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CLUSTERING IN THE CONTEXT OF INCLUSIVE DEVELOPMENT OF THE REGIONS

The article runs about the advantages of the cluster approach to the development of the region which, in contrast to others, has to set up close partner ties, the aim of which is to provide the competitiveness both of each separate participant of cluster, and the union on the whole by means of introducing innovations. The cluster union formation is of great importance for the economic activity of the region to be efficient, as it encourages attracting investments and producing competitive products and services on the innovative technologies basis.

In the article the author draws attention to a low activity of cluster forming process in Ukraine, as in the country there are a set of challenges connected with financial resource deficiency, no confidence to the power bodies, low awareness of enterprises of clustering advantages.

The cluster value as an important universal instrument capable of enhancing the economic competitiveness of individual countries (or regions) and the efficient development of the modern global economy is substantiated. On the basis of the research performed there have been defined the main tasks of making the process of clusterization to be more active in the regions of Ukraine.

The article analyzes the concept of inclusive development and identifies its key points. The research made it possible to find out that there are a significant number of factors varieties in quality, intensity, force of manifestation and effect, that influence or may have an impact on inclusive local development, which is important for improving the well-being and life quality of the local population, expansion and realization its rights and opportunities.

The practical significance of the results obtained is that the scientific findings, the results obtained and the suggested recommendations are a practical basis for the development and improvement of the clustering process in ensuring the economic security of the state.

Keywords: cluster, competitiveness, cross-border cluster, economic development, region, economy clustering, inclusive development, inclusive growth.

Vолодимир Осипов, Ганна Граматік, Олександр Паларієв. КЛАСТЕРИЗАЦІЯ В КОНТЕКСТІ ІНКЛЮЗИВНОГО РОЗВИТКУ РЕГІОНИВ

У статті відзначено переваги кластерного підходу до розвитку регіону, який на відміну від інших має встановлення тісних партнерських зв'язків, які покликані забезпечити конкурентоспроможність як кожного учасника кластеру, так і об'єднання в цілому шляхом впровадження інновацій. Формування кластерних об'єднань має великі значення для ефективної економічної діяльності регіону, оскільки сприяє залученню інвестицій та виробництву конкурентоздатної продукції та послуг на основі використання інноваційних технологій.

У статті автори відзначають низьку активність формування кластерів в Україні, оскільки в країні існує ряд проблем, пов'язаних з дефіцитом фінансових ресурсів, недовірою до влади, низькою поінформованістю серед великих підприємств щодо переваг кластеризації.

Обґрунтовується значення кластера як важливого універсального за своїми можливостями інструмента для підвищення конкурентоспроможності економіки окремих країн (або їх регіонів), а також для ефективного розвитку сучасної глобальної економіки. На основі проведенного дослідження було визначено основні завдання активізації формування кластерів в регіонах України.

У статті проаналізовано поняття інклюзивного розвитку та визначено його ключові моменти. Проведене дослідження дало змогу з’ясувати, що існує значна кількість різноманітних за якістю, інтенсивністю, силою прояву та дії факторів, які впливають або можуть впливати на інклюзивний місцевий розвиток, що є важливим для покращення добробуту та якості життя місцевого населення, розширення й реалізації прав і можливостей.

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Formulation of the problem in general. The development of a modern economy in the context of globalization, post-industrial society and informatization is characterized by a tendency of increasing competition between regions and individual territories. Clustering as a basis for efficient use and creation of regional resources for improving competitive status in geopolitical space on the basis of cluster expansion is a decisive factor in strengthening the level of the national economy competitiveness [3].

Recent large-scale transformations in the economy, integration processes, the transition to a new scheme of the state, which entails a change of administrative and budgetary relations of the center and the region, have led to the formation of many negative tendencies in the development of regional systems. This fact testifies to the decrease in the effectiveness of traditional administrative and institutional mechanisms of state regulation of regional development.

Clustering is one of the leading and effective directions of the state internal socio-economic policy, aimed at active inclusive development of regions and industries in a new and better form of economic cooperation. The process of clustering the Ukraine economy is conditioned by the need to realize the sectoral, regional and national economic and public interests of the subjects of the country economic activity and the introduction of modern European forms of economic interaction and development.

