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SUSTAINABLE DEVELOPMENT OF UKRAINIAN AGRICULTURAL SPHERE: DEFINITION AND DETERMINANTS

Проведено критичний аналіз поняття сталого розвитку в агросекторі, а також визначено та обґрунтовано систему детермінант сталого розвитку агросфери. Виявлено еколого-економічний, консервативний, процесний, синергетичний та системний підходи до визначення сталого розвитку агросфери. Дотримуючись системного підходу до його визначення були згруповані детермінанти сталого розвитку агросфери на основні (екологічні, економічні, інституційні, політичні, соціальні), а також додаткові (інформаційні, організаційні, техніко-технологічні), які здійснюють вплив на ефективність ведення сільського господарства та розвиток сільських територій зокрема.

Ключові слова: агросфера, детермінанти, концепція, продовольча безпека, ресурси, сільське господарство, сільські території, системний підхід, сталий розвиток.

The problem statement. Today, among the concepts of interaction between society and nature, the world community supports foundations of the idea of sustainable development, developed by the International Commission on Environment and Development in 1984-1987. That is due to the urgent needs of efficient agriculture and sustainable development of rural areas in particular. Objective preconditions for the formation of the sustainable development of agriculture conception were unresolved global problems. Such as the problems of hunger elimination and denutrition, the overcoming of poorness and poverty of the rural population in certain underdeveloped countries, global warming, land degradation, soil water pollution in rural areas, destruction of natural ecosystems etc. [12, p. 138-139].

Besides, determinant's definition of sustainable development of the agricultural sphere, due to the need of minimizing the consequences of a technocratic model use to agricultural development in Ukraine which was oriented to the extensive methods application of conducting activities by members of AIC (agro-industrial complex) [3, p. 47], will allow achieving the sectorial goals of the 'Ukraine-2020' Sustainable Development Strategy [2]. The same is about effective implementation of the state program for the development of the agrarian sector of the national economics [1].

According to the obtained results **the recent research and publications analysis** suggests that academics want to promote their own understandings of the theoretical and applied aspects of sustainable agricultural development. In particular, we should note that Yu. M. Lopatynskyi and S. I. Todoryuk systematized a scientific category of sustainable development and its factors in the monographic research [5], whereas L.V. Gaponenko draws attention to the modeling of sustainable development on the example of agrarian enterprises [3]. Talking about S. Weltan, Yu. Leventon and N. Jager, they conducted a structured survey of literature, in combination with a cluster analysis, in order to identify general ideas and aspects related to the sustainable development of agriculture, as well as to identify their principles [8]. At the same time, A.V. Kharitonov, at the regional level, clarified theoretical and applied aspects of sustainable development of agriculture [11]. In addition, R. B. Ross, V. Pandey and K. L. Ross, publish the results of their sustainable development and strategy of the leading agro-food companies of the USA in the report [7], whereas D. Giovanucci, S. Sherr and D. Nierenberg explored the prospects for sustainable development of agriculture in the twenty-first century. [6]. K. Zacharia is convinced that in the conditions of the world scientific and technological revolution, agriculture will always be the main source of food [9]. Therefore, L.Shchukina investigates the sustainable development of agriculture through the prism of global problems and national peculiarities of achievements in this direction [12]. Nevertheless, the Ukrainian peculiarities of conception and determinants of sustainable development of the agricultural sphere are not enough taken into account yet.

The purpose of the article is to carry out a critical analysis of the sustainable development concept in agrarian sector, as well as to define and back up with facts the determinant's system of sustainable development of agricultural sphere.

Material and methods of research. To achieve the above said purpose, the following research materials were studied: monographs, publications in scientific and periodical publications, materials of scientific and methodological conferences on the chosen direction of scientific research relating to the problem identified in the article. In this research abstract-logical, selective, graphical, monographic, comparative and tabular methods were used.

Main results of the research. The key field of the real sector of the economics is agriculture. Its effective and rational development guarantees food and environmental security of any country. Gradually, agriculture is turning from the so-called ballast of the world economics into its 'locomotive' demonstrating the high economic efficiency of the agro-industrial complex, the constantly growing innovative capacity, as well as significant investment attractiveness in the last decade.

