ACTUAL PROBLEMS OF MODERN SCIENCE

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CONTENT

ASSESSMENT OF CLUSTER TOOLS FOR THE DEVELOPMENT OF SOCIO-ECONOMIC SYSTEMS IN THE CONTEXT OF FORMING A MODEL OF THEIR SECURITY-ORIENTED MANAGEMENT

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The spread of the impact of global integration processes on the development of the national economy leads to a revision of existing approaches in domestic practice to the formation of the institution of national security at both state and regional levels. The need to take into account the threats and challenges that arise in the process of international cooperation requires the improvement of tools to protect the national interests of the state not only in political but also in socio-economic and innovative aspects. The growing role of integration factors in the formation of competitive advantages of the territory, on the one hand, contribute to the shift of attention from national to regional level and necessitate consideration of the integration component in determining the level of their economic security, on the other, provide greater diversification of approaches systems.

In general, a significant number of works by both domestic and foreign scientists are devoted to building an effective model of the functioning of the economic security system of the region. For example, the team of authors edited by V. Geetz [1] on the basis of the model of classification of threats to economic security of the region determine the influence of the most important factors of regional development on the behavior of individual threats. Sukhorukov A., Moshensky S., Petruk O. [2] assess the state of economic security of the regions of Ukraine, taking into account the threat of a decline in industrial production. The study of factors of industrial threats depending on the production specialization of the region is presented in the work of Golovchenko O. [3].

Babets I. [4] studies the factors of industrial production and the problems of formation of industrial security of Ukrainian regions, as well as determines the impact of industrial and technological threats on the level of economic security. According to Bilyk R. [5], in order to adequately assess the level of economic security, it is necessary to constantly monitor the impact of various factors, as their action is multipolar and, depending on the situation, they may hinder or contribute to security.

The approach of Ivanova N. is interesting for the purposes of research [6], which proposes to include the following factors in the list of threats to the economic security of the regions:

– loss of markets, which directly affects the economic security of the region, because the loss of markets for products (services) of economic entities reduces the indicators of gross regional product and sales of industrial products (services), which reduces the welfare of the region. To avoid this threat within the regional administration, the scientist proposes to develop programs to strengthen the competitiveness of regional industry;

– loss of competitiveness and competitive advantages, in particular, the main consequence of the loss of competitiveness of the region, the author considers the deterioration of living standards;

– population migration is one of the main threats to regional economic security, which is also a consequence of inefficient regional governance. With the intensification of migration processes, there is a loss of human and labor potential, which leads to the destruction of the industrial potential of the region [6].

Analysis of the works of scientists shows that the category of economic security is most often considered in terms of threats (primarily external) that arise in relation to the socio-economic system. Accordingly, the attention of researchers is mainly focused on finding ways and tools to reduce external factors of negative impact on the economic development of the territory.

Reducing the impact of direct methods of state regulation on the development of socio-economic systems, which is characteristic of the knowledge economy, has contributed to the emergence of new forms of integrative entities, including local authorities, which in a dynamic environment are able to respond more quickly to changes at the national and international levels. We believe that the cluster form of business organization, which has been effectively tested in both developed and developing countries, is an integral part of the development of socio-economic systems of innovative type, which use a modern set of tools to protect their own interests. The formation of regional clusters contributes to the structuring of relationships between the subjects of market interaction, respectively, the socio-economic system becomes more flexible to innovative transformations. The variety of manifestations of the phenomenon of clustering, multivariate cluster models, differentiated tools of cluster policy allows you to

widely use this form of integrative education in building a model of security-oriented management of the territory.

The formation of a cluster in the socio-economic system allows to optimize the spatial organization of the region and find more effective forms of innovative interaction of economic entities in a given area. As a result, in the regional plane we observe a decrease in the impact of the external environment on the development of both individual subjects of market interactions and the socio-economic system as a whole; strengthening the competitive position of the territory at the national and international levels allow local authorities to create an effective system of protection of regional producers and the local market as a whole. On the other hand, the new opportunities provided to businesses by strengthening the system of regional support and protection, allow them to find new forms of cooperation, which in the future will strengthen their competitive position at the national and international levels, and increase their degree. economic security and the territory of their operation.

