SCIENTIFIC APPROACHES TO THE DEVELOPMENT OF THE INDUSTRY STANDARD OF THE LAND MANAGEMENT PROJECTS FOR THE ORGANIZATION OF THE TERRITORY OF THE SCIENTIFIC INSTITUTIONS, THE LANDS OF WHICH HAVE BEEN ALLOCATED FOR AGRICULTURAL RESEARCH AND EDUCATIONAL ACTIVITIES

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Abstract.

Legislation that effectively regulated land ten years ago requires a comprehensive update and systematic approach to the development of standards, rules and restrictions.

The article substantiates the need to improve the legislative support of land management. The conceptual approach to the formation of normative legal support in the field of land management is proposed, which is based on the principles of systematicity, planning and optimality.

This approach is based on the standardization and unification of types of land management documentation, taking into account the particularities of land use according to their main purpose.

The distribution of land categories by main purpose in accordance with the Land Cadastre of Ukraine is shown, which should be the basis for the creation and improvement of standards and rules in land use.

Scientific approaches are grounded, in accordance with the improved system of legislative support of land management, to the development, composition and content of the industry standard of the project of land management regarding the organization of the territory of scientific institutions, the lands of which are allocated for agricultural research and educational activities.

Such standards must establish rules and regulations for the use of land for the intended purpose and uses, and must be taken into account when developing land use documentation standards.

Key words: land management, lands for agricultural research and educational activities, land category, type of use, land management project, organization of the territory, land use, main purpose.

Formulation of the problem. Ukrainian legislation clearly states that land use regulations are binding for all land use entities. These regulations establish the organization, state standards, rules and regulations for the implementation of works on land management, their composition and content. Today, however, the standardization of land management is at an early stage.

As the 2015 study by Novakovsky L. etc. [6] states, "during the period of independence of Ukrainian state standards, rules and regulations in the field of land management were practically not developed, and therefore in the practice of land planning often continue to apply more than forty normative documents of the former USSR (GOSTs, sanitary rules and norms, state building rules), to one degree or another" [6].

Thus, currently the main regulatory documents, which are guided by specialists in the field of land management and land cadastre are:

Land Code of Ukraine – 2001;

Law of Ukraine "On Land Management" – 2003;

Law of Ukraine "On the State Land Cadastre" – 2011;

Resolution of the CM of Ukraine "On the procedure of keeping the State Land Cadastre" – 2012;

Instruction on setting (restoration) of land boundaries to the nature (on the ground) -2010 (Order of the State Land Committee of May 18, 2010 No. 376).

Methodological guidelines for the development of land management projects that provide ecological and economic justification for crop rotation and land management – 2013 (Order of the State Land Agency of 02.10.2013, No. 396).

Except for some new legal acts (Land Inventory Procedure – 2019), improvement of the system of legislative regulation of land relations occurs only by amending the existing legislation.

However, as the world experience shows, today the world is rapidly evolving both in technology and in the social orientation of goods and services. Legislation regulating land ten years ago now requires a comprehensive update, a systematic and consistent approach to the development of standards, rules and restrictions. Only this approach will allow Ukraine to use land resources efficiently and rationally.

Analysis of recent research and publications. The problems of development, improvement and systematization of standards, norms, rules and restrictions in land use, established by legislative acts were addressed by a number of leading scientists-land managers of Ukraine (Novakovsky L., Dobryak D. [5], Dorosh Y., Tretyak A., Stetsyuk M.).

The issues of land management and rights to land plots of state scientific establishments and enterprises of the National Academy of Agrarian Sciences of Ukraine have recently been addressed by such scientists as Dorosh Y., Novakovsky L., [6], Ibatullin S., [7], Tarnopolsky A., Avramchuk B. [2].

Regarding standardization and normalization in the field of land management and organization of land management works, this issue was devoted to labor of Tretyak A. Dorosh O., Tretyak V., Kolganova I. [8], Martin A., etc. After the adoption of the Law of Ukraine "On Land Management" in 2003, which defined all types of land management documentation, no studies were conducted on the unification of different types of land management documentation. Specifically, such studies should address the issues of classifiers and standards, both for different types of land use documentation and for land with different purposes of use. The purpose of the article is to formulate scientific approaches to the development of the industry standard of the land management projects for the organization of the territory of the scientific institutions, the lands of which have been allocated for agricultural research and educational activities.

