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THE EU COHESION POLICY AND HEALTHY NATIONAL DEVELOPMENT: MANAGEMENT AND PROMOTION IN UKRAINE

Editors

Nataliia Letunovska,
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**THE EU COHESION POLICY AND
HEALTHY NATIONAL
DEVELOPMENT: MANAGEMENT AND
PROMOTION IN UKRAINE**

Monograph

Edited by Nataliia Letunovska, Liudmyla Saher, Anna Rosokhata

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The monograph focused on the specifics of the principles of the EU Cohesion Policy implementation. The authors conducted an analysis of the economic, ecological and social aspects of the integration of the EU experience into the state policy of Ukraine. The monograph summarizes approaches to the restoration of the country and healthy development. Particular attention is paid to the issues of health care system management, the trends and prospects of achieving the state of resilience of the medical and social provision system of the population in the context of the impact of COVID-19 on the national economy. The experience of using marketing and innovative technologies in the context of healthy national development is summarized.

The monograph is generally intended for government officials, entrepreneurs, researchers, graduate students, students of economic, medical, and other specialties.

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Introduction

Health is the most important need of a person, which determines ability to work effectively and ensures the harmonious development of the personality. The availability of European experience in solving issues of healthy development at the level of countries and regions, which significantly improves the socio-economic situation, determined the nature and subject of research in this collective monograph, which includes consideration of such issues as reforms in Ukraine, taking into account developments in the EU cohesion policy, analysis of the economic, environmental and social aspects of Ukraine's integration into the EU, recovery and cohesion in the conditions of martial law, issues of managing the health care system in Ukraine and abroad, and aspects of marketing and innovative technologies in the context of healthy development.

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2.3. Bioeconomy development perspective in Ukraine on the basis of clustering: EU experience implementation

The awareness of the scientific and political public of Europe of the need to develop and implement new approaches to the preservation of the natural environment, biotic and landscape diversity as interconnected indispensable components of the human habitat and the guarantee of further development of society led to the formation of a number of new approaches to solving organizational tasks of nature protection and understanding them scientific basis from a new point of view. At the same time, as a result of historical prerequisites, Ukraine inherited many traditions regarding nature protection, thanks to which it significantly lagged behind in the development of the process of formation and implementation of systemic approaches to the active preservation of the natural environment in conditions of its significant anthropogenic transformation.

According to the estimates of the Ministry of Economy, the gross domestic product (GDP) of Ukraine decreased by 30.4 percent in 2022, which is the largest drop in recent history of Ukraine (Ministry of Economy..., 2022). The total amount of economic losses from the war at the end of 2022 amounted to 700 billion dollars and significantly exceeded the country's GDP (Damage of Ukraine, 2023). The number of people in Ukraine living below the poverty line has increased more than 10-fold since the beginning of the full-scale war (from 2.0% to over 25.0%). At the current rate, by the end of 2023, the number of Ukrainians living below the poverty line may increase to 55%. Damages and losses caused to land and water resources, the surrounding natural environment and atmospheric air, according to the State Environmental Inspection of Ukraine, reached about 1.7 trillion hryvnias (Public Report, 2022).

This is certainly the trigger for deepening economic, social and environmental crises. Therefore, it is time to comprehensively solve the problems of preserving and restoring natural, physical and human capital, stimulating the economic activity of businesses to ensure sustainable economic development and the future of our country in the post-war period, which is consistent with the Sustainable Development Agenda until 2030 and the Paris Climate Agreement, as well as development and creation of methods of promotion and implementation of ecologically safe types of products and services, namely, ecological marketing strategies (Kashchena, 2021). The need to live in a prosperous, healthy environment, with fresh air, clean water, quality food and a stable climate, actualizes the

development of an effective strategy for post-war reconstruction and economic development of Ukraine on an innovative basis. Its basis should be the concepts of greening of social production, resilience of socio-economic systems and "build back better" (Build Back Better), which are oriented towards "green" recovery with observance of the principles of fair, inclusive and transparent implementation of regeneration actions (Fig. 2.5) according to the existing plan (Recovery Plan, 2023).

