Regional management and local self-government

UDC 351

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FORMATION OF CLUSTER STRUCTURES IN THE SPHERE OF STATE LIFE OF CITIES

Summary. The author's interpretation of the category "cluster of the sphere of state life support of cities" is given. The main distinctive features and possibilities of application of different models of development of cluster structures are generalized. The cluster form of organization of interaction of economic entities in Ukraine is characterized. A strategic plan of technological modernization of cities and the region on a cluster basis in the field of state life support has been developed. The basic model of cluster construction in the sphere of state life support is made. The main directions of stimulating the development of the cluster form of the organization in the sphere of state life support are highlighted.

Key words: cluster, sphere of state life support, strategic plan, technological modernization.

The problem statement. The results of comprehensive research show that at the state level (as opposed to regional and microeconomic) tools for assessing trends and dynamics of socio-economic change in the city, as well as strategies for its development are insufficiently developed, there is a lack of methodological tools for scientific strategic decision-making and priority areas, development of urban livelihood, based on full information on trends in the state socio-economic system.

Development of a strategic targeted approach to the development of the modern city, the feature of which is the priority of the social function of the city by clustering its territorial development and increasing the comfort of the living environment, which will contribute to economic development, change housing needs, development and modernization of infrastructure, as well as to improve the state policy of sustainable development at the stage of decentralization of power.

Overview of recent research and publications. The problems of urbanization and urban development management are devoted to the works of A. Saul, L. Bezzubko, A. Gorbunov, I. Ilyin, J. Crempton, S. Kruglik, O. Chernyshova, J. Shodonere, V. Yakovleva and others.

The purpose of the study (task statement). To prove the necessity of creating a cluster in the sphere of state life support of cities and modeling of relations between the cluster participants. Determining the main directions of stimulating the development of the cluster form of organization in the field of state life support of cities.

Research results. Generalization of approaches of scientists, such as M. Porter [1, p.26], S. Sokolenko [2, p.2], E. Fezera [3], L. Matrosova [4], M. Voynarenko [5], V. Chuzhikova [6], G. Semenova [7], S. Rosenfeld [8], V.

Fedorova [9], to interpret the concept of cluster allows to provide the following author's definition of the category "cluster of public life of cities": it is the most effective form of organizing innovative processes of enterprises in state regulation of urban life, which are united by one goal to achieve competitive advantage at industry, national and global levels.

In the modern city, depending on the initial conditions of the exogenous and endogenous environment, one cluster can be used for the cluster in the sphere of state life support (table 1).

Table 1

Distinctive features and possibilities of application of different models of development of cluster structures*

Development	Distinctive features	Possibilities of
model		application
Ahead	Priority development of high-tech industries in our own scientific developments.Priority development of large-scale industries aimed at meeting the priority needs of the population, based on our own latest innovations.Priority development of scientific and educational sphere on our own basis.	In countries with a high level of scientific and technical potential and education
Supporting	Ensuring the functioning of industries of different levels of manufacturability using both its own developments and foreign innovations. Ensuring the functioning of large-scale industries is aimed at meeting the priority needs of the population using both their own innovations and foreign ones. Ensuring the functioning of the scientific and educational sphere both on its own basis and by attracting foreign experience and experience.	In countries with an average level of scientific and technical potential and education
Catching up	Development of industries of various degrees of technology through the involvement of foreign scientific developments. Development of large-scale industries aimed at meeting the priority needs of the population through attracting foreign innovation. Development of scientific and educational sphere by attracting foreign experience and developments.	In countries with a low level of scientific and technical potential and education

Source: compiled by the authors on the basis of materials [10, p. 23]

When forming a cluster in the field of state life support of cities, three basic principles should be followed:

• common interests of potential participants - the same or mutual relations;

• concentration - arrangement convenient for regular contacts;

• interaction - interrelations, interdependence with a great variety of formal and informal [11, p. 121].

Naturally, cluster-funding mechanisms are important. Among the most significant items of expenditure on cluster activities should be noted:

- spend on cluster creation;
- spend on infrastructure development and maintenance;
- spend on individual cluster projects and programs [12].

Today, the cluster form of organization of interaction of economic entities is becoming more widespread in Ukraine. As an example of the efficient use of natural resources, in particular, granite, the development of the construction industry and the formation of a cluster of construction and building materials can be used as a guide. The members of this cluster include two banks, which intensively cooperate with construction companies, as well as educational institutions, which provide training and management. Yet, this is just the beginning of a future large-scale modernization of industrial policy in Ukraine.

The strategy of technological modernization of cities and the region on a cluster basis, which, in particular, provides for the creation of a cluster in the field of public life.

