
Theoretical Foundations of Production Cluster Organization Processes in Regions

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Abstract: In this article, the theoretical foundations of production cluster organization processes in the regions, their necessary conditions and the experiences used around the world are analyzed. In conditions of global uncertainty, the modern economy is experiencing a renaissance of increased attention to industrial policy aimed at creating a structurally balanced import and independent industry, developing strategies to reduce imbalances in the internal economic space of regions and industries based on the growth of industrial production, its integration and localization in the interior.

Key words: Cluster, globalization, import, export, industry, industrial production, localization, integration, economic space.

New trends in economic development (reformatting the composition and structure of value chains, redistribution of economic potential, localization of production, ESG agenda, import substitution, etc.) dictate the need to search for fundamentally different business models, forms of organization and stimulation of the development of domestic production. In conditions of global uncertainty, the modern economy is experiencing a renaissance of increased attention to industrial policy aimed at creating a structurally balanced import and independent industry, developing strategies to reduce imbalances in the internal economic space of regions and industries based on the growth of industrial production, its integration and localization in the interior. At the same time, systemic localization of production is necessary with a mandatory focus on future inclusion in global supply chains through the introduction of the latest innovative technologies.

Thus, the national industry of Uzbekistan today is required to simultaneously increase its resistance to external shocks and threats, intensively increase “lost” production volumes, as well as achieve a high level of implementation of innovative developments and production of high-value products. And all this is impossible without building new mutually beneficial partnerships and creating a domestic market.

To solve these problems, projects in the field of import substitution must be provided with adequate resources, advanced competencies and appropriate technological solutions, which, as a rule, are not fully available to an individual industrial enterprise. In this connection, it is necessary to integrate enterprises at the intersectoral and interregional levels, which, in the context of the implementation of the import independence policy, makes it advisable to develop new organizational and economic models for the integration of economic agents on the basis of partnership and mutually beneficial cooperation, which allows coordinating the activities of industrial enterprises and attracting resources from other factors regional socio-economic systems. The generally accepted direction of modern economic thought is the statement that “...the economy and all its subsystems are stratified into cluster-network structures... and the driver of development becomes “... cooperation and integration of .. enterprises.” In our opinion, in these realities, a “reboot” of the cluster system is required an industrial development model that has proven its

effectiveness in many countries and regions, which will allow us to move to a qualitatively new level of development through the use of so-called “windows of opportunity.”

Speaking about the current challenges faced by the domestic industry, it is important to emphasize that industrial growth must occur in parallel with increasing resource efficiency and reducing the negative impact on the environment. Abandonment of sustainable development goals and ESG projects (ESG - environment, social, governance) in the context of the current systemic crisis can have a detrimental effect on the domestic industrial sector, leading in the long term to stagnation of the industry, increasing environmental problems and a decrease in the quality of life of the population.

There is no doubt that for the implementation of sustainable development goals, the industrial sector of the economy is one of the most important areas. International agreements that have been reached, from the 1992 UN Framework Convention on Climate Change, now ratified by 195 countries, to the most recent Paris Agreement reached in December 2015, have contributed significantly to raising awareness of climate change issues and finding sustainable solutions. It has been shown that industrial associations, such as industrial symbiosis, make it possible to achieve economic growth through more rational use of limited resources and the formation of a system for exchanging resources for their reuse. The European Commission has also published several directives that mention the importance of industrial symbiosis.

In the literature, similar industrial associations also include industrial ecosystems operating on the basis of the principles of a circular economy. Industrial symbiosis and industrial ecosystem are models of industrial integration that originate from biological science. In our opinion, the industrial ecosystem should be considered as a generic concept in relation to the industrial cluster and industrial symbiosis.

A cluster is a transitional form of an industrial ecosystem from the point of view of the evolution of economic space. These models are of significant interest in the position of “updating” cluster theory and, in general, operationalizing the cluster approach in practice, large-scale changes in cluster policy, which has enormous untapped potential for stimulating the growth of the industrial sector of the domestic economy, reformatting and creating new value chains in the current conditions. The scientific hypothesis of the study is the assumption that in conditions of systemic crises and for the purpose of sustainable development and achieving import independence of domestic industries, an effective instrument of economic policy is the formation and functioning of clusters based on the principles of ecosystem interaction, offering fundamentally different mechanisms for coordinating economic entities in a modern dynamic innovative environment.

