The Significant Aspects of Digital Transformation In State Administration For Rational Agricultural Land Use

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Abstract

Various approaches and methods of studying economic theories of well-being, which have been formed mainly during the last century, have been identified. In general, the level of public well-being needs to be measured and measured by objective and subjective factors, given the current state of the economy in the country. It is proved that the volume of welfare financing has a decisive influence on the level of the relevant social development target and the equity of social resource allocation. The foundation of the well-being of any human society is the production of material goods as a basis for the life of each person and the civilized development of society. The main factor in such products is the human labour and the land, which is a means of production of rational agricultural land use. The idea of land resource management and optimal land utilization is defined.

Keywords: State Administration, Agrarian Relations, Environmental Management, Land Potential, Transformation, Land Management, Rational Use of Land Resources, Public Policy.

INTRODUCTION

The development of society has at all times been linked to the earth, which today remains the primary means of humanity and a source of social wealth. Throughout Ukraine's independence, there is a constant concentration of land, which has the downside, resulting in people losing universal access to land as a resource. The state should, therefore, direct its land a policy to stimulate the dispersion of land ownership so that as many people as possible enjoy the benefits of land and other natural resources.

The transition to market relations entailed a radical transformation of agrarian relations, for which it was recognized as necessary to carry out land reform in the newly created state. Regulation of land relations was supposed to be aimed at creating conditions for rational land use, reproduction of preservation, soil fertility, and upgradation of the natural environment and equal development of various forms of management. Combining land relations with social and financial and growyh on this basis investment-innovative processes of analysing the level of welfare will contribute to much more efficient use of the land-resource potential of Ukraine.

REVIEW OF LITERATURE

Among the main researchers of the problems of land resources management are the following scientists: D. Dobryak, O. Dorosh, O. Drebot, V. Gorlachuk, V. Krivov, A. Martin, L. Novakovsky, A. Sohnych, A. Stativka, M. Degree, A. Tretyak, N. Tretyak, M. Fedorov, A. Yurchenko and others. Many Ukrainian scientists have devoted their study to public and individual well-being, to the study of the quality and standard of living of the population, including T. Kiryan, E. Libanova, V. Mandybur, L. Nozdrin, A. Revenko, S. Pyrozhkov, G. Filyuk, M. Shapoval and others. However, the

use of welfare analysis to improve the management of land potential of territories is a relatively new and under-researched issue.

Over the problems of innovative rural development farms in Ukraine worked such scientists as Ambrosov V.Ya., Gorbunov M.P., Yatsenko O.M., Shubravska, O.V., Lyko P.A., Sabluk P.T., Prisyajnyuk M.V., Kotikova O.I., Pokotilova V.I., Reznik N. P., Sdigheh A. B., Gupta S. K., S. d. F. Teston etc. The scientific works of these scientists have made a significant contribution to the development of the theory and practice of innovative processes in the agricultural sector of the economy. But in the context of considering these issues in the context of sustainable development and integration requirements, it is the implementation of the agro-digital cooperation platform that will enhance the competitiveness of agricultural production.

RESEARCH METHODOLOGY

The theoretical and methodological basis of the study is the classical provisions of economic theory, concepts of social development, methods of dialectical and historical synthesis, the work of domestic and foreign scientists in the field of economics, land management, land management and digitalization. General and special scientific methods were used to solve the problems in the article, namely: monographic, methods of deduction and induction, economic-statistical, scientific abstraction and generalization, abstract-logical, synthesis methods of analysis, method of ordering expert and comparative.

The aim of the research is to focus the environmental, technological and socio-economic aspects of the state authority of optimal agricultural land utilisation in the conditions of growth of the digital nation.

RESULTS

The combination in space and time of the processes of diversification of land ownership relations with the internationalization and globalization of the economy should take place in the interests of the national community, and therefore requires special attention and regular government intervention (government regulation).

There is a need to rethink the content and functions of managing relationships in the ownership, use, protection and reproduction of natural resources through improvement, refinement and development of the institutional base of regulation of nature management in Ukraine through implementation by authorized entities managing their functions at all organizational levels. Effective management involves the separation of management and economic functions with respect to natural resources, the separation of powers in relation to natural resources, administration, monitoring and control.

There is no assessment of natural resources that takes into account all benefits and environmental and social functions, some of which are non-monetary. In general, the following problems of valuation in environmental management can be distinguished: pricing for the right to use natural resources; pricing at ecosystem services.