- 1. The plan of realization of strategy in which mechanisms of responsibility and communications of the power, business, the population, concrete actions, the corresponding organizations, terminations are defined.
- 2. Annual programs of economic and social development of the region,

developed based on strategy and plan of its realization.

3. Strategies for the development of administrative-territorial units of the region, and, in particular, a large city, have also been developed based on the above-mentioned strategy.

In order to understand the relationships within the cluster, attention should be paid to the characteristics of the firms that exist in the cluster, and the agreements that are concluded and executed within the cluster. There are three broad typologies of spatial socio-economic clusters, defined by certain functions that they perform (Gordon and McCann, 2000). These are pure agglomerations, economic complex and social networks. The key feature that distinguishes each of these separate ideal types of spatial socio-economic clusters is the nature of the relationship between participants (table 2).

Table 2

Characteristics	Pure agglomeration	Economic complex	Social networks
The size of the	Atomistic	Some companies are	Variable
organization		quite large	
Characteristics	Unidentified	Recognized	Trustful
of the	Fragmentation	Trading stability	Loyalty
relationship	Unstable		Joint Ventures
			Joint Lobbying
Membership and	Open	Closed	Partially open
access to the	Rents	Domestic investment	History
cluster			Experience
Просторові	Подорожчання	Не впливає на орендну	Часткова оренда
результати	оренди	плату	Капіталізація
The concept of	Urban	Local housing	Local but not urban
space			
Example of a	Competitive city	Economic complex	New industrial zones
cluster	economy		
Analytical	Pure agglomeration	Production theories	Social network theory
approaches	models	Analysis of input and	(Granoveuer)
		output data	

Socio-economic clusters

Source: compiled by the authors

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The cluster is characterized by redistribution of risks, mutual understanding, flexible policies, various forms of participant support and incentives. This is exactly what is currently lacking in the sphere of state life support of cities to ensure its way out of the crisis and progressive development. In our opinion, the construction of a cluster in the sphere of state life support should be carried out according to such a basic model (Fig. 1).

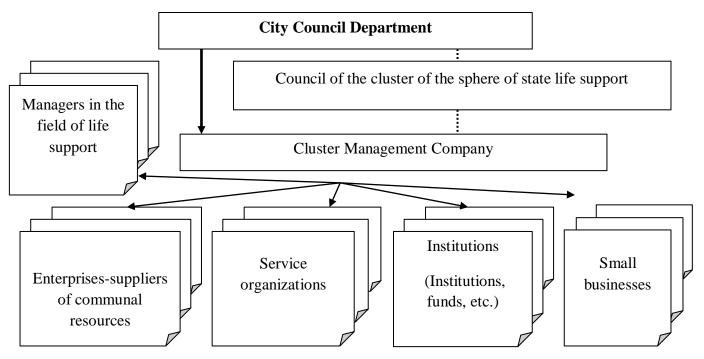


Fig. 1. Model of interaction of participants of the cluster of the sphere of state life support of cities

The analysis of the existing experience of clustering in the regions of Ukraine, as well as the generalization of foreign experience allowed identifying such main directions of stimulation of life (Fig. 2).

	Cluster form of the organization of the sphere of state life support of the cities of Ukraine	
Improvement	of the normative-legal base of the state regulation of innovative activity	
	he authorities of all levels of integration of branches of economy with educational establishments	
Development functioning of	of an effective investment and innovation mechanism for the formation and clusters	
Î Î	of the financial mechanism of state regulation of the activities of cluster nely such forms as targeted financing, granting of subsidies, subventions	
-	of a regional economic policy aimed at creating conditions for the and implementation of innovations	
Implementatio	on of tax regulation measures for cluster participants	
Improvement	of the system of education and professional training	
Improving the systems	e institutional environment and knowledge and technology dissemination	
Creation of sp	ecialized infrastructure for cluster development	
venture funds	possible sources of cluster financing, which can be funds of the local budget, , investments of enterprises and organizations, including international ones, rnational ones	

Fig. 2. The main directions of stimulating the development of the cluster form of the organization in the field of state life support of cities

World experience shows that a modern city with high-tech production is based on the integration of scientific, innovative and industrial enterprises of different types, and associations, enterprise groups, clusters and borders provide scientific and technological development with horizontal, vertical and national ties.

Conclusions and further research perspectives. The cluster approach is the basis for the emergence of new scientific and technical areas, as well as a factor in the indirect support of education, university science and venture. To stimulate the innovative development of enterprises, including within the cluster systems of state life support, various forms are used in world practice, in particular direct financing, financing creation of funds for innovation (Germany, Switzerland, the Netherlands); reduction or exemption from part of taxes and fees (USA, Germany) and others.

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