The cluster approach to industrial policy formulation in countries around the world has been used since the 1980s and 1990s. Today, it is not only powerful means of achieving the goals of the economic growth policy, its structural changes, modernization, but also an instrument of regional and innovative development, proving the competitiveness of enterprises in the domestic and foreign markets. Cluster-based industrial policy is classified as a cluster policy of the state and effectively implemented by leading countries in the world. At the same time, the clustering process in ensuring the state economic security is influenced by the dangers and threats that must be identified in order to determine and apply effective mechanisms for their neutralization.

Currently, there are more than 850 active clusters in the economies of the world leading countries and the CIS countries. Most of them are concentrated in Great Britain (169), the USA (152), India (106), France (96), Italy (72), Denmark (34) and Germany (32) [6].

The peculiarity of the domestic clusters formation is their focus on the fields of light industry, construction, agro-industrial complex and metallurgy, while for European countries the priority is the development of high-tech innovative clusters in mechanical engineering, biopharmacology, electronics and information technologies. At the current stage of world economic development, clustering is becoming widely used and important as a tool for industry dynamic growth due to cooperation, specialization and concentration of production, activation of innovative activities, new technologies introduction and enhancement of domestic products competitiveness.

After the end of the financial crisis period, 2008-2009, world leaders and scientists have concluded that to prevent such crises in the future, it is necessary to open and develop new opportunities for productive employment, significantly improve living standards and translate economic growth into large-scale progress in all areas of life. In this way, the world community has decided to take full advantage of the inclusive growth and development of the country’s economy.
Analysis of recent researches and publications. The study of the clusters formation and functioning was reflected in the works of such scientists as Porter M., Coase R., Sokolenko S.I., Voynenenco M.P., Zakharchenko V.I., Oisпов V.M., Brizhan I.A., Varyanchenko O.V., Makarenko M.V., Nazarenko S.A., Papkovskaya O.E., who explored theoretical and methodological approaches to cluster formation, but at the same time, the state and prospects of the Ukrainian economy clustering require further researches, because this approach has proven its efficiency in many countries around the world.

Issues of regional policy, cross-border cooperation, creation and development of Euroregions, cross-border clusters formation, positive effects and other peculiarities are covered in the works of such Ukrainian scientists as M.I. Dolishnii, L.I. Fedulova, N.A. Mikula, A.I. Mokiy, I.V. Studennikov etc.

The clusters creation as an element of innovation is observed in many sectors of the state's economy.

Chuzhikov V.I. considers the cluster concept as a competitive organizational form of a territorial-hierarchical model of production with different levels of localization, which gives maximum economic and social effect by minimizing costs in relatively similar industries, and assumes in the cluster system such a prerequisite as a concentration [1, p. 164].

Saibuk P.T. states: “... cluster systems are the embodiment of a combination of scientific, industrial and commercial structures, and on the basis of using the benefits of cooperative interaction contribute to the formation and effective use of real competitive advantages of individual enterprises, industries, regions, national economies in the conditions of increasing global competitive confrontation. At this stage of the Ukrainian economy development, clusters can be an effective tool for intensifying the development of domestic entrepreneurship and strengthening the market positions of certain economic entities” [8, p. 4].

Voynenenco M.P. interprets the cluster concept as a territorial-sectoral voluntary association of enterprises that work closely with scientific institutions and local authorities to increase the competitiveness of their products and the economic growth of the region [9, p. 31].

According to M. Porter's theory, "a cluster is a group of geographically neighboring interconnected companies and related organizations operating in a particular field and it is characterized by a commonality of activities and are complementary to each other." [7, p. 207].

The Ukrainian researcher Stanislav Sokolenko showed the following stages of economic development based on clusters: 1) mobilization (stimulation of implementer’s activity), 2) diagnostics (assessment of economy and economic infrastructure), 3) stage of cooperation (persuasion in the importance of cooperation) and 4) implementation (applying of implementation of cluster’s working group initiatives).

Highlighting previously unresolved parts of the common problem. Despite numerous scientific works, the problems of the state economy clustering are not fully understood and needed further investigation. A number of issues regarding the ways of development and effective functioning of cross-border clusters in Ukraine remains unresolved.

