ZAMONAVIY FAN, TA'LIM VA TARBIYANING DOLZARB MUAMMOLARI

АКТУАЛЬНЫЕ ВОПРОСЫ СОВРЕМЕННОЙ НАУКИ, ОБРАЗОВАНИЯ И ВОСПИТАНИЯ

ACTUAL PROBLEMS OF MODERN SCIENCE, EDUCATION AND TRAINING

UDK 339.564

PROSPECTS FOR THE USE OF MECHANISMS BASED ON THE CLUSTER APPROACH IN THE DEVELOPMENT OF EXPORTS OF INDUSTRIAL PRODUCTS

Konstantin Ivanovich Kurpayanidi
PhD in economics, docent,
Professor of the Russian academy of natural sciences, Fergana polytechnic institute,
Corresponding member of the International Academy of Theoretical & Applied Sciences
E-mail: konstantin@ferpi.uz

Ilyosov Asrorjon Ahrorjon ugli
PhD student,
Fergana Polytechnic Institute

Аннотация: Целью данного исследования является систематический анализ использования кластеров в промышленных производственных процессах. Детально изучено использование кластеров в производстве и экспорте промышленной продукции. Они выдвинули концепцию развития высоко промышленных кластеров, направленных на увеличение экспорта промышленной продукции на основе анализа и сравнения систем, статистической группировки и использования рейтинговых методов.

Ключевые слова: кластер, теория кластеров, кластеризация, промышленные кластеры, коммерческие кластеры, локальные кластеры, программа развития промышленного кластера.

Аннотация: Тадқиқотнинг мақсади саноат ишлаб чиқариш жараёнида кластерлардан фойдаланишни тизимли таҳлил қилишдан иборат. Саноат маҳсулотлари ишлаб чиқариш ва экспорт қилишда кластерлардан фойдаланиш масалалари батафсил ўрганилди. Тизимли таҳлил ва таққослаш, статистик гуруҳлаш ва рейтинг усулларидан фойдаланиш асосида саноат маҳсулотлари экспортини оширишга йўналтирилган саноат кластерларини ривожлантириш концепцияси илгари сурилган.

Калит сўзлар: кластер, кластер назарияси, кластерлаштириш, саноат кластерлари, савдо кластерлари, маҳаллий кластерлар, саноат кластерларини ривожлантириш дастури.

Abstract: The purpose of this study is to provide a systematic analysis of the use of clusters in industrial production processes. The use of clusters in the production and export of industrial products was studied in detail. They advanced the concept of developing industrial clusters aimed at increasing the export of industrial products based on the analysis and comparison of systems, statistical grouping and the use of rating methods.

Keywords: cluster, cluster theory, clustering, industrial clusters, commercial clusters, local clusters, industrial cluster development program.

Introduction: The development experience of countries around the world shows that clusters are the key to achieving a level of competitiveness at the enterprise level to the level of a national economy that is competitive in the global market. If we analyze the clusters on the example of developed countries, half of the existing enterprises in the United States are grouped into clusters, which account for 60% of GDP [1, p.3]. The economies of Norway, Denmark, and Sweden are almost entirely covered by clusters. Finland has become one of the world's most competitive economies due to clusters, with 0.5% of the world's forest resources, accounting for 25% of world paper exports and 10% of wood products exports [2, p.2].

The word "cluster" (derived from English, head, link, ring, ball) reflects the basic principles of the market mechanism, and market participants seek to unite in clusters in order to gain a competitive advantage. Although the full development of clustering in the world dates back to the 80s of the XX century, scientific research in this area in our country began in 2000, but the practical reforms to transition to this system began to be carried out on the basis of the Action Strategy [3, p.2].

Literature review: Cluster theory was put forward in the 19th century by the German economist Johann Heinrich von Tunen, W. Launhard, and A. Weber.

Soliyev A., Qodirov X. (2019) the use of clusters in strategic planning has been studied.

