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# DIRECTIONS FOR IMPROVEMENT OF LAND USE ADMINISTRATION WITH CONSIDERATION OF ENVIRONMENTAL SAFETY REQUIREMENTS

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Abstract. It is revealed that the general index of quality of state administration of land use in Ukraine is 15.5 points, which holds 76th place out of 186 states. It is revealed that its quality is determined by the coherence of the components of the administrative process: legal, regulatory, fiscal and information management. The essence of ecological and economic tools of land administration, which prompts landowners and land users to rational land use with financial, credit, fiscal, price, subsidy, control and other tools, is described in detail. It is determined that land protection activities should be financed from the state budget, from the profit of economic entities, from environmental, economic and insurance funds, provision of bank loans. In order to increase the responsibility of landowners and land users for compliance with ecological requirements in economic activity, introduction of land management regulations and economic sanctions is proposed. Areas of improvement of administration of land use taking into account the requirements of ecological safety are given. **Keywords:** ecological and economic instruments, land use administration, economic

stimulation, ecological safety

### Formulation of the problem.

Given the current ecological state of the land, the problem of it protection has become a security issue for the country. Therefore, ensuring the protection of lands and rational use of them requires an integrated and balanced approach at all levels – from local to state, taking into account the interests of individuals, communities and society as a whole. Priority in the settlement of this process belongs to the administration of land use, the success of which is assessed by the ability of management to administer land in an efficient, productive, and less costly way.

In this regard, the land administration system should guarantee the right to own land, support the taxation of land and real estate, provide monitoring of the land market, protect the land of state property, improve land use planning and its infrastructure, ensure the quality of land resources and environment management, to contribute to the completion of land reform. The general index of quality of state administration of land use in Ukraine in 2017 is 15.5 points (76th among 186 countries). The leaders in this position are: Singapore – 29 points, Lithuania and the Netherlands – 28.5, Taiwan – 28.5, Rwanda – 28.0 points and Estonia on the sixth place [5, p. 220].

In this context, there is a need to expand the possibilities of administering land use to manage rights, limitations and responsibilities that can be solved through the management of business processes and administration systems that directly affect human activities in relation to land. This is determined by the implementation of relevant laws, institutions, processes and technologies, standards within which managers and administrators must operate the land.

*The purpose of the paper* is to investigate economic and environmental instruments that affect the quality of land administration and suggest directions for improving these instruments, taking into account environmental safety requirements.

## Presenting main material.

The quality of the land use administration process is determined by the interconnectedness and coherence of the components of the management process - legal, regulatory, fiscal and information management, and the loss of one leads to a violation of the entire administration technology. The legal component is aimed at protecting the interests of business entities, subject to the fulfillment of their obligations in the possession, use and disposal of land in compliance with the ecological safety of land use. The fiscal component is aimed at obtaining economic benefits to economic entities from the use of land in compliance with the requirements of land protection activities. The importance of the regulatory component is to stimulate landowners and land users (introduction of preferential taxation, lending, insurance, limitation and subsidies) in order to increase land capitalization and sustainable (balanced) development. However, the key element in the system of land administration is the information and management component, since it accumulates all the others [13].

In scientific papers, there is an opinion that the effectiveness of land use administration depends on the effectiveness of two interrelated subsystems: 1) management – a key instrument for implementing land policy and land use management within the framework of building an integrated land use management system; 2) information (contains land-information systems, geospatial data infrastructure and electronic control system (e-government)) [5]. The effectiveness of the land administration system depends on the level of modernization of cadastral information as a tool for regulating land-property relations of the state.

According to A. Tretiak, O. Dorosh, the hierarchical land use management system consists of two subsystems, one of which is managerial (subject to state administration), the other is managed (involves private management). The task of the subject of control within these systems is to direct the development of the object in the expected direction through managerial influence [12, p. 37].

A. Tretiak believes that the administration of land use should be carried out in stages: 1) the definition of the components of environmental management of land use; 2) analysis of factors influencing the ecological safety of land use [11, p. 370].