A study of inclusive development in the regions requires more thorough research. It should be noted that inclusive development in the context of cluster formation is a catalyst for economic growth and it provides additional benefits and the possibility of obtaining a greater synergistic effect.

The aspects regarding the definition of conceptual, theoretical, methodological, instrumental foundations of the cluster structures formation and development in ensuring the economic stability of regions and the state as a whole remain insufficiently illuminated, and this fact determines the relevance of the conducted research.

The aim of the study is to justify theoretical and methodological foundations and scientific and practical approaches to the development of the clustering process in ensuring the sustainable development of the economy of the state and its regions, to study the role of clusters in the development of national and regional economies which are the components of modern global economic space, as well as to study the inclusive development of economy of the state and its regions.

The realization of this aim led to the solution of such tasks: - to explore the essence of the concepts “cluster” and "cross-border cluster" as a theoretical and conceptual basis for the formation of directions and systematization of the process of cluster policy implementation; - to determine the clustering process influence on the state economic stability; - to systematize the factors that impede and accelerate the development of economic clustering; - to analyze the clusters benefits in the cluster model implementation of economic development; - to explore the concept “inclusive development” and identify its key points.

Statement of the main material. In the current economic conditions, most regions of Ukraine have significant difficulties in securing and maintaining the rate of the territory socio-economic development. The lack of strategic investment projects in the territory development necessitates the creating and implementation of new approaches to regional development. The current economic conditions, integration of Ukraine into the European economic space, new approaches in the field of state management of regional development necessitate the use of effective and innovative methods of managing economic processes at the regional level using a cluster approach. The European countries experience, where the cluster approach has become widespread, has shown that the functioning of clusters is an effective means of enhancing the regions competitiveness and bringing the economy to a new level. As Ukraine strives to integrate into the European economic space, the use of clusters is now considered by state authorities as one of the priority areas for the development of the economic complex.

Defining the leading role of clusters in the revival of the national economy, domestic scientists in the study of their economic nature have repeatedly linked the processes of clustering with the need to approve the regional model of economic development. Based on the principles of enterprises economic motivation, clusters are
better able to use the scientific and educational potential of the region than other forms of organizational entities. Therefore, the formation of regional innovation systems and clusters should not be seen as separate concepts of regional development, as well as components of a single mechanism for the implementation of regional policies that complement each other, and each of the components of this mechanism can and should be a catalyst for inter-regional integration [10].

Clusters are industry-territorial voluntary associations of business entities that work with authorities, scientific and public organizations to increase the competitiveness of their products and the region [11].

Given that clusters have a wide range of activities, there is a need to classify them by territorial division of labor. Thus, there are regional, interregional and international, in particular, cross-border clusters. Regional clusters are created within one region and are geographically focused on interconnected industries. Interregional ones include enterprises, organizations and institutions located in different regions of the country, and they are primarily focused on the foreign market, i.e. export, and aim at creating competitive products. International, in particular, cross-border clusters operate within two or more countries [4].

Cross-border clusters are a new form of cross-border cooperation in the current context of developing of cross-border cooperation between neighboring countries.

A cross-border cluster is a form of integration of independent companies and associated institutions that are geographically concentrated in the cross-border region, specialize in different industries, linked by common technologies and skills and complement each other, based on the existence of a coherent strategy for the cluster participants development [2].

The following interpretation of the concept of a cross-border cluster is proposed: it is a model of a cluster organization, which provides for localization of interconnected enterprises and institutions in the cross-border territory, enables to realize the best possible interconnection of production, scientific and technological potential, marketing, consumer demand, and determines the orientation of consumers with the aim of improving the competitiveness of final products and the efficiency of production in general, both for the domestic and foreign markets.

The peculiarity of cross-border clusters is that their participants are located in different tax, customs and legislative environments of neighboring countries, but they can have joint ventures and organizations, use common infrastructure and operate in cross-border markets. Another peculiarity is that the intensity of network interactions in the cross-border cluster is limited by the presence of a border, which creates additional barriers to the free movement of goods, labor and capital. Barriers to collaboration can also be different mentality, traditions, language, culture, negative history pages, etc. [5].

It worth be noting that cross-border cooperation is aimed not only at meeting the needs of the internal market, but also makes it possible to use external economic channels for the sale of the products and services. It allows us to enter the European markets and gain more impact from the functioning of the cross-border cluster.

