THEORETICAL PRINCIPLES OF FORMATION THE PLATFORM OF SYSTEMIC INTERACTIONS OF LAND RESOURCE AND MARKET CYCLES OF DEVELOPMENT

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Global trends in the development of economic theory and methodology today demonstrate to the urgent need to formulate a new conceptual framework for economic relations, regulate them, conduct a new economic policy, and turn to the newest vision of economic practice, in particular in the field of nature using. The above factors also determine the choice of research direction for the systemic interaction of land resource and market cycles of development.

The purpose of this article is to investigate the conceptual foundations of forming a platform for systemic interactions between the land-resource and market cycles of development to ensure social well-being and sustainable spatial development of the country. The achievement of this purpose necessitated the following tasks: to define the goals, the aim of the platform of systemic interactions of the land resource and market cycles of development and to determine the structure of the interconnected elements of the platform at the national level.

As a result, the theoretical principles of formation a platform of systemic interactions of land resource and market cycles of development are investigated; in particular the identification of its system characteristics is made in the article. The structure of the interconnected elements of the system interaction platform at the

national level is outlined. The goals and purpose of its functioning are determined and the aim of the first one to achieve the goal – to ensure public well-being and sustainable spatial development of the country is justified, as well as the functions of the platform of systemic interactions of land resource and market cycles of development at the national level.

Keywords: platform, land-resource and market cycles of development, public welfare, sustainable development.

Topicality. Development trends and the global scientific community are finding more and more ways to quickly and efficiently form systemic interactions through the use of a new market infrastructure called the Business Platform. The development of multilateral business platforms is a consequence of changes not only in production, consumption, transportation, supply, but also in every sector of the economy and society as a whole. The basis of such a business platform is the use of systems designed to bring together entities that could not previously be combined and provide them with tools for collaborative interaction. Such platforms will have a huge impact on the development of markets, in particular land-use and market cycles of development at all hierarchical levels. This is the reason for choosing the direction of study.

Analysis of recent research and publications. In the context of transformational changes, scientists such as S. Bobilev, I. Bystryakov, I. Komar, D. Klinovy, A. Tretyak, M. Khvesik, A. Khozhayev and others devoted their achievements to solving the problem of interaction between society and nature through a platform economy. However, the need to explore the theoretical foundations of the formation of a systematic system of interactions between land-resource and market cycles of development, which operates on different scales in time and space, to achieve environmentally-friendly and cost-effective land use and its resources, has been actualized.

The purpose of the article is to investigate the conceptual foundations of forming a platform of systematic interactions of land-resource and market cycles of development to increase the level of capitalization of land use.

Methods. The theoretical basis of the study was the current provisions and principles of economic theory, economics of land and nature, numerous scientific works of world importance on issues related to the essence of the problems that are solved in the article.

Results. One of the most important roles in the life of our country and any country is played by the earth as a combined natural resource. However, its specificity is that the land has several hypostases at the same time [1, p. 24-25]:

• the territory of the country, the main state-forming component (national security);

• a universal spatial basis that is constantly maintained at the expense of a certain correlation of land categories and types of land use (spatial security);

• the main means of production in agriculture and forestry (food security);

• the main component of nature (environmental safety);

• the foundation of water, mineral, forest, recreational and other resources (economic security).

It is known that land as a combined natural resource, land use and land use by industry are large and complex systems [1, 2]. For example, we give a diagram of the interaction of land use systems and land use by industry with higher and lower levels (Fig. 1).

