

## PRINCIPLES OF FORMATION AND FUNCTIONING CLUSTER FORMATIONS

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*In the article substantiates the importance of the principles in the formation of clusters and deals with general principles of the formation of clusters. Researched the question of the influence of the archetypal features of the territory by using the class-based approach to development of territories. The author formed the system of clusters functioning principles. This article proposed that the principles of functioning of clusters, can be used by the authorities as the evaluation criteria regarding the level of usefulness, advisability and necessity of state support of their functioning in the region. It was determined that the system of principles of formation and functioning of clusters will be the engine for the identification of existing and selection of promising formations cluster type in Ukraine.*  
**Key words:** cluster, principles of formation, principles of operation, decentralization, the archetype of the territory, evaluation criteria.

**Formulation of the problem.** The decentralization processes taking place in our country are intended to convey not only the powers and resource base, but also the responsibility of local and regional authorities for constant development and the search for ways to fill various kinds of resources in the territory entrusted to them.

To this end, throughout the world, the authorities are resorting to a cluster approach in the policy of developing the territory, as a cluster of structures with a synergistic effect: allowing each participant to stay in touch with itself, fostering competition and creating an investment climate., becomes a platform for the implementation of innovations and the development of science and, ultimately, is a real basis for the overall development of the territory on which the participants are located. At the same time, the main advantage of such an approach in the activities of public authorities is equality in the five participants, both representatives of business and science, and government structures. Thus, the new principles of the organization of joint actions, which are oriented not on conquest (let alone in the name of common goals), but also on the dialogue, interaction, interaction of the state and society in solving the issues constituting it, are ensured in public consciousness and the state system. general interest. In the end, a full dialogue dialogue will take place in the system of horizontal interconnections.

**Analysis of recent research and publications.** The study of cluster entities is given sufficient attention, both among foreign and domestic scientists. The fundamental foundation for the study of cluster phenomena and clustering processes in the world is made by A. Marshall, M. Porter, S. Rosenfeld, E. Bergman and E. Feser, T. Anderson, K. Ketels, and others.

The works of M. Voynarenko, V. Heytsya, S. Sokolenko, V. Zakharchenko and V. Osipova belong to the Ukrainian scientific paper on the issues of the organization and management of clusters, their effectiveness and their impact on the development of the economy of the region and the country as a whole., etc. Among the the-

oretical developments, partial, but insufficient attention is paid to the isolation of the principles on which the clusters are formed, in particular, due to the influence of archetypal peculiarities of the theory, the use of the cluster approach to the development of territories and the principle of the functioning of cluster formations remains incomplete.

**Selection of previously unsettled parts of the general problem.** In attempts to apply the cluster approach, Ukraine is not an exception. Since the beginning of the 2000s, the Cabinet of Ministers of Ukraine adopted a number of documents, which discussed the need for clustering. However, in the context of the permanent reform of the public administration system, the case has not yet reached the official legal document – the grounds for using a cluster approach that would define the fundamental principles of the formation and functioning of clusters. This led to the fact that attempts to independently identify and structure clusters in separate regions do not bring the maximum possible effect.

At the same time, it should be noted that the principles of cluster formation are objectively inherent in the process of clusterization of initial principles, the basic laws, rules and regularities of the formation of cluster entities [1].

The value of the principles in the formation of clusters is due to the fact that they:

- contribute to overcoming the gaps in the formation of clusters;
- direct the development and functioning of different types of cluster entities;
- coordinate the functioning of the mechanism for regulating relations in the cluster;
- are the most important criterion of necessity and grounded clusterization [1].

**The purpose of the article.** The main purpose of the article is to identify the principles of formation and functioning of clusters, taking into account the influence of archetypal specialties of the territory, when using the cluster approach to the development of territories.

**Presenting main material.** The world experience demonstrates to us examples of success-

ful clustering, the processes of which are based on common approaches to the formation of cluster structures. Such approaches are based on the general (primary and basic) principles of clusterization, such as: voluntariness, common goal, equality of participants, interconnection, territorial closeness, etc., which are described in detail by scientists [1,2] (Table 1). In addition, taking into account the individual characteristics of each cluster entity, its type and location, special principles can be singled out. In the stat-tion, we will dwell in more detail on the general principles.

