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CONCEPTUAL FRAMEWORK FOR BALANCING ECONOMIC GROWTH AND ENVIRONMENTAL SUSTAINABILITY AT REGIONAL LEVEL

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ПРИНЦИПИ ЗБАЛАНСОВАНОСТІ ЕКОНОМІЧНОГО ЗРОСТАННЯ ТА ЕКОЛОГІЧНОЇ СТІЙКОСТІ НА РЕГІОНАЛЬНОМУ РІВНІ

Purpose. To determine the main directions for the reformation of strategic regional governance in support of implementation of the sustainable development policy at regional level.

Methodology. The main arguments in this article were developed through the content analysis of scientific literature dedicated to the problems of transition of regional development towards the path of sustainability, and through the comparative analysis of statistical data in the field of environmental and economic policy in various regions of Ukraine.

Findings. The concept and objectives of regional governance were specified in the context of sustainable development; the historical analysis of various forms of implementing principles of sustainable development at regional level was conducted; the problem of balancing environmental management with economic development in Ukrainian regions was analysed.

Originality. Conceptual directions for balancing the environmental, social and economic development targets at regional level were suggested in this article.

Practical value. The implementation of the proposed recommendations would contribute towards the reduction of environmental load while enhancing economic growth of regions.

Keywords: *sustainable development, regional governance, balancing economic, environmental and social development targets*

Problem statement. The idea of sustainable development and the guiding principles for its implementation have been evolving in scientific communities and at numerous international forums over the course of many decades. Principle 1 of the Stockholm Declaration of the United Nations Conference on the Human Environment (1972) states that there is “a fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being”. In this sense, Report to the Club of Rome (1972) focused attention on the ‘limits to growth’ as the ‘limits of an environmental capacity’, i.e. the progress of human civilization should be considered as sustainable environmental development.

Today, sustainable development is a widely accepted human goal. According to the definition by Brundtland Commission (1987), the sustainable development is a pattern of economic growth in which the present use of resources

meets human needs while preserving the natural resources for tomorrow’s generations.

Identification of an unsolved problem. As it is stated in chapter 2 of the Agenda 21 (1993), countries with transitional economies, such as Ukraine, can have special difficulties in the realisation of the new social model. It was underlined that the regional level is of great importance for implementation of the global environmental targets and objectives. The process of reforming regional governance can help to create commitment to the principles of sustainable development, while taking into account the major concerns of citizens and government agencies, business and industry [1].

In this respect, the Ukrainian scientific community and the general public are concerned that the regional economic model, which promotes unsustainable consumption and production patterns, assists in the exploitation of natural resources to the verge of extinction and their total depletion, has induced multiple crises in all Ukrainian regions. There is

an urgent need for its replacement through a 'green economy' approach [2].

Analysis of the recent research in the field of regional governance showed a growing interest in sustainable development issues. Many scientists emphasised that the sustainable regional development aims to ensure that environmental concerns are considered in all aspects of regional development, and that people could protect their environmental rights [1–6]. Studies have shown that supporting regional sustainable development aims to solve a number of fundamental issues, such as poverty reduction, achieving sustainable patterns of consumption and production, enhancing efficiency in environmental protection and the rational use of natural resources. However, these tasks are complex and long-term and they can, in addition, cause conflicts of interests between different social groups.

While noting the progress made in advanced countries, the conducted research confirms that in countries with transitional economies, including Ukraine, regional governance remains limited to an outdated concept of interaction with the natural environment [2, 5]. The existing policies, strategies and coordination of all economic issues in most regions are being increasingly questioned, as they do not adequately respond to the problems of environmental protection and rational use of natural resources.

Formulation of the research aim and objectives. The main aim of this research is to determine the key directions for the reformation of regional governance in support of implementation of the sustainable development policy.

To achieve the main aim, the following specific objectives have been formulated: 1) to analyse the historical experience of countries, which came a long way towards sustainability of their development; 2) to identify the forms of implementing principles of sustainable development at regional level; 3) to suggest conceptual requirements for balancing the environmental, social and economic development targets at regional level.

