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## **CLUSTER APPROACH AS A PUBLIC POLICY TOOL**

### **КЛАСТЕРНИЙ ПІДХІД ЯК ІНСТРУМЕНТ ДЕРЖАВНОЇ ПОЛІТИКИ**

***Summary.** The necessity of developing innovations for the growth of the economy and maintaining its competitiveness in the long run has been studied. It is proved that this fact is connected with the creation of the mechanism for the innovative economic development, which is a priority at both state and regional levels of management. An important place in the structure of this mechanism is occupied by innovative clusters.*

*It is investigated that currently the cluster approach is considered as a new management technology that allows entities to increase the competitiveness of a particular region or industry, and the state as a whole. Partnerships within regional cluster structures, the availability of knowledge transfer channels stimulate innovative activities, promote the development of advanced technologies and the improvement of all the stages of joint economic activities. Studies show that the production structure of the cluster is more profitable than the industrial structure, as to create an innovative product requires the integration of efforts of*

*enterprises in different industries. When grouping companies into clusters, there is an opportunity to optimize productive and technological processes and minimize costs at different enterprises. In addition, the cluster creates the effect of the industrial scale, which is based on the specialization of cluster members, as well as the presence of the innovative core that stimulates the production of new types of products and services. As a result, all participants in regional cluster structures receive additional competitive advantages under the sway of the combined influence and specialization, which provides increased productivity and reduced production costs.*

**Key words:** *mechanism, innovation, cluster, public policy, modernization, region, competitiveness.*

**Анотація.** *Досліджено необхідність розвитку інновацій для зростання економіки та підтримки її конкурентоспроможності в довгостроковій перспективі. Доведено, що цей факт пов'язаний із створенням механізму інноваційного розвитку економіки, який є пріоритетним як на державному, так і на регіональному рівнях управління. Важливе місце в структурі цього механізму посідають інноваційні кластери.*

*Досліджено, що на сьогоднішній день кластерний підхід розглядається як нова управлінська технологія, яка дозволяє суб'єктам господарювання підвищити конкурентоспроможність як окремого регіону чи галузі, так і держави в цілому. Партнерство в рамках регіональних кластерних структур, наявність каналів передачі знань стимулюють інноваційну діяльність, сприяють розвитку передових технологій та вдосконаленню всіх етапів спільної господарської діяльності. Дослідження показують, що виробнича структура кластера є більш прибутковою, ніж промислова структура, оскільки для створення інноваційного продукту необхідна інтеграція зусиль підприємств різних галузей. При об'єднанні компаній у кластери з'являється можливість оптимізувати виробничо-технологічні*

*процеси та мінімізувати витрати на різних підприємствах. Крім того, кластер створює ефект промислового масштабу, в основі якого лежить спеціалізація учасників кластера, а також наявність інноваційного ядра, що стимулює виробництво нових видів продукції та послуг. У результаті всі учасники регіональних кластерних структур отримують додаткові конкурентні переваги під впливом спільного впливу та спеціалізації, що забезпечує підвищення продуктивності та зниження собівартості продукції.*

***Ключові слова:** механізм, інновації, кластер, державна політика, модернізація, регіон, конкурентоспроможність.*

**Introduction.** In the modern economy, clusters are becoming one of the most effective forms of the integration of the productive, financial and intellectual capital, which ensures the formation and development of competitive advantages for the territories. The priority role of the clusters in the structure of the regional mechanism for the innovative development actualizes the importance of the problem concerning the formation of regional innovative clusters.

The purpose of the article is to develop the mechanism for the innovative clusters formation as a part of the innovative mechanism for modernizing the public policy.

**Overview of the research literature.** The current state of the clustering of the regions in Ukraine demonstrates that the clusters in our country not only exist, but some of them function quite successfully, creating a real positive effect on the natural and economic development of the regions. However, there are those that remain underdeveloped due to the insufficient level of the participation of the government authorities and public administration in promoting the processes of the clustering of the regions.

The world experience in forming the clustering of the regions is reflected in the works of the foreign authors: T. Andersson, M. Enright, A. Marshall, M. Porter

and others. Among the Ukrainian scientists it is worth noting the research papers of M. Voynarenko, S. Sokolenko, O. Tyshchenko, V. Fedorenko and others related to the development of the cluster structures. The works of these scientists cover the following issues: the organization and public administration regarding clusters; the competitiveness and formation of competitive advantages; determining the efficiency of the clusters and their impact on the growth of the domestic regional product, the gross domestic product, as well as the natural and economic development of the country as a whole.

**Formation of a whole article.** Investigate the possibilities of using the cluster approach as an effective tool of state policy with the aim of using it for the growth of the economy and maintaining its competitiveness in the long term.

**Presentation of the main body of the study.** There are also a number of approaches to defining the management mechanism at the regional level. However, today we think that it is expedient to consider the essence of this mechanism in ensuring the transition of the region into a qualitatively new state, characterized by the achievement of the strategic goals of its socio-economic development [1].

