METHODOLOGICAL ASPECTS OF THE STUDY OF CROSS-BORDER COOPERATION IN THE CONTEXT OF EU ENLARGEMENT

The paper discusses methodological principles of cross-border cooperation study in the context of EU enlargement. Approaches and methods of multi-level phenomena and the dynamics of cross-border cooperation are analysed and systemised. The need for the introduction of the cluster analysis for the simulation of specific border region is investigated.

Keywords: cross-border cooperation, the methodological apparatus, limology, clusters, cluster analysis

Statement of the problem. The current stage of development of the Ukrainian state is inseparably associated with globalization processes that become catalysts for inter-regional and cross-border cooperation between countries. Regions participating in cross-border cooperation certainly receive some advantages in the social and economic spheres.

These regions not only have the ability to solve common problems with territorial border regions of neighbouring countries, - to attract foreign capital, to stimulate the creation of new jobs, - but they can also use cross-border cooperation as a tool for aligning territorial imbalances that are present in all regions of Ukraine. The cross-border cooperation between countries considerably intensified financial, material and human flows, significantly weakened the barrier function of national borders, resulting in contribution to a network of formal and non-formal interaction of subjects of neighbouring border regions. Horizontal relationships form the basis for new forms of spatial integration - the European regions, development corridors, parks,
industrial clusters, thereby providing an opportunity to maximize resource efficiency both by matching the strategic directions of development of individual regions, and by creating a joint strategy. However, any process associated with socio-economic development that affects the functioning of the region, requires a methodological apparatus for the study, because quality and tested system of methods can analyze various aspects of cross-border cooperation more objectively and accurately.

**Analysis of scrutiny of the topic.** Western scholars and scientists of the CIS made great contribution to the development of theory and research methodology of CBC. The definitions of “cross-border region” and “cross-border regionalism” can be found in the writings of V.S. Bilchak [1, p. 29], N.M. Mezhevych, M., Shinkovsky, B. Van der Velde, D. Scott, J. Hackley. N.V. Kaledin, V.A. Kolosov, Y.A. Korzhy, L. LaRouche, M. Perkman and others researched the concept of “new spatial forms of international economic integration”. However, the works of Ukrainian scientists involved in the study of various aspects of cooperation between border regions of Ukraine, are of particular relevance. Mikula, O.S. Peredriy, Y.M. Pahomov, S.I. Ustych, I. Artiomov, N. Nosa, M.N. Tovt, M.A. Lendyel, P.Y. Studenyak, A.V. Balyan, V.Y. Vysochansky, E.V. Kish, I.I. Ustych and others have paid considerable attention to methodological apparatus study of cross-border cooperation.

For example, E.B. Kish, working on problems of limology, [4] proved that every process that occurs between neighbouring countries requires a broader methodological approaches and comprehensive analysis of all elements of an integrated system of cross-border cooperation. From the standpoint of methodology in this light, it is important to study the issue of dichotomy - dependence and autonomy of the various areas of life in the border areas in particular. I.I. Ustych also addressed the phenomenon of cross-border regionalization within the context of innovation [11, p. 303] from the standpoint of the concept of globalization and the associated concept of “transparent borders.” Historical and logical approaches proposed by the researcher can more objectively assess the current state of border areas of Western Ukraine.
The purpose of the article. Uncovering problems of methodological apparatus study of CBC in the context of the EU enlargement.

Presentation of the main content. Factors characterizing the status and potential of cross-border cooperation have a multilevel nature, and they are formed at three levels - regional, national and global. In order to objectively and thoroughly investigate the characteristics of cross-border cooperation, it is necessary to use a range of methods of scientific knowledge, in particular synergistic method, and system analysis with the use of policies and theories of factor analysis. The combination of these methods makes it possible to understand at a deep level hierarchy of events occurring in the regional environment, which in turn always interacts with systems of higher order, which also always determine the development prospects of the region [7, p. 44].

In order to understand the nature, role and place of cross-border cooperation at the regional level, we also propose to use logic synthesis and structural analysis, which enables the study of factors that shape the internal environment of the region. To study the general provisions of the development and functioning of cross-border cooperation, its categorial apparatus, sources of formation and development directions, we consider appropriate to use the dialectical method, method of causal relationships and retrospective analysis.

Implementation of any intergovernmental programmes, strategies of cooperation and joint projects require the use of statistical-analytical and mathematical-statistical methods, because they are necessary for the correct calculation of potential reserves, strengths and weaknesses, forecasting, development of recommendations and suggestions.

In order to deepen the methodological frameworks of cross-border cooperation research in a particular area, to ensure its institutional foundations for the formation of new conceptual provisions, grouping and classification processes and phenomena, we consider the most appropriate method of scientific abstraction. The above method also makes it possible to study regional phenomena in the context of overall national development, and to develop specific proposals to improve cross-border cooperation.
One can follow the approach of T. Tereshchenko [14, p. 9], who considers it appropriate to take into account the following principles of cross-border cooperation study: complexity, multilevel, target orientation and efficiency. However, if it is necessary to evaluate not only the results of cross-border cooperation, but also the dynamics and trends of its development, we agree with the idea of M.I. Mikhailova and A.M. Zamora, who offer to adhere to the following principles of cross-border cooperation study [10, p. 36 - 37]:

- Complexity and comprehensiveness. That is, cross-border cooperation is seen as a system that is connected to the internal and external factors of the environment. E.B. Kish has developed the concept of systems research of internal and external processes. She concluded that the study of cross-border cooperation is impossible without taking into account the complexity of the phenomena occurring in the border regions.