World practice shows that the formation of cluster structures in the border areas is a key to the development of both regional and state economies, because their creation and functioning contribute to increasing the competitiveness and investment attractiveness of the region, provide high level and quality of life, economic growth and sustainable development of the region, allow to solve socio-economic, environmental, territorial and other problems.

An inclusive economic development model involves the creation of maximum opportunities for personal development, participation in all spheres of life, employment and equal access to work results. «An inclusive development» is a concept that has the broad meaning and is being implemented in many aspects and therefore there is the lack of a commonly accepted interpretation and unified understanding in the economic literature, reviews, and reports of international institutions. Inclusive development is seen as a steady rapid development of all sectors of the economy, which attracts a large part of the country’s labor resources and is characterized by equal access to the labor market and resources.

The priority of inclusive development is to improve the population quality of life through the formation of a high-employment economy and a society with a minimal separation.

According to Porter's cluster policy, enhancing the competitiveness of a region is based on three main areas: improving the productivity of companies operating in their business, increasing the level of innovation and stimulating the new companies formation. A characteristic feature of clusters is that companies, located in the certain area, compete with each other, but at the same time cooperate in areas where the synergy of joint actions (e.g. joint research and development) can be missed. Competition does not exclude interaction with other companies and can be a driving force for their development. This phenomenon is called in management «Coopetition» (that from English means a combination of words cooperation and competition). This is like cooperation between business competitors with mutually beneficial results.

The example of this effect is the Silicon Valley in the USA (California), where the development of the IT industry has attracted and continues to attract the best computer scientists from around the world, enabling enterprises located there to increase their advantages over competitors.

Such a form of cross-border cooperation like cross-border clusters is widespread in the leading countries of the world and developing countries, but it is the most widespread at European borders, where the main purpose of the cross-border cluster is to accelerate economic growth by combining the efforts of participants, providing competitive advantages to cross-border regions.

The unique economic experiment was the experience of creation and activity of the cross-border agro-ecological-recreational megacluster "Frumushika-Nova". This project dates back to 2006, when construction began on the site of the Moldovan villages Frumushika-
Nova and Roshiya, evicted in the spring of 1946 due to the formation of a military training ground. Frumushika-Nova is located on the territory of Veselodolinsky village council of Tarutino district in Odessa region.

Today Frumushika-Nova is the center of ethnographic, rural green tourism and family holidays. There are the largest sheep breeding complex in Europe for breeding sheep of Karakul breed, the highest granite monument in Ukraine, entered in the National Register of Records of Ukraine, Ethnographic Open Air Museum, Family Recreation Center, Sculpture Park, mini-zoo on its territory.

The ideology of formation of the cross-border production-scientific-educational megacluster "Frumushika-Nova" is as follows:

- combining economic, social, environmental and other interests to strengthen economic potential and achieve higher sustainable development rates;
- representation and protection of legal rights and interests, creation of legal, organizational, economic, technical conditions for stable development of the region;
- promoting the implementation of cluster initiatives in the Tarutino region of Odessa region, Ukraine, Moldova and Romania;
- creation of poles and points of economic growth based on strategic priorities and investment attractiveness;
- raising the living standard of the population in the project area.

The purpose and stages of formation of the cross-border production-scientific-educational megacluster "Frumushika-Nova" in Tarutino region:

1) creation of organizational, scientific, technical and applied platform for sustainable development of the communities of Tarutino district of Odessa region, which are located in the area of depressed steppe landscapes;
2) implementation of principles of sustainable development of territories and communities of the southern regions of Ukraine;
3) formation of the model of efficient and environmentally friendly nature management in the steppe zone; search and use of internal competitive advantages, attraction of investments, budgetary funds, international technical assistance;
4) promoting the development of entrepreneurial results and the creation of new innovative results on a project basis;
5) search and implementation of other directions and methods of community development, territories that will contribute to improving the quality of population life in the project area.

Currently, the following structural units that are part of the megacluster are developing:

- The subregional cluster “Sheep breeding”;
- The sectoral cluster «Lavender»;
- The grape production cluster;
- The regional cluster «Recreation and tourism».