Thus, the essence of the mechanism for the regional development management is a purposeful integrated action of the regional authorities and management together with other stakeholders in management and business on all the subsystems of the region (social, environmental and economic) to achieve the intended result, namely a qualitatively new state of the regional socio-economic system [2].

Considering the above, the management mechanism can be represented as follows (Figure 1).

As can be seen from the figure, the mechanism for the regional development management includes three components of the management mechanism: the economic subsystem, social subsystem, ecological subsystem of the region.

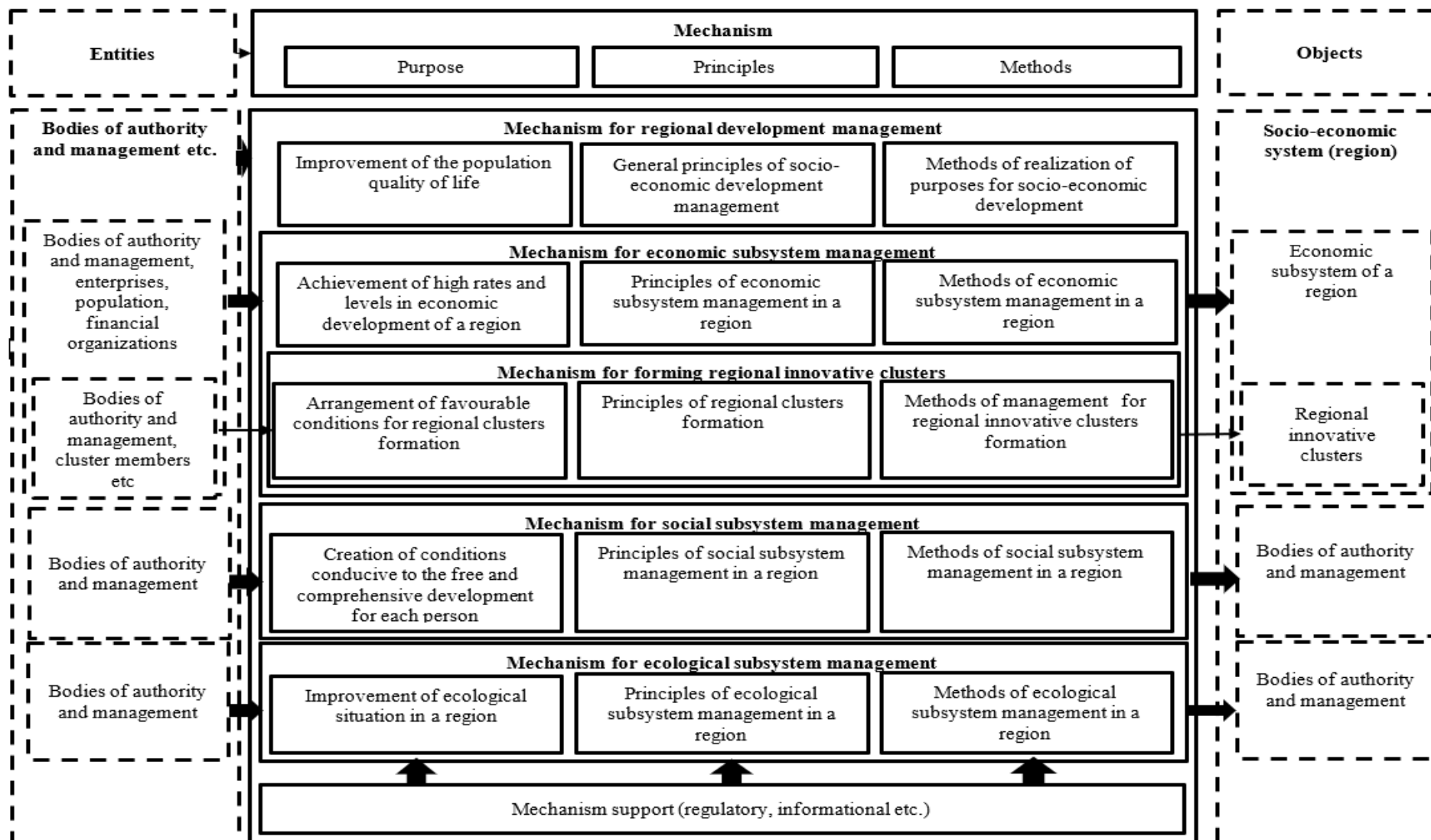


Fig. 1. The mechanism for the formation of the regional innovative clusters as a part of the complex mechanism for the development management in a region [3]

The formation of the mechanism for managing the regional development should be based on the system of principles.

The most general principles of the socio-economic development management include the principles pertaining to the sustainability of the regional system, the security of the development, as well as the balance of interests in the development of the region.