Some studies of the relationship between the level of economic security of the region and the existence of clusters in them have been the subject of study by both domestic and foreign scientists, in particular, Voynarenko M. [7], Yasheva G. [8], Uskova T. [9] as a key regional economic advantage from the creation of the cluster identified the growth of competitiveness of the socio-economic system; Sokolenko S. [10] focused on improving the quality of workers and the formation of a local concentrated labor market; Degtyarev P., Polosin I. [11], Asaul A., Skumatov E., Lokteeva G. [12] emphasized that the emergence of integrative entities in the region allows to better define territorial priorities and, accordingly, to defend regional interests, and ensures the effective redistribution of productive forces in a given area.

We support the opinion of A. Borzunov [13] that the world experience of advanced countries convincingly proves not only the efficiency but also the inevitable regularity of cluster formation; it is due to their functioning that instead of the traditional object management in the region, a single system is created, which includes all components of the product (services) and / or institutions involved in its creation. Undoubtedly, the use of a cluster approach in planning the development of the regional economy allows to ensure effective protection of all participants in intra-regional cluster interactions from threats from the external and

internal environment by creating a basis for harmonizing economic conditions and active information and advisory exchange within the socio-economic system.

The effectiveness of the cluster mechanism is also due to the reduction of the element of uncertainty and a high degree of market foresight for all participants in the cluster. Thus, to ensure the sustainable development of both Ukraine as a whole and its individual regions, it is necessary to develop and implement a consistent cluster policy.

Figure 1 shows a graphical representation of the role of the cluster in building a sustainable security-oriented socio-economic system (built by [13]).

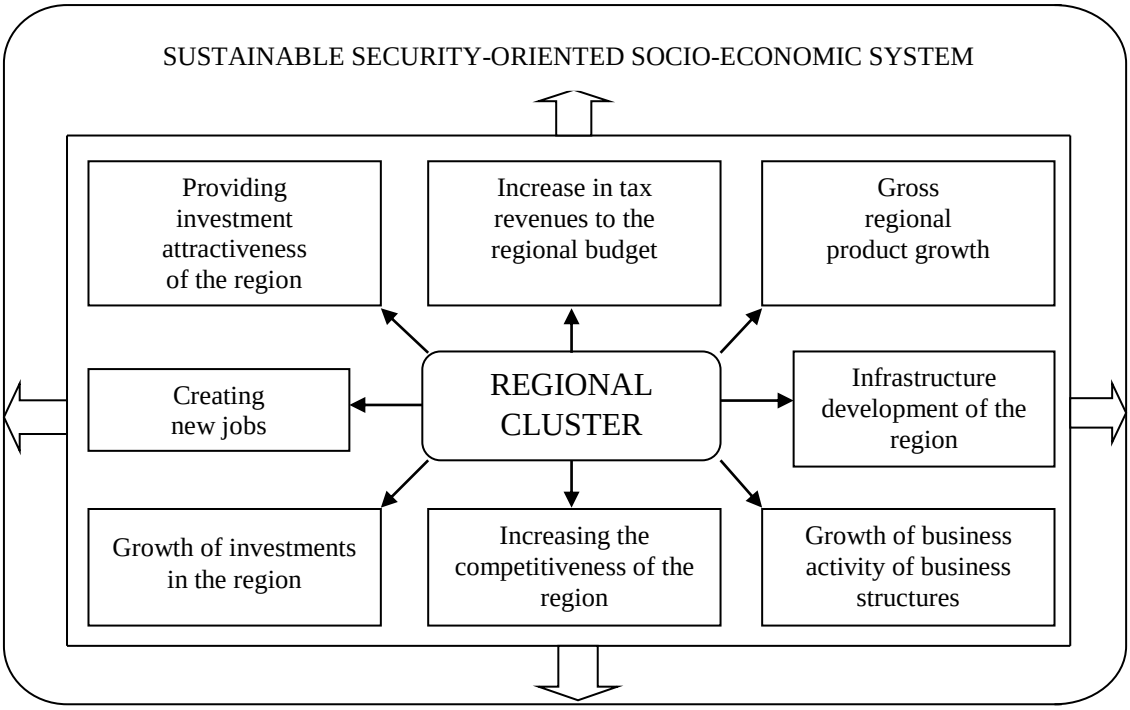

Fig. 1. The role of the cluster in creating a sustainable security-oriented socio-economic system