Kurpayanidi K. (2020) some issues of formation of a modern competitive national innovation system in the Republic of Uzbekistan are analyzed.

Muminova E. (2020) studied blockchain technology, digitization efficiency and basic principles of digitization and a set of blocks that require material resources to develop the national digital economy.

Ilyosov A. (2020) highlights some of the challenges in digital manufacturing and industrial product exports in the context of the digital economy.

Analysis: Today, there are 380 clusters in the United States that operate in the field of computer technology. At the top of them is Silicon Valley, home to world-renowned companies such as Intel, AMD, Oracle, Apple, Cisco, Yahoo !, eBay. There are 206 clusters in Italy, specializing in the production of food and consumer goods. Italian industrial clusters account for 43% of employment, accounting for more than 30% of the country's exports. There are 168 clusters in the UK that specialize in biotechnology and bioresources production. India has created clusters in the field of computer technology, which number 106. The Bangalore cluster has been as successful as Silicon Valley, with an IT turnover of $ 70 billion. dollars. Tax breaks provided separately for clusters are the key to success [3, p.2]. In France, there are 96 clusters belonging to the pharmaceutical and cosmetics and food industries (Table 1).

Table 1 - The top five countries in terms of cluster number

№	Country	Number of clusters	Field of activity
1	2	3	4
1.	USA	380	computer technology
2.	Italy	206	production of food and consumer goods

| 3. | Great Britain | 168 | biotechnology and bioresources production |
| 4. | India | 106 | computer technology |
| 5. | France | 96 | pharmaceutical and cosmetics and food production |

The United States, like other industries, is a world leader in clusters. There are 2 different types of clusters at the regional level in the country, which differ from each other in some respects. Trade clusters are groups of related industries that serve markets outside the region in which they are located [4, p.2]. They determine their location independently (based on the location of natural resources), as a rule, can choose 3 areas that are mainly competitive. Examples of such clusters include Information Technology in Silicon Valley, Financial Services in New York, and Video Production and Distribution in Los Angeles. Trade clusters are the "engines" of the region's economy, without which high economic performance is impossible [5, p.2].

Local clusters are networks that serve the local market. They are located in every region of the country, regardless of competitive advantage. They play an important role in providing regional employment. Also, local clusters will be protected from direct competition because they are connected to a specific area. Examples include local health services such as pharmacies and hospitals, and local commercial services such as dry cleaning [6, p.2]. The role of these two types of clusters in the country's economy differs from each other in several respects (1-picture).

	Trade clusters	Local clusters
Employment	36 %	64 %
Income	50 %	50 %
Patents	96,5 %	3,5 %
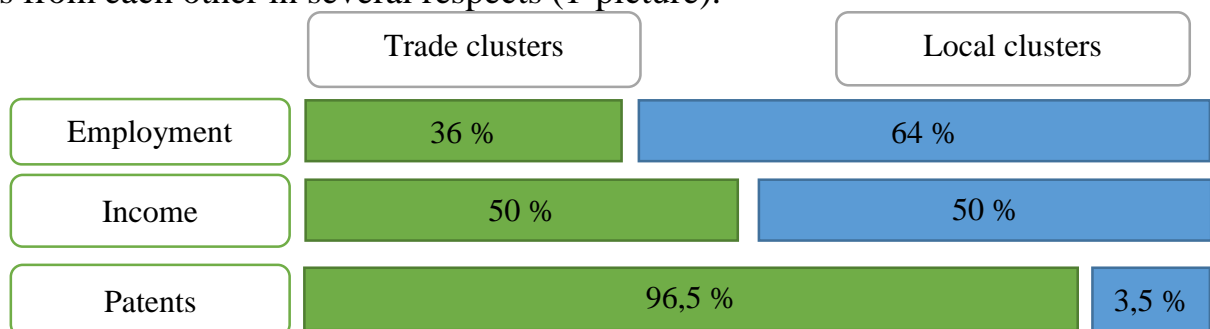
1-picture. The share of trade and local clusters in the U.S. economy.