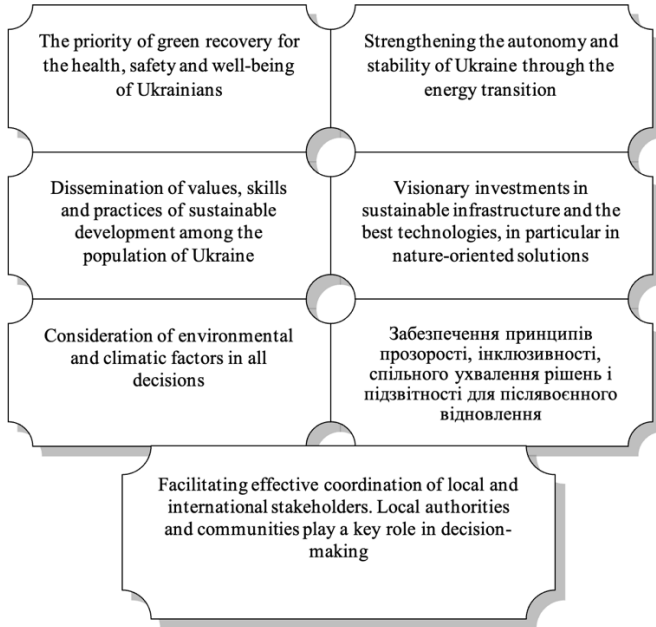


Figure 2.5 – Principles of "green recovery" of the economy of Ukraine (Ukraine, 2022)

On the way to restoring and building the economy of the future, integration into the world political, economic and business community, Ukraine must already today comply with the requirements of the "green economy", innovativeness, transparency and responsibility of business, reducing the negative impact on the environment and society, etc. (Kovalevska, 2021). In the context of ensuring sustainable innovative development, digitalization and environmentalization are drivers and guarantees of quality business transformations of various intensity and orientation (Fig. 2.6).

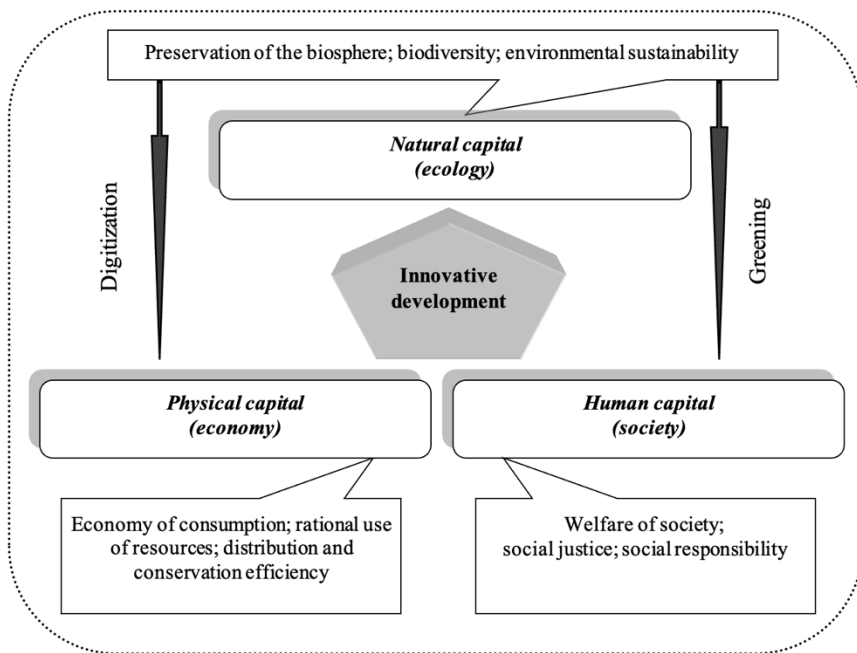


Figure 2.6 – Drivers and determinants of sustainable innovative business development

The defining concept of ecologization of the economy is the transition to the bioeconomy as an energy-efficient, resource-saving, innovative and socially inclusive model of development, which is based on the optimal balance between natural, physical and human capital, and involves the use of innovations (information and communication, technological, environmental, social, etc.) and changing the cycle of value creation through the use of digital technologies.

