5.1	6	5.1	9	5.0	12	5.2	6
Japan	5.5	1	5.4	2	5.3	3	5.2	5	5.2	7

Note. In 2013-2014 Index-148 countries; in 2012-2013 Index-144 countries, 2011-2012 Index-142 countries, in 2010-2011 Index-139 countries, in 2009-2010 Index-133 countries.

3. Economic Growth Issues in Russian Agro-industrial Complex

Taking into account the positive impact of economic growth rates and their sustainability on dynamics of economic development, it is no wonder that the pace of economic growth is considered to be one of the key issues when the country aims to intensify the reproduction process and to find solutions for social tasks. However, this issue should not be tackled at the national level only, it has area and industry dimensions. To all effects and purposes, if a country's economic growth rates do not grow, the economy is characterized by replacement or even constricted reproduction.

Among the criteria of sustainable economic growth there are usually named the following: invariable direction of development, targeted among others at growth of output and living standards; balanced socio-economic system with appropriate economic/social systems development ratio; efficient structure of investment policy aimed at integrated development of industries within the economic framework.

Under present conditions the indicators of sustainable economic growth in addition to the main ones, which are GNP growth rate, changes in the structure of material goods and services, productivity rate in social labour, are the following:

- increase in the production of new and higher in quality means of production and technologies;

- increase in the output of radically new products and services alongside with the increase in productivity and demand;

- relative reduction in costs due to the consumer's effect growth;

- increase in production of the means of production targeted at producing new goods;

- extensive use of information technologies to ensure the renewal of different aspects of technological mode.

The country's economic development and living standards to a large extent depend on how developed the agro-industrial complex (AIC) is. The share of the AIC industries constitutes about 9% GNP, with food products making up to 46% of total retail turnover. One out of five in the workforce is engaged in agro industrial sphere, tax liabilities of food and processing industry bring about 18% of revenues (All-Russian Research Institute of Agriculture Economics, 2011). Agriculture is the end user for many industries and services, providing employment for millions of labour force.

With Russia becoming more involved in global developments there is perceived the need to economically protect national interests in agricultural sphere, primarily in order to ensure food supply security and appropriate degree of economic independence.

However, there is no theoretically substantiated framework for the AIC economic growth perspectives which will be focused on national level issues, and what is more, there is no clearly cut strategy in the state economic policy. Official documents acting as organizational and legal provision for the present agrarian policy ("Perspectives of long-term socio-economic development of the Russian Federation for the period up to 2020",

"Doctrine of food supply security of the Russian Federation", "Perspectives of the rural areas development for the period up to 2020"), hold to mainly inertial model of evolution in agriculture, which does not allow to spur the factors of AIC economic growth.

Having the richest natural resources potential the Russian AIC cannot fully cover the food requirements of the population of the country, and the deficit in food products has to be made up for with imports. Over the period of 2006-2013 the volume of food imports increased twofold and amounted to 42.58 billion USD in 2013 (Federal Customs Service).

According to the data of the RF Federal Customs Service in 2013 the volume of food products imports increased by more than 3% in comparison with the previous year. There was a marked increase in imports of such staples as butter (32.6%), milk and cream (30.9%), milk and condensed cream (in 2.2 times).

The figures indicate that there is a negative trade balance in this sphere-value of imports in 2013 exceeded the value of exports by 27.9 billion USD. From macroeconomic point of view this is due to the fact that Russia lags behind in production of the major types of agricultural produce and food products (Table 3). Over the past five years there has been negative dynamics in such staples as butter, grain, potatoes, milk.

The main reasons of the current situation are:

- lack of systemic approach to finding ways of ensuring intensive growth of the AIC;

- undervaluation of integrity of basic reproduction conditions for the economic growth in agrarian sector under the conditions of globalization of the economy;

- insufficient consistency and integration of the measures undertaken in order to ensure development of agro-industrial complex at different organizational levels.