At the same time, the clusters also serve as an effective tool for cooperation in public policy and industry, as they have access to a variety of programs and directions for economic development [7, p.3]. While the first clusters played an important role in ensuring regional competitiveness and economic development, they are now working to increase labor productivity, create new jobs, encourage innovation, and stimulate the emergence and development of new businesses (2-picture).
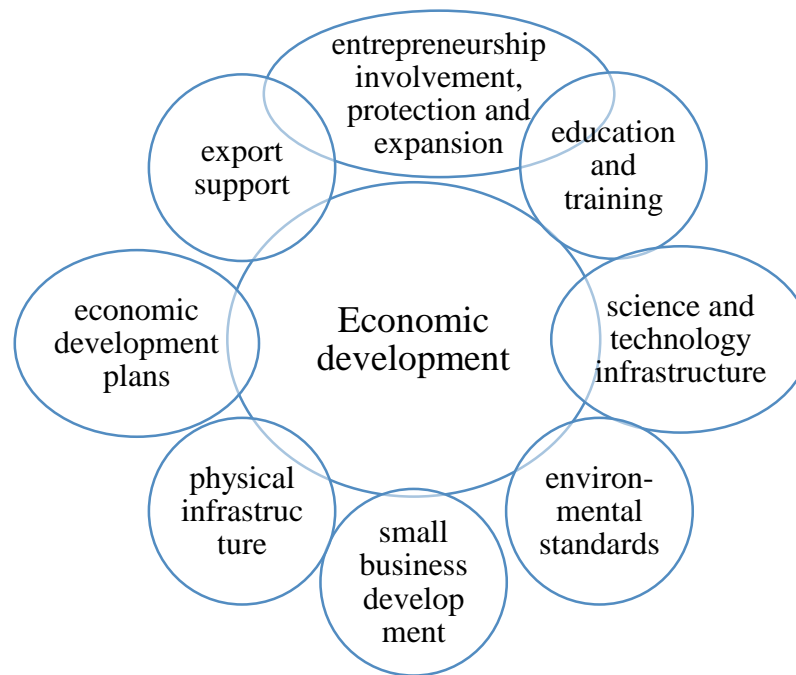
2-picture. Clusters and economic development.

The development of clusters depends in many respects on the implementation of government support measures [8, p.1]. One of the main measures in countries with developed clusters is the formation of this infrastructure. For example, the National Planning Agency in France (DATAR), the Cluster Search and Classification Information System (CASIS) in Luxembourg, the US National Competitiveness Council, and the UK LINK cooperation program [9, p.2].

IV.Discussion

Clusters have a number of advantages along with ensuring regional competitiveness. They are:

− efficiency of production scale, ie one of the firms within the cluster serves as the core of innovative activity;

− coverage effect. This can be achieved by reducing transaction costs as a result of the cluster sharing the resources of many enterprises;

− Synergy effect associated with general standardization of products. Through these three different effects, loss-making enterprises in clusters can overcome low profitability, which leads to increased labor productivity and lower production costs. In general, through a cluster, enterprises will have more competitive opportunities;

− Innovative effect. By merging into a cluster, the chances of implementing large-scale innovative projects will increase. Innovative efficiency has a positive impact not only on the enterprise, but also on the competitive advantage of the country in the industry, sector, region. The basis for the development of clusters is the historical production structure in this region. Large enterprises tend to establish supply links with small enterprises, which allows them to quickly introduce new technologies that contribute to economic growth [10, p.2].

− Clusters that stimulate innovation and production are organized horizontally. This in turn provides flexible specialization, accelerates contracting, and accelerates the spread of innovation;

- In pooling resources, cluster members contribute in the form of cash, technology, patents, trademarks, know-how, and skilled personnel. At the same time, they will have the opportunity to consult and share experiences to determine what resources are needed to implement joint projects, what is needed for project effectiveness, and how costs and benefits will be distributed. But they remain independent in other areas of research and production. Such collaboration serves to significantly reduce the risk of participants, reduce the cost of research and development through the use of partner experience and skills, and so on.