As we can see, the creation and functioning of at least one cluster in the socio-economic system can increase the level of economic security of the region. Accordingly, local authorities should be interested in continuous monitoring of the activities of existing clusters, which requires an analysis of relationships with other actors in the socio-economic system, and actualizes the analysis of the level of institutional interaction within the region.

Undoubtedly, the formation of clusters in the region is one of the manifestations of institutional relations. The order of assigning the cluster to the institutions of socio-economic orientation is due, in our opinion, to the dual nature

of the formation of voluntary territorial and sectoral associations. The dual nature of cluster formation is manifested in the fact that on the one hand, the emergence of a cluster in a certain area must be preceded by a number of socio-economic preconditions that contribute to the unification of enterprises in the business network and in a certain area leads to a change in economic behavior of market participants, determines the need for new elements of infrastructure, helps to identify "points of economic growth of the territory" and, ultimately, bringing the region's economy to a qualitatively new level.

The study of clusters as an institutional category, in our opinion, allows us to reconsider the role of each of the participants in the territorial-sectoral association in shaping the overall potential of the regional economy as an open socio-economic system. The role of government as one of the participants in the cluster is considered not only as a regulator of economic behavior of economic entities in a given area, but also as an active participant in market relations; formation of various forms of public-private partnership and cooperation allows to determine the most acceptable for the economy of the region tools of indirect support. Research of the business sector in terms of participation in the cluster and other forms of business networks is not limited to finding reserves to increase its level of profitability; it becomes important to study the sources of integration and synergetic relations, provided that the competitive advantages of each of the participants are preserved and increased. Institutions in the region cease to be considered only as one of the elements of market infrastructure and become an important component of the innovation potential of the socio-economic system.

Like any other institutional category, a cluster has several unique features that at the same time allow it to be identified as an institutional concept. Identification of these signs requires consideration of the following important provisions:

– the cluster is manifested through the interaction of human capital. It is the human resource that provides the basis for the search for common interests and the development of various forms of cooperation among the authorities of the region, enterprises and institutions. Interest in the implementation of constructive dialogue and the need to create additional competitive advantages encourages participants in regional economic cooperation to form clusters;

– the cluster realizes its potential through the use of the advantages of the organizational resource. Establishing horizontal and vertical schemes of cooperation among small and medium enterprises and elements of market infrastructure in a given area allows, on the one hand, to build effective channels of added value, on the other – to maintain motivational mechanisms among participants and increase their competitive advantages;

– the cluster is a component of the regional innovation system, respectively, the development strategy of the territorial-sectoral association should be mutually consistent with the innovation priorities of the socio-economic system.

The presence of a strong relationship with the institutional structures of the region determines the need to take into account the role of institutions in ensuring the environment of the cluster. In general, the assessment of the cluster life cycle through the prism of institutional theories suggests that from the standpoint of institutionalism clusters can be considered as multi-institutional formations, the composition of which varies at each stage of the life cycle of education.

Usually the life cycle of a cluster is described by analogy with the life cycle of the organization. In particular, the team of authors led by T. Uskova [14] noted that the development of the cluster occurs through the following stages: agglomeration, emergence, development, maturity, transformation. According to Alekhine A. [15], the life cycle of a cluster is based on the life cycle of a product or production, so after the stage of maturity, the researcher proposes to introduce the stage of decline of the association. We believe that the contradiction of the application of the last stage in relation to network associations is evidenced by the fact that usually most clusters are characterized by the production of not one but several products, so their decline is unlikely due to the end of the life cycle of one product or production.