In Ukraine, the bio-economic development strategy has not yet been formed, the development of biotechnology is taking place at a slow pace (primarily due to the development of agricultural technologies), and their application is only partial. The main economic spheres in the national economy where biotechnology is applied are agriculture, the pharmaceutical industry, the food industry, as well as bioenergy.

Bioeconomy is a mechanism capable of ensuring the achievement of sustainable development, it has a number of positive effects on all studied areas (economic, social and environmental). Bioeconomy is generally focused on ensuring economic growth, sustainability, well-being of mankind in all forms through the economy of the future, dedicated to human life, with the help of rational use of ecological resources. Bioeconomy is a form of economic activity based on the balanced interaction of three systems: economic, ecological, social, and is determined by the processes of mutual exchange of renewable biological resources with the aim of ensuring a high level of quality of life and preserving the ecological balance for future generations.

To date, the development of the biotechnology industry in Ukraine is a non-priority sector due to the lack of sufficient funding from representatives of small and medium-sized businesses, as well as state programs. A large number of universities specializing in scientific research and the presence of a strong scientific base are the foundation for the creation of "know-how". At the same time, the use of the cluster model will allow to change the innovative structure of the country's economy in a short period of time, to launch large-scale production of innovative products. It should be noted that the stimulation and support of clusters in the EU fell under the direct influence of the strategic document "Europe 2020". One of the main factors in strengthening the EU economy is sustainable growth based on flagship initiatives, such as "Efficient use of Europe's resources" - involves supporting the transition to a low-carbon economy by increasing the use of renewable energy sources, modernizing transport, reducing resource intensity and promoting energy efficiency; and "Industrial Policy in the Age of Globalization" - improving the business environment, in particular for small and medium-sized businesses, as well as supporting the development of a strong and sustainable production base that will allow global competition. Also, support for clusters in the EU is based on: optimization of connections between clusters and framework programs; provision of additional powers and financing by the European Fund for Regional Development of a number of program initiatives, in particular INTERREG; further development of the "Competitiveness and Innovation" program; development and development of the new program "Regions of Knowledge" (RoK) within the framework of the new Eighth Framework Agreement, which, according to its creators, maximally contributes to the intellectualization of economic activity in the EU.

The leading program for increasing the competitiveness of enterprises is the "Competitiveness of Small and Medium Enterprises" (COSME), which was developed as part of the "Europe 2020" strategy for the development of small and medium enterprises for 2014-2020, the budget of which is 2.3 billion euros . A key element of this program is the creation of conditions for access of small and medium-sized enterprises to financial resources (Lysak, 2022).

Stimulating the competitiveness of clusters creates an environment for their development and generation of ideas. The EU actively supports such a policy aimed at strengthening existing clusters and promoting the emergence of new ones. Current cluster management policies seek to establish an enabling framework to support the development of new industries and innovations and the discovery of new value-added chains. It is very difficult to effectively manage a cluster, because there is a large network of universities, enterprises, public organizations, and research institutes operating in the cluster, which have their own interests and need to coordinate in order to achieve the common goal of the development of this cluster. A number of initiatives are functioning in the EU to support the development and strengthening of the competitive advantages of innovation clusters (Table 2.10).

In general, it is worth noting that the operating environment for high-tech companies in Europe is becoming less attractive than in other geographical areas.

Taking into account market demand and the strengthening of the competitive environment of other regions, the EU lacks funding and foreign investments, and venture funds do not ensure the implementation of all projects that arise in new EU countries. The legal environment plays an important role in increasing the level of innovation and rapid development of the EU countries in the biotechnology industry. EU projects and initiatives have a positive impact on solving major problems in the international environment.