In addition to the advantages of clusters listed above, some disadvantages are also noticeable.

- Clusters, as we have noted, are a form of increasing regional and international competition. Increased international competition affects the elasticity of labor demand, which in turn can lead to wage stagnation and rising unemployment;
- In the practice of network clusters, excessive convergence, large-scale cooperation with government agencies and state control of clusters lead to corruption;
- Relying on the development of clusters can have a negative impact on the development of some even more competitive enterprises;
- Ishonch Confidence as a result of associating the term cluster with excessive competition can lead to some inconsistencies and losses.

In general, each process is characterized by its advantages as well as its shortcomings or some contradictions [11, p.3]. This requires the need to identify its possible shortcomings in advance and take the necessary action. Each country or region should focus on these issues in its cluster policy.

Conclusion: A number of normative and legal documents have been adopted in our country with a special focus on clustering policy. In particular, the Decree of the President of the Republic of Uzbekistan dated March 29, 2019 "On additional measures for the accelerated development of fruit and vegetable production in the Republic of Uzbekistan" PF-5388, September 21, 2019 "On approval of the Strategy of innovative development of the Republic of Uzbekistan 2019-2021" and Cabinet of Ministers of the Republic of Uzbekistan dated October 16, 2017 No. 834 "On organizational measures for the organization of youth entrepreneurship clusters", March 31, 2018 "On additional measures for the organization of cotton and textile industries and clusters" On the basis of the Resolution No. 253 of June 18, 2019 "On measures to establish modern seed clusters in the Republic of Uzbekistan" No. 512, Youth Entrepreneurship, Mountain Tourism, Cotton-Textile, Silk, Silkworm, Livestock, Fisheries, Rabbit, Poultry , agrocluster in nursery, fruits and vegetables, food - Measures for the organization of clusters in the areas of food, wine, mini-clusters, gas-chemical, scientific-industrial, public-private scientific, solid waste management.

From the above, it is clear that in our country there are no industrial clusters specializing in the production of high-tech and export-oriented industrial products. In our opinion, based on the experience of foreign countries, it is possible to further increase the export of industrial products and achieve a competitive advantage through the establishment of Industrial Clusters (INCs) in accordance with our national

characteristics. It is expedient to develop programs for the development of SCs in the regions of the country. These programs should consist of the following sections.

1. General rules.
2. Current status of SCs, existing shortcomings.
3. Purpose and priorities of the program.
4. Expected results from the development of SCs.
5. Joint projects of SC participants.
6. Financial support of the program.
7. The main indicators of the effectiveness of the program.

Methodology of cluster formation:

✓ formation of organizational and institutional structure;
✓ identification of cluster type;
✓ Determining the composition of cluster participants;
✓ Identification and quantitative analysis of the structure and cooperation between cluster participants;
✓ Analysis of the competitive environment and innovation structures of the cluster;
✓ Determining the success rate of a cluster.

Based on the above, we consider it expedient to implement the following on the organization of ICs in our country:

✓ Organization of SCs based on the characteristics of the regions of the country, based on the study of best practices of industrialized foreign countries;
✓ Development and improvement of existing regulations on the regulation of SCs;
✓ Development of SC development programs;
✓ Creation of organizational structures dealing with the organization, management, coordination and control of the activities of SCs;
✓ Development of research activities related to SCs;
✓ Development of methodical materials on the organization of SCs.

References

[1]. Muminova, E., Honkeldiyeva, G., Kurpayanidi, K., Akhunova, S., & Hamdamova, S. (2020). Features of Introducing Blockchain Technology in Digital Economy Developing Conditions in Uzbekistan. In *E3S Web of Conferences* (Vol. 159, p. 04023). EDP Sciences.