- Historical retrospective. The dynamics of cross-border cooperation is necessarily considered based on the circumstances and events of the past. I.I. Ustych [13, p. 234] also adheres to the same ideas in the study of features of cross-border cooperation in the Transcarpathian region. He believes that an objective assessment of the potential and trends of cross-border cooperation in neighbouring regions is not possible without taking into account the events of the past and historical background of socio-economic development of border areas.

- Balanced regional development based on the maximum of its potential. According to this principle, cross-border cooperation is investigated using all the resources, reserves, imbalances, and possibilities of their alignment to stabilize the socio-economic development of border areas.

- Compliance of development of the regional programmes with programme objectives of EU enlargement. Thus, according to this principle, it is necessary to analyze how the goals and actual achievements of CBC meet the goals and targets, set under various joint programmes and projects of the EU.

- Mandatory consideration of constant change. Since the border areas are characterized by specific dynamics of development, cross-
border cooperation is also not a sustainable system - it is constantly changing under the influence of economic, political and social factors, and therefore requires continuous monitoring of changes to promptly identify new opportunities or obstacles for such cooperation.

- Coherence of development. This principle includes compliance of CBC with national programmes and national development strategies.

In addition, in our own study, we adhere to the view that for creating a realistic assessment of regional scale and forecasting in the context of a given region, the most accepted is the practice of cluster analysis. We believe that this method allows for the widest identification of innovative potential of border areas to form a “portfolio” of the region. Cluster simulation allows creating a common information and economic space, which provides opportunities to create a high level of attractiveness of the region for investments, and opens new horizons for joint participation in EU projects. The method of cluster simulation allows implementing new forms of cross-border cooperation in real life.

If we consider the practical implementation of the cluster model for Ukraine, according to the Concept of cluster creation, we can highlight the following types of clusters:

- Industrial clusters;
- Innovative technology clusters;
- Tourist clusters;
- Transport and logistics clusters.

Creation of transport and logistics clusters was selected as a priority for Ukraine. Efficient formation of transport and logistics clusters takes place under conditions of favourable market initiatives and high-quality transport infrastructure.

Analysis of key elements on the formation of regional transport and logistics cluster of Transcarpathia allows highlighting the main components of regional transport and logistics cluster of Transcarpathian region:

- Logistics Centre and innovative technologies;
- International transport corridor;
- Regional authorities;
- Research and educational institutions.
It brings together regional trucking companies, licensed warehouses, local authorities, research institutions, and network of communications that enhance interaction and competitive advantages of transport corridor. Cross-border transport and logistics centres that use cluster management model in the Transcarpathian region become the unifying management bodies of intermodal transportation on the western border of Ukraine.

**Conclusions.** Thus, cross-border co-operation is a tiered and dynamic phenomenon that requires extensive methodological research apparatus. Development of cross-border cooperation in the border areas of Ukraine requires attention of scientists, and a wide range of scientific instruments of knowledge to maximize the incorporation of peculiarities of a particular region. Given the concepts and principles developed by scientists, we can distinguish general principles of study of cross-border cooperation, which would consider the conditions and dynamics of the internal and external environment of cooperation between neighbouring countries.

In addition, for objective evaluation and practical implementation of joint projects and programmes we offer the use of a cluster model for regional economy of border areas. For the implementation of real proposals, we have developed the basic concept of cluster modelling, under Concept of cluster creation in Ukraine.

Cluster simulation will allow calculating development of cross-border regions using innovative investment method, including prospects of the use of clusters.

*List of sources and literature*


11. Передрій О.С. Розширення Європейського Союзу і нові підходи в управлінні транскордонним співробітни-
цтвом / О.Передрій, С.Устич // Актуальні аспекти реа-лізації євроінтеграційних пріоритетів України. Серія:


У статті розглядаються методологічні засади вивчення транскордонного співробітництва в умовах розширення ЄС. Аналізуються та систематизуються підходи і методи дослідження баґаторівневих явищ і динаміки транскордонного співробітництва. Досліджується необхідність впровадження кластерного аналізу для моделювання процесів окремого прикордонного регіону.

Ключові слова: транскордонне співробітництво, методологічний апарат, лімнологія, кластери, кластерний аналіз.

В статті розглядаються методологічні основи зу-чення трансграничного сотрудничества в условиях расширения
ЕС. Анализируются и систематизируются подходы и методы исследования многоуровневых явлений и динамики трансграничного сотрудничества. Исследуется необходимость внедрения кластерного анализа для моделирования процессов отдельного приграничного региона.

Ключевые слова: трансграничное сотрудничество, методологический аппарат, лимология, кластеры, кластерный анализ.

The article considers the methodological foundations of the cross-border cooperation study in the context of EU enlargement. Approaches and methods of multi-level phenomena and the dynamics of cross-border cooperation are analysed and systemised. The need for the introduction of the cluster analysis for the simulation of a single border region is investigated.

Keywords: cross-border cooperation, the methodological apparatus limology, clusters, cluster analysis