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## **SOCIO-ECONOMIC DEVELOPMENT OF THE DANUBE REGION OF UKRAINE IN THE CONTEXT OF COOPERATION WITH THE EU**

*The formation of a concept for the socio-economic development of Ukraine's regions requires the development of a concept for the restoration of Ukraine's economy on the basis of sustainable development in the context of intensified cooperation with the EU. Particular attention should be paid to the regions of the country that are part of depressed territorial units and are of strategic importance. One of such regions is the Danube Region, which is of strategic importance for the infrastructure support of the Ukrainian economy. The article examines the main problems of development of this region with their distribution in three areas: economic, social and environmental. The authors identify the main tasks for forming the concept of socio-economic development of the region and propose a mechanism for managing the development of a depressed region, which identifies forms and approaches to management, as well as appropriate methods and tools. The implementation of the proposed measures will allow to realise the potential of this region in the context of deepening cooperation with the EU countries. The key elements of the existing potential of the Danube Region of Ukraine are the following: location and infrastructure, natural resources, trade opportunities, energy resources, economic potential, international cooperation, and others. It is proved that ensuring the socio-economic development of this region requires significant investment resources. The author proposes the main measures to increase the level of investment attractiveness of the region, namely: legal reform, liberalisation and simplification of import and export of goods, implementation of infrastructure projects, support for high-potential industries, improvement of public administration efficiency, intensification of partnership with the private sector, implementation of environmental standards, and an active information campaign. The implementation of the proposed measures will help form the basis for the socio-economic development of the Danube Region in cooperation with the EU.*

**Keywords:** *socio-economic development, regional development, depressed regions, international cooperation, systemic approach, development concept.*

**Statement of the problem.** Ensuring the country's sustainable development, especially in the context of the instability of the external world, requires the search for new methods and mechanisms for managing and modernising the economy. This problem is of particular relevance for Ukraine because of Russia's military aggression. The EU has established rules of interaction between government agencies, the public and business to ensure stable regional development. These rules include mutual trust, equality, collegial strategy definition, an agreed strategy with a defined outcome, clearly defined tasks, division of roles, a transparent governance mechanism, and financial contributions.

Formulation and implementation of the state regional policy based on the principles of the EU regional policy and depression criteria is a key step for the integration of the national economy into the European economic area and Ukraine's participation in the European Community. The issue of formulating and implementing a policy of economic development of the Danube Region is becoming particularly relevant in view of its proximity to the EU borders and meeting the requirements for the region's competitiveness in an open economy. The implementation of Ukraine's regional development policy in line with EU standards should be carried out in stages, including coordination of approaches, programming, financing, monitoring, application of incentive instruments and adaptation of legislation to European standards.

**Analysis of recent publications.** A number of works by domestic and foreign scholars are devoted to the study of the problems of socio-economic development of regions. The theoretical foundations for the formation of mechanisms for socio-economic development of regions were studied by O. Gonta [1], O. Pavlova, K. Pavlov, A. Kudesnik [2], M. Kyzym, Y. Ivanov and I. Hubareva [3], T. Klebanova, O. Rudachenko, O. Panasenko [4]. The peculiarities of the economic component in the formation of sustainable regional development are revealed by O. Kraynik [5], A. Lelechenko [6]. The impact of investment processes on the development of the region is outlined by Baranovskyi M. [7], Matusiak S. [8], Petrenko K. [9], Pron L. [10]. The peculiarities of taking into account uncertainty and the need for a security component are studied in [11, 12, 13].

**Unresolved parts of the problem.** Despite this, the issues of formulating a strategy for sustainable socio-economic development of Ukraine's regions in the context of post-war recovery and intensified cooperation with the EU remain insufficiently researched.