For the purposes of the study, we support the opinion of D. Yermolaev and E. Natashkina [16], who represent the cyclicity of the cluster due to the change of the following four stages: protocluster, superprotocluster, growing cluster, cluster in decline. The protocluster stage is characterized by the lack of a strategic goal of the association and the mechanism of cluster formation. This moment corresponds to the emergence of territorial-sectoral association, but the mechanism of association of potential participants in the cluster has not yet been determined. The emergence of such a mechanism allows us to move to the stage of

superprotocluster. In essence, the stage of the superprotocluster is transitional, characterized by high dynamics, there is a rapid quantitative and qualitative increase of integrative potential, which can trigger the transition of the union to a qualitatively new level - the stage of growth. The growth stage is characterized by the orderliness of the relationship between the members of the territorial-sectoral association and the increase of competitive advantages of the cluster, contributes to the stability of the institutional formation and its adaptability to the changing environment. At the same time, progressive trends at the stage of cluster growth allow it to stay at this stage for as long as possible, to move to more complex quantitative and qualitative forms, in particular, from industrial to innovation-oriented, and from innovation-oriented to innovation-forming network formations [16].

The difference of the proposed approach is that upon completion of each of the states it is possible to move to both the next and previous stage. In addition, scientists note that the stage of cluster decline is inevitable, because any progressive development has its limits, but after the collapse of the cluster system, participating companies move to the state of the protocluster of a qualitatively new level.

Knowledge of the stages of the cluster life cycle allows to develop institutional mechanisms for managing intracluster interactions. It is obvious that at the stage of protocluster and superprotocluster it is necessary to direct efforts on creation of principles and mechanisms of association of the enterprises in a cluster. In this case, the undisputed leadership in the use of institutions of initiative, innovation, information, integration and interest, the mechanisms of application of which are described in detail in [17].

At the stage of cluster growth it is necessary to support the emergence of new competitive advantages in the cluster, a fuller use of reserves for the formation of competitiveness. Also, management at this stage should be aimed at creating obstacles to the transition of the cluster to the fourth stage - the stage of disintegration. Our research in this direction leads to the conclusion that at the stage of growth the activity of cluster models in the economy is supported by the interaction of two institutional "triangles": cluster-forming - three "C" and cluster-supporting - three "S", developed by M. Voynarenko [7].

The stage of cluster decline does not require management, but involves the implementation of efforts to restructure the territorial-sectoral association, including through the formation of a new cluster at a qualitatively new level. The general algorithm of institutional support of the cluster at each stage of the merger life cycle is presented in Fig. 2.