The "Europe 2020" program is aimed at activating goals for achieving success in innovative areas of development and technological progress among EU member states. In addition, interaction and cooperation encourages research programs, knowledge and research implementation, as well as the establishment of a scientific infrastructure between companies for the transfer of technology and expertise.

Table 2.10 – Initiatives to support the formation and implementation of innovation clusters by EU countries

| Name of the initiative | Characteristic |
|--|--|
| 1 | 2 |
| 1. Network "Internal network of technologies" TCI (TechCityinsider Network, 1998). | A global network of organizations and expert practitioners with in-depth knowledge of competitiveness, innovation and cluster development. |
| 2. The European Foundation for Cluster Excellence, (2003). | A non-profit organization that aims to provide expertise in policy and practice, providing a single platform for professional development, bringing together best practices and knowledge based on a European approach, and sharing experiences in cluster development. The Foundation offers a wide selection of training programs on cluster management, which have been developed within the framework of the "Cluster Excellence" initiative. Programs range from short-term programs partnering with business schools to long-term programs at the regional level. |
| 3. Initiative «Europe INNOVA» (PRO INNO Europe, 2006). | An initiative of the European Commission Directorate for Enterprise and Industry (Directorate General for Enterprise and Industry), which aims to become a laboratory for the development and testing of new tools to support enterprise innovations with the aim of their faster creation and implementation. The initiative unites public and private structures that support innovation, such as innovation agencies, technology transfer centers, business incubators, financial intermediaries, cluster organizations, etc. Within the framework of the initiative, 200 public and private organizations in eight traditional and high-tech sectors cooperate, which exchange experience in managing clusters and are engaged in solving problems arising as a result of globalization. |
| 4. European Cluster Memorandum, (2007). | The document contains recommendations on the priorities of cluster policies both at the level of the EU as a whole and for individual states. Special emphasis is placed on cross-border cooperation. The main idea of the memorandum is to improve the quality of European cluster policies. |

Continued table 2.10

| 1 | 2 |
|--|--|
| 5. The European Cluster Observatory, (2007). | The online platform (Internet resource) provides access to information about clusters and cluster policies of European countries. Provides access to the library, graphic and visual presentations, which helps in the analysis of the cluster market. |
| 6. European cluster policy group, (2008). | Founded by the European Commission and authorized to advise the Commission and EU countries on effective support and development of world-class clusters in the EU. |
| 7. Initiative "European Business Support Network" (Enterprise Europe Network – EEN, 2008). | Offers support and advice to entrepreneurs and companies in Europe, in particular helping small and medium-sized enterprises with access to innovation networks, finding the right business partner and providing information on EU legislation, with the aim of realizing as many opportunities as possible in the EU. This coordinated network is based on the combination of the Innovation Transfer Center and the European Information Center, and consists of about 600 local friendly organizations in more than 60 countries around the world. |
| 8. European Innovation Platform for Cluster, (2008). | A web-based interactive space that provides easy access to knowledge, learning resources, indicators of development, implementation and evaluation of innovative policies. The platform informs users about innovative systems operating in different countries, provides statistical comparative analysis and helps develop and implement effective policy solutions. In a broader sense, the platform facilitates the exchange of knowledge and strengthens cooperation between countries and regions. |
| 9. The European Cluster Excellence Initiative, (2009). | The purpose is to improve cluster management systems and develop standards for assessing the quality of cluster management. The scheme used for the quality-labelling scheme of cluster management was developed by the European Secretariat for Cluster Analysis. The assessment of the cluster organization is carried out by independent cluster experts who have received special training. |