Relations in the agrarian sector in economically developed countries are based on the stimulation of direct compliance with the rules and regulations of landowners and land users associated with the use and protection of land. In the case of violation of norms and rules of land use, in a certain part their rights are terminated. For example, in the United States, such business entities are deprived of subsidies, loans, and the possibility of concluding public contracts. And for the abuse of the environment with emissions, discharges. dumping of pollutants, the use of harmful technologies in the cultivation of products fines are imposed: a) payment up to 25 thousand dollars, for each day of violation; b) criminal liability for up to two years. In the western part of Germany, for several decades, an annual soil survey, including analyses of nitrate content, is carried out. In case of exceeding the established norm, land owners and land users pay a substantial fine, and a ban on the sale of poor-quality products leads to bankruptcy.

The formation of the ecological and economic mechanism in Ukraine takes place on the basis of norms regulated at the legislative level. In particular, the Law of Ukraine "On Environmental Protection" defines: economic measures related to environmental protection and allocation of funds for their implementation; the size of payment taking into account the norms and limits for the special use of natural resources; payments for environmental pollution taking into account actual emissions and limits of dumping of waste production and pollutants; the amount of payment taking into account the limits for the deterioration of the quality of natural resources, which is the result of possession and use of them; distribution of payments for pollution of the environment and the use of natural resources; stimulation of rational nature use [9].

Requirements for landowners and land users are defined by the Law of Ukraine "On Land Conservation" (Article 35), which stipulates: not to violate the norms of land and environmental legislation; not to aggravate the qualitative state of lands and soils; do not use intensive soil tillage technologies; not to violate standards, norms and rules in the implementation of anti-erosion, agrotechnical, agrochemical, melioration and other measures; provide information on the use of pesticides and agrochemicals to relevant executive and local self-government bodies [8].

In view of the above, in Ukraine, the system of state administration of rational use and protection of land in the form of obligations to landowners and land users should be more efficiently implemented. Definition and guarantee of rights and restrictions on land use will allow determining the extent of liability in case of non-compliance and set the amount of incentives in case of their implementation.

In the field of agricultural land use, it is considered that economic levers, whose actions are aimed at land reproduction and ecological conservation, together constitute an economic mechanism for rational use and protection of land.

According to A. Martyn, the land-use system should contain economic regulators, which include: fiscal payments; transaction payments; formation of prices in the primary market of land; economic incentives for implementation of land protection measures; penalties for non-compliance with norms and rules when using land; provision of budget funds for implementation of land reform and land protection purposes [6, p. 24].

According to M. Khvesyk [10, p. 404], financial and economic regulators in the field of land relations include: land tax; rent for land; compensatory payments in case of land withdrawal; compensatory payments in case of land conservation; promotion (awards) for improving the quality of land; payments for reducing fertility of soils; taxes on civil land turnover; normative price; market and mortgage price of land; tax privileges; investment credit stimulators; fines and financial sanctions.

Economists believe that the components of the economic mechanism in the field of nature use are: pricing; charge for nature use; economic responsibility for pollution, financing of environmental protection measures (provision of budget funds, establishment of environmental funds); environmental stimulation; environmental insurance [1; 2].

Land managers note that the economic methods of stimulation for the introduction of land conservation measures should include: 1) exemption from payment of land tax areas for conservation, engaged in the creation of field-protective forest bands and anti-erosion hydraulic engineering structures, land plots in the stage of agricultural development or improvement of their qualitative status, in the defined term of the project; 2) exemption from taxation of part of the profit used for land and nature conservation purposes; 3) provision of preferential loans and loans for the purchase of anti-erosion equipment intended for the cultivation of soil, the construction of anti-erosion hydrotechnical structures, the implementation of forest-melioration activities and the chemical soil reclamation [12, p. 183–184].

In view of the above, the ecological and economic mechanism of land use administration needs to be improved (Fig. 1).

After all, the use of traditional methods (permitting mechanisms in land use and direct administration in the framework of certain documentation) are not sufficiently effective because of the lack of both economic and environmental regulatory levers. The above are manifested because of: the inability to interest agricultural producers in land-based activities through the investment of their own money; lack of links with other economic indicators of economic activity; ineffective reaction to changing ecological and economic situation in the region and the state.

State regulation of ecological and economic measures in land use is a priority direction for efficient functioning of land administration. This requires the creation of a unified national geospatial data infrastructure, online access it, and the creation of electronic information services for the purpose of efficient planning and development of land use, investment attraction, etc. [4].