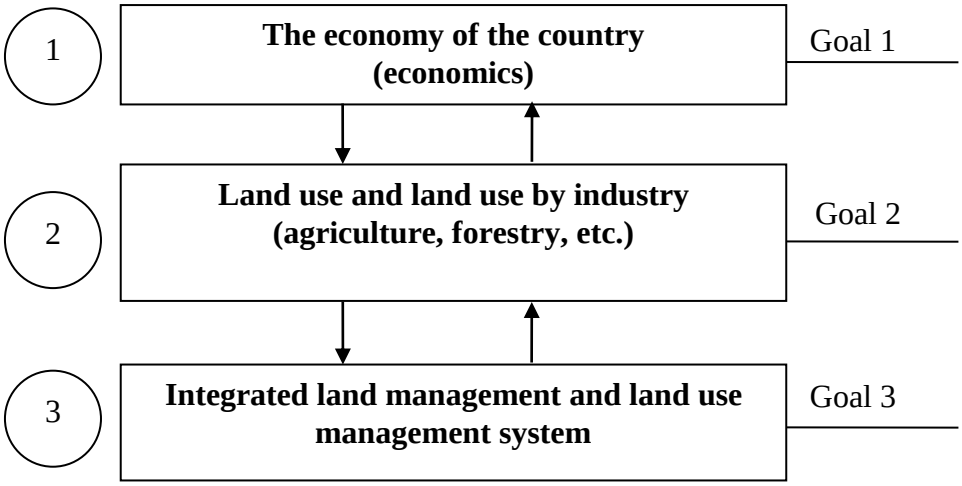

Fig. 1. Scheme of interactions of systems of different hierarchical levels

As can be seen, land use and land use by industry (agriculture and forestry, etc.) are part of a larger system of the first hierarchical level - the economy of the country (national economy). In turn, the second system includes many lower-level hierarchical systems, the most important of which will be an integrated land and land management system (system 3), which contains all levels of government - from ministries to landowners and land users.

It follows from the foregoing that there is an urgent need to develop a platform of interaction between state and public institutions in order to balance the various interests and to address a number of problems concerning environmentally sound and cost-effective land use and the resources that are on it. Her solution is seen in the formation of a platform of systematic interactions between land and market development cycles.

In their study, S. Bobilev and A. Khozhayev state that the reproduction of natural cycles occurs with the aim of developing low-waste and resource-saving technologies - the creation of closed technological cycles with full use of raw materials entering the production system, without waste that would fall outside the system, since natural cycles are characterized by a defining feature: the biosphere is a closed system, where all the elements are interconnected and cause each other [3, c. 174]. That is, the formation of a platform of systemic interactions of land-resource and market cycles of development can be regarded as a business model - a

closed system that reproduces natural cycles as closely as possible. As an example, agriculture can be cited where the amount of waste is minimal due to their utilization within the industry: in the system of agriculture - animal husbandry first supplies the second feed, as well as waste processing of grain, sunflower, sugar beet and other crops. In turn, animal husbandry provides agriculture with extremely fertile organic fertilizers, creating a closed loop. Instead, the modern technogenic economy is an open system, and obtaining the final product requires significant resources and is unfortunately accompanied by significant waste.

The concept of resource cycles was proposed in 1975 by the scientist I.V. Mosquito, who believed that the exchange of substances between society and nature has a pronounced nature of the polycyclic process, and the total flow of this exchange can be divided into separate resource cycles. Generally, under the resource cycle, a scientist understood the totality of transformations and spatial movements of a particular substance or group of substances (resources) at all stages of its use by man, including search, preparation for exploitation, extraction from the natural environment, processing, transformation, return to nature. Thus, according to I.V. The mosquito divides the metabolism between society and nature into major resource cycles and sub-cycles [4, p. 75], namely:

• on the use of renewable resources, which include three subgroups: cycles of soil and climate resources and agricultural raw materials; cycles of forest resources and timber under forestry sub-cycle; cycles of flora and fauna resources with a series of sub-cycles developing on the basis of biological water resources, hunting resources, and useful wild fruits and vegetation;

• the use of minerals within which there are three subgroups: cycles of energy resources and energy with energy-chemical and hydropower sub-cycles; cycles of metallurgical resources and metals with coke chemistry; cycles of non-metallic fossil raw materials with a group of sub-cycles - mining, chemical, mineral, construction materials, especially valuable and liquid non-metallic minerals.