Continued table 2.10

| 1 | 2 |
|--|--|
| 10. European cluster platform for joint work between business and cluster representatives. (European Cluster Collaboration Platform, 2010). | Facilitates cooperation of clusters in the EU and on the international market. The key goals are the internationalization of small and medium-sized enterprises, the organization of activities to find potential partners for transnational cooperation and the exchange of knowledge, the launch of new dynamic memorandums between the European Commission and third world countries on cluster cooperation, support for the key growth of the European business sector and competitiveness, ensuring synergy with other European cluster initiatives and programs. |
| 11. Initiative "Cluster Policy for South-Eastern Europe" (Cluster PoliSEE, 2012). | The goal is to expand regional opportunities and promote cluster development in the development of personal smart specialization strategies. The initiative is aimed at defining, developing and implementing a regional cluster policy by pooling resources and integrating activities in the global value chain, coordinating regional competitive advantages from international synergies. |
| 12. A pioneering initiative for new growth through smart specialization (The Vanguard Initiative for New Growth through Smart Specialisation, 2013). | A strong regional network consisting of political leaders and ministries. The main goal is to use smart specialization as a principle of coordination in the selection of European priority regions in order to stimulate joint entrepreneurial opportunities. |
| 13. "Regions of Knowledge" initiative, (2013). | This initiative, as part of the 7th Framework Program of the EU for research and development, promotes the development of network cooperation at the pan-European level between innovation clusters, which include local authorities, enterprises and research centers. The purpose of this initiative was to strengthen the scientific potential and competitiveness of EU regions by implementing economic development strategies based on scientific research, especially by supporting transnational cooperation networks of regional innovation clusters. |

Continued table 2.10

| 1 | 2 |
|---|--|
| 14. Strategy "Clusters and smart specialization", (2013). | This tool is focused on political support and attraction of investments in clusters, encouraging stakeholders to participate in the development of clusters, conducting monitoring and research in the development of innovative clusters. |
| 15. Initiative "Technological infrastructure for key promising technologies" (KETs Technology Infrastructures, 2014). | Launched by the European Commission to stimulate innovation among small and medium-sized enterprises by identifying key promising technologies (KETs) and improving their collaboration. The initiative helps to transform the identified technological prospects of enterprises into an innovative competitive product. |
| 16. Cluster facilitated projects for new industrial value chains, (2015). | The task of such projects is to develop new inter-industry chains of industrial importance throughout the EU, based on the use of the innovative potential of small and medium-sized businesses. |

One of the tasks of implementing bioeconomy achievements in European countries is the creation of special bioeconomy strategies at the state level and supporting strategic documents. At the same time, the growing asymmetry of innovative and biotechnological development of countries can be reduced by using such principles as: reuse of resources and materials; decarbonization of the economy (solving the problem of reducing the carbon intensity of GDP) using bioprocessing systems (agriculture and forestry) in the production process; promoting the development of regions (rural and coastal); risk management (reasonable use of technologies and their management) to prevent harm to the population and the environment; availability and openness to use of goods and services.

Eight countries have already created a special bioeconomy strategy - Germany, Finland, Italy, Spain, France, Ireland, Latvia and Norway, which focus on the priority areas of bioeconomy development specific to these countries. Thus, most EU countries focus on research and innovation strategies that are close to the bioeconomy or its development in certain industries. Some countries do not have any specific strategic programs or policies for the development of their national bioeconomies (Greece, Cyprus, Malta). There are countries that are in the early stages and continue

to have discussions about creating strategies, namely negotiations between government officials, politicians and potential investors.

The most acute problems of the development of high-tech clusters based on biotechnology are the minimal funding by the state and the attraction of business investors who could bring this sector to a new level. In recent years, biotechnology has not reached the stage of maturity and the possibility of entering the European innovation market in the "new" EU countries. An example to follow is the experience of Poland, Hungary, and the Czech Republic, which are leaders in the development of the biotechnology sector among the "new" EU countries. These countries were able to stimulate this sector, develop programs to attract investors and launch a mechanism for the formation of biotechnological clusters.

The analysis of tools for supporting the development of clusters and their formation in the countries of South-Eastern Europe, such as Poland, Hungary and the Czech Republic, shows that the innovative development path of Ukraine should be oriented towards the application of clustering approaches to solving economic problems. The process of creation and development of domestic specialized biotechnological clusters, the transfer of European biotechnologies will contribute to the development of such a model of clusters, which provides for the diverse nature of the combination of its elements with different types of relationships. Such a polystructural model will be based on a combination of the principles of complementarity, collaboration, mobility, sectoral diversification and synergism; and taking into account the real conditions of doing business, will contribute to the implementation of European production systems, the establishment of effective partnership relations between Ukrainian and European companies, bypassing the mechanism of blocking the excess export of domestic agricultural products with minimal added value at a low scientific intensity.