It is important that land-based activities are carried out at the expense of the state budget, from the profit of economic entities, from economic, environmental and insurance funds, and the provision of bank loans. And in order to increase the responsibility of landowners, land users and tenants of land plots it is important to introduce land management regulations and economic sanctions.

For the proper functioning of the land administration system, economic levers need to be improved, for which we propose: to develop mechanisms for returning funds to economic entities that use innovative technologies to ensure rational use, protection of lands and soils; to simplify the procedure for granting subsidies, subventions, grants, privileges for land owners and land users, using the funds from payment for land, reimbursement of losses of agricultural and forestry production coming to local budgets; optimize the payment of rent payments, the cost of land, land tax and rent; to improve the mechanism of economic stimulation (to supplement the list of land protection measures in relation to which it is expedient to stimulate landowners and land users.

An important ecological and economic tool for protecting land from negative natural and anthropogenic influences on the one hand, and on the other – the system of compensation for damage caused is environmental insurance. This type of insurance will in the long run become an important element of national security, as it will contribute to the requirements of environmental safety. An important environmental tool in the land administration system is the environmental impact assessment. In this regard, environmental requirements and restrictions for investment-friendly areas should be established.

The formation of mechanisms and instruments for market turnover of land will facilitate the creation of conditions that stimulate the demand and supply of these land plots, and auctions for the sale of non-used agricultural land plots.

Responsibility for violation of land and environmental legislation should be strengthened through the introduction of market coercive measures through strict legal, tax, credit and administrative policies for: a) the use of land not for intended purpose; b) pollution of land and soils; c) waste disposal; d) excessive use and pollution within established limits (limits).

In this context, it is necessary to increase the effectiveness of state, self-government and public control over the use and protection of land. An agrochemical passport of a land plot may be an indispensable source of information for improving control over the use and protection of land and detecting violations.

O. Dorosh notes that "... the existing certification of land relates only to a certain set of agrochemical indices of the arable layer of soils, leaving out the attention of the processes and properties of soils that are inherent in deeper horizons of the soil profile, which are established and documented in the course of soil surveys. Namely, they, as a rule, directly influence the use of land, their protection, evaluation. In this form of agrochemical passport there are no quantitative indicators of the degree of erosion, gleiing, salinity, solodization, capacity of the profile and its individual horizons, which does not provide complete information for the objective solution of the problem of use and protection of land" [3, p. 23].

We believe that the content of this document should be supplemented with information on the suitability of the most appropriate use of agricultural lands, how it was used earlier, the ecological parameters of the site – the content of humus, chemical composition of the soil, measures aimed at improving the quality of land, expediency in land conservation and environmental protection measures. In the case of reducing the agro-chemical evaluation of land, sanctions are applied, and for its increase - economic incentives.

The development of agrochemical passports is a time-consuming and costly process, the realization of which is possible in the case of an agreement between the business entity and the developer of this document, which provides for payments extended in time with partial discounts. And for companies renting large land masses, the development of this document is possible on the basis of an agreement with the owners of land shares at the expense of payment of rent or part of it.

## Conclusion.

Studies conducted show that the quality of land use administration is determined by the coherence of the legal, regulatory, fiscal and information management components, among which priority is given to the latter. It was clarified that financial, credit, fiscal, price, subsidy and control instruments induce landowners and land users to

Directio	Directions of improvement of administration of land use on ecological and economic grounds
State regulation of environmental and economic measures	Implementation of a unified national geospatial data infrastructure, online access to it and the creation of electronic information services for the purpose of planning and development of land use     Use of system of state orders and contracts, grants, subventions, stimulation of land use development.     Financing of land conservation activity from the state budget, from the profit of the economic entity, from economic, environmental and insurance funds, granting of bank loans     Introduction of land management regulations and economic sanctions to increase responsibility of landowners, land users and thread to be and some the state budget.
Improvement of tools for economic stimulation	Expansion of a list of economic measures in relation to which it is expedient to stimulate landowners and land users. Optimization of the payment of land rent, the value of land, land tax, rent, aimed at stimulating the rational use of land resources. Redistribution of land rent in directions of use.
Improvement of ecological instruments	Introduction of environmental insurance as an important tool for protecting land from negative natural and man-made impacts and compensation system for damage caused Conducting environmental expertise and assessing environmental impacts Establishing environmental requirements and constraints in the development of the most investment-attractive territories Establishing environments, adequate rent from the use of assimilation potential and compensation for environmental damage.
Formation of the system of market circulation of land plots	Formation of mechanisms and instruments of the system of market circulation of land plots Assistance in conducting auctions for the sale of agricultural land not used in accordance with intended purpose Assistance in creating conditions that stimulate demand and supply of these land plots
Control and liability for violation of land and environmental legislation	Increasing the effectiveness of state, self-government and public control over land use and redistribution of land rent. To improve the control over the use and protection of land and to detect violations an indispensable source of information may be the agrochemical passport of the land plot The use of market coercive instruments through rigorous legal, tax, credit and administrative policies for: a) the use of land not for intended purposes; b) pollution of land and solis; c) waste disposal; d) excessive use and pollution within established limits

