Original Research   **Open Access**

Cluster Approach as a Factor of Increasing the Investment Attractiveness of the Region

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Abstract

Close connection of cluster processes with increasing competitiveness of territories and states has been recently reinforcing the idea of promoting a special approach in modern theory and practice, called cluster policy, that influences the formation and development of clusters. Regional production clusters are built on the basis of the assets and resource base of the territory and include organizations and enterprises of various sectors of economy. The development of territorial clusters can play an important role in solving the problem of attracting investments to regions, since exactly clusters are able to generate innovative mechanisms of management. Cooperation and specialization of entities included in cluster provides them with opportunities to increase both competitiveness and efficiency of their activities and financial stability. Generally, regional cluster policy implies a set of direct, but mostly indirect, activities aimed at reducing barriers to the exchange of knowledge and ideas, as barriers prevent the establishment of effective links between various participants in the clustering process. The article describes the features and conditions of successful implementation of the cluster approach as a factor in increasing investment attractiveness at the regional level. Moreover, the perfect case in point is the experience of implementation of cluster initiatives in the Republic of Tatarstan.

Keywords: Regional clusters; Regional cluster policy; Investment attractiveness of the region; Cluster approach; Cooperation and specialization of enterprises.

1. Introduction

According to statistics, the clustering processes has currently covered more than 50% of the economies of the leading countries. The most exceptional examples of presence of cluster structures can be identified in the economies of Denmark, Finland, Norway, Sweden (Sölvell *et al.*, 2008). Particularly fast clustering processes are developing in countries in South-East Asia, Japan, and China. Cluster innovative investment framework has most successfully showed itself in a relatively small, but sufficiently diversified territorial economies, with industry structure which initially have the level of production and technological competitiveness relevant to the world standards.

Regional clusters of production are formed on the basis of the assets and resource base of the territory and include organizations and enterprises of various sectors of the economy (Haak *et al.*, 2014). Moreover, representatives of the administration, government agencies, , research institutes, educational institutions, professional and public associations also can be classified as members of clusters. Russia's social and economic development strategy till 2020 designated the formation and promotion of territorial production clusters as one of the important directions of the formation of a national system of support development, ensuring entry of our country into the world markets of high-tech and medium-tech products (Antúnez, 2016).

2. Methods

The cluster approach to the management of regional development processes is, first of all, a new management technology designed to strengthen the competitive positions of both specific territories or industries and the whole country. For the regional governing, clustering is, firstly, one of the most progressive and convenient models in industrial policy; secondly, it is an effective platform for building interactions between businesses and government; thirdly, local authorities are concerned about numerous issues, the solution of which requires additional material costs, time and knowledge.

The practice of implementing projects to support

and develop clusters has been taking place in Russia since 2005. Taking into account the peculiarities of the modern stage and the guidelines for import substitution and export support formulated by the President and the

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Government of Russia, the main tasks of the modern stage of economic development naturally include measures to conduct an active cluster policy.

The cluster approach is an effective framework for achieving the main regional economic goals: increasing the profitability of territorial entities and providing the population with jobs. These provisions are confirmed in practice by the successful experience of many countries (Egorov and Charkina, 2006).

However, clustering processes cannot be considered as a phenomenon peculiar mainly to regions with low level of industrialization. Thus, according to statistics, the vast majority of clusters are located in the regions of long-term industrial development, and their specialization is focused on traditional industries (Feser *et al.*, 2008).

The enterprises that are included to the cluster compete with each other as well as work together to find solutions to various problems. The prior ones are the need to distribute innovative developments and prepare appropriate qualified personnel is in the first place (Bodnár *et al.*, 2014).

Cluster structures are currently operating in many regions of Russia. However, according to the results of the assessment of the Global competitiveness index, the level of development of clustering in Russia is still comparatively low (114 place out of 144 countries). It is worth mentioning that BRICS countries have a serious

advantage behind Russia (its partner): India – 29 place, Brazil – 28 place, China – 23 place (Mustafina and Kaygorodova, 2016)

Territorial production clusters as an investment object cannot be formed from scratch, it means that the clustering process can be successful and effective only if the project meets the following conditions:

1. Member-entities participating in the cluster should be geographically located on the close distance. This clause enables members to save in transport and communication costs, provides an opportunity to reduce material costs in managerial cooperation, and to obtain savings through the exchange of labor, capital and information. Moreover, the geographical scale of clusters can vary from local and regional to interregional.

2. Institutions of development and public administration should maintain their compliance with high quality standards. This condition assumes that the state pursues a purposeful policy of promoting various forms of cooperation including cooperation on the basis of a network of development institutions. Also, it provides direct financing of cluster projects in the early stages, focusing them on the future needs of the business. Moreover, the role of such formal structures increases when cluster is expanding and getting the status of completed project, as investment projects with significant finances are becoming the part of cluster at the stage.