Theory and practice show that in the conditions of globalization of world economic relations, the integration of ecologically oriented enterprises and the formation of specialized bioclusters, as an organizational form of their effective functioning, become reasonable strategies for the development of the bioeconomy. Clusters, in particular small and medium-sized enterprises in the field of bioeconomy, can be formed on the basis of self-organization as a result of natural integration and cooperation in the production of ecological products or with the help of strategic planning carried out by regional or branch management bodies (Fig. 2.7).

The methodological foundations of the implementation of the biocluster strategy include the following stages: approval of regulations, strategies and programs; signing of contracts, agreements and contracts by the participants; training and retraining of enterprise personnel; implementation of communication projects and interaction technologies;

making corrections to documents; coordination of biocluster activities and participants; monitoring and evaluation of the efficiency and effectiveness of the functioning of the biocluster and of each participant; formation of measures to adjust activity and interaction (Kashchena, 2022).

Agricultural enterprises, as potential participants of the biocluster, often offer similar or related types of ecological products and services and are competitors in the markets, and self-organization of enterprises in this case is mainly carried out at the initiative of the leading enterprise. A difficult aspect of creating a biocluster at the initial stage is reaching an agreement between entrepreneurs on the formation of assets and strategies. The unifying factors of the economic interests of the creation of a biocluster are the agreements on the implementation of a single price policy on the market of ecological products, the expansion of the scope of provision of eco-services by its participants, the conduct of a single marketing policy, the joint planning of the introduction of innovative technologies, that is, the synergistic interaction of elements of a certain system of enterprises.

For the formation of regional or sectoral bioclusters, appropriate conditions must be created, primarily of an organizational and economic nature. The results of the study indicate that such conditions are gradually being created in terms of increased competitive dependence between participants in the biotechnology market, the presence of a single infrastructure, and the need to expand the range of ecological products. Preparatory work for the creation of clusters requires both strategic management from the coordination center and coordinated activity and management from each enterprise.

During the performance of their functions, these structures form a single regional or branch (network) database, work out the methodological basis of bioclustering, develop provisions on the biocluster, basic economic standards, assess the development potential, options and forms of contractual relations within the cluster, prepare a selection of innovative priorities and projects, determine personnel policy, guidelines for strategic planning (Nesterenko, 2022).