**The purpose of the article is to** improve the scientific and methodological foundations for forming the concept of socio-economic development of the region. The object of the study is the Danube Region, which is of strategic importance for Ukraine's economy in the context of intensifying cooperation with the EU countries. To achieve this goal, the study solved the following tasks: the main threats to the development of the Danube region were investigated, which were systematised by the following areas: social, economic, and environmental; a mechanism for managing the development of a depressed region was proposed, which is the basis for the concept of socio-economic development of the Danube

region; investment advantages of this region and potential areas of its development were identified.

**Research methodology.** In the context of war, it is important to apply the concept as a system of scientifically based strategic goals for the development of regional economic policy in the Danube Region, both in economic, political and scientific and technological development. With regard to the object of territorial development of the Danube Region, in our opinion, the concept may consist in the following: based on the identification of the essence of the key socio-economic problems of the present and the future period, to formulate the goals of anti-crisis territorial development, to integrate the objectives of all types of scientific developments in regional development, to ensure the target orientation of territorial and sectoral studies of the region. In our opinion, these global goals can be conceptually summarised in a simple systemic scheme of interdependencies: "causes of the crisis - anti-crisis actions - costs - results - public welfare - sustainable development". The question of which goal should be prioritised is decided on the basis of specific industries and production facilities in the depressed area. Identifying the problems and threats to the region's socio-economic development allows us to develop a comprehensive strategy for its recovery and development in the context of intensifying cooperation with the EU.

**Research findings.** The Danube region of Ukraine is facing serious challenges caused by the war in the country and economic difficulties. The current situation requires in-depth analysis and consideration of strategic ways to overcome economic and social problems. Cooperation with the European Union in the context of socio-economic development of the region is becoming an urgent task that requires scientific substantiation and careful analysis. The relevance of the article is to analyse the key aspects of the concept of socio-economic development of the Danube Region of Ukraine in the context of cooperation with the EU. The study of the socio-economic development of the Danube Region is of great importance for both the scientific community and practitioners in the field of regional policy and development, and can make a significant contribution to solving the current problems of the region and the country as a whole. In order to ensure the socio-economic development of the Danube Region in the context of cooperation with the EU, we consider it expedient to elaborate a concept of integrated development of this region. The main tasks in this context are to identify:

- ✓ the main territorial and sectoral problems, as well as the goals of economic and social development, based on the need to ensure the unity of Ukraine's sovereignty and the ultimate goals of the region's development with the ultimate goals of the country's unified national economic complex, maximising the contribution to the solution of national tasks for the development of a socially oriented market economy, taking into account the role and place of the region in the territorial division of labour and the need to equalise it and create equal opportunities;

- ✓ resource, scientific, technical and organisational potential, the state of production and territorial complexes and ways of their technical re-equipment based on the introduction of innovative and resource-saving technologies, taking into account the aggravation of negative trends in the labour market;

- ✓ the potential of land funds, labour resources and capital that the region can dispose of in the short, medium and long-term planning period, taking into account actions that change the internal regional and external factors of the transit economy;

- ✓ Structural correlations between the main factors of production: material production and non-productive sphere; intra-regional specialisation industries and service industries; labour resources and employment of the local population; raw materials and their full integrated use;

- ✓ the role of production, market, trade and intermediary, financial and credit, social, economic, legal and institutional infrastructure in servicing market production and the population, the state and ways to improve them in order to maximise the standard of living of the local population;

- ✓ the expediency of developing anti-crisis territorial targeted comprehensive programmes of socio-economic and environmental nature aimed at restoring and regional reproduction of: labour resources; financial, credit and monetary relations; investment and construction process; food resources; natural resource potential; production and market infrastructure.

The restoration and development of these subsystems of territorial entities constitute a single system of regional revival, which are in a state of interaction. They form the basis of the proposed concept of socio-economic development of the Danube Region.