This actualizes the need to develop a new organizational and economic model of the industrial cluster of the region as a unit of economic analysis, occupying an intermediate place between economic agents and regional economic systems, and based on an ecosystem approach, allowing to achieve a positive synergistic effect in the implementation of strategic development goals from the integration of enterprises in an intersectoral and interregional levels. At the same time, it is necessary to take into account the task of harmonizing priorities and tools for supporting import substitution and stimulating sustainable development.

The purpose of this article is to substantiate the feasibility of studying an industrial cluster as a localized ecosystem and to develop an organizational and management model of the cluster based on a synthesis of ecosystem and agglomeration approaches. This goal led to the formulation and solution of the following tasks: to conduct a comparative analysis of the categorical apparatus of research; identify key factors in the processes of formation and evolutionary development of industrial clusters, as well as identify mechanisms and tools for their practical implementation. The main results of the study can become a theoretical and methodological basis for the formation of a policy to stimulate cluster development in the regions of Uzbekistan, which will ensure the intensification of economic activity of industrial entities and will ultimately affect the growth of

economic and improvement of social indicators of development of enterprises, industries and the country as a whole.

It is important to emphasize that, like industrial clusters, symbioses have a territorial and economic basis. However, in our opinion, the concept of “cluster” is broader than “symbiosis”, since it can be formed not only according to the principle of resource saving and resource efficiency, but also according to the principle of creating high-tech products, innovative developments, etc., which also indirectly leads towards achieving sustainable development goals.

In turn, the industrial ecosystem model is an evolutionary development of cluster, symbiotic and other models, combining the most promising practices of interaction and coordination of participants and supplementing them with new principles necessary in modern conditions. An industrial ecosystem can be viewed as a network of various interacting factors that cooperate with each other on a purely voluntary basis; their interaction constantly produces a new order that emerges without central control. Thus, the fundamental difference between ecosystems and clusters and symbioses is the absence of a management vertical and the a priori significance of equality of opportunity for all factors. At the same time, the principle of self-organization implemented in ecosystems does not imply a chaotic spontaneous association of participants. Thanks to its attractors - certain values, behavioral norms and models - the ecosystem does not become chaotic. The center for combining factors in the ecosystem (integrator) is an “anchor” organization, usually a large industrial enterprise, or a group of enterprises that actively participate in establishing transparent rules for joint activities and developing a culture of cooperation, ensuring consistency in the interaction of all factors among themselves, coordination their economic interests.

Interaction with other industrial enterprises, involving consumers in the process of resource management - all this contributes to the release of resources through joint consumption and the return of consumer waste directly into production cycles. And connecting regulators and research centers to these processes ensures the identification of new opportunities for interaction and development of resource-efficient technologies.

An industrial ecosystem is distinguished by its transboundary nature, therefore, in our opinion, it should be defined as a geographically distributed network of industrial clusters or industrial symbioses (Fig. 1). Interterritorial clusters are built on the principles of high adaptability and flexibility, which allows them to integrate into industrial networks and ecosystems. In turn, industrial symbiosis is one of the possible types of industrial clusters aimed at increasing resource efficiency and reducing the negative impact on the external environment. The cross-border nature of the industrial ecosystem can be practically realized using a digital platform. This will make it possible to generate networks of industrial clusters and/or industrial symbioses from different regions and ensure effective intersectoral interregional interaction of their constituent factors, the transaction costs of which will be minimized within the framework of such cooperation.

The factor of transaction costs will be one of the determining factors when deciding to include new factors in the industrial ecosystem of their remote regions. As J. Korhonen notes, there are several ways to reduce transaction costs in industry, one of which is to reduce transport costs. From this point of view, it is advisable to have industrial factors located close to each other so that losses from resource exchange are minimized and, accordingly, logistics costs are minimized. In this regard, the problem of finding partners for interaction is becoming urgent, and in this issue, informal institutions play a significant role, which are a reflection of the level of trust between the participants. These aspects justify the need to apply new principles and mechanisms for building and coordinating the interaction between factors.

References

1. Agzamov, A. T., Rakhmatullaeva, F. M., & Giyazova, N. B. (2021, June). Marketing strategy for the competitiveness of modern enterprises. In *E-Conference Globe* (pp. 1-3).