Research methodology. The main arguments in this article were developed through the content analysis of scientific literature dedicated to the problems of transition of regional development towards the path of sustainability, and through the comparative analysis of statistical data in the field of environmental and economic policy in various regions of Ukraine. Furthermore, the authors utilised the findings of their own previous research in the field of sustainable development at regional and local levels.

Presentation of the research results. Resolution 2 (Plan of Implementation, 2002) of the World Summit on Sustainable Development in Johannesburg emphasises that each country has the primary responsibility for its own sustainable development, makes its own decisions, and ensures efficiency of legislation and availability of the necessary infrastructure for achieving it.

It is known that, under the influence of the Stockholm (1972), Rio de Janeiro (1992), Johannesburg (2002) and other world forums, the most advanced countries began to outline the transition from policies of mitigating the consequences of environmental damage to the policies of precaution and prevention of adverse environmental impacts.

In Ukraine the issue of the quality of the environment is high on the agenda. At present, according to various indices (e.g. number of hazardous industries, amount of industrial wastes per capita etc.) Ukraine is among the worst in Europe. Anthropogenic and industrial pressure on the Ukrainian environment is more than three times higher as compared to the corresponding indices in the EU member states. According to the 2014 Environmental Performance Index (EPI), among 178 countries Ukraine ranks the 95th [7]. It should be noted that, in general, in the last 15 years the environmental situation in Ukraine did not improve, and the major environmental problems remained the same.

The historical experience of many countries, which have come a long way in promoting and implementing sustainability priorities, shows that there are various forms for introducing the concept of sustainable development at the regional level. A number of authors have emphasised the fundamental role of the United Kingdom, Germany, Denmark, the Netherlands and some other countries, which in the course of the past decades have refined the mechanism of sustainable development in regional planning [8].

It is important to mention that originally the purpose of a balanced regional policy was solely to resolve local environmental conflicts [2, 6]. A number of authorities started to test and evaluate the economic, legal and administrative instruments of environmental governance, some of them proved to be very effective (e.g. taxes on pollution of water bodies in the Netherlands or the experience of the US in regulating emissions to the atmosphere).

However, with time, in response to ideas of sustainable development, it was eventually realised that it is necessary to incorporate environmental considerations at a more strategic level, at an earlier stage in the decision-making process, when the major decisions concerning development activities are not yet taken. The purpose of this new policy is to integrate environmental considerations into the process of making policies, plans and programmes for a wide range of actions and development sectors in the region to provide for social progress with minimal harm to the environment while taking into account the concerns of future generations [2, 6]. This approach suggests the need for adapting a conceptual framework of regional governance, which should create conditions needed for the functioning of all business processes on the principles of sustainable development.

Today, European legislation explicitly define the sectors in which development strategies are subject to environmental assessment: agriculture, forestry, fisheries, energy, industry including mining, transport, waste management, water management, telecommunications and tourism. With the reference to the concept of sustainability, national legislation in some countries specifies the criteria for defining sustainability beyond the scope of environmental problems.

For example, in Finland, according to provisions of the Act on the Assessment of the Effects of Certain Plans and Programmes on the Environment (200/2005), the objects of the environmental assessment are strategic decisions that have direct or indirect effect in Finland and outside of Finland's territory on a) human health, living conditions and quality of life; b) soil, water, air, climate, flora, fauna and biodiversity; c) community structure, buildings, landscapes,

townscapes and cultural heritage; d) the utilisation of natural resources; e) interrelations between these factors.

Analysis of issues related to the balanced economic and environmental development of Ukrainian regions revealed that the dominating scientific paradigm adheres to several fundamental theses, which is contrary to the very idea of sustainable development [2, 5].

Firstly, the Ukrainian economic model is based on domination of economic considerations over social and environmental.

It should be noted that the ways of achieving sustainable development are extensively discussed in Ukrainian literature. It is not possible to agree with positions of individual scientists and politicians who consider the strong economy to be a key issue of sustainable development and suggest solving economic problems first, and only then social and environmental. For example, Solomatin [9] argues that “if there is a well-developed economy, then we can expect both the solution for issues of social justice and the acceptable environment...”. At the same time he defines the healthy environment as the unacceptable luxury for Ukrainian people: “some just need to feed their people, as it is here in Ukraine, to provide a roof over their heads, maintain the minimal social standards, while others require a “social and environmental dessert”.