As noted above, the largest sheep-breeding complex for the breeding of sheep of the Karakul breed is located on the territory of the megacluster "Frumushika-Nova".

The purpose of the project was to revive sheep farming as a means of addressing the economic and social problems of rural employment; providing the population with environmentally friendly livestock products; addressing the challenges of the food program in the context of the global food crisis. The main tasks of the project are the organization of a shepherd complex of the European level - creation of a closed cycle of production on the cluster principle; increasing the efficiency of the use of pasture land, reserve land; increasing the number of sheep and especially of the Karakul breed; popularization of the idea about returning to environmentally friendly livestock production among the general population.

A number of important activities are being implemented on the megacluster territory, one of which is the creation of the sectoral cluster “Lavender”. It is planned to create a research center, which will include representatives of the leading higher educational institutions of Odessa. New types of industrial and agricultural activities will be developed separately. For example, climate change has made it possible to grow lavender. On-site processing will be organized, and during the flowering - excursions to the lavender fields.

Viticulture and winemaking are closely linked. Dynamic development of winemaking is now impossible without the improvement of viticulture. The wine production cluster is considered as an effective form of wine tourism organization. Wine tourism is a reflection of the global trend of cultural tourism development, including its manifestations as wine and gastronomic tourism. Wine tours are forming a new offer in the region's services market and are generating a synergistic effect of the cluster's functioning.

The Odessa region strengthens its position on viticulture and winemaking from scientific, technical, technological and organizational points of view, including by creating profile associations for the protection, implementation and support of geographical names. Therefore, in the spring of 2019 the Association of Winegrowers and Winemakers was registered under the name "Tarutino-terroir".

The cluster model of production organization and promotion in the market of goods and services helps to solve a number of economic problems of the region, diversify production of goods and services, increase their competitiveness. An important component of the region economic system is the successful functioning of the territorial-recreational system and the formation of a recreational-tourism cluster based on it, enabling the effective use of natural and anthropogenic recreational resources, historical and cultural heritage and significantly enhancing the impact of the sphere of recreation and tourism on the economic development.

The megacluster “Frumushika-Nova” worked as the only system whose strategic success was laid at the stage of idea formation and design. This experience should be an impetus for further clustering processes.

All theoretical developments have been tested during the formation of the megacluster “Frumushika-Nova”, which is currently in the stage of economic growth and is strengthening its innovative, productive links with Moldova and Romania. In the future, it is planned to participate in international grant projects and development programs, thus creating more favorable conditions for inclusive development of the region.
Large and medium-sized cities, as centers of local, regional and interregional levels, serve as "poles of growth" because of the higher concentration of economic, innovative, scientific, infrastructural, cultural and information development potential. Today, particularly large cities are generating not only social development trends, but also new ideas where new sustainable development concepts are implemented ("smart cities", "creative cities", "green cities", "learning cities", etc.), they try out the newest elements of local governance (for example, participatory governance). Therefore, the competitiveness of regions and the country as a whole depends on the vector and the level of cities development, in particular, promising and creative economic activities based on self-identification and the key competitive advantages of their development. Achieving a new quality of urban economic growth, namely in the context of the inclusive development benefits, determines the social effects, standard and quality of the population life, the positive resilience of the social processes development in cities and regions. Inclusive growth as a result - a fair distribution of income - allows feeling its results for every member of society, covering all spheres of its life; is accompanied by an improvement in the quality of citizens’ life and a reduction in poverty. Inclusive growth as a process is ensuring the widespread possibility of population participation in the growth process, both in terms of decision-making and in creating growth itself. People are required to be actively involved in the processes of political, social and economic change. That is, it is important to increase the involvement the all segments of the population in solving the development problems, as well as to increase the involvement in the development of all territories.

Inclusive local development is one of the most promising modern concepts and, accordingly, models of territorial development, the formation of which depends on the identification of relevant factors. Creating a supportive environment for people's lives and existence, including them in the processes of producing and distributing social goods, meeting diverse needs and realizing positive systemic changes within the territory of living are just some of the inclusive development factors that logically derive from its ideological basis. However, there are a number of other factors that need to be taken into account in the processes of inclusive local development. First, this is unemployment and poverty, inequality, population migration, local identity, marginalization, social security, accessibility of goods and services, including in the fields of health, education, infrastructure and so on. Thus, improving the well-being and quality of the population life based on an inclusive approach requires, first, identification and systematization of its factors, firstly general, then specific, which are characteristic to the concrete territorial communities.