Table 3. Per capita production of major types of agricultural produce and food products in 2010, in kg (federal state statistics service)

Type of produce	Russia	Byelorussia	Kazakhstan	Germany	France	USA	China
Butter	1.5	10.4	0.9	5.5	6.4	2.3	0.1
Grain	426	737	746	611	1099	1,375	366
Potatoes	148	825	157	142	111	64	52
Cattle and foul for slaughter in dead-weight	50	102	57	111	86	136	59
Milk	223	698	330	350	375	280	3
Eggs, in numbers	284	373	228	129	251	306	366

Conceptual changes in the agrarian economic complex towards modernizing and innovating agro-industrial production should be conducted in keeping with the macroeconomic factors, which at present restrict the opportunities for the main body of agricultural commodity producers to extend reproduction, to switch over to energy-saving technologies and to ensure significant economic dynamics. These constraints are primarily the result of government policy aimed at liberalization of the energy resources and increased costs of material and technical resources. In addition, joining WTO and adhering to its regulations and requirements proved very painful for the Russian agriculture. According to the agreement with WTO Russia gets support for agricultural activities at the level of 50 USD per a hectare. For many countries this figure amounts to at least 1,000 USD. It should be noted that the 'allowed' support for Russia does not reflect the correctly calculated norms though; it highlights the lack of sound judgment and absence of careful preparation before joining WTO.

At present, however, it is necessary to actively support the industry. Research shows that if correct and socially fair proportions in national income allocation are observed, a balanced pricing police will provide agriculture profitability level of 25%, even with the added costs of a competitive salary (Buzdalov, 2013). This approach would mean the significant flow of badly needed investments so that the agriculture can be switched to the intensive mode of development. As for now, deterioration in the equipment of the AIC exceeds 40%. Even though the fixed assets replacement ratio in agriculture shows some growth, it is considerably lower than the figures for other industries (Table 4).

Table 4. Fixed assets replacement ratio, % (federal state statistics service)

Industry	2005	2009	2010	2011	2012
Agriculture	2.4	4.1	3.7	4.3	4.2
Mining	5.1	7.1	4.9	6.0	6.4
Manufacturing	5.4	6.2	5.9	6.4	6.5
Construction	2.9	3.4	3.2	5.1	4.5
Commerce and catering	6.4	7.0	6.4	7.6	6.6
Financial sector	6.6	7.1	7.8	9.6	11.0

The investments in agrarian fixed assets are not high enough to ensure intensified production and dynamic development of agriculture. This sector is notorious for its low attractiveness for investors, being constrained by long-term nature of investments and non-existence of really competitive environment, while alternative options of funding more attractive industries are ready available.

Analysis of fixed assets investments indicates that their structure over the past 15 years has practically remained the same: the share of agriculture is low and considerably smaller than that of mining, or transport and communications, or real estate (Figure 1).

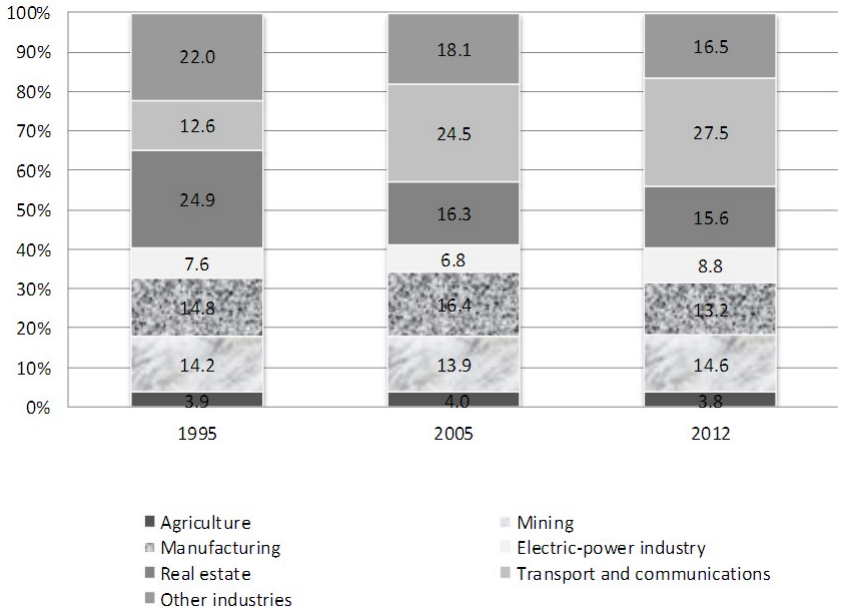

Figure 1. Industry-based fixed assets investments, % (Federal State Statistics Service)

It should be acknowledged that it is difficult to finance intensive development of agriculture when the economic growth rates are slowing down and the fiscal revenues decrease. This call for search of new approaches and policies in agricultural sector, which will help find solutions for strategic issues in agro-industrial production under given limited resources.