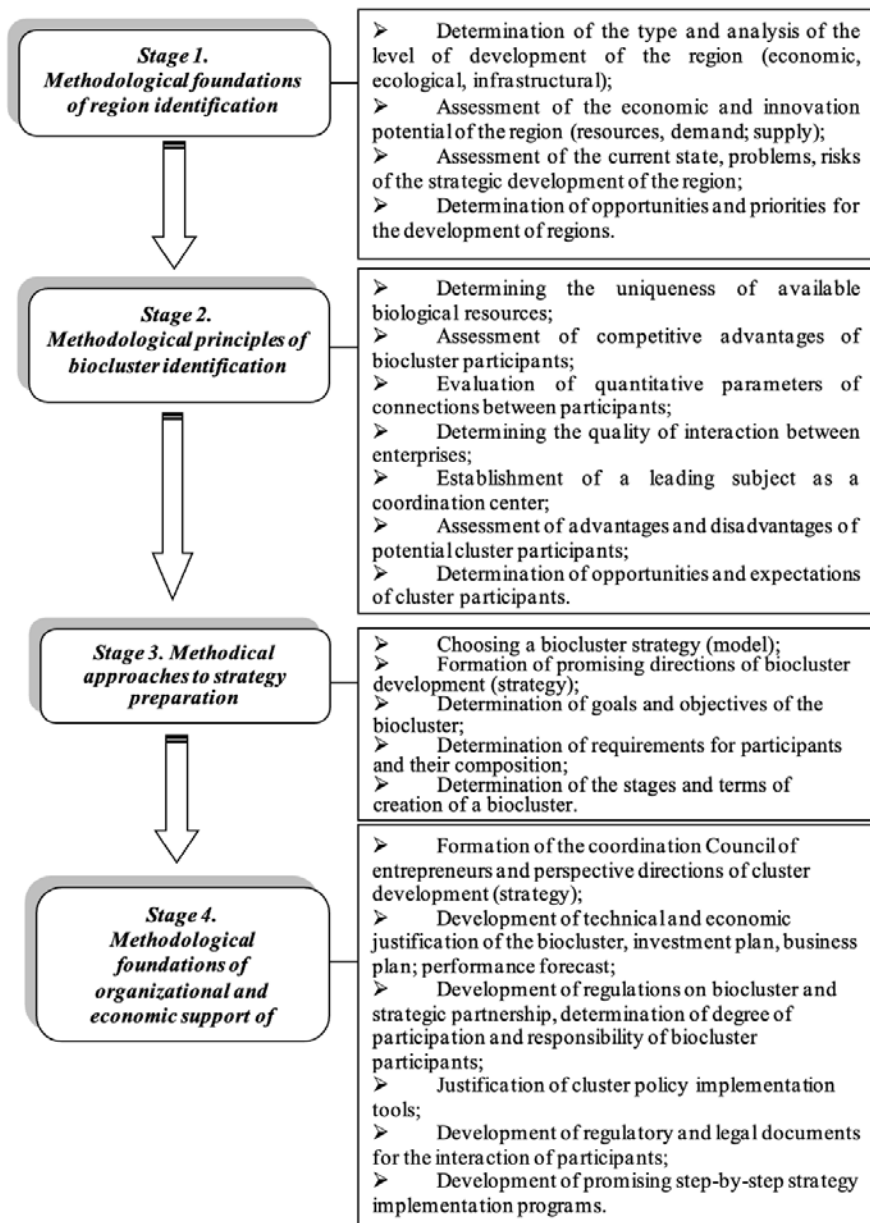


Figure 2.7 – Formation of the strategy of innovative bioclusters

Thus, the implementation of the experience of the EU countries is possible only with an amendment to the national mentality, territorial location and position of Ukraine in the international division of labor and specific markets of goods and services. Under these conditions, the starting conditions of sustainable development are the provision of: economic development supported on the basis of a modified market system; natural and ecological sustainability; close international cooperation and cooperation to achieve the goals of sustainable development; sustainable social development based on the principle of justice.

In Ukraine, an integrated approach to environmental management has not yet been implemented due to the lack of an appropriate legislative and regulatory framework. At the same time, Ukraine is interested in developing further cooperation in the field of environmental protection in the following areas: - global climate change; - management of water resources, in particular the Black Sea; - renewable energy and energy efficiency. The application of European experience in the field of socio-economic development of Ukraine is possible in terms of the pace and quality of the implementation of the strategic goals of sustainable development. The list of the main indicators of the strategy (economic development, social development, protection of the natural environment and rational use of natural resources) should be distributed and take into account: the ecological balance of production in the basic branches of industry, agriculture, the production of consumer goods and the provision of services, housing and utilities, transport, military activity; environmental expertise in the field of scientific support, environmental education, civil society, regional policy, international cooperation.

An additional effect of the transfer of European biotechnologies will be further research and production collaboration (growth occurs due to the strengthening of the synergy effect), financing of innovative development of selective fields, high technological efficiency of related sectors of the national economy, and the involvement of domestic scientists in European grant instruments (Horizon 2020, etc.). For this, it is necessary to use both the accumulated experience of European clusters and new developments. Synergistic approaches to the development of regions and scientific and technical directions will strengthen the possibilities of implementing scientific and technical developments and, ultimately, will contribute to the development of the economy of Ukraine.

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