2. Abdullayevna, Q. Z., Anvarovich, Q. A., & Muxtorovna, N. D. Theoretical foundations of enhancing the competitiveness of the national economy. *Gwalior management academy*, 87, 54.
3. Bakhodirovna, U. A., & Ilkhomovna, Z. M. (2021). Tourist potential of the Bukhara region. *Researchjet journal of analysis and Inventions*, 2(04), 243-246.
4. Rakhmatullayeva, F. M., Boboyeva, G. G., & Kudratov, A. D. (2021). Essence of Structural Shifts in Regional Economic Systems. *International Journal of Development and Public Policy*, 1(5), 128-130.
5. Navruz-zoda, Z. (2020). Evaluation of Holy Places of the Regions for the Development of Pilgrimage Tourism. *Indonesian Journal of Law and Economics Review*, 6, 10-21070.
6. Narzieva, D. M., & Kudratov, A. D. (2021). the importance of digitalization of the economy and priorities in Uzbekistan. *World Economics and Finance Bulletin*, 2(2), 9-13.
7. Bakhodirovna, U. A., & Ilkhomovna, Z. M. (2021). Tourist potential of the Bukhara region. *Researchjet journal of analysis and Inventions*, 2(04), 243-246.
8. Umarovna, T. M. (2021). A three-step strategy to develop the industrial economy in China through entrepreneurship and innovation. *ResearchJet Journal of Analysis and Inventions*, 2(06), 152-156.
9. Furqatovna, O. N., Niyozovna, N. I., & Nutfulloyevna, A. H. (2022). Approaches Aimed At Ensuring a High Quality of Education in the Training of Economists. *Journal of Ethics and Diversity in International Communication*, 2(3), 78-83.
10. Yavmutov, D. S., & Rakhimov, O. H. (2021). Pilgrimage Tourism And Its Prospects In Uzbekistan. *Economics*, (1), 29-31.
11. Turobova, H. R., & Kodirov, A. A. (2016). The role of small businesses to improve the export potential. *Academy*, (12), 21-23.
12. Nizamov, A. B., & Gafurova, S. K. (2020). Assessment of factors influencing the quality of education in higher educational institutions. *ACADEMICIA: An International Multidisciplinary Research Journal*, 10(6), 1784-1796.
13. Abdullayeva, H. (2021). Japanese Experience in Increasing the Efficiency of Tourist Territories in Uzbekistan. *ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu.uz)*, 7(7).
14. Hakimovna, U. M., & Muhammedrisaevna, T. M. S. (2022). Audit and Marketing Audit in Small Business and Private Entrepreneurship: The Order and Process of Inspection. *Journal of Ethics and Diversity in International Communication*, 2(3), 84-88.
15. Muminov, K. I., & Abdullaeva, H. (2020). The effect of coronavirus pandemic to Uzbekistan tourism. *South Asian Journal of Marketing & Management Research*, 10(11), 36-42.
16. Khamidov, O. K. (2020). Foreign countries' experience in developing tourism potential and significance of clusters in Uzbekistan. *Scientific reports of Bukhara State University*, 4(2), 281-284.
17. Abdulloev, A. J., Tairova, M. M., & Aminova, N. B. Environmentally friendly and sustainable supply chain management in the platform economy.
18. Furqatovna, O. N., Niyozovna, N. I., & Nutfulloyevna, A. H. (2022). Approaches Aimed At Ensuring a High Quality of Education in the Training of Economists. *Journal of Ethics and Diversity in International Communication*, 2(3), 78-83.
19. Giyazova, N. B., & Davlatov, S. S. (2021, June). The relevance of a small business marketing strategy. In *E-Conference Globe* (pp. 4-6).

20. Halimova, N. J., & Ismatillayeva, S. S. (2021, November). The Perspectives of Development Children Tourism in Uzbekistan. In *International Conference On Multidisciplinary Research And Innovative Technologies* (Vol. 2, pp. 184-188).
21. Narzullayeva, G. S., & Sh, O. S. (2021). Theoretical aspects of assessment of marketing communications. *International Engineering Journal For Research & Development*, 6, 3-3.
22. Khalimova, N. J. (2022). Uzbekistan Hospitality Training Programs and its Problems. *Journal of Ethics and Diversity in International Communication*, 2(3), 57-66.
23. Qayimova, Z. A., & Aminova, N. B. (2021, October). Modern Interest Rate Policy of Commercial Banks. In "online-conferences" platform (pp. 259-263).
24. Tairova, M. M., & Giyazova, N. B. (2016). The role of marketing in the agricultural sector of Uzbekistan.
25. Turobova, H. R., Tairova, M. M., & Giyazova, N. B. (2020). Possibilities of improving cooperation relation by developing agritourism in farming industry evidence from Uzbekistan. *Test Engineering and Management*, 83(5-6), 676-688.
26. Muhammedrzaevna, T. M., Khakimovna, U. M., Abdullayevna, K. Z., & Bayazovna, G. N. The role of using innovations in improving the competitiveness of goods. *Gwalior management academy*, 11.