Applying clustering to agrarian sector will not only help ensure positive dynamics of the AIC but will also trigger the development of the whole economic system addressing both national priorities and social responsibility issues. In this way the stable development of agrarian sector will determine sustainable economic growth and social stability in the country as a whole.

4. Cluster Technologies in Rural Areas Development

The Russian rural areas, comprising municipalities and regions where the main operations involve production and processing of agricultural produce, occupy two thirds of the territory with 39.2 million people (27% of the total population). There are 150 thousand rural settlements run by 24,409 rural administrative authorities forming 1,865 administrative regions (RF Ministry of Agriculture).

In most cases municipalities such as small towns, residential communities, villages, Cossack and mountain

villages, kishlaks and other residential settlements with marked agricultural profile are sparsely populated. In over 70% of rural residential settlements the number of people does not exceed 200, while settlements with more than two thousand inhabitants make up only 2%. The bigger part of the rural residential settlements are uninhabited areas or with not more than 10 residents (Regulation of the RF Government of 30 Nov.2010. # 2136-p). It goes without saying that it is practically impossible to apply cluster approach in an isolated under populated settlement. Cluster technologies will work efficiently on the basis of integrated municipalities in one or several regions.

Another issue to take into account is climate conditions which determine the agricultural production environment. There are relatively few regions (constituent entities) in Russia which can be considered in terms of gross regional product structure viable for agricultural production. The figures for 2012 indicate that the share of agriculture in GRP was the highest for the Kalmykia Republic with 34.2%. For the other regions of the Southern Federal District the proportion is at the level of 7% to 10%. The share of agricultural production is relatively high for the Altai Republic (20.9%), the Karachai-Cherkess Republic (18.5 %), the Republic of North Ossetia-Alania (17.8 %), the Kabardino-Balkarian Republic (17.4 %), the Belgorod and Tambov Regions with 17.3 % each. There are another 13 regions with the share in GRP higher than 10% (Zinchuk, 2012).

With the support of the state, cluster technologies in agrarian sector will boost market mechanisms and ensure the socio-economic dynamics of the AIC.

Many economists agree that the regions where the clusters emerge become leaders of economic development. The formation of clusters is particularly crucial for the regions where agro-industrial production has a substantial share in gross regional product. What is more, cluster structures are much more suited for new economic environment, contributing to increased competitiveness of the AIC of the region and promoting its innovational development.

More and more regions in Russia recognize the benefits of using cluster technologies in AIC innovational development. They aim both, to ensure the balance of regional economic system on the basis of reestablishing economic relations and to maximize the economic potential of the region. As a result this leads to local authorities being actively involved in building agrarian clusters (agro clusters). By agro cluster is understood an integrated innovational structure which is located on a certain territory and is formed on the basis of agreement between independent economic agents with the aim to build a strategic platform for agro-industrial production development.

There have already emerged different types of agro clusters. For example, in the Samara Region under the initiative to ensure the food security of the region there has been built a regional agro-industrial cluster which includes 476 large agricultural enterprises, 2603 farms, 1000 food, processing and agro service companies, 5 agricultural machinery units, 11 educational and research institutions (The Samara Region Ministry of Agriculture).

In the Stavropol Region within the framework of agro-industrial cluster development the volume of agricultural produce is steadily rising together with increase in its share in the domestic and international agricultural markets. The Stavropol Agro-industrial Cluster is a large scale integrated structure which encompasses a substantial part of the regional economic system and contributes 13.6% to the GRP. The cluster includes 165 business units, 42 wine and cognac manufacturers, 40 mineral water bottling plants, 20 beer and non-alcoholic beverages plants, 18 bread production plants, 16 milk factories, 13 meat processing factories, 7 canning factories, 4 distilleries, 4 oil-extracting factories, a sugar plant. The science-based and innovational support of the Stavropol Agro-industrial Cluster is carried out by Stavropol State Agricultural University (Agro cluster).