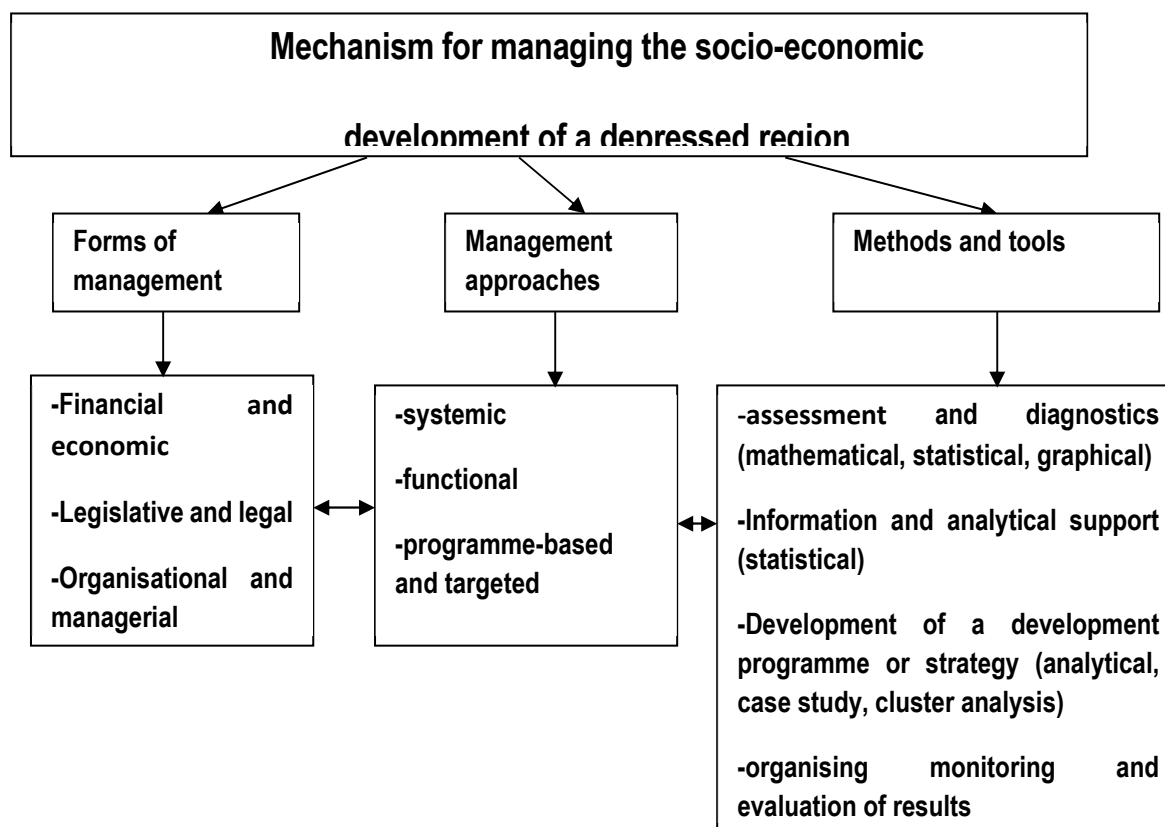
The proposed concept of territorial development, on the one hand, takes into account the modern requirements of the regional policy pursued in the EU, and on the other hand, the specifics of the object - the depressed Danube region. Of course, its implementation is characterised by a combination of prerequisites, factors and development trends, but the approach to the analysis of depressed areas has much in common, regardless of the region in question.

Based on the provisions of the systemic approach, the system of public administration of development of depressed territories is considered as a complex dynamic, integral system consisting of a controlling and a managed subsystem, a channel for receiving management information, a channel for transmitting information about the state of the managed system to the controlling one, and which forms and manifests its properties in the process of interaction with the environment and is at the same time an active component of such interaction. It is this systematic approach to the study of the research object that requires the formulation of the problem, purpose and objectives of the study, structural analysis of the object, development of the concept of its development, analysis of development problems and development of models for their solution, synthesis of managerial problems of development of depressed territories and decision-making on its provision (Fig. 1)

The assessment of the economic development of the Danube Region includes determining the levels of provision of the region with natural resources, economic development, investment attractiveness, entrepreneurial activity and development of transport communications. The main indicators include the coefficient of territorial diversity of natural resource potential, increase in gross output per capita, investment in fixed assets

per capita, increase in small enterprises in production, and the Engel coefficient for transport communications.