Presenting main material. According to the Land Code, nine categories of lands are allocated in accordance with the main purpose in Ukraine. However, land law does not define the concept of primary purpose, nor does it define the concept of non-basic purpose and type of use. Therefore, based on the provisions of the Land Code, as a result of studies, the application of this rule should be based on the definitions of land categories and for what purposes they are provided. Therefore, according to the Land Code of Ukraine, the main land uses are divided as follows:

Table 1

Allocation of land categories by purpose in accordance with the Land Code of Ukraine and proposals for the allocation of main purposes

N⁰	Land category	The main purpose	
	Agricultural land	- lands for agricultural production;	
1		- land for agricultural research and education;	
		- land to accommodate suitable production infrastructure.	
2	Residential and	- land for housing infrastructure development;	
	community development	- land of public buildings and structures;	
	land	- lands of other public buildings.	
	Lands of nature reserve	- natural areas and objects of the nature reserve fund;	
3	fund and other nature	- artificially created territories and objects of the nature reserve	
	conservation purpose	fund.	
4	Wellness land	- lands with natural healing properties;	
		- land for disease prevention and treatment of people.	
5	Recreational land	- land for recreation	
		- land for tourism;	
		- land for sporting events.	
6	Land of historical and	- lands under cultural heritage monuments, their complexes	
	cultural purpose	(ensembles);	
		- lands under historical and cultural reserves;	
		- lands under historical and cultural protected areas;	
		- lands under protected archaeological sites;	
		- lands under open-air museums;	

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		- lands under memorial museum-estates.	
	Forest land	- land covered with forest vegetation;	
7		- land not covered with forest vegetation;	
		- non-forest land that is granted and used for forestry purposes.	
8	Water foundation land	- land occupied by seas, rivers, lakes, reservoirs, other water	
		bodies, swamps, and islands not occupied by forests;	
		- lands occupied by coastal protection strips along seas, rivers	
		and around reservoirs, other than land occupied by forests;	
		- lands occupied by hydrotechnical, other waterworks and	
		canals, as well as lands allocated for drainage strips for them;	
		- land occupied by waterways;	
		- land occupied by artificially created land within the waters of	
		seaports.	
9	The lands of industry,	- industrial land;	
	transport,	- transportation land;	
	communications, energy, defense and other	- communication land;	
		- energy lands;	
	purposes	- defense lands;	
		- land of other purpose.	

Note: Created by the authors based on the provisions of the Land Code of Ukraine.

The Land Code stipulates that the procedure for the use of majority of categories of land is established by law or by the Cabinet of Ministers of Ukraine (except for agricultural land and land of water fund) [3].

However, currently there are no such standards, rules or procedures for the use of land by their primary purpose or transfer to other categories.

Therefore, the question of rethinking and constantly improving the system of legislative support for land management, land cadastre and protection of land and other natural resources is now extremely acute.

With this purpose, an approach to the development of regulatory support in land management is proposed, based on the principles of systematicity, planning and consistency, and includes the following:

1. The Land Code of Ukraine.

1.1. The Law of Ukraine "On Land Management".

1.1.1. The land management documentation standards.

1.2. Laws defining the procedure for land use by category.

1.2.1. Sectoral standards for the preparation of land management documentation for land with the intended purpose.

Such a system of normative documents not only complies with the provisions of the existing legislation, but also streamlines the implementation of works on land management, maintenance of the State Land Cadastre, unifies land accounting and creates conditions for data collection in order to build automated systems of management of land and property complex of the enterprise, community, country, development of regional and local land use schemes.

At present, the National Program of Use and Protection of Lands and Other Natural Resources of Ukraine, regional and local schemes of land use and protection is urgently needed, as well as the implementation of scientifically sound zoning within the boundaries outside settlements.

Today, according to the Law of Ukraine "On Land Management", there is an exhaustive list of types of documentation on land management. At the same time, in the conditions of development of the market agrarian economy and before the launch of the market of agricultural land plots, the established list of types of documentation on land management impedes the economic development of the state.

However, this Law does not provide the type of land management documentation which, by its composition and content, would provide for the organization of the territory of the institutions and enterprises to which the land was granted for research and educational purposes.

Land use documentation also does not take into account land use characteristics according to their main purpose.