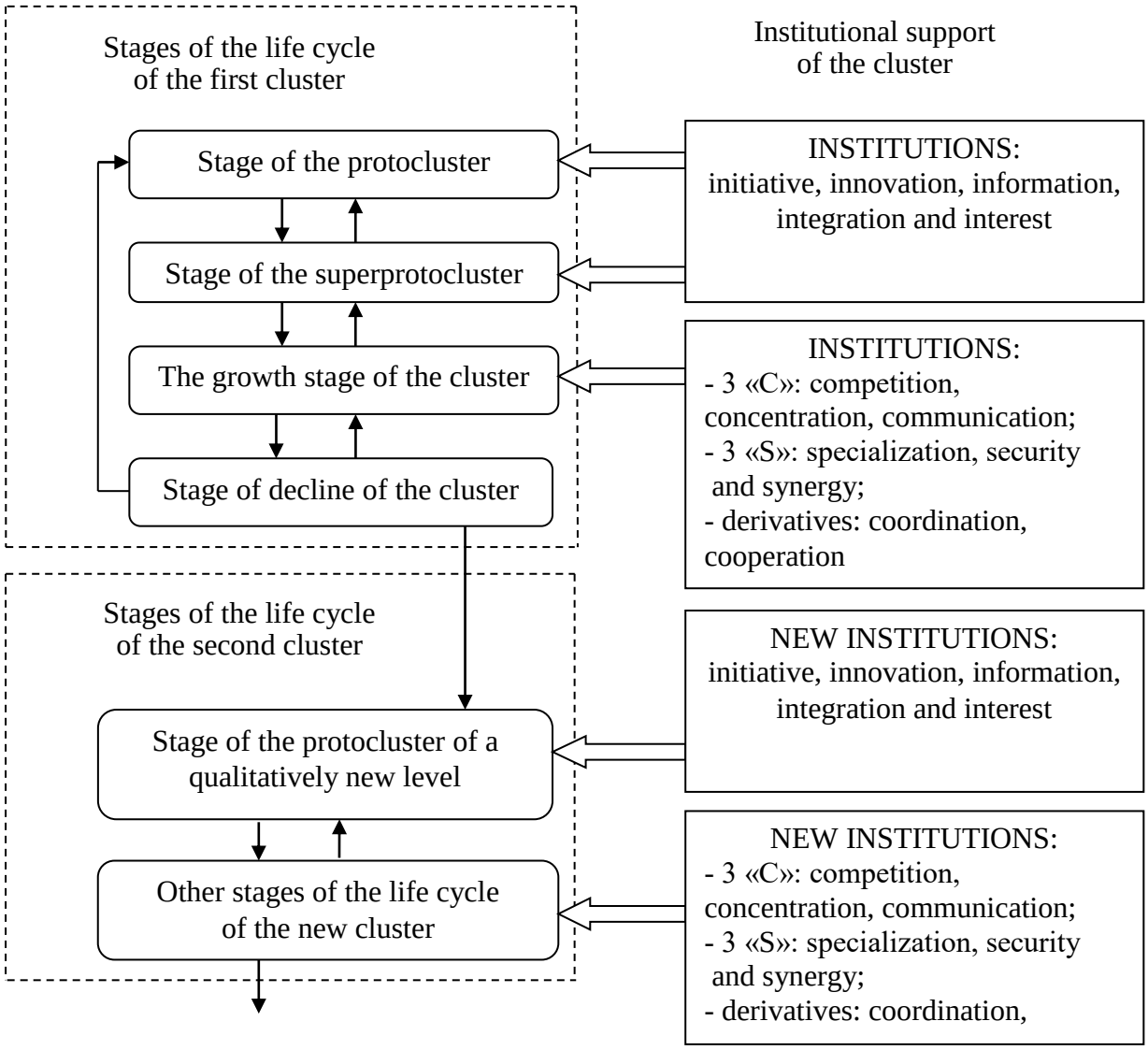

Fig. 2. Components of the cluster's institutional support system at each stage of the merger lifecycle*

* – built by the author

Studies have shown that, depending on the stages of the cluster life cycle, there is a specific institutional support. The structure of institutional support depends on the level of complexity of the tasks to be achieved, in particular, it can be both the formation of the overall goal of the integrative association, and the

maintenance of its competitive advantages. The choice of components of institutional support is determined by the intensity of intracluster interactions, the nature and strength of transformations arising from the external or internal environment of the association, the motivation of economic actors, their level of awareness of available alternatives to institutional reforms, and the magnitude of positive synergies. derived from their interaction.

In general, we can conclude that today the reliable competitive position of the regions and increase the level of their competitiveness are becoming important conditions for sustainable security-oriented development of the regional economy. At the same time, increasing the competitiveness of the region is considered not only as a tool for the development of its economy, but also as a major factor in improving the level and quality of life. This approach to the development of socio-economic systems allows to analyze as factors of the economic process that create or weaken the threat to economic security of the region, not only factors of production but also its competitive weaknesses and advantages in such competitive fields as capital market, investment market, market labor market, market of goods and services.

Under these conditions, the application of cluster theory to the innovative and competitive development of the regional economy is a necessary condition that allows a clearer picture of the modern development of integrative entities and assess their impact on the level of economic security of the socio-economic system as a whole. Undoubtedly, taking into account the institutional component in building a model of security-oriented management of socio-economic systems will improve the quality of research by increasing the possibility of taking into account additional factors of intra-regional cooperation.

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