The social and economic development assessment includes an analysis of employment, unemployment, wages, access to goods and services, social protection and education. The indicators to be analysed include employment in the Danube Region, unemployment rate, average monthly wages, turnover of goods and services per capita and the increase in people with higher education.



**Figure 1. The mechanism for managing the development of a depressed region**

Source: Suggested by the authors

Environmental assessment takes into account the impact of human activity on nature and the level of waste accumulation. The indicators to be analysed include emissions of harmful substances and greenhouse gases, and the generation of hazardous waste by hazard class.

The assessment of the demographic situation includes an analysis of demographic trends and population density. The indicators for analysis include natural population growth, population dynamics, migration balance, population density and population of depressed settlements.

The financial support and sources of finance are also analysed for the possibilities of managerial influence on the development of the territory. Indicators include the share of own revenues and rayon budget revenues per capita.

At the same time, identification of the existing problems that hinder the socio-economic development of the region is the first step in implementing the main provisions of the

proposed concept. In particular, the authors have identified and systematised the main problems of the Danube Region's development in the following areas: social, economic, and environmental. A number of social factors characterise the main threats related to the existing demographic situation in the region and compliance with social conditions. The group of economic factors includes a number of indicators that identify obstacles to balanced economic development and its financial support. The environmental factors include the problems of compliance with environmental norms and standards, as well as the effects of military operations on the region's environment.

The war in Ukraine has caused significant damage to the region's economy, including destroyed infrastructure, job losses, loss of foreign markets and difficulties in rebuilding destroyed businesses. The main economic factors include the following:

- ✓ Economic dependence on other countries: The EU Strategy for the Danube Region considered combining inland waterway transport with air, rail and railways to achieve full synergy of the transport sector. Unfortunately, in the context of the war, the region has limited access to seaports, which may limit opportunities for international trade and investment.

- ✓ Unstable energy supply: The dependence on energy imports and the volatility of energy supply create problems for industrial production and electricity consumers.

- ✓ Poor infrastructure: The lack of infrastructure, including roads, railways and communications, as well as the destruction of the infrastructure of the ports of Izmail, Reni and Ust-Dunaisk as a result of Russian attacks, creates challenges for the region's economic development and competitiveness.

- ✓ Outdated industry: Some industries in the region are outdated and less competitive on the global market, making it difficult to adapt to modern economic requirements. Nevertheless, the ports of Izmail, Reni, and Ust-Dunaisk have the potential for further development. In particular, modernisation and renewal of port infrastructure, attraction of investments for the construction of new terminals and dredging require investments of over USD 120 million.

- ✓ Low level of innovation activity: The lack of innovation limits the development of new technologies and productivity gains. The development of innovative sectors such as information technology, green energy and biotechnology could make the region more competitive.

- ✓ The need to support small and medium-sized enterprises: The development of small and medium-sized enterprises can create new jobs and contribute to regional development. The EU can provide financial and advisory support to these enterprises.

- ✓ Limited attraction of investment resources: Attracting investment projects by facilitating the business environment and creating special economic zones can support the development of the region.

- ✓ Instability: Conflict and underdevelopment in the region can lead to economic instability, unemployment and limited access to employment opportunities.