[2]. Ilyosov, A. (2020). Some problems in digital production and export of industrial products in the digital economy. Economics and finance, (3), 175.

[3]. Ilyosov, A. A. (2020). Analysis of the structure of export of industrial products and changes in trends in the export process of the fergana region. Государственное регулирование социально-экономических процессов в условиях глобального кризиса (pp. 4-10).

[4]. Kurpayanidi, K., Abdullaev, A., Ashurov, M., Tukhtasinova, M., & Shakirova, Y. (2020). The issue of a competitive national innovative system formation in Uzbekistan. In *E3S Web of Conferences* (Vol. 159, p. 04024). EDP Sciences.

[5]. Солиев А., Кодиров Х. (2019). Кластеризация экономики – важнейший фактор стратегического планирования. Иқтисодиёт: таҳлиллар ва прогнозлар. Т.: 2019., №1. 104-108 б.

[6]. Усмонов Б.Ш., Раджабов О. (2017). Изучение опыта развития и управление инновациями в кластерах. Т.: Fan va texnologiya, 2017 г.

[7]. Абдувалиев А.А. (2017). Миллий иқтисодиётда кластерларни ривожлантиришнинг хорижий мамлакатлар тажрибаси таҳлили. Иқтисод ва молия/Экономика и финансы. 2017 йил 7-сон.

[8]. The main macroeconomic indicators of the Republic of Uzbekistan for January-December 2019. (2020).T .: The State committee of the Republic of Uzbekistan on statistics.

[9]. Mukhsinova, S. O. (2020). Public debt as a tool of the state's macroeconomic policy. ISJ Theoretical & Applied Science, 05 (85), 180-187. Soi: http://s-o-i.org/1.1/TAS-05-85-39 Doi: https://dx.doi.org/10.15863/TAS.2020.05.85.39

[10]. Abdullayev Alisher Mahmudovich, Konstantin Ivanovich Kurpayanidi (2020) Analysis of industrial enterprise management systems: essence, methodology and problems. Journal of Critical Reviews, 7 (14), 1254-1260. https://dx.doi.org/10.17605/OSF.IO/E6JFS

[11]. Tolibov, I.S (2017) Modern state and the priority directions of further development of economy of Uzbekistan in the conditions of globalization. ISJ Theoretical & Applied Science, 10 (54): 176-185. Soi: http://s-o-i.org/1.1/TAS-10-54-29 Doi: https://dx.doi.org/10.15863/TAS.2017.10.54.29

UDC: 338

FACTOR ANALYSIS OF PRODUCTION PROCESSES IN AGRICULTURE SECTOR OF THE REGION

Kholmurotov Fozil Saribaevich
Faculty of Tourism and Economics
PhD student
Urgench state university
E-mail: fozilholmurotov@gmail.com

Аннатация: Ушбу мақолада қишлоқ хўжалигида маҳсулот ишлаб чиқариш жараёнини моделлаштириш асосида унга таъсир қилувчи омиллар аниқлаган ва уларнинг таъсир даражаси баҳоланган. Ишлаб чиқаришдаги муҳим бўлган ишчи кучи ва капитал омилларининг эластиклик коэффициентлари ҳисобланган. Шунингдек, иқтисодий ўсишнинг интенсив ва экстенсив манбалари аниқланган. Олинган натижалар асосида қишлоқ хўжалигида маҳсулот ишлаб чиқаришни ривожлантиришни қўллаб-қувватлашнинг асосий йўналишлари бўйича таклиф ва хулосалар келтирилган.

Калит сўзлар: қишлоқ хўжалиги, маҳсулот, модел, стохастик модел, ишлаб чиқариш функцияси, эластиклик, иқтисодий ўсиш, капитал, меҳнат.

Аннотация: В данной статье определены факторы, влияющие на производственный процесс в сельском хозяйстве, на основе моделирования