Based on the fact that agriculture is an important factor in increasing the well-being of population, there is a need to formulate an appropriate model that guarantees the sustainable development of agricultural sphere, the construction of which is formed thanks to agricultural production, rural areas and rural population [4, p. 50]. Formation of such a model requires the definition of "sustainable development", which has a large number of definitions today – from 50 to 100 [12-13]. We agree that the difficulty of defining this concept is related to the numerous aspects of the human community development and the principles for uncertain and multifaceted future of mankind. The above mentioned difficulties provoke the lack of thoughts unity and differences of scientific views in defining the concept of sustainable development of the agricultural sphere in representatives of various social societies and groups in particular. So, the critical analysis of sustainable development conception in the agrarian sector made it possible to identify five such approaches (Table 1).

It is obvious that, with the advancement of society on the path to sustainable development of the agricultural sphere, needs of people will change and become more diverse, means of achieving them will improve, and therefore new approaches to its definition will be required.

Table 1 – Approaches to the sustainable development of agricultural sphere definition

№	Approaches	Main idea of the approach
1	Ecologo- economic	Based on the need to harmonize strict environmental quality limits with socio-economic needs.
2	Conservative	Here the priority of saving the existing level of the agricultural sphere development as a system is taken into attention. Scientists define the sustainability of sustainable development of the agricultural sphere from the point of the neoclassical theory, which is characterized as preserving the current level of per capita consumption of agricultural products depending on the inalienable change over time, the magnitude of capital stock.
3	Process (evolutionary)	Sustainable development of rural areas is considered as a process of changing the various spheres of rural community 's life, including ecological, economic and social. As well as determining the landmarks of such development, namely, increases in the AIC volume production, increase of agricultural efficiency, increase of rural population's level of life and its full employment, rational use of land, etc.).
4	Synergical	It considers frequency-hopping changes in the agricultural sphere as a system with the transition of agriculture to a new quality level, primarily through an innovative foundation.
5	Systematic	Sustainable development of the agricultural sphere is defined as a process of change that reflects the system's ability to meet the needs of the rural community, maintain economic efficiency, and preserve the environment. It considers sustainable development of rural areas as a process of changing the various spheres of life of the rural community (social, economic and environmental), but also the mechanisms for influencing the development of rural areas are specified such as financial and investment strategy, mandatory participation of local initiatives, effective actions of local self-government bodies etc.).

Generalized by the authors according to the following sources [8, 10-11, 13].

Thus, based on ecologo-economic, conservative, process, synergetic and systematic approaches to the definition of sustainable development of the agricultural sphere, it can be defined that the main value of the suggested theories is the person who participates and forms the sphere of his activity in agriculture in particular.

Following the systematic approach to determining the sustainable development of the agricultural sphere, it is sufficient to define a system of determinant, due to which there is development of agricultural production, rural areas and rural population in general (Fig. 1).