The social problems of the Danube Region of Ukraine include a number of challenges that affect the life and well-being of the population in this region. The main social factors include the following:

- ✓ Demographic challenges: Population decline and migration due to the war have a negative impact on the availability of labour and the consumer market.
- ✓ Lack of access to education: Insufficient access to quality education can lead to low educational attainment and limit the opportunities for young people in the labour market.
- ✓ Population migration: Under unfavourable conditions, many people may choose to migrate to other areas in search of better opportunities, which can lead to a loss of labour and a decrease in population.
- ✓ Social exclusion: Conflict and other internal difficulties can lead to social exclusion and a sense of isolation in the region.
- ✓ Insufficient access to healthcare services: The availability of quality healthcare services may be limited in some parts of the region, leading to health problems.
- ✓ Social divide: Conflict and inequalities in the distribution of resources can lead to social divisions between different groups.

In the context of cooperation with the EU, a number of measures can be proposed to overcome the social problems of the Danube region of Ukraine:

- ✓ Funding for social projects: Financial support from the European Union for the implementation of various projects in the region aimed at reducing unemployment, improving the quality of education, and developing healthcare services and infrastructure.
- ✓ Youth and education support programmes: Developing and implementing educational programmes and scholarships for young people to help improve the education and skills of young professionals and facilitate their employment.
- ✓ Medical care and infrastructure: Development of medical infrastructure and provision of medical care to the population, including investments in hospitals, clinics and medical personnel.
- ✓ Employment development: Providing support for local businesses and initiatives that can create jobs.
- ✓ Social integration and recovery: Cooperation programmes and projects can contribute to the social integration of refugees and internally displaced persons, as well as to the restoration of social structures in the conflict zone.

The consequences of the war on the development of the Danube Region not only affect its socio-economic development, but also have a significant impact on the natural landscape, infrastructure facilities and environmental pollution. The authors identify the following environmental factors:

- ✓ Environmental pollution: Environmental problems and pollution can affect public health and quality of life.
- ✓ Damage to the natural landscape: The destruction of infrastructure due to war requires significant financial resources to restore it and create conditions conducive to the existence of living organisms.
- ✓ Inability to use large areas of agricultural land: Due to the hostilities, large areas of agricultural land, forests and water bodies remain partially unusable.

At the same time, the results of the study indicate that there is a significant development potential for this region. In particular, the attractiveness of the Danube region of Ukraine

for investors in the face of negative military actions and economic risks may be due to several factors:

- ✓ Location: The Danube Region enjoys an important geographical location that facilitates the development of trade and transport routes.
- ✓ Natural resources: The region is rich in natural resources, particularly agricultural land and forests. This makes it interesting for investors interested in agriculture and agricultural processing.
- ✓ Trade opportunities: The region has the potential to develop foreign trade through the Danube River and access to the Black Sea. This can be an important aspect for investors looking for opportunities to export and import goods.
- ✓ Energy resources: The region has the potential to develop renewable energy, including solar and wind power. This may attract investors interested in green energy supply.
- ✓ Economic potential: Despite challenges, the region has the potential for economic recovery and growth, especially with the right investments and reforms.
- ✓ International cooperation: Cooperation with international partners and organisations can provide additional support and resources for the development of the region.

Improving the investment climate in the Danube Region of Ukraine can be achieved through cooperation with the European Union by implementing the following measures:

- ✓ Legal reform: Improve the legal environment and simplify investment-related legislation to ensure the protection of investors' rights and create transparent and stable rules of the game.
- ✓ Liberalisation and simplification of import and export of goods: Joint initiatives with the EU to simplify customs procedures, harmonise standards and regulations, and ensure the free movement of goods and services.
- ✓ Infrastructure projects: Implementation of infrastructure projects in the region that will help rebuild infrastructure, facilitate access to markets, increase logistical efficiency, and provide an enabling environment for investors.
- ✓ Supporting industries with high potential: Developing and supporting a selected sectoral area to attract investment, such as the environmental industry, tourism or agriculture.
- ✓ Effective governance: Reforming and modernising the governance and anti-corruption system to ensure fairness and transparency in the investment process.
- ✓ Partnership with the private sector: Cooperation with the private sector and creation of favourable conditions for investment projects and initiatives.
- ✓ Environmental standards: Implementation of environmental standards and technologies to reduce negative environmental impacts and increase the region's attractiveness to investors.
- ✓ Information campaign: Conducting information campaigns and educational events for investors on the advantages and opportunities of the region.