Current methods of valuation of natural resources, in particular land, in accordance with the law, do not reflect their real value. Valuation of land by which governed and applied to the state regulation of land relations (payment of special use, compensation for losses, sanctions, the market of rights), does not have a corresponding stimulating effect on land users and does not sufficiently implement the fiscal function.

Ensuring sustainable development is based on a balanced and harmonious balance between social needs and economic needs activity and environment. Solve existing problems land use in Ukraine and prevention of negative consequences, restoration of potential productivity of land resources is possible by creating a favourable institutional, legal and financial-economic environment. Improvement of land relations in Ukraine requires scientific substantiation of the mechanism of their development, which provides for the definition and specification of a set of instruments and methods of regulation

ISSN: 2005-4238 IJAST Copyright © 2020 SERSC of public balanced land use and environmental relations. Sustainable land use organization in Ukraine should be based on the use of administrative, legal, financial, economic, organizational and socio-psychological mechanisms. The first includes regulatory, institutional, administrative, control and permitting instruments. The organizational mechanism provides for a set of land management, planning tools and instruments for institutionalizing the governance structure. The role of the financial and economic mechanism is to use the instruments of economic stimulation and economic guarantee, market, credit-mortgage, fiscal-budgetary and innovative instruments. The tools of the social-psychological mechanism of the development of land relations belong to the moral and ethical influence, belief and scientific support of innovative development of land relations.

During the period of dogmatism and stereotypical thinking, the science of land management not only did not advance but did not have time to comprehend new realities of life. Management of the process of use and protection of land resources occurred spontaneously, without a deep understanding of those the tasks facing science itself. Many scientists have not been involved in the scientific development of the land management system. This was largely due to the lack of demand in society for new original and bold scientific ideas in land management.

The concept of land management is broad and multifaceted. In general terms, the purpose of land management is to create and maintain a system of land relations and land use that enables it to satisfy its needs to the greatest extent land-based societies. At present, in the conditions of development of the land market, there has been a reorientation to take into account the economic aspect, that is, to achieve the maximum economic effect, which most often looks like the maximum cash flow to the budget and cost recovery. However, without social orientation, the goal of management can aggravate the social situation.

The modern purpose of land management should be is focused on maximizing economic impact while ensuring a guaranteed social and environmental level.

Therefore, the purpose of land management is to create and ensuring the functioning of a system of civilized land relations and sustainable land use, which enables to create conditions of preservation and restoration of environmental properties, in particular land, to receive a maximum of financial resources from the state and local budgets.

In the context of sustainable development in Ukraine, a key role in the field of environmental management belongs to the development of a socio-ecological-economic approach to the use of natural resources, while it is important to form a system of organizational, management and economic measures as components of effective implementation of the environmentally oriented policy.

In today's socio-political context, it is especially important to form legal and information support for the land management system as the main source of budgeting for communities and populations points. This system must take into account the ecological characteristics of the lands of different functional purpose.

Currently, due to the lack of legal framework is objectively inevitable the formation of an organizational and legal mechanism for managing land resources, based on the economic interest of the subjects of land relations, does not contradict the environmental feasibility of rural and urban land

At the present stage of economic and political transformation in Ukraine, an instrument for solving the problems of efficient use of land resources in general, individual objects of the property complex in the interests of meeting the needs of society and citizens may serve land management, state land cadastre, real estate inventory and land monitoring - as an information base on the object of management – land fund.

Since the 1970s, the concept of sustainable development has begun to emerge within the United Nations (UN) system under the auspices of UNESCO. According to the UN formulation, the

development of a society that can meet the needs of present generations without sacrificing the opportunities left to future generations to meet their own needs must be sustainable.

The sustainability of development is ensured by the balanced activity of society in three dimensions: social (cultural growth), economic (material support) and environmental (natural equilibrium).

Based on this definition, sustainable development of the region should be understood as the functioning of the territory with established borders, which allows satisfying the needs of the population through the use of accessible resources while retaining sufficient resources to meet the needs of future generations.

One of the fundamental resources of human economic activity island. Land use, like any other resource, should be rational. The rational use of land resources means the achievement of maximum effect in the implementation of current whole land use, taking into account the beneficial interaction of land with other natural factors while maintaining the same opportunities in the future.

