

Experience of the Russian Federation in the Development of Clusters in Uzbekistan

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Abstract: This article examines the role of clusters in the economy of the Russian Federation and the Republic of Uzbekistan, their types and varieties of products they produce. Opinions of leading research scientists about clusters. The procedure for organizing agricultural clusters. The results of implementing the cluster system in several areas in leading countries are covered in detail.

Key words: Clusters, tax administration, volume of turnover, working staff, tax revenues, agro-industrial, buttermilk-agricultural clusters, tourism, agriculture, automotive, industry.

Introduction

The cluster system is a complete system that covers all processes, from the production of raw materials to the delivery of processed finished products to the consumer. Currently, the cluster system is used in several sectors of the economy of our country. In particular, in agriculture, tourism, the technological sphere, pharmaceutical production and other areas.

Our President Sh.M. Mirziyoyev has repeatedly emphasized the effectiveness of this system, which has proven its effectiveness in the economy.

In the Republic of Uzbekistan, the cluster system was first introduced into the agricultural sector in 2017.

Literature review

Cluster theory was first advanced in the 19th century by the German economist Johann Heinrich von Thunen and his followers W. Launhard and A. Weber. A. Marshall, in his work "Principles of Economic Science", selected urban agglomerations and industrial areas as research objects and conducted studies on the relationship between productivity and geographical localization of production. He proved that the productivity of enterprises and organizations depends on their geographical location near economic zones.

B. Lundvall and B. Johnson proposed the concept of "development blocks" related to cluster theory and emphasized that sectoral or regional production associations, the process of continuous training of the entire population of the country, are a source of national economic growth and competitiveness. The modern interpretation of cluster theory was fully formed in the 1980s. M. Porter empirically proved that large competitive companies tend to concentrate in certain areas.

Research methodology

The analysis used statistical grouping, comparative and trend analysis methods. The article provides a comparative analysis of the scientific and theoretical views of economists on the place of the cluster system in the economy.

Analysis and results

Currently, the cluster system in the Russian Federation is very well developed and is used in all sectors of the country's economy. In 1999, the Organization for the Development of Information Technologies, Radio Electronics, Instrumentation, Communications and Info-Telecommunications was

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registered in the St. Petersburg Region and transferred to the cluster system in 2012. This cluster has about 90 subsidiaries and employs about 21 thousand people.

The Kam Innovative Regional Production Cluster, located in the Kam region of the Republic of Tatarstan, was established in 2012 and is engaged in the production of automobiles and automobile components. The cluster has 300 subsidiaries and employs about 120 thousand people. In addition to automobiles, this cluster is also engaged in the processing of oil and gas products. The area of the cluster is very large, covering 6 districts. The cluster has an international airport, a railway station, and a seaport.

The St. Petersburg Information Technologies Cluster provides development and production of integrated systems of security and energy efficiency at transport, energy, industrial and housing and communal infrastructure facilities of the constituent entities of the Russian Federation.

The St. Petersburg Environmental Clean Technologies Cluster is also located in this region, which is engaged in environmental protection and waste recycling. This cluster was established in 2014, it has about 60 subsidiaries and employs about 45 thousand people.

In the Ulyanovsk region, the Ulyanovsk-Avia cluster was established in 2009 and is engaged in the production of aircraft and components. The cluster has about 80 subsidiaries and employs about 30 thousand people.

In the Novosibirsk region, the Siberian Naukopolis cluster was established in 2016 and operates in the field of information technologies. The cluster includes about 230 enterprises and employs about 23 thousand people.

The Regional Petrochemical Cluster in the Republic of Bashkortostan was established in 2012 and operates in the field of refining petroleum products.

The cluster includes about 210 enterprises and employs about 50 thousand people.

The Udmurt Machine-Building Cluster, located in the Udmurt Republic, was established in 2015 and is engaged in the production of automotive, information technology, metallurgy, education, rubber and plastic products, and military weapons.

The cluster includes about 60 enterprises and employs about 36 thousand employees.

The Pharmaceuticals, Biotechnologies and Biomedicine Cluster in the Kaluga Region was established in 2012 and operates in the field of pharmaceuticals, chemical products, and nuclear and radioactive technologies.

The cluster includes about 50 enterprises and employs about 11 thousand employees.

The above clusters are considered large clusters in the Russian Federation. In addition, medium and small clusters make up the majority in the country.

From the results of the analysis, we can see that almost all industries in the Russian Federation have been transferred to the cluster system, and these clusters are still operating effectively today.

The location of clusters in the country is of great importance, including climate, labor force, and infrastructure, which are among the factors affecting the efficiency of the enterprise.

The above clusters employ a large part of the population, which serves to improve the income and lifestyle of the population. Today, almost 50% of the economies of the world's advanced countries have switched to the cluster method. For example, there are more than 2 thousand clusters in the European Union. They cover 38% of the workforce. This method has been fully implemented in the industry of Denmark, Finland, Norway, and Sweden. In our country, this system is at a stage of rapid development. If a few years ago clusters were created only in the agricultural sector, now they are also emerging in other sectors.

In foreign countries, clusters have already become a leading system in all sectors of the economy. For example, in the US, 32 percent of people in the private sector work in clusters, and in Sweden, 39



percent of working-age citizens work in clusters. In India, clusters produce more than 60 percent of the country's exports.

The world-famous cluster known as "Silicon Valley" in the US includes 87,000 companies, 40 research centers, and dozens of universities. The infrastructure of this innovative cluster is served by 180 venture firms, 47 investment banks, and 700 commercial banks.

Conclusions and suggestions

In short, clusters are a modern economic intermediary in the formation of an innovative, competitive and efficient economy, ensuring the flow of manufactured goods to consumers, increasing production capacity, increasing production volumes, healthy production relations and efficiency. Innovations are associated with the "human capital", that is, the thinking of enterprising specialists in clusters that combine industry and cross-industry activities.

In these clusters, along with the integration of education, science and production in the sectors, the beneficial cooperation of small enterprises in the sector also creates the basis for the increase in elements of internal and external integration between sectors.

The essence of the cluster is that the farms, enterprises, and institutions in its composition unite into a single team in the process from the production of raw materials to the creation and sale of finished products. As a result, the cost of production decreases and there is an opportunity to make more profit.

The cluster system has shown great importance in the economy of the Russian Federation. The political situation in the world has seriously damaged the Russian economy. In such a situation, the effectiveness of the cluster system has become obvious.

The largest clusters in the Russian Federation are mainly in the automotive industry, information technology, pharmaceuticals, agriculture and education.

In our country, the cluster system is currently used only in the agricultural sector. In this case, clusters, in cooperation with farms, are engaged in the production, cultivation, supply of agricultural products with chemicals, fuel and equipment, processing and selling products. Based on the experience of the Russian Federation, there is an opportunity to transfer a number of sectors to the cluster system in our country. In particular, in our country, we can cite the automotive industry, pharmaceuticals and education as examples.

Currently, there are 92,000 farms and 256 clusters in Uzbekistan, which are, 116 grain clusters, 140 cotton clusters.

This clusters consists of 42 facilities in the Ferghana region, 36 facilities in the Kashkadarya region, 22 facilities in the Karakalpak Republic, 21 facilities in the Surkhandarya region and 19 facilities in the Samarkand region.

Currently, the rapidly developing tourism sector in our country is also being clustered. In this case, the nature of our country, its favorable and clean climate attract foreign guests. The main factor in the tourism cluster is the hotel business, and it is necessary to prepare, train and provide skills to each employee working in it. We can conclude that it would be advisable to apply the cluster system in many areas, based on the economic indicators of developed countries and taking into account the conditions of our country.

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