In the Omsk Region noncommercial partnership “Centre of Innovations” is implementing a federal project “PARK”-“IARC: Industrial and Agrarian Regional Clusters”. The aim of the project is an integrated creation of cluster facilities in RF regions. The Omsk Region has become a pilot operation. There has been created an innovational cluster combining 4 complexes: agribusiness, petrochemical complex, silicone complex, forestry. The main aims of the cluster participants are the following: to create a complex of high level processing of grain crops and biomass and formation of integrated food and energy system-joint production of food and fuel on the basis of renewable sources of base materials. Agro-industrial participants of this cluster are agricultural enterprises “APK Titan” LLC with 100 hectares of land and “Titan-Agro” LLC, which has a fodder plant and a swine enterprise.

The Omsk industrial and agrarian regional cluster demonstrates the advantages of cluster technologies, which provide solutions both to economic (8-fold increase in value added to the costs of agricultural raw materials and produce), innovational (5-fold increase in the base materials processing depth) and social tasks. Within the

cluster framework there are carried out cultural, educational and sport activities programs, there is also given support to fundamental science and young scientists, a housing program is being implemented. The cluster has offered new stable jobs, triggered the development of small and medium businesses, it is improving the infrastructure and addressing ecological issues (Anokhina, 2013).

These examples give an ample proof that clusters at the level of regional agro-production complex are in fact a tool of strategic management of the agro-industrial production and can perform such functions as regulation of interrelations between industries, optimization of human resources deployment and rural area development.

