

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## Agriculture and Agribusiness: Clustering Issues.

Marina T. Tekueva<sup>1\*</sup>, Alexey V. Burkov<sup>2</sup>, Vladimir V. Nosov<sup>3</sup>, Svetlana A. Novoselova<sup>4</sup>, and Alexandr V. Nayanov<sup>5</sup>.

### **ABSTRACT**

The present article aims at studying formation of agro-industrial clusters within the Russian Federation based on the statistical analysis of backgrounds in the sector. Objective of the article – statistical analysis of current agribusiness development in the Russian Federation. Object of the research – agribusiness of the Russian Federation. Subject of the research – establishment of agro-industrial clusters in the national economy, Russian agriculture clusterization modelling as one of long-term perspectives for solving a food security problem of the Russian Federation.

Keywords: agriculture, agribusiness, agro-industrial clusters.

<sup>&</sup>lt;sup>1</sup>Lecturer, Institute of Informatics, Electronics and Computer Technology College of Information Technology and Economics, Kabardino-Balkarian State University, Russia.

<sup>&</sup>lt;sup>2</sup>Doctor of Economic Sciences, professor, Department of applied Statistics and Informatics, Mari State University, Russia;

<sup>&</sup>lt;sup>3</sup>Doctor of Economic Sciences, professor, Department of Accounting and Statistics, Russian State Social University. Russia; <sup>4</sup>Candidate of Economic Sciences, Associate Professor, chair of Department of Cost accounting, analysis and audit, Saratov

State Vavilov Agrarian University, Russia; 
<sup>5</sup>Candidate of Economic Sciences, Associate Professor, chair of Department of Organization of production and business management in agriculture, Saratov State Vavilov Agrarian University, Russia.



ISSN: 0975-8585

#### INTRODUCTION

Currently there is no clear definition for "a cluster". In general, a business cluster is the territorial alliance of interconnected complementary and fungible companies (research institutes, corporations, universities), which increase competitive peculiarities and advantages of each company and the whole cluster. The term "cluster" was introduced into the Russian economic literature in the 90s of the 20th century, when works by the Harvard economist Michael Porter had been translated from English. Clustering enables branches to improve and maintain their competitiveness, and not to go below level of the countries that are inclined to renewal to a greater extent. All organizations in the cluster have the same ideological values and business secrets due to their cooperation. In the cluster they act as a peculiar basis for entry into markets of other countries, not merely as a basis for domestic market growth.

### **CHOICE OF THE METHOD**

In literature one can find the following cluster features:

- Similar technological processes;
- Common resource base;
- Maximum geographical neighbourhood of objects;
- Innovation.

Such term as "cluster policy" is used to maintain clusters in different branches. Cluster policy means government activity that includes different measures and mechanisms to maintain cluster establishments, to increase competitiveness of particular regions and organizations in the cluster, as well as to introduce innovations into the branch [1].

It should be noted that at present Russian legislation has not yet formalized the term "cluster", nor is the cluster approach to management widely spread across our country.

At the moment, clusters are established in the Russian agriculture as well, but it's too early to assess the results. Thus, for example, the agro-industrial cluster was established in the Republic of Adygea in the Urals. It is planned to establish such clusters within the Volga Republic, the northern regions of the country (the Republic of Karelia and the Komi Republic, Murmansk, Kamchatka, etc.).

The idea of establishing clusters itself is based upon geographical location, regional boundaries of the territory and small distance between cluster components. All cluster components have both similar peculiarities and differences to increase competitiveness. Usually, some biggest companies, competing with one another, make the core of the cluster. At that, this cluster supports and integrates work to a wide variety of smaller organizations and companies, as well as sensitizes them to innovations. As clusters are innovation-oriented, a lot of countries use the cluster approach in their economic activity more often to implement their innovation programs [2].

#### **DATA AND ANALYSIS**

Only detection of existing or possible clusters in the national economy is a compulsory condition for a future improvement of the economy of this county in the near and far future. And consideration must be given to the fact that this country should be able to support (for example, financially) new-formed clusters. Number of running cluster projects in different sectors of economy, according to the Ministry of Economic Development and Research of the Russian Federation, 2014 are presented in Table 1.



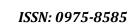
Table 1. Number of running cluster projects in different sectors of economy, according to the Ministry of Economic Development and Research of the Russian Federation, 2014.