It should be noted that all these cycles, except for metal resources and metals with a coke chemistry sub-cycle, are directly related to land resources and they are a component of land use. Therefore, in the context of our study, it is legitimate to interpret the land-resource and market development cycle as a cycle of land-use development, a component of land resources through the transformation of land relations - an element of social relations regarding the use, protection and reproduction of land in accordance with socio-ecological and economic conditions in a certain social development gap.

The most comprehensive purpose of our study is the concept of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) [5], which is based on the six interrelated elements that make up socially -Eco-economic system that operates on different scales in time and space. We have adapted the conceptual structure for the country-wide and market cycles of development at the national level (Fig. 2), which collectively represents the unity of the interconnected elements of the platform of systematic interactions of the land-resource and market cycles of development and includes the following structural elements:

• the environment, such as land resources and land use as ecosystems;

• benefits to society from land use, including ecosystem goods and services;

• anthropogenic assets (tangible and intangible), such as an increase in the value of land benefits (capitalization of land use) through land improvements (buildings, land reclamation, land management, etc.);

• institutions, management (administrative) systems and other indirect drivers (factors) of development, such as concerned ministries and agencies, united territorial communities, landowners, land users (farmers, households), etc .;

• direct drivers (factors) of development, such as natural origin - the ecological and economic suitability of land and the value of other natural resources; anthropogenic origin - land improvements (buildings, land reclamation, land management, etc.);

• quality of life, such as land resources and land use as an environment for human life, balanced development of land use as a component of well-being.

This model of systemic interaction platform is quite simple demonstrates the complex interactions between society and nature, includes the basic elements and defines their interaction with each other, namely the most relevant in achieving the goals and objectives of the platform to ensure public welfare, development potential, land and policy in general .

The goals of creating such a platform for systematic interactions between the land-resource and market cycles of development at the national level are:

• facilitating the process of ensuring public, open and transparent involvement of land resources in the economic circulation;