The principle of the sustainable development of the regional system involves the long-term maintenance of the conditions for the reproduction of the potential of the territory (its social components, natural resources, environmental, economic and other constituent parts) in the balanced and social orientation.

The security of the regional development means one of the most important characteristics of the integrated socio-economic development, which characterizes the state of the object in the system of its relations in terms of the ability to survive and go forward under internal and external threats, as well as unpredictable factors and the ones which are difficult to predict.

The principle of the balance of interests implies the balanced development of the nature, population and economy of the region.

The mechanism for the regional economic subsystem management is of the greatest interest, because it determines the development of other subsystems related to the regional socio-economic system.

This mechanism includes the mechanism for the regional innovative clusters formation, the purpose of which is to create the favourable conditions for the formation of such clusters.

Among the basic principles of the economic subsystem management in the region are the following: the integration of financial resources, the balance of economic interests, the responsibility, the use of effective management methods, the targeted use of resources, meeting the needs of target groups.

The principle of the integration of financial resources involves the mobilization of all the possible sources of the investment funding for the strategic

development of the region. It is inextricably linked with the principle of the balance of economic interests, which implies, firstly, the identification of the management and economic entities that have current or future interests in the development of the region, as well as the search and adoption of agreed investment decisions; secondly, ensuring the compliance with the interests of the economic and management entities involved in the implementation of the strategic economic goals of the region.

The principle of the responsibility provides for the establishment of the responsibility for specific individuals, organizations and institutions for the use of resources and the performance of certain tasks. The principle of the control presupposes the existence of the conditions for constant monitoring of the implementation of the goals for the socio-economic development of the region. The principle of the targeted use of resources means the concentration and the use of limited material and financial resources to achieve the planned goals for the development of the region. The principle of meeting the needs of target groups provides for the orientation of the actions of the territorial authorities and entrepreneurs in the implementation of goals to meet the needs for target groups of consumers of goods and services both in the territory and abroad.

This mechanism includes companies, government agencies, educational and research institutions. However, in this model, the key elements are not only the government but also the private sector. Thus, in this mechanism, the management entity is not only the state but also the companies that are the potential members of the cluster. The cluster project is also funded by both public and private funds. The mechanism is administered by the organization that includes the representatives of the businesses, government, educational and research institutions, and community organizations. Its activities are aimed at developing the cooperation between companies, as well as between companies, research organizations and universities.

Thus, this model of the mechanism construction has a greater degree of decentralization and the presence of multi-channel funding [4].

An important point in the formation of regional innovation clusters is the investment mechanism for the development of social potential of regions. Because the integration and globalization processes observed in the conditions of economic instability determine the exceptional importance of investments for the formation and development of enterprises in Ukraine. Effective implementation of investment activities at the present stage is the basis for the development of Ukraine's economy, ensuring the possibility of its integration into the European socio-economic space, which will further enhance its competitiveness [5].

Investment activity is becoming the most important part of world economic relations, affecting the interests of a growing number of enterprises, both those that accept investment and those that are their sources. The interdependence of developing countries and enterprises in conditions of economic instability is not only becoming an obvious fact, but also requires a new level of awareness of the place in international relations and the task of attracting investment at the national and global levels [6].

**Conclusions.** The above allows us to draw the following important conclusions regarding the content and features of the formation and implementation of the investment mechanism of public policy for the development of social potential of the region:

- investment mechanism for the development of social potential of the region is a system consisting of four subsystems - management, target, providing and managed - and a set of links between them. The composition of subsystems is necessary and sufficient for the implementation of a full-fledged management influence, it does not depend on the specifics of a particular area and can be considered universal;

- in the system of relations can be distinguished basic and partial relations: basic relations are represented by the principles and functions of management, which are general in nature, regardless of the specifics of a particular area; partial connections, due primarily to the composition of economic methods and



management tools, reflect the peculiarities of approaches to solving the problems of life of a particular area;

- in the structure of the investment mechanism of development of social potential of the region the universal and differentiating parts can be allocated: the universal part is presented by the basic subsystems and basic communications; differentiating part - partial connections;

- the presence of several types of antisocial regions requires the development of adequate investment mechanisms for the development of their social potential, which necessitates the application of a differentiated approach to the formation and implementation of a mechanism for managing social development for each type of territory.

Thus, the creation and prospects of the clusters in the region can be considered in terms of the following principles: the general principles, which are inherent in all types and kinds of the clusters, regardless of their industrial orientation, and the special principles, which take into account the industrial orientation of the real or emerging cluster.

The general principles of the cluster formation include:

- the geographical location of the region;
- the administrative-territorial structure of the region;
- the features of the natural resource base of the region, their impact on living conditions of the population;
- the population composition, demographic and ethnocultural features;
- the features of the economy in the region (i.e. the main factors of the industry development, the problems of the region and the ways to solve them).

We also believe that the territorial clustering is based on the following principles: the presence of the geographical proximity; the inclusion of the private and public enterprises related to business and non-business relations.

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