3. The regional infrastructure should be basically developed. There are certain basic requirements to transport, social and engineering infrastructure of the region, as well as the essential level of development of the organizational structure of the managing clusters, internal and external cooperation and contract relations in the production of goods (services).

4. The cluster should have a cluster-forming core, i.e. a set of companies that produce the final product. The core can include one or several independent large enterprises, that possibly have a serious competition between each other. This distinguishes the cluster from a financial-industrial group or a cartel. At the same time, the enterprises included in the core of the cluster provide the most favorable conditions for the development of production specialization, including auxiliary, servicing and supporting industries.

5. The cluster should conform to the main political goals and objectives of the regional and state authorities. The cluster, which is created and developed in the region where the unity of cluster policy and a common strategy of industrial development of the country and regions remains

preserved, is destined to the efficient development. On the contrary, the case when the interests of cluster members are taken as a basis is already a special and complex problem.

6. The cluster should have a free access to a sufficient range of human resources. The higher

education institutions, secondary vocational education institutions and initial vocational education institutions should comply with the requirements of the cluster in terms of content and quality of education. Moreover, the region should develop the system of continuous education.

2.1. Features of The Cluster Approach in The Formation of Regional Industrial Policy

Generally, applying cluster approach in the development of a region and increasing its investment attractiveness requires authorities and residents of a territory, as well as economic entities to reconsider their goals, objectives and even changes in the management procedures and mechanisms of managerial influence applied by economic entities and authorities. The differences between traditional and cluster approaches in creation regional industrial policy are demonstrated in Table 1.

Table-1 .Comparative features of traditional and cluster approaches in creation regional policy

Criteria	Traditional approach	Cluster approach
Local and State governments support	Entrepreneurs. The material component of the infrastructure	Business environment. The non-material component of the infrastructure
The sequence of development (source of initiative)	Centralized (from the top to the bottom)	Initiatives can come from both the authorities and business structures, but the construction is carried out together
Managing authority	State government	Regional authority
Partnerships	No/weak	Strong
The process of projects selection	Closed	Open, joint, competitive
The criteria of effectiveness of regional policy	Increase of employment, increase of investments	Increase in competitiveness of region and country, growth of living standards
Flexible responding to changes in market conditions	moderate	moderate
Key players	Large business structures, corporations, banks, research institutions, governmental authorities	Innovative enterprises, corporations, research institutions, associations
The main source of investment	Bank capital	State resources, capital of institutional investors
The possibility of cross-sectoral synergy of innovations	limited	moderate
The main drawback of the approach	High inertia	Significant dependency on state funding at the initial stage of the innovation cycle

The variety of priorities for the development of clustering in the region is the unifying component of regional policy, which depends on the dimensions and conditions of the region's economy development; in a more precise formulation, it means choosing the promising areas and sectors of the economy (Asheim *et al.*, 2006).

3. Discussion

Generally, regional cluster policy implies a set of direct, but mostly indirect, activities aimed at reducing barriers to the exchange of knowledge and ideas, as barriers prevent the establishment of effective links between various participants in the clustering process (Hospers and Beugelsdijk, 2002).

In this regard, it is necessary to focus on the fact that the cluster policy aimed at increasing the attractiveness of the region has some characteristic features:

1. Mandatory focus on support of groups of companies, joint projects and scientific developments instead of individual enterprises.

2. Cluster policy is not limited by the target segment of economic activity, so special attention should be paid to related sectors.

Cluster policy is mainly a set of indirect intervention measures aimed at forming the parameters of the economic environment and developing business networks between various entities, individuals and institutions involved in the process.

It is worth considering the influence of regional cluster initiatives on increasing the investment attractiveness of the Republic of Tatarstan.

The Republic of Tatarstan is an exceptional example of successful implementation of the cluster approach in the development of the economy and increasing its investment attractiveness . This concept, is a priority direction of development, presented in the "The Strategy of Social and Economic Development of the Republic of Tatarstan till 2030". The strategy proclaims the idea of development of the Republic of Tatarstan as a global investment-attractive, competitive and sustainable region, the engine of growth of the "Volga – Kama" region (Glaser, 2014).

Industrial production contributes to a significant portion of the gross regional product of the Republic of Tatarstan. Thus, the cluster initiatives implemented in the Republic are based primarily on large industrial enterprises.

It is worth mentioning the positive experience of the cluster regional projects implementation the Republic of Tatarstan. "Kama innovative territorial production cluster" can be considered as a perfect example. This cluster appeared due to the efforts of enterprises included in it. "Kama innovative territorial production cluster" is based on such industries as refineries, petrochemicals, automotive industry (Yusupova *et al.*, 2017).