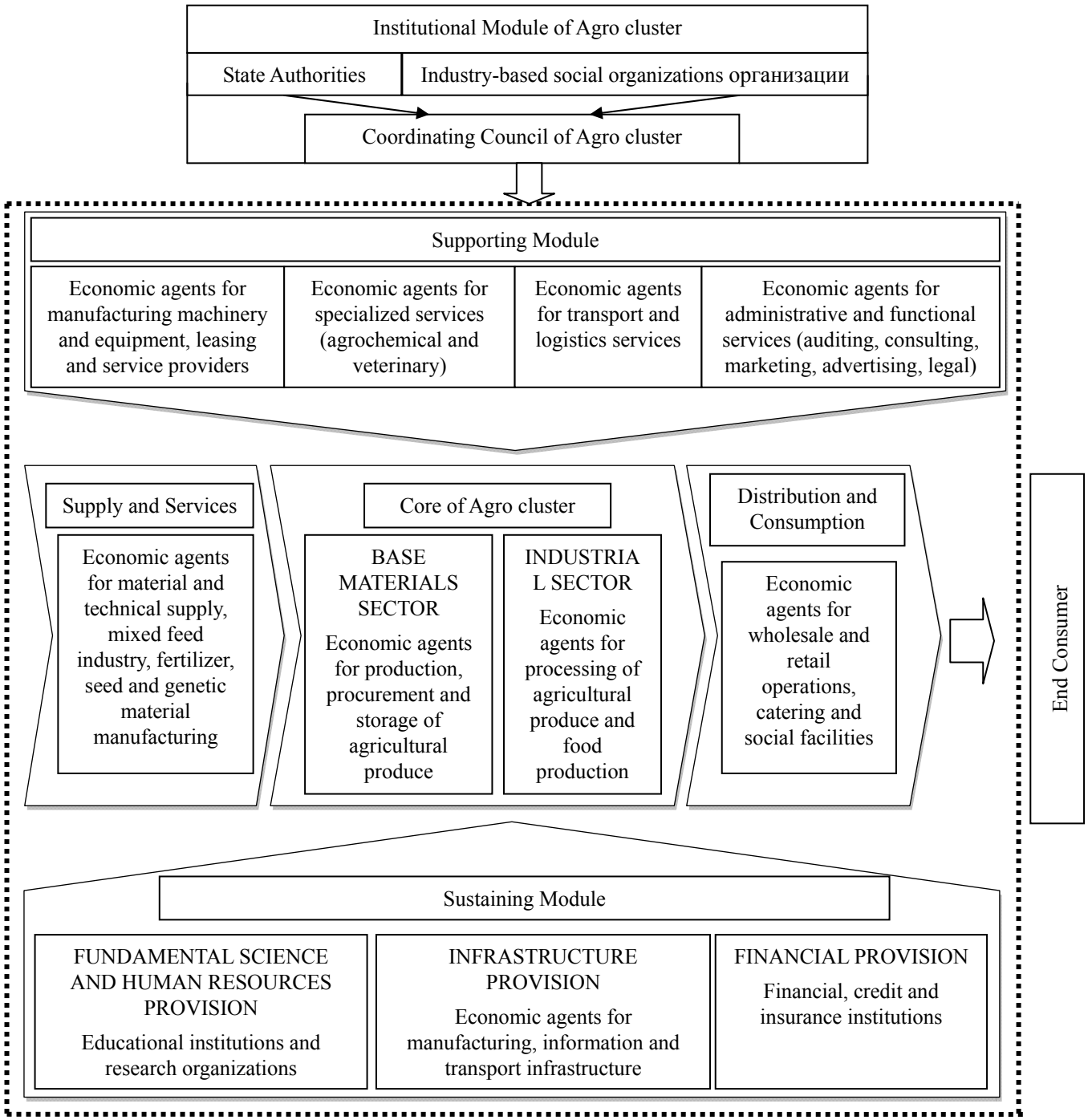

Figure 2. Conceptual framework of agro cluster

However, there is already evidence that not only top down approach is visible in the process of cluster formation. There are also examples of businesses attracted by the advantages of clustering. One of the main agricultural

projects of 2013 in the Pskov Region was the initiative of the owner of Velikolukskyi meat processing plant Wladimir Podvalnyi. The businessman is building agro cluster with the investments of more than 50 billion rubles. There has already been built a fodder plant, 4 pig farms for 2 million pigs are being constructed. He also plans to create a new meat processing plant in close proximity to already functioning one and a baby food combine under his own brand. Agro village for the employees with 500 houses on the territory of 500 hectares will become an integral part of the project (Business Petersburg).

However, the scale of cluster technologies in agribusiness in Russia is not sufficient to ensure the dynamic development of the AIC. Among the restricting factors should be named the absence of specialized legal and regulatory frameworks, insufficient methodology of cluster formation processes and virtually no interest on the part of authorities in agro clusters development. What is more, neither in the Federal Law "On development of agriculture" #264, nor in "Perspectives of long-term socio-economic development of the Russian Federation for the period up to 2020" there is a concept of agro cluster. In the "State Program of agricultural development and on regulating markets of agricultural produce, base materials and food for 2013-2020" the issue of area cluster formation is narrowed down to dairy and meat industries only. No other types of clusters are mentioned in this document, neither is there a legal and regulatory basis for cluster development in the AIC.