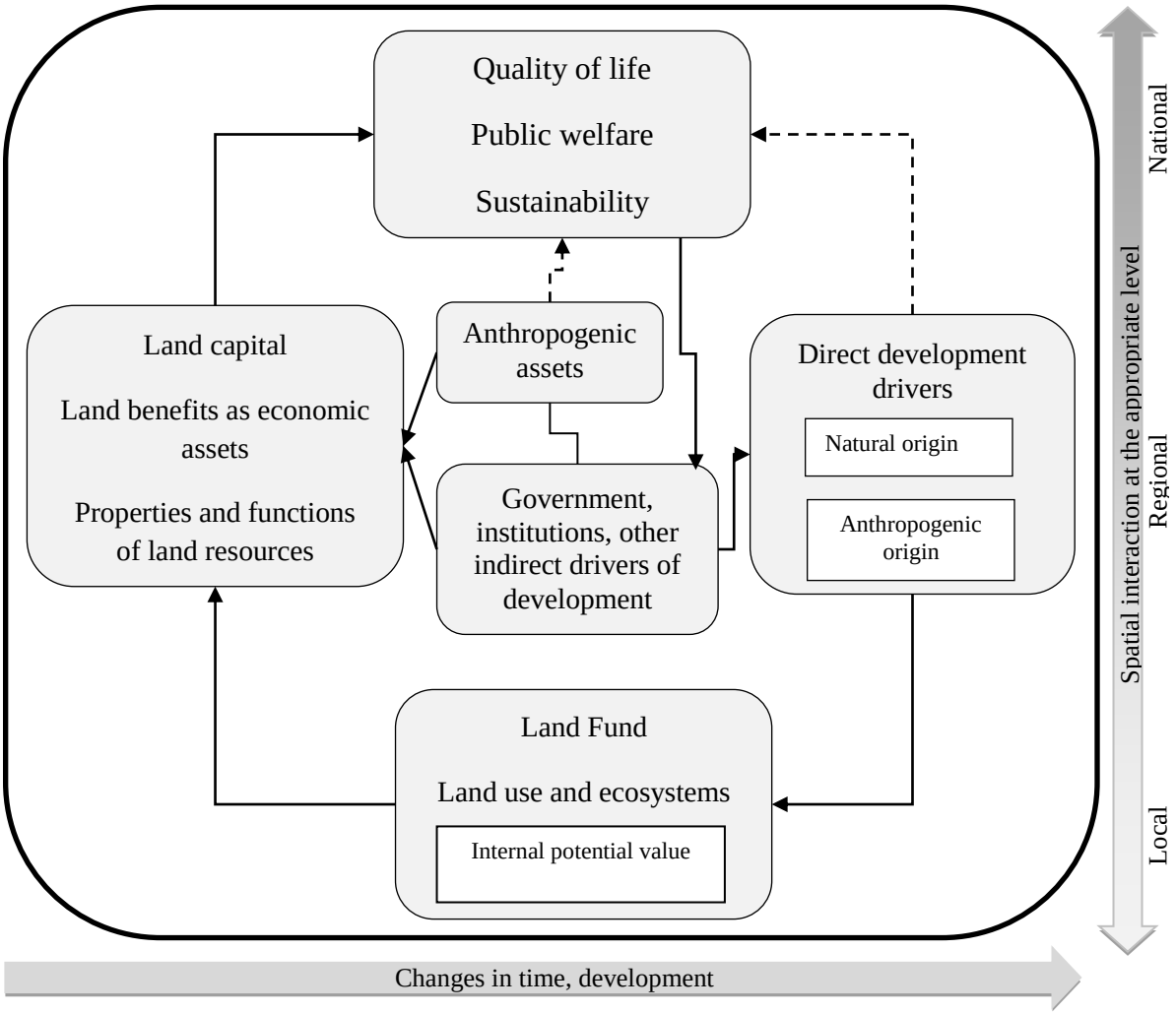

Fig. 2. Conceptual structure of the platform of systemic interactions of land-resource and market cycles of development (made on the basis of the framework concept of IPBES)

• search for financial resources from the point of view of applying the principles of structural management and project financing;

• creating the preconditions for changing the mechanism of formation of land use value by applying the concept of such a platform;

• moving away from linear types of management chains in land use to the use of business ecosystem platforms;

• socio-ecological-economic orientation of interactions of land-resource and market cycles of development at the national level.

The purpose of the systematic system of interaction of land-resource and market cycles of development at the national level is to increase the role of land resources in the national economy by transforming the system of relations between major land users and stewards of land assets in the direction of introducing transparent and common processes of building business systems, which goals, as well as stakeholder interests, including local features to ensure a good quality of life through community and well-being and sustainable development. The economic role of such platforms is to reduce transaction costs (such as seeking information when negotiating to resolve common stakeholder issues, etc.). In addition, the business platform under modern farming conditions is much more profitable and larger than the linear models of development, because it enables all participants in the relationship to establish relationships (exchange of goods, services, information, etc.).

The goal of the system interaction platform will be to achieve this goal, namely involving all stakeholders, coordinating, providing tools and services, defining rules and standards.

This approach is due to the fact that the development of economic theory and methodology has led today to the urgent need to formulate a new conceptual

framework of economic theory, conduct a new economic policy, a new vision of economic practice, because there is a public interest in another economy, such as: composition of economic actors (multilevel systems , agents); the goals and objectives of stakeholder activity; an expanded vision of the results of land use, as well as the use, distribution, consumption and exchange (taking into account additional intangible results of economic activity, such as mental models, institutions, new knowledge, precedents, development of economic systems capabilities, results of activities in the form of goods, works, services); filling of land resources (system resource - land and other natural resources); another definition of land use economics and economic land relations, etc.