In the context of the implementation of the reform of local self-government and the territorial organization of power in Ukraine, the opinion of the team of scientists Gerasimchuk Z.V is

extremely interesting. and Smolich DV, who propose in the system of general principles of cluster formation to allocate the principle of decentralization. Scientists suppose centralized state stimulation of the formation and development of clusters, but emphasize that the application of the principle of decentralization, involves the active role of regional authorities in this process [1].

Such an approach is not only contained within the framework of the Law of Ukraine "On the Principles of State Regional Policy", which provides "... consideration of natural, historical, ecological, economic, geographical, demographic and other peculiarities of the regions, their ethnic and cultural identity [7]" in implementation by the public authorities of measures of policy develop-

Table 1

**General principles of clustering**

Principle	Content of the principle
<i>Voluntary</i>	This principle covers a very important range of issues related to the freedom of cluster formation exclusively on a voluntary basis. The content of the principle of voluntariness is that the right of the participants to join in the cluster includes the following aspects: first, the right to form clusters exclusively on a voluntary basis, and secondly, the right to voluntarily enter into cluster education, thirdly , the right to leave the cluster without interruption.
<i>Common goal (synergistic effect)</i>	It means that the cluster formation process should be subordinate to the global unifying goal, which has absolute priority. Objectives must be realistic, specific and aimed at achieving the ultimate goal, which will produce a synergistic effect. The synergistic effect will be called an increase in the performance of enterprises in the region as a result of the integration, integration, merging of individual parts into a single system, where the effect of the interaction of elements of the enterprise system exceeds the sum of the effects of each element separately.
<i>Territorial localization</i>	It is explained by the close territorial placement of the bulk of the members of the cluster system.
<i>Unity and connectivity</i>	The principles of unity and cohesion are closely linked, but if the principle of unity reflects the "outside view" on clustering, then the principle of connectivity guides the "inside look" to this process. The principle of unity demonstrates the structure of the cluster and consists in a coherent consideration of the cluster both as a whole, and as a set of components (elements). The principle of connectivity reveals the connections between the members of the future cluster, which involves mutual understanding, mutual support and trust of the participants to each other.
<i>Equality of participants</i>	It involves the equality of participants in cluster education, predetermines the democratic formation of a team of like-minded people, to develop and implement a strategy for the development of the cluster, taking into account the interests of each participant.
<i>Decentralization</i>	Provides an active role of regional authorities in the process of clusterization, even for centralized state stimulation of the formation and development of clusters.
<i>Development and self-development</i>	Justifies the need to take into account the variability of cluster formations, their ability to develop, expand, replace components, and collect information.
<i>Corporate identity</i>	Defines the need for a climate of trust and a culture of communication between cluster members, a unified system of values, and a sample of behavior for the possibility of sharing information, experience, reducing costs and maintaining the business reputation of the cluster as a whole.
<i>Constancy</i>	Provides for the harmonization of economic, social and environmental interests in the formation of industrial clusters.

Source: developed by the author according to [1; 7]

ment of territories. This principle is a reflection of the archetypes of the territory (clearly defined functional and stylistic peculiarities), where cluster activities will be carried out.

Yes, any territory has its own format. Such formats are always a few, and we can talk about the city, territory, settlement in many sokh-sah. However, the below three-level semantic system (Fig. 1) is present in any territory [3].