Thus, we believe that the implementation of the proposed concept of socio-economic development of the Danube Region based on the implementation of the above measures

will ensure the sustainable development of this region in the context of cooperation with the EU.

**Conclusions.** The Danube region is a promising region of Ukraine, which will allow Ukraine to increase international trade through shipping in the extremely difficult conditions of war.

The results of the study made it possible to systematise the problems inherent in the development of this region in terms of ensuring its sustainable development based on the principles of sustainable development, taking into account the strategic directions of intensifying cooperation with the EU. The main economic problems include a high degree of economic dependence on other countries, problems of infrastructure and energy supply, insufficient attention to innovation, etc. Demographic challenges, migration, social exclusion, etc. are identified as the main components of the range of social problems. Environmental problems are characterised by significant destruction of the territory and restrictions on the use of agricultural land, as well as pollution. In order to solve these problems, the author proposes to improve the mechanism of managing the development of a depressed region and identifies priority areas for attracting investments for the region's recovery.

As for the limitations of this study, there may be several. One of the limitations is that in times of war, it is impossible to accurately assess the economic needs of the region, environmental damage, and social needs of internally displaced persons because there is no access to complete static information, so the question of formulating a strategy for sustainable socio-economic development of the Danube Region in the context of post-war recovery and intensified cooperation with the EU remains.

A further topic for research could be the development of a phased implementation of measures to improve the socio-economic development and attractiveness of the Danube Region, as well as the development of a system for assessing the effectiveness of the implementation of relevant measures, given the situation in Ukraine.

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## **СОЦІАЛЬНО-ЕКОНОМІЧНИЙ РОЗВИТОК ДУНАЙСЬКОГО РЕГІОНУ УКРАЇНИ В УМОВАХ СПІВПРАЦІ З ЄС**

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*Формування концепції соціально-економічного розвитку регіонів України потребує розроблення концепції відновлення економіки України на засадах сталого розвитку в умовах активізації співпраці з ЄС. Особливої уваги потребують регіони країни, що відносяться до складу депресивних територіальних одиниць та становлять стратегічне значення. Одним з таких регіонів є Дунайський регіон, що має стратегічне значення для інфраструктурного забезпечення економіки України. У статті досліджено основні проблеми розвитку даного регіону з розподілом їх за трьома напрямками: економічні, соціальні, екологічні. Авторами визначено основні завдання для формування концепції соціально-економічного розвитку регіону та запропоновано механізм управління розвитком депресивного регіону, в якому виділено форми та підходи до управління, а також відповідні методи та інструменти. Реалізація запропонованих заходів дозволить реалізувати потенціал даного регіону в контексті поглиблення співпраці з країнами ЄС. Ключовими елементами наявного потенціалу Дунайського регіону України*

визначено наступні: локація та інфраструктура, природні ресурси, торговельні можливості, енергетичні ресурси, економічний потенціал, міжнародна співпраця та інші. Доведено, що забезпечення соціально-економічного розвитку даного регіону потребує значних інвестиційних ресурсів. Запропоновано основні заходи для підвищення рівня інвестиційної привабливості регіону, а саме: проведення правової реформи, лібералізація та спрощення ввезення та вивезення товарів, реалізація інфраструктурних проєктів, підтримка галузей з високим потенціалом, підвищення ефективності державного управління, активізація партнерства з приватним сектором, впровадження екологічних стандартів, активна інформаційна кампанія. Реалізація запропонованих заходів дозволить сформувати базу для соціально-економічного розвитку Дунайського регіону в умовах співпраці з ЄС.

**Ключові слова:** соціально-економічний розвиток, регіональний розвиток, депресивні регіони, міжнародна співпраця, системний підхід, концепція розвитку.