Federal districts	Number of regions in the federal district	Number of regions establishing clusters	Number of running cluster projects	Agribusiness
Russian Federation	83	58	218	41
Structure, %	100	70	100	19
Central Federal District	18	12	33	7
Structure, %	100	67	100	21
Northwestern Federal District	11	7	28	8
Structure, %	100	64	100	29
Southern Federal District	6	6	22	4
Structure, %	100	100	100	18
Volga Federal District	14	13	57	8
Structure, %	100	93	100	14
Ural Federal District	6	2	11	1
Structure, %	100	33	100	9
Siberian Federal District	12	6	27	3
Structure, %	100	50	100	11
Far Eastern Federal District	9	7	23	7
Structure, %	100	78	100	30
North Caucasian Federal District	7	5	17	3
Structure, %	100	71	100	18

Today, number of running cluster projects in the domestic economy totals to 218 according to the Ministry of Economic Development of the Russian Federation and in-house study. The projects are being implemented in 58 of 83 Russian regions, or 70% of the territory. The largest share of the regions implementing cluster initiatives accrues to the Southern Federal District and the Volga Federal District – 100% and 93% respectively, and the smallest share accrues to the Ural Federal District and the Siberian Federal District – 33% and 50% respectively. At that, the highest number of clusters – 58 is established in the Volga Federal District. Also, the Volga Federal District and the Northwestern Federal District are leaders with regard to the number of established agro-industrial clusters – 8 clusters each. And, the Far Eastern Federal District and the Northwestern Federal District are leaders in terms of the agribusiness clusters share – 30% and 29% respectively. In general, 41 agro-industrial clusters or 19% are being formed in the Russian Federation.

Formation of agro-industrial clusters in Russia is greatly influenced by internal causes, which are indicative of unstable development of the agricultural infrastructure and assets depreciation. Along with the unfavorable socio-economic environment on agricultural territories, it spurs the state to develop the regional cluster policy at a rapid pace. It should be noted that agro-industrial clusters themselves are not considered to be full-fledged cluster systems, they are slowly formed, and one can see positive results only in a couple of years. Such systems do not allow making a breakthrough in the agriculture, but in spite of it, they are of paramount importance for local employment, as well as for the tax sector [3].

Agro-industrial cluster advantages are as follows: competitive growth of the region in terms of food production; natural advantages; new opportunities to improve production technology and equipment.





Not only agricultural organizations, but authorities, research institutes, educational institutions, etc. may participate in the agro-industrial cluster.

In general, it's worth mentioning once more that formation of the agro-industrial cluster is a heavy and complicated process. In order to have the cluster approach adapted to our environment, it should be used with the integrated business-groups. That is, in other words, such companies and clusters can complement one another when used together, namely: there won't be differences between the clusters and the objectives of business-corporations [4]. It gains importance when considering the current situation in the agriculture in different regions of the country. Any more or less reliable integrated system (business-group) can reduce its production costs and increase its competitiveness due to the following components:

Highly-developed service infrastructure; Consulting services; Educational and scientific institutions; Contractors delivering any equipment and production facilities [5].

Such alliances of agricultural clusters and business corporations positively influence both the specific companies of this establishment and the regional economic development. The reason is that the cluster considers teamwork of 3 participants at such cooperation:

- 1. Authorities (self-governing authorities, tax authorities, etc.);
- 2. Business (commercial banks, entrepreneurs and their associations, etc.);
- 3. Scientific institutions (universities, scientific centers, etc.).

#### CONCLUSION

We note finally that establishment of clusters in the agro-industrial sector of the economy has both positive and negative results. Integration of existing companies into the unified system involves some difficulties. It is evident in the integration process itself, goal setting, regulation of this establishment, as well as in the process of obtaining expected results that will be tangible not within the first years of operation of this agro-industrial cluster. But, in spite of all above-mentioned, in general, establishment of agro-industrial clusters positively influences the economy of the region and the country, drawing it nearer and yet nearer to the world viable economy standards.

Need in cluster development of the agribusiness is driven by peculiarities of its financial and economic activity. Seasonal flows of financial resources determining necessity in periodic attraction of external ones, as well as reproduction of some material resources within the branch to ensure the production among other factors underline peculiarities of the agribusiness providing for future cluster development.

Private-state sector partnership and project financing could become a potential supplement to the government programs on agriculture financial support. These methods contribute to reduction of agricultural inputs risks arising during implementation of investment projects. Along with the targeting and purposive character, one can expect growth of investment attraction both for local and foreign investors.

#### **REFERENCES**

- [1] Larionova, N.I., Napolskih, D.L., Yalyalieva, T.V. (2015) Institutional aspects of state control over the effectiveness of innovation clusters development. Actual Problems of Economics, no 5, pp 20-23
- [2] Nosov V.V, Kotar., O.K., Kosheleva M.M., Alajkina L.N., Novikova N.A. (2014) Assessing effectiveness of insurance premium subsidy in agricultural insurance. Ecology, Environment and Conservation. Vol. 20. no. 4. pp. 1857–1863.
- [3] Nosov, V.V, Kozin M.N., Gladun T.N. (2015) Optimization of the farm production structure taking into account weather, economic and environmental conditions. Ecology, Environment and Conservation. Vol. 21. no. S. pp. 103–110.
- [4] Yalyalieva T. V. Economic state control effective land management. Actual Problems of Economics , 2014, no 9 pp301-306



ISSN: 0975-8585

[5] Yalyalieva, T.V., Murzina, E.A. (2015) The system of parameters efficiency of financial supervision. Advances in Systems Science and Applications, Vol. 5, no 4, pp 226-230

2016