rational use of land. In this case, landbased activities should be financed by the state budget, from the profit of economic entities, from environmental, economic and insurance funds, and the provision of bank loans. The directions of improvement of the system of administration of land use, which should guarantee land ownership, support the taxation of land and real estate, provide monitoring of the land market, protect the land of state property, improve land use planning and its infrastructure, provide the quality of land management and the environment, to contribute to the improvement of the quality of land and soils and to facilitate the completion of land reform.

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#### Купріянчик І. П., Свиридова Л. А. НАПРЯМИ ВДОСКОНАЛЕННЯ АДМІНІСТРУВАННЯ ЗЕМЛЕКОРИС-ТУВАННЯ З УРАХУВАННЯМ ВИМОГ ЕКОЛОГІЧНОЇ БЕЗПЕКИ https://doi.org/10.31548/

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Анотація. З'ясовано, що загальний індекс якості державного адміністрування землекористування в Україні становить 15,5 бала, за яким їй належить 76-те місце зі 186 держав. Доведено, що його якість визначається взаємоузгодженістю складових управлінського процесу: правової, регуляторної, фіскальної та інформаційно-управлінської. Детально розкрито сутність екологічних та економічних інструментів земельного адміністрування, що спонукають землевласників і землекористувачів до раціонального використання земель за допомогою фінансово-кредитних, фіскальних, цінових, дотаційних, контрольних та інших інструментів.

Визначено, що землеохоронна діяльність має фінансуватися з державного бюджету, з прибутку господарюючих суб'єктів, з екологічних, економічних і страхових фондів, банківських кредитів. З метою підвищення відповідальності землевласників і землекористувачів за дотримання екологічних вимог у господарській діяльності, запропоновано впровадження землевпорядних регламентів та економічних санкцій. Наведено напрями вдосконалення адміністрування землекористування з урахуванням вимог екологічної безпеки.

Ключові слова: еколого-економічні інструменти, адміністрування землекористування, економічне стимулювання, екологічна безпека \*\*\*

### Куприянчик И. П., Свиридова Л. А. НАПРАВЛЕНИЯ СОВЕРШЕНСТВО-ВАНИЯ АДМИНИСТРИРОВАНИЯ ЗЕМЛЕПОЛЬЗОВАНИЯ С УЧЕТОМ ТРЕБОВАНИЙ ЭКОЛОГИЧЕСКОЙ БЕЗОПАСНОСТИ

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Аннотация. Установлено, что общий индекс качества государственного администрирования землепользования в Украине составляет 15,5 балла, по которому ей принадлежит 76-е место из 186 стран. Доказано, что его качество определяет взаимосогласованность составляющих управленческого процесса: правовой, регуляторной, фискальной и информационно-управленческой. Подробно раскрыта сущность экологических и экономических инструментов земельного администрирования, побуждающих землевладельцев и землепользователей к рациональному использованию земель с помощью финансово-кредитных, фискальных, ценовых, дотационных, контрольных и других инструментов.

Определено, что землеохранная деятельность должна финансироваться из государственного бюджета, из прибыли хозяйствующих субъектов, из экологических, экономических и страховых фондов, банковских кредитов. С целью повышения ответственности землевладельцев u землепользователей за соблюдение экологических требований в хозяйственной деятельности, предложено внедрение землеустроительных регламентов и экономических санкций. Приведены направления совершенствования администрирования землепользования с учетом требований экологической безопасности.

Ключевые слова: эколого-экономические инструменты, администрирование землепользования, экономическое стимулирование, экологическая безопасность