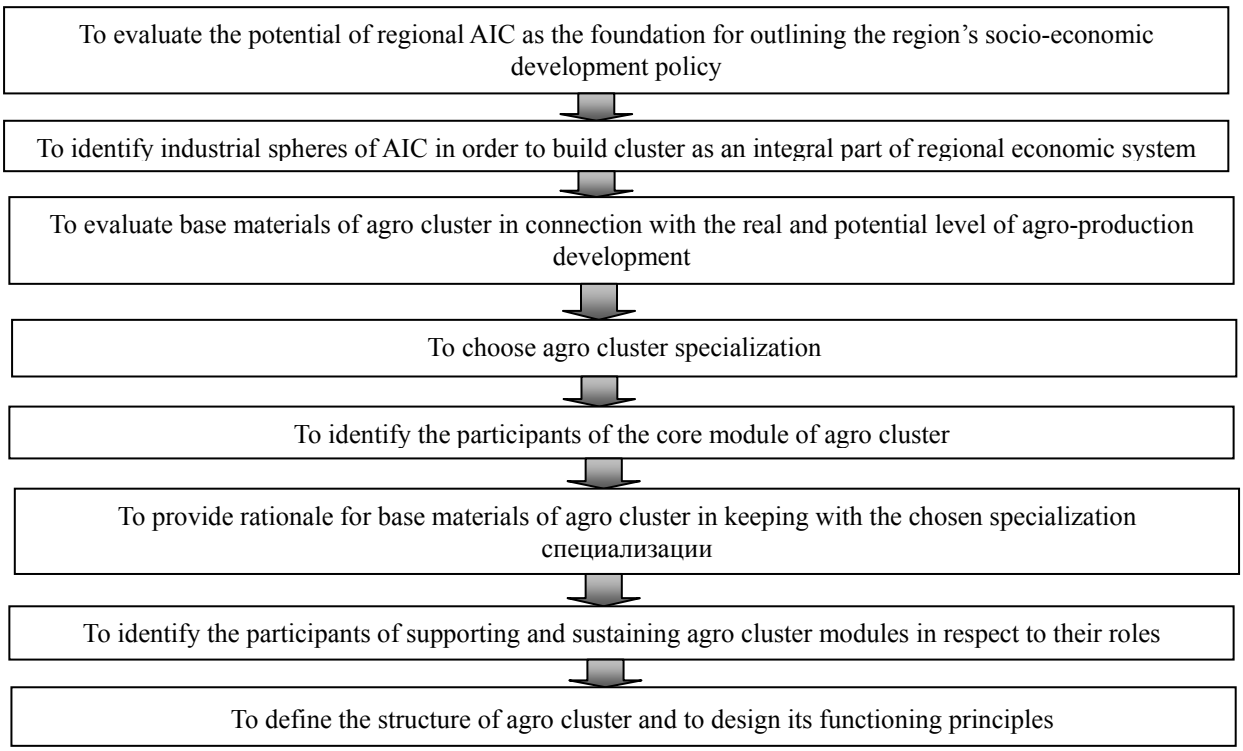

Figure 3. Stages of building a regional agro cluster

Taking this into account it is appropriate to define a concept of basis model of agro cluster and formulate basic conceptual requirements for its activities as the foundation for economic growth of the AIC:

1) The main aim of agro cluster formation is to create conditions for dynamic development of the AIC on the basis of partner relations between the participants and theoretically substantiated and innovational approaches.

2) The structure of agro cluster is identified on the basis of business processes management technology on value chain creation for end consumer of agrarian produce with maximizing area deployment potential of the participants (Figure 2).

3) The core of the agro cluster is formed by the businesses which will jointly ensure economic success for the cluster. These businesses will be engaged in the major operations and encourage development of the other participants of the cluster.

4) Base materials sector of the core of agro cluster are agricultural enterprises which provide competitive agricultural raw materials at the first stage of business process and thus ensure the well-being of the whole cluster.

5) Structure of agro cluster is flexible and allows changing the participants if there are changes in its objectives and if new opportunities arise. However, the cluster will retain its agricultural focus.

6) Sustainability and efficiency of agro cluster is determined by opportunity to maximize synergy effect of enriched capabilities of the participants and business environment with the dominant role of government bodies providing business climate for the cluster activities.

7) Agro cluster should be an integral part of a regional economic system and perform not only the functions related to economic interests of the participants, but also serve as an instrument for socio-economic development of AIC and the area as a whole.

The suggested stages for implementing cluster technologies in agro-industrial sphere are based on the developed conceptual requirements and are targeted at maximizing area potential (Figure 3).

5. Conclusion

Summing up, it is undeniable that cluster technologies cannot be considered a panacea for providing solutions for the identified problem areas which are too deep and complicated to be addressed in only one way. That is why the above suggested approach of the authors does not aim at exclusiveness. There may be other forms and means to ensure economic growth of the AIC which could prove more worthwhile and efficient to be implemented given a particular case. Nevertheless, one thing is clear-it should be among the priorities of the Russian national policy to transform the national agro-industrial complex into one of the key sectors of national economy, so that it could satisfy the main needs of the population and industry, help solve the social problems and build a future agro-export potential of Russia.

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