Conclusions and Prospects. In exploring the systemic characteristics of the formation of the platform of interaction of land-resource and market cycles of development it is proposed to use the concept of the Intergovernmental scientific-political platform on biodiversity and ecosystem services. The adapted conceptual structure of such a platform encompasses six interconnected elements that make up the socio-ecological-economic system, which operate on different scales in time and space, which together represent the unity of the land-resource and market cycles of development. The main purpose of the platform is to reduce transaction costs in the interaction of society and nature, the main function is to achieve environmentally safe and cost-effective land use in the process of its capitalization by directing the subsystem management processes of such activities to create and further operate sustainable economic systems (or their complexes) within the overall structural model of system economy. A further study is the process of platform organization of the interaction of economic entities, taking into account the natural factor.

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Теоретичні засади формування платформи системних взаємодій земельно-ресурсного та ринкового циклів розвитку

Світові тенденції розвитку економічної теорії та методології сьогодні свідчать про нагальну потребу формування нової концептуальної основи економічних відносин, їх регулювання, проведення нової економічної політики, звернення до новітнього бачення господарської практики, зокрема у сфері природокористування. Зазначеними чинниками й обумовлено вибір напряму дослідження платформи системних взаємодій земельно-ресурсного та ринкового циклів розвитку.

Метою даної статті є дослідження концептуальних засад формування платформи системних взаємодій земельно-ресурсного та ринкового циклів розвитку для забезпечення суспільного добробуту та сталого просторового розвитку країни. Досягнення зазначеної мети зумовило необхідність розкрити наступні завдання: визначити цілі, мету функціонування платформи системних взаємодій земельно-ресурсного та ринкового циклів розвитку та визначити структуру взаємопов'язаних елементів платформи на загальнодержавному рівні.

В результаті у статті досліджено теоретичні засади формування платформи системних взаємодій земельно-ресурсного та ринкового циклів розвитку, зокрема здійснено ідентифікацію його системних характеристик. Наведено структуру взаємопов'язаних елементів платформи системних

взаємодій на загальнодержавному рівні. Визначено цілі й мету її функціонування та обґрунтовано спрямування перших на досягнення мети – забезпечення суспільного добробуту і сталого просторового розвитку країни, а також функції платформи системних взаємодій земельно-ресурсного та ринкового циклів розвитку на загальнодержавному рівні.

Ключові слова: *платформа, земельно-ресурсні та ринкові цикли розвитку, суспільний добробут, сталий розвиток.*

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Теоретические основы формирования платформы системных взаимодействий земельно-ресурсного и рыночного цикла развития

Мировые тенденции развития экономической теории и методологии сегодня свидетельствуют о насущной необходимости формирования новой концептуальной основы экономических отношений, их регулирование, проведение новой экономической политики, обращение к новейшему видению хозяйственной практики, в частности в сфере природопользования. Указанными факторами и обусловлен выбор направления исследования платформы системных взаимодействий земельно-ресурсного и рыночного циклов развития.

Целью данной статьи является исследование концептуальных основ формирования платформы системных взаимодействий земельно-ресурсного и рыночного циклов развития для обеспечения общественного благополучия и устойчивого пространственного развития страны. Достижение указанной цели обусловило необходимость раскрыть следующие задачи: определить задачи, миссию функционирования платформы системных взаимодействий земельно-ресурсного и рыночного циклов развития и определить структуру взаимосвязанных элементов платформы на общегосударственном уровне.

Как результат в статье исследованы теоретические основы формирования платформы системных взаимодействий земельно-ресурсного и рыночного циклов развития, в частности осуществлена идентификация его системных характеристик. Приведена структура взаимосвязанных элементов платформы системных взаимодействий на общегосударственном уровне. Определены задачи и миссия ее функционирования и обоснованно направления первых на достижение цели - обеспечение общественного благосостояния и устойчивого пространственного развития страны, а также функции платформы системных взаимодействий земельно-ресурсного и рыночного циклов развития на общегосударственном уровне.

Ключевые слова: платформа, земельно-ресурсные и рыночные циклы развития, общественное благосостояние, устойчивое развитие.