The land management system of economic entities should be based on:

- distinguishing between public and civil law in the field land use;
- the flexible regulatory framework in the field of efficiency improve the use of objects of land and property complex of economic entities;
- a systematic approach to the state cadastral accounting of real estate objects and their evaluation;
- a fair tax system of real estate, which eliminates a large (1.5-2 times) tax burden for agricultural producers compared to settlements.

The complex problem of maintaining the balance between nature and society in nature management can be solved by introducing an ecological and economic mechanism in nature management.

Any economic mechanism is an expression of the economic relations of different actors in society in a given territory. It can be both rational and irrational. The need to account for the economic mechanism of the whole diverse spectrum of environmental factors influencing the whole territory transforms it into an ecological and economic mechanism. Thus from the concepts of the economic mechanism largely depend on the results of public well-being, the state of the environment and as a result of health population.

Consider the system of implementation of management methods in nature management on the example of land use and protection.

Under the ecological and economic mechanism of environmental management understand the system of organization of life in a certain territory in the aggregate ways of regulating the relationship between land users, landowners and tenants, aimed at improving the environmental and economic status of the land.

The management of environmental management in relation to the use and protection of land resources uses different methods of influence on the collectives and individual employees of agricultural enterprises. Among they are the most widespread administrative, legal and economic methods. As noted earlier, special attention should now be given to the environmental and social components of land use and protection, therefore, the economic management method should be replaced by the integrated socio-environmental method. The effectiveness of the management system is critically determined by the state of control and regulation of the use of natural resources, including land.

The ecological and economic mechanism of land management is an integral part of the economic mechanism of environmental management as a whole, therefore, it must be consistent with other natural ecosystem processes. The ecological and economic mechanism of land management is regulated by the state and includes a number of certain restrictive procedures.

The state, in the form of authorities, as well as local self-government bodies, forms priority directions for the development of land relations, develops rules and rules for the relationship between landowners and users sites.

The current use of land resources in Ukraine does not meet the requirements of balanced environmental management, because violated environmentally acceptable the ratio of arable land, natural forage, forest plantations, which adversely affects the sustainability of the agro-landscape.

Some areas of productive land have lost economic fertility. Due to excessive ploughing, the deficient balance of biogenic elements, insufficient introduction of organic substances, mineral fertilizers, ameliorant, pollution, etc., land resources of Ukraine are degraded in modern conditions. The environmental situation in recent years has deteriorated so much that it will now depend on both the economic status of the business entities and the provision of quality food to the population, namely, the food security of the country. Therefore, one of the most important components of Ukraine's economic security is the provision of an ecological and economic component in the agricultural sector of the country's economy.

Regarding agricultural lands in the management cycle, the external environment defines the whole set of aspects of the management process that are not directly included in it, but the change of characteristics of which can affect both the goal setting and the result obtained. These aspects include requirements for management activities and their performance, including criteria for evaluating their effectiveness; current norms (legal, ethical, environmental, etc.) and principles of activity; activities that can be separated institutional (regulatory, including forms and realization of land ownership rights), resource (personnel, material and financial) and organizational, including their information component. The closed chain "need (motivation) \rightarrow goals, objectives \rightarrow implementation (actions, technologies) \rightarrow result in \rightarrow performance evaluation \rightarrow adjustment" directly forms the structure of the agricultural land management cycle.

In agricultural production, the need is due to the need to ensure the sustainable development of the land natural-economic system, which includes the totality of natural components and socio-economic actors, taking into account their organizational forms, the order of use of various resources, etc. The need is specified in the motives due to the need to ensure the rational use and optimization of the structure of land resources, creating favourable organizational and economic conditions for the functioning of economic entities of different forms of ownership, providing protection and reproduction of soil cover, as well as sustainable socio-economic development of rural settlements; the purpose, taking into account the conditions, requirements, norms and principles, specifies the task of management in terms of characteristics (criteria) of the desired socio-ecological-economic result of management activities: implementation involves the implementation of an interdependent set of specific actions and technologies, which determines the conditions, forms, methods and means of achieving management tasks; the result characterizes the level of socio-ecological and economic problems achieved in the management process in relation to a specific territory and time period; Performance evaluation shows the degree of achievement of the desired socio-ecological and economic characteristics; the adjustment is intended to clarify and, if necessary, amend the organizational and economic conditions for the functioning of economic entities, their resource support, the issue of protection and reproduction of soil cover and sustainable socio-economic development of rural territorial entities. A special place among the structural components of the management cycle is self-regulation, which determines the conditions and opportunities of natural expediency functioning of the natural component of land resources from the standpoint of biogeocenosis. The form and realization of land ownership rights are equally important conditions for ensuring the effectiveness of management activities. Land ownership forms the basis for other relationships that are drawn up in the process of extended agricultural reproduction, which includes a system of redistribution of rights to ownership of the assets and outputs of production and distribution. In terms of land management, property relationships are quite complex and controversial because characterized by external conditions - restrictions on land ownership, use and disposal. The