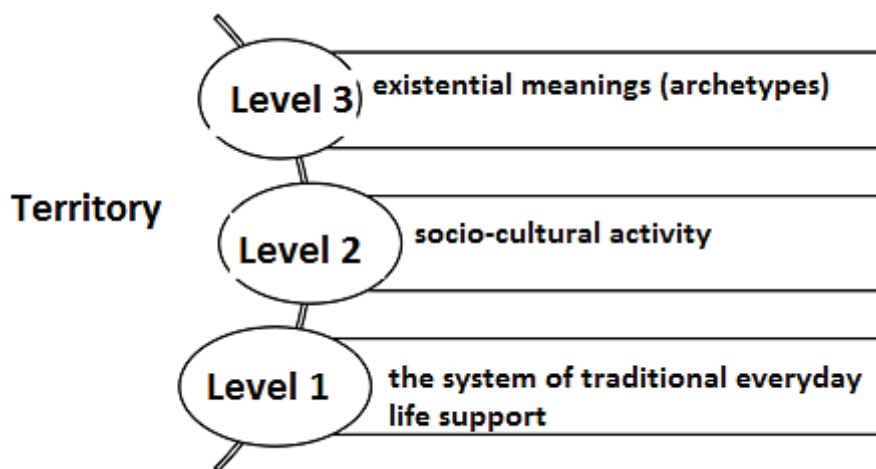
The first level – the system of traditional everyday life-security, which determines material flows, material relations and material heritage of the territory. These are buildings, structures, people who work, housing and communal services, flows related to food and other logistical supplies. The second level is associated with the development of socio-cultural activities. There are certain strategies, scenarios of development that can be both personal and related to individual communities and their executions. The third level, from which we can not go anywhere, are existential meanings or archetypes associated with this territory. This can also be called the sacred territory or territorial existential, which in many ways may be ambiguous. Those or other people, the community connect their future, their lives, their own meanings with a certain territory and can to some extent describe these meanings. Returning to the development of individual territories, such qualities of archetype images make them particularly attractive as the basis for positioning in the eyes of target audiences, since they ensure consistency and consistency, which eventually translates the brand position of the territory eventually.

Definition of “archetypes of territories” is defined by V. Gleb as a historical poison-city, with clearly expressed functional and stylistic peculiarities [4]. We agree with the researcher’s approach to defining the definition and its essence, but at

the same time we believe that the term is more suitable for determining the archetype of urban areas and does not take into account rural and settlement territories, as well as territories whose population is united by joint activity, etc., while it would be advisable to understand it as the historical core of the territory, with clearly distinguished functional-stylistic features [6]. At the same time, we support the opinion of the said researcher regarding the need to take into account historically determined criteria for the allocation of the territory for functional purposes, which has its own archetype according to its potential and problems, and we believe that such a principle should take place.

For example, Slobidska Ukraine has long since been the center of ceramic production. The presence of clay deposits on the territory of the land resulted in the appearance of manual ceramic production in VI – IV millennium BC [9]. Potting in the 18th – early 20th centuries. occupied one of the most important places in the handicraft production of the city of Tora – now the Slavic Donetsk region and some nearby villages. At the end of the nineteenth century. pottery dishes gradually began to oust the factory activity. In the 90s of the twentieth century, as a result of unsuccessful work and the closure of ceramic enterprises and the release of skilled personnel, the small and medium-sized business in the sphere of chemical production was rapidly developing. Today in Slavyansk there are more than 700 ceramic enterprises of small and medium-sized businesses, employing over 35,000 people in this sphere.

With the support of the United Nations Development Program in Ukraine (within the framework of the Donbas Economic and Social Reconstruction Project), the Government of



**Fig. 1. Three-level semantic system of territory**

Source: developed by the author according to [3].

Japan, in partnership with the Government of Ukraine, within the framework of the Ceramic Region Initiative, in 2015, small producers of the ceramic industry in the city of Slova ' The Japanese combined into a cluster [8]. As a result of the study of the field of ceramics in a few months, it was noticed that each of the entrepreneurs is characterized by narrow-profile production. If he produces sculptures, then he does not produce dishes, if he manufactures dishes, he does not deal with figures, etc. Here, the role of the cluster is also shown, taking into account the historical specialization of the territory: thus, uniting representatives of small and medium-sized businesses, with the help of qualified experts, developed the missing packaging and promotional materials of products that will allow Slavic and ceramic products to be competitive in the markets. Within the framework of the "Ceramic Region" project, a strategy was developed for the cluster to enter new markets, a number of trainings were held, including branding and communications, presentation of products in 4 cities of the country (Slavyansk, Kiev, Illichivsk and Chernivtsi).

In the same vein, if regional authorities initiate a clusterization in the region, in addition to decentralization and taking into account historically determined criteria for the allocation of territory for functional purposes, the principle of openness of the cluster formation process and involvement in the identification of promising areas of activity of the general public should be highlighted. It is foreseen that representatives of SMEs, large enterprises, science, authorities and the public are involved in the SWOT-analysis of the region. These people live and work in this territory, identify, so the best and the best know the available and hidden advantages and potential of the area, as well as the disadvantages and over-codes that can be encountered. On this basis, ultimately, key clusters for the region are allocated (about 10).