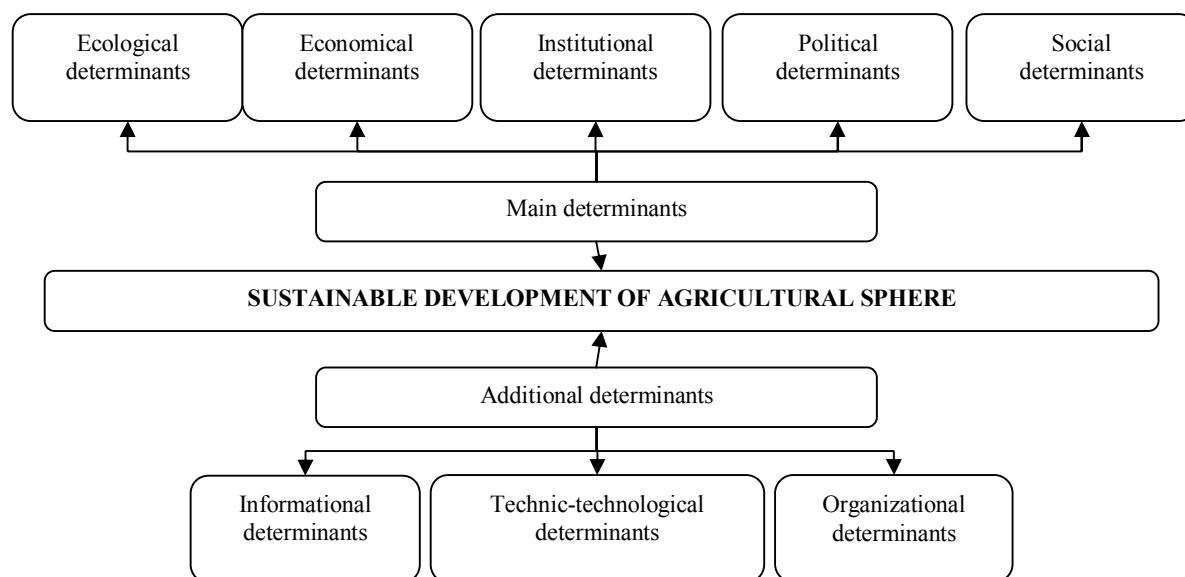


Fig. 1. **Determinants of sustainable development of the agricultural sphere.**
Arranged by authors according to sources [3, 5-13].

It should be noted that the results of recent studies and publications analysis prove the emphasizing primarily environmental, economic and social determinants of sustainable development of the agricultural sphere by scientists [3, 10-13]. Thus, supporting the approach of Yu. M. Lopatynskiy and S. I. Todoryuk concerning their systematization to the main (basic) and additional (complementary) determinants [5, p. 15], the first group of sustainable development of the agricultural sphere determinants [3, 5-13] includes:

- ecological (preservation of raw materials and the environment, which is a place of pollution flow);
- economic (support for manmade physical capital, human capital including informational and cultural, as well as natural capital);
- institutional (basic institutions, formal and informal institutions of direct influence on the sustainable development of the agricultural sphere); political (the role of central government and local self-government in solving the problems of rural territories);
- social (equality of rights and social justice).

Whereas, the additional determinants of the sustainable development of the agricultural sphere [5-9] are: informational (informational support and public access to up-to-date information about the environment in the agricultural sphere) and techno-technological (development and introduction of agricultural production technologies); organizational (the interaction of components involved in the process of sustainable development of the agricultural sphere), etc.

Conclusions and perspectives of further research. According to the main findings of the study we can conclude that the sustainable development of the Ukrainian agricultural sphere is its ability to maintain its potential to meet the needs of society in food, while at the same time preserves and reproduces human and natural resources, improving the efficiency of technical and technological processes and institutional management of agriculture for a long period of time irrespective of determinants variety influence on the agrarian sphere of human activity development. The determined system of the main and additional determinants of sustainable development of the agricultural sphere will allow considering the influence of their combination comprehensively, which determines the current state and properties of agricultural sphere as a whole.

Prospects for further research is the further work at sustainable development of Ukrainian agricultural sphere system of indicators during the process of applying the methodology of

quantitative and qualitative measurement and analysis of the results of food security, raising the level and quality of life of the rural population, as well as environmental protection from the negative consequences of the economic activity of modern civilization.

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Устойчивое развитие агросферы Украины: дефиниция и детерминанты

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Проведен критический анализ понятия устойчивого развития в агросекторе, а также определено и обосновано систему детерминант устойчивого развития агросферы. Установлено эколого-экономический, консервативный, процессный, синергетический и системный подходы к определению устойчивого развития агросферы. Придерживаясь системного подхода к его определению, автор сгруппировал детерминанты устойчивого развития агросферы на основные (экологические, экономические, институциональные, политические, социальные) и дополнительные (информационные, организационные, технико-технологические), которые оказывают влияние на эффективность ведения сельского хозяйства и развитие сельских территорий в частности.

Ключевые слова: агросфера, детерминанты, концепция, продовольственная безопасность, ресурсы, сельское хозяйство, сельские территории, системный подход, устойчивое развитие.

Sustainable development of ukrainian agricultural sphere: definition and determinants

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A critical analysis of the concept of sustainable development in the agrarian sector was carried out, as well as a determinant system of the sustainable development of agricultural sphere was defined and backed up with facts. Ecologo-economic, conservative, process, synergetic and systematic approaches to the determination of sustainable development of agricultural sphere have been revealed. Following the systematic approach to its definition, the determinants of the sustainable development of agricultural sphere were grouped into the main (ecological, economic, institutional, political, social), as well as additional (informational, organizational, technic-technological). All of them have an impact on the efficiency of agriculture and development of rural territories in particular.

Key words: agricultural sphere, determinants, conception, food security, resources, agriculture, rural territories, systematic approach, sustainable development.

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