relationship of ownership, ownership, use and disposal to management should be considered, first of all, as a ratio of the categories «genera», «special» and «single». Due to the social division of labour and the interconnection of production activities of individual agricultural producers, the property takes different forms, each of which can be effective in specific conditions: natural landscape, economic, social, demographic, historical, etc.

Natural-resource, economic-geographical, investment, budgetary and demographic potentials are the basis on which economic and social relations develop. In the conditions of growing social heterogeneity, differences in the availability of resources (natural-climatic, labour, capital, information, etc.). Necessity rapprochement of territories for the formation of a single socio-economic space sharply raises the question of defining new approaches in managing the social development of territories and developing a strategy for improving their effectiveness.

In today's difficult environment, further socio-economic development of rural territorial communities requires the search for internal reserves based on the competitive advantages of their territories. At the same time, actions of local self-government bodies should be directed not so much at the redistribution of higher budget funds, but at the receipt of revenues on their own territory through the development of an organizational and economic mechanism of formation of conditions for self-development of communities and economic entities. The self-government bodies of the municipality should create conditions for the involvement of local resources in the process of socio-economic development, and to ensure the growth of the local budget revenue on this basis.

CONCLUSIONS

The digitalization of the agricultural sector takes place simultaneously in three environments: (1) the real (offline) environment, (2) the virtual (online) environment, (3) the institutional environment. Within the real environment, the digitization of physically existing objects, including the population of rural territories, agribusinesses, ICT infrastructure, etc., is taking place. The virtual environment is regarded as space design and use of digital technologies and platforms. The institutional environment is responsible for building a regulatory framework based on digital principles as fundamental. Within these environments, at their intersection, digital business ecosystems are created as an aggregate physical and virtual (digital) objects and entities.

Optimal utilisation of land resources of nation in the conditions of the digitalisation will be possible due to the best combination of economic and control management, which should be embodied in the critical economic system of optimal agricultural land utilisation, which should be applied on the zonal level. The growth of such a system is the objective of further technical researches in the agriculture science of the chosen research.

REFERENCES

- Ambrosov V. Ya. (2007), "Large-scale enterprises as a basis for the introduction of innovations", Ekonomika APK, no.6, Pp.14-19.
- O. Harnaha, "The theoretical basis to ensure rational land use", Economist, 12, 2011, Pp. 41-44.
- 3. O. Isachenko and V. Somochkin, "The leading role of public land in the organization of environmental management" Land Management and Cadastre, 1, 2014, Pp. 10-19.
- Horbunov M.P. Yatsenko O.M., Azhel' T.O.(2016), "Problems of innovation in agriculture of modern Ukraine", Visnyk NTU «KhPY», no.24, Pp.17-20.