The use of this public-wide approach is prevalent in the world, particularly in the United States. In addition, the "Strategic session of the Odessa region", held in the summer of 2015, is an example of the use of public participation in the identification of promising regional clusters in Ukraine.

The possibility of further functioning of each of the probable clusters is evaluated on the basis of common principles for operation, such as:

- *Level of education of employees* (degree of education);
- *How easy it is to work* (business climate);
- *Infrastructure and logistics component*;
- *Innovative development* – how much innovation can be attracted to cluster activity or how innovation will develop as a result of activity;

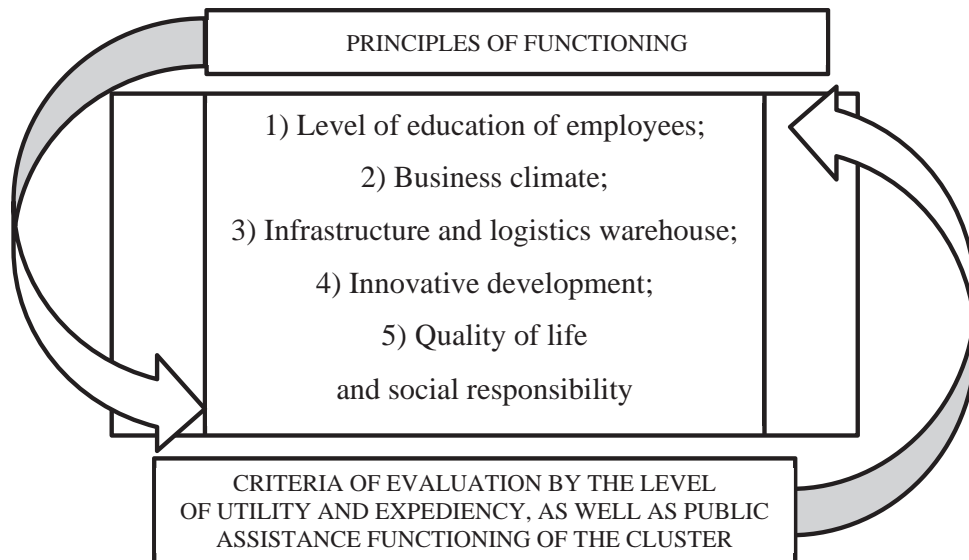
– *Quality of life and social responsibility of the cluster participants* – as a cluster activity will affect the living standards in the region and the possibility of developing the ecosystem (a developing network around: education, raising the standard of living, etc.). How does OO offer? Karpenko agrees with this approach, "Cluster social responsibility should foresee the contingent contribution of the state, business, education and science, as key elements of the cluster, to the sustainable development of the individual, society, country. For the successful formation and functioning of clusters, it is necessary, first of all, to think about social welfare, and not at any price to defend the individual interests of each partner [5]". At the same time, the main core components of the cluster's social responsibility are: unconditional implementation of the current legislation of Ukraine, respect, trust, integrity, honesty, mutually beneficial cooperation, prevention of lies and theft, protection of the environment and human life.

Finally, on the basis of the above principles, the authorities should constantly analyze the activities of cluster structures, using them as criteria for assessing the usefulness and appropriateness, as well as the state assistance to their functioning in the region (Figure 2).

Therefore, we note that the system of principles for the formation and functioning of clusters will be the driving force for identifying existing and identifying promising cluster type entities in Ukraine.

**Conclusions and suggestions.** The introduction of a cluster-based approach to the development of the Ukrainian territory, based on the principles of the formation and functioning of clusters, will promote accelerated socio-economic development and increase of the competitiveness of the economy due, on the one hand, to increase the intensity of entrepreneurship development, increase of innovation activity, increasing investment attraction, increasing revenues to budgets of all levels, and, on the other hand, increasing the number of new jobs, developing social infrastructure, implementing environmental protection measures and so on.

In view of the above, taking into account such principles when using the cluster approach is an objective necessity of the development of the economy and social life. And the use of the principles of functioning of clusters as criteria for assessing the usefulness and appropriateness, as well as the state assistance to their functioning in the region. Further research will focus on the development of methodological principles for the application of a clustered approach to the activities of public authorities.



**Fig. 2. Interconnection of the principles of functioning and criteria for assessing the activity of the cluster**

Source: developed by the author

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