However, economic growth does not always correspond to the objectives of sustainable development and is not necessarily equivalent to the growth in prosperity of society, although the social well-being is accepted as its aim. Moreover, studying the dependence of economic development and quality of live revealed that the higher input of a region into the national economy, the worse its environmental conditions, higher morbidity rates and natural decline in the population.

For instance, Dnipropetrovsk *oblast* is one of the largest and most economically developed regions of Ukraine; the region accounts for 17.4% of national GDP. At the same time, regional development is aimed mainly at the most environmentally polluting industries, which generate ca. 75% of the regional gross product. On the whole, the environmental situation in Dnipropetrovsk *oblast* can be characterised as critical, and parts of its territory – as zones of environmental disaster [10].

In Ukraine, a wide spectrum of environmental instruments have been developed and used – environmental certification of products, production and control systems, environmental audits, environmental monitoring etc. At the same time in many regions inefficient management reached such extent, by which the environmental balance can no longer be maintained.

It is obvious that the regional development strategies must systematically integrate different types of social problems and environmental considerations, issues of resource-saving and pro-active environmental protection.

Secondly, planning the economic activities at any level is based on the extensive use of natural resources.

Analysis of the current environmental policy in Ukraine revealed that in general it is aimed at the complex correction of interrelated economic, social and environmental imbalances, and at the harmonisation of the environmental regulations with the principles, tendencies and trends of the envi-

ronmental policy development in the EU. It is important to mention that Ukrainian environmental legislation adheres for the most part to the concept of sustainable development, i.e. balanced management of social and economic development, while preserving natural resources and securing quality of the environment for current and future generations.

However, in reality many natural resources that can be easily accessed are used without limitations. Moreover, analysis of state of the environment in various districts of the Dnipropetrovsk *oblast* revealed that there is a direct correlation between the quantities of natural resources in a district and the level of anthropogenic pressure in it. In the discussions about the solution of industrial, agricultural, urban planning and transport problems the environmental considerations are most often overlooked. Decisions about protection and development of natural sites are often subjective and/or are influenced by the commercial interests.

In the period since independence, considerable progress has been achieved in strengthening the institutional system for environmental protection in Ukraine. Nevertheless, Ukraine needs an effective mechanism for developing regional strategies that would integrate current economic policy targets and sustainable development goals into these strategies. Moreover, integration of environmental concerns has to be more consistent and coherent. This may also mean that the regional state administrations, state departments for environmental protection in oblasts, state ecological inspectorates and other government bodies would concentrate their efforts on their main functions within the principles of sustainable development

Therefore, there is a need for the new methods of government regulation and control over the use of natural resources.

Thirdly, there is an abundance of uncivilised market relations in the area of use and protection of natural resources.

It is assumed that the market forces in an attempt to satisfy the individual needs of consumers inevitably create a “common good”. The demand for a natural resource (just like for other goods) defines its public utility. In literature a lot of attention is paid for problems of the quantitative assessment of the public welfare, including factors such as consumption of natural resources. Various authors argue that market equilibrium is achieved only when the price for a resource is equal to the costs of its production [9].

At the same time, the practice of destructive consumption of natural resources is progressing in Ukraine. The natural resources are not considered to be irreplaceable. This is especially true for the bio-resources which are irresponsibly exploited outside the protected areas (e.g. natural and biosphere reserves). Currently, the costs associated with the production of natural resources are relatively low – society does not care about preserving natural resources for the needs of future generations.

In Ukraine, the market mechanisms are not particularly effective in compensating for the lost natural resources. The business entities pay the taxes on the use of natural resources (e.g. land tax) and fees for polluting the environment (i.e. for exceeding the maximum allowable emissions and discharges of pollutants into the environment). However, in regions with high anthropogenic pressure, the environmental problems are

addressed mainly at the expense of other financial resources. For example, in Dnipropetrovsk Oblast 150 000 165 UAH from the local budget were spent on environmental activities in 2012–2013, while no funds at all were allocated from the central state budget [10].

In general, there is a persistent deficiency of financial resources for solving the environmental problems in regions with high anthropogenic pressure. It is possible to argue that among the Ukrainian officials there is an absence of understanding or unwillingness to understand and to take into account that environment plays a fundamental role in human economy.