"Kama innovative territorial production cluster" of the Republic of Tatarstan has been included in the list of innovative territorial clusters in 2012, approved by the Chairman of the Government of Russian Federation D. A. Medvedev.

It got its name due to its location in the North-Eastern part of the Republic of Tatarstan on both banks of the Kama river. The cluster includes urban district Naberezhnye Chelny and five municipal districts: Elabuga, Zainsk, Mendeleevsk, Nizhnekamsk and Tukayevsky.

The competitive advantages of the cluster are explained by the successful economic and geographical location, formed cooperation relations and the territorial proximity of its participants (all the largest enterprises - participants of the cluster are located within a radius of 30 kilometers). An important role in the development of the economy of the "Kama innovative territorial production cluster" belongs to the special economic zone "Alabuga".

The total volume of investments declared by residents of SEZ "Alabuga" is 153.5 billion rubles, while the volume of investments absorbed by residents for the entire period of activity as of January 1, 2016 is 96.12 billion rubles. 5504 jobs have been created on

the territory through new projects. The total revenue of residents from the sale of goods, works and services reached 165.2 billion rubles. The volume of tax revenues, which for the entire period of activity amounted to 12.4 billion rubles, is also significant (Abikhanova *et al.*, 2018).

Enterprises-residents produce primarily modern, innovative products, including import substituting production (cars, thermal insulation products, MDF, sheet glass, fiberglass, etc.). The objective to produce products substituting import has been defined by Federal Government.

It is expected that in the future promotion of the practice of investment projects in the "Kama innovative territorial production cluster" will provide the ability to create about

30 thousand high-performance workplaces, reach the number of shipped products to 2 trillion rubles, to increase the volume of gross value added created by 2020 in "Kama innovative territorial production cluster" (up to 1.1 trillion rubles).

In this regard, the cluster can become a point of growth not only for Tatarstan, but also for the whole Russia. The information on the basic target reference points of development of the "Kama innovative territorial production cluster" for the period up to 2020 is presented in Table 2.

Table-2. Basic target indicators of development of the "Kama innovative territorial production cluster"

Indicator	Planning period	Value
Research and development expenditures. Formation of innovative infrastructure of enterprises and organizations of the cluster (billion rubles)	2012-2016	9,6
	2016-2020	3
Number of employees involved in R & d (the staff of organizations-members of the cluster)	До 2020	4000 чел.
The total revenue of the enterprises-members of the cluster from the sale of non-oil products in the domestic and the foreign market (billion rubles)	2016	19,8
	2020	50
The total number of jobs with the level of wages exceeding the average wage of the region based cluster twice, as well as enterprises and organizations-members of the cluster (units)	2016	4270
	2020	5020
Output per employee of enterprises and organizations-members of the cluster (thousand rubles)	2016	4915
	2020	6850
The total amount of private investment in the development of production, design and market promotion of new products (billion rubles)	2016	5,66
	2020	1

Since 2015 the Republic of Tatarstan has 15 representative offices in CIS-countries and foreign countries, and 8 representative offices in Russian regions. The following fundamental purposes of these representations have been highlighted: representation of trading and economic interests of the Republic of Tatarstan, promotion of cooperation on mutually advantageous conditions, identification of potential investors and partners for the economic development priorities of the Republic of Tatarstan (Alavirafiee *et al.*, 2018).

5. Summary

According to the experience of developed countries, clusters are the most flexible and effective mechanisms under market economy conditions. They are based on the principles of cooperation and competition.

Clustering is particularly important for regional management. It is one of the most progressive and convenient models of industrial policy and an effective platform for building business networks between

business and government.

The clustering processes of territorial and production clusters have to successfully and effectively meet a set of conditions to become the investment target.

The choice of development priorities of clustering in the region is the unifying component of regional policy. The choice depends on the dimensions and conditions of the region's economy development; in a more precise formulation, it means choosing the promising areas and sectors of the economy.

6. Conclusion

The international experience and especially successful experience of the Republic of Tatarstan bring the new status of the core of the economic policy of the Republic to the cluster activity. Cluster activity is focused on priority areas that cause economic development and sufficient growth of competitiveness in the national and international markets.

Thus, clustering has become a new management technology and one of the most progressive and convenient models for the implementation of the most important areas of economic policy. Also, it has demonstrated its sufficient high efficiency in the Republic of Tatarstan, which gives the promising expectations in terms of application the practice in the regional management of other regions of Russian Federation. At the same time, it should be taken into account that the focus on the promotion of the cluster approach on a regional scale may require regional administrations and the individuals, as well as economic entities to reconsider goals, objectives and in some cases transformations in management procedures and mechanisms of managerial influence.

Acknowledgements

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