**Conclusions, problems and their solutions.**

Traditionally, the ultimate goal of any state is to achieve a high standard and quality of the population life. Considering the trends that have taken place in the global community in recent years, related to globalization processes and the global competition growth, there is an inevitable need to change the management paradigm of both national and regional competitiveness. At the same time, we must be aware that the classic chain of "ensuring and improving the quality of the population life", i.e.: education quality - quality and efficiency of management - efficiency of innovation and investment activity - efficiency of resources use - competitiveness of goods (region, country) - quality of the population life – all these need some revision and modification. In this regard, not only innovation, knowledge and education, but also the special attention and aspirations of business relationships should be key factors in achieving and retaining advantages over competitors, as they will help to create conditions for the creation of so-called network structures, namely, clusters.

The main factors that impede the effective development of cluster entities are:

- lack of a clear mechanism for cluster formation;
- low quality of management during the forming a cluster model of development;
- low development level of territorial integrated systems;
- insufficient development of small business;
- low level of infrastructure development and organizational conditions;
- low level of trust between the main economic agents;
- poor quality of business climate;
- lack of a culture of information openness;
- distrust of potential cluster participants and the formation of unfair competition;
- low production culture and lack of management experience based on outsourcing;
- perception of factor conditions as the main determinant of cluster development success;
- low level of associative structures development, which do not cope with the tasks of development and promotion of priorities and interests of regional development;
- using in most cases only short-term forecasting tools.

As for the possible negative effects of clustering, there are: vulnerability (specialization and technological interruption may undermine certain benefits of the cluster); inflexibility (rigid existing structures have the risk of delaying radical reorientation and hampering the necessary restructuring); self-sufficiency syndrome (accustomed to past successes, the cluster may not be able to recognize constantly changing trends); closed effect (can be caused by overconfidence about local contacts and knowledge at the same time as ignoring external communications and poor forecasting); reduction of competitive pressure (cooperation can help reduce competitive pressure, which will weaken the driving forces of innovation and innovative activity); internal recession (similar to how social capital is necessary to form the basis of cluster development, the latter may, in turn, undermine and destroy the social preconditions that shape it).

Despite the number of problems listed above, clustering has considerable potential and prospects for implementation and development. The advantages and benefits of the clusters existence and implementing a cluster model of economic development are considered:

- new manufacturers, especially from other industries, are accelerating their development by promoting research and providing the necessary funds to implement new strategies;
- free access to information and rapid dissemination of information through the channels of suppliers or consumers in contact with competitors;
- interconnections within the cluster create new ways and opportunities for competition, as well as create completely new opportunities;
- human resources, ideas, information and knowledge form new and unexpected combinations.

Regarding the stimulation of the efficient development of cluster entities, a foundation should be the state policy that foresees:
- an appropriate tax and subsidy system;
- the development of national and regional economic development strategy, the basis of which is clustering;
- legislative and legal framework for the formation and development of cluster entities;
- training specialists relevant to the clustering processes [13].

The cluster model and the cluster approach can, and even preferably, be used to solve a range of challenges such as: solving competitiveness problems; stimulation of innovative activity; improvement of the national economic policy; development of regional development programs; interaction of all entrepreneurship forms.

Thus, the clusters can be regarded as an organizational form of stakeholder consolidation efforts, aimed at achieving competitive advantage in a globalized environment. In addition, clusters enable businesses and the region to develop not by inertia, but to provide themselves with key success factors in the future through the creation of a long-term development strategy. Clusters form the basis of effective economic development of the regions territory and contribute to the effective development of the country as a whole.

It takes time for clusters to succeed. Numerous examples show that it takes decades to build a cluster to develop a strong and real competitive edge. However, it is quite clear that clusters today are a form of internal integration and cooperation that is capable of providing both the resilience and the synergistic effect of counteracting the blows of global competition by monopoly transnational corporations. In addition, they add high importance to the microeconomic component, as well as territorial and social economic development, and offer effective tools to stimulate regional development.

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