Fourthly, there is no environmental assessment of economic development programmes in regions.

In Ukraine, the concept of social welfare is interpreted as the sum of individual well-being at different levels – territories, regions, citizens. The constant economic growth is accepted not only as possible, but also as the best solution for poverty problems and for problems of environmental degradation. To extrapolate from the past economic growth tendencies, value and utility of resources and other material products that are used today is considered feasible and logical.

It is worth noting that the majority of development programmes in Ukraine declare the necessity of the general decrease in anthropogenic pressure on the environment, but on the other hand, these programmes consider natural resources as only one of the production factors, as a necessary element of the material expenses in a turnover of financial and material flows. It is obvious that development of a region has to be perceived as an open subsystem within the bounds of natural environment, and it should ensure sustainability of the environment and its regenerative capacity when the development parameters are altered.

Therefore, as can be seen from the discussion above, the environmental problems in Ukraine are more related to issues of sustainable development policy, i.e. integration of economic, environmental and social considerations in the development of every territorial unit – regions, their districts and individual settlements, rather than to issues of nature protection only.

Research conclusions and outlook. Summing up the results of the analysis of experience of countries, which have come a long way in promoting the sustainability, it should be noted that the purpose of sustainable regional policy is to integrate environmental considerations into the process of making strategies, plans and programmes for a wide range of actions and development sectors in the region to provide for social progress with minimal harm to the environment, while taking into account the concerns of future generations.

Balancing economic growth and environmental sustainability at regional level has to be guided by the following conceptual framework:

- The regional development strategies must systematically integrate different types of social and environmental considerations, issues of resource-saving and pro-active environmental protection.

- Economic development of a region has to be perceived as an open subsystem within the bounds of the natural environment, what determines the proactive approach to environmental problems.

- An environmental and economic balance should be maintained by the appropriate set of methods for the government regulation and control over the use of natural resources.

- Sustainable development implies the differentiated approach to planning of the economic development of regions and their subdivisions, which should contribute to normalisation of the environmental stress.

- There is a need for new instruments for developing / environmental assessment of economic development strategies that should contribute to the future reduction and prevention of the environmental pressures within a region and transboundary territories.

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Мета. Встановити основні напрями реформування регіонального управління в підтримку реалізації політики сталого розвитку.

Методика. Аргументація розроблена на основі аналізу наукових праць із проблем виведення регіону на шлях сталого розвитку, а також вивчення статистичних

даних щодо стану навколишнього середовища та економічної політики в різних регіонах України.

Результати. Уточнене поняття та завдання управління регіональним розвитком у контексті завдань сталого розвитку; узагальнений історичний досвід щодо форм впровадження концепції сталого розвитку на регіональному рівні; проаналізована проблема збалансування управління еколого-економічним розвитком регіонів в Україні.

Наукова новизна. Розроблені ключові напрями еколого-економічного збалансованого управління розвитком на регіональному рівні.

Практична значимість. Реалізація запропонованих рекомендацій сприятиме економічному зростанню в регіоні за умов зниження навантаження на навколишнє середовище.

Ключові слова: *сталий розвиток, регіональне управління, баланс між економічними, екологічними та соціальними цілями розвитку*

Цель. Установить основные направления реформирования регионального управления в поддержку реализации политики устойчивого развития.

Методика. Аргументация разработана на основе анализа научных работ по проблемам вывода региона на

путь устойчивого развития, а также изучения статистических данных в области состояния окружающей среды и экономической политики в различных регионах Украины.

Результаты. Уточнено понятие и задачи управления региональным развитием в контексте задач устойчивого развития; обобщен исторический опыт относительно форм внедрения концепции устойчивого развития на региональном уровне; проанализирована проблема сбалансирования управления эколого-экономическим развитием регионов в Украине.

Научная новизна. Разработаны ключевые направления эколого-экономического сбалансированного управления развитием на региональном уровне.

Практическая значимость. Реализация предложенных рекомендаций будет способствовать экономическому подъему в регионе при условиях снижения нагрузки на окружающую среду.

Ключевые слова: *устойчивое развитие, региональное управление, баланс между экономическими, экологическими и социальными целями развития*

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