- M. Ievtushenko, "The use of state mechanisms in the implementation of the concept of rational land use and areas of improvement", Bulletin of Kharkiv National University named after V. N. Karazin, 970, 2011, Pp. 242-245.
- 6. Kotykova O. I.(2015), "Theoretical principles of formation of an innovative model of agricultural land use", Stalyj rozvytok ekonomiky, no.5, Pp.9-13.
- 7. O. Bryndzia, "Economic levers systematic approach to sustainable agricultural land use", Science and economics, 2, 2014, Pp. 99-105.
- 8. Mesel'-Veseliak V.Ya. (2011), "Economic preconditions for ensuring the expanded reproduction of agricultural production in Ukraine", Ekonomika APK, no.3, Pp. 9-16.
- 9. O. Palenychak "Economic incentives promoting sustainable agricultural land use", Sustainable Nature, 1, 2014, Pp. 69-72.
- Lajko P.A., Babiienko M.F., Kulaiets' M.M., Muzyka P.M., Vitvyts'ka O.D., Lajko H.P., Buzovs'kyjYe.A., Skrypnychenko V.A. (2008), "Information provision of the formation and functioning of the market of scientific and technical products as an integral part of innovation activity", no.7, Pp.96-105.
- 11. M. Stupen and O. Skorupska, "Economic aspects of land use for agricultural purposes", Bulletin of Lviv national agrarian University, 21(1), 2014, Pp. 389-395.
- 12. Available at: http://www.ukrstat.gov.ua. (Accessed 15 Jan 2019).
- 13. L. Shashula "The role of organic agriculture in the economic provision of environmental management", Sustainable Nature, 1, 2014, Pp. 389-395.
- 14. Pokotylova V.I. (2008), "The role of Science in the formation of the innovative potential of the agro-food complex", Ekonomika APK, no.7, Pp.68-75.
- 15. A. Dubrovyk-Rokhova (2018, April 12). Digitization is just the beginning. [Online]. Available: https://day.kyiv.ua/uk/article/ekonomika/didzhytalizaciya-ce-lyshe-pochatok.
- Prysiazhniuk M. V., Zubets' M. V., Sabluk P. T. (2011), Ahrarnyj sector ekonomiky Ukrainy (staniperspektyvyrozvytku) [Agrarian sector of Ukraine's economy (state and prospects of development)], NSC IAE, Kyiv, Ukraine.
- 17. I. Yasinetska, O. Petrishche and I. Kovtyniak, "State land castle as an informational base", Economy and Society, 14, 2018, Pp. 680-685.
- 18. Sabluk P.T. "Innovative model of the agrarian sector development of Ukraine's economy and the role of science in its formation", available at https://nonproblem.net/wp-content/uploads/2017/10/34-42.pdf. (Accessed 13 Jan 2019).
- 19. A. Martyn (2017, July 3). State Land Cadastre: Where Are We Going? [Online]. Available: https://agravery.com/uk/posts/author/show?slug=derzavnij-zemelnij-kadastr-kudi-jdemo.
- 20. O. Sakal (2019, September 3). White Land Market: Reality and Expectations [Online]. Available: https://www.epravda.com.ua/publications/2019/09/3/651218/
- 21. Shubravs'ka O. (2012), "Innovative Development of the Agrarian Sector of the Ukrainian Economy: Theoretical and Methodological Aspect" Ekonomika Ukrainy, no.1, Pp.27-35.
- 22. M. Stupen, S. Rohach, and I. Rii, "The mechanism of economic regulation of land relations", Economist, 2, 2015, Pp. 42-43.
- Reznik N. P., Sandeep Kumar Gupta, Olena M. Sakovska, Anatoliy D. Ostapchuk, Ruslana V. Levkina; Ukrainian World Exchange Market of Oilseeds: A Research of Challenges for Growth, International Journal of Engineering and Advance Technology, ISSN 2249-6958, Vol-8, Issue-6, 2019, Pp 3823-3829
- 24. Reznik N.P., DemyanYa. Yu., Tokar Ya .I., Sandeep Kumar Gupta and Anatoliy D. Ostapchuk; Mechanism of Investment Maintenance For The Sustainable Development of The Agricultural Sphere, International Journal of Innovative Technology and Exploring Engineering; ISSN: 2278-3075, Vol-8 Issue -11S, 2019, Pp 112-116.

- 24. Sedigheh Asghari Baighout, Sandeep Kumar Gupta, Serdar Vural UYGUN and Rabi Kumar" Investigating the Factors Affecting the Selection of Grapevine top wire method in the Malekan East Azarbaijan Gardens: Economic Growth, International Journal of Scientific and Technology Research, ISSN 2277-8616, Vol- 8, Issue-12, 2019, Pp 693-700,
- 25. Sandeep Kumar Gupta, Rainu Gupta, Vivek Srivastava and Ram Gopal "The Digitalisation of The Monetary system in India: Challenges and Significance for Economic Development", Journal of Emerging Technologies and Innovative Research, March 2109, Vol 6, Issue 3, 2019, Page 01-04, ISSN: 2349-5162.
- 26. Sayonara de Fátima Teston, Sandeep Kumar Gupta, Transforming Leadership and Rural Successors, XXV Scientific Initiation Seminar, Integrated Teaching, Research and Extension Seminar and University Exhibition, Universidade do Oeste de Santa Catarina, Brazil, ISSN 2237-6593, October 2019.