In 2019, the national scientists-land managers renewed active scientific studies related to the land management of state scientific agricultural institutions of the National Academy of Agrarian Sciences of Ukraine. Thus, Tarnopolsky A. etc. states that "in order to achieve an appropriate level of quality in land inventory works for land management for scientific institutions, organizations and agricultural enterprises, the principles of planning, reliability and completeness of data, consistency and standard procedures, availability of information database, generalization of data from

adherence are needed in order to uniform principles and technology of their processing" [2]. In addition, it is necessary to take into account the need to organize the land use territory of NAAS scientific institutions, taking into account the specific scientific, research and educational orientation of the activities of such institutions and enterprises.

Therefore, the issue of amending the Art. 25 of the Law of Ukraine "On Land Management" by including in the list of documentation on land management, which take into account the peculiarities of land use for their main purpose, has already arisen.

Table 2

Nº	Project development results	Land management project providing ecological and economic justification for crop rotation and land management	Land management project for the organization of the territory of scientific institutions, the lands of which have been allocated for the implementation of agricultural research and educational activities
1	Management of land plots	Yes	Yes
2	Consideration of the specifics of the researches of scientific institutions	No	Yes
3	Formation of electronic document	No	Yes
4	Transferring the project to nature (on the ground)	Yes	Yes

Suggestions for new types of land management documentation

For example, it is proposed to develop a land management project for the organization of the territory of scientific institutions, the land of which has been allocated for agricultural research and educational activities. This project, based on scientific approaches to the industry standard, provides for the consideration of the location of buffer zones, zones of special use of land, quarantine zones and the organization of land use in accordance with the scientific substantiation of agricultural land use for research and educational purposes.

Table 2 shows the main differences between the two land management projects mentioned.

But first of all, in order to have a systematic and planned approach to improving the regulatory framework, it is necessary to define the main provisions of the industry standard of such land management project.

In accordance with its objectives, the industry standard of the land management project for the organization of the territory of the scientific institutions, the land of which is allocated for agricultural research and educational activity, should consist of six sections, which regulate the basic requirements for carrying out the land development works on the project development:

- 1. General provisions.
- 2. Surveying.
- 3. Land management design (organization of lands of scientific institutions).
- 4. Project approval and acceptance.
- 5. Transfer of the project to nature (to the ground).
- 6. Formation of electronic document.

In the *General Provisions* section, it is necessary to define the purpose of the development of the land management project; Procedure of scientific substantiation of specifics and requirements for carrying out scientific researches within the limits of land use; the persons who can be the contracting authority of the project and the basic requirements for the developers of the project of land management regarding the organization of the territory of scientific institutions, the lands of which have been allocated for carrying out agricultural research and educational activity; materials to be included in the land management project (materials should include the requirements of the following sections of this Standard). The peculiarity of standardization of the land management project for this type of purpose is the need to approve the Order of scientific substantiation of specifics and requirements for conducting scientific researches within the land use by the decision of the Scientific Council of the scientific institution-customer.

Section *Geodetic surveys* should regulate the basic requirements for topographic and geodetic survey of the land use by the state scientific institutions and enterprises of the NAAS, the grounds for the formation of land plots or the establishment (restoration) of their boundaries to the nature (on the ground). In addition, this section should list the materials that are formed as a result of surveying.

Section *Land Management (organization of lands of scientific institutions)* specifies methods of designing, ordering agricultural lands, forming boundaries of zones of restrictions and encumbrances on land, buffer zones, zones of special land use, quarantine zones, the order of land use within these territories on the basis of scientific justification for the use of agricultural land for research and educational purposes. This scientific justification must be approved by the protocol of the meeting of the Scientific Council of the developer of the land management project. The section should contain a list of materials that are formed as a result of work on the organization of the territory and the organization of lands of scientific institutions.

The fourth section of the *Project Approval and Acceptance* should set out the basic methodological recommendations for the stage of project development, the procedure for approval and acceptance of the project of land management regarding the organization of the territory of scientific institutions, the lands of which are provided for agricultural research and educational activities, as well as the procedure of the developer and customer in depending on the initial data and the initial conditions of use of state-owned agricultural land. A mandatory point for this primary purpose is to specify the approval of the scientific substantiation of the project proposals by the protocol of the meeting of the Customer Scientific Council.

The next section of the industry standard *Transfer of the project to the nature* (*on the ground*) should regulate the procedure and conditions for carrying out geodetic works on the transfer of the project (boundaries of land areas, zones of restrictions and encumbrances, buffer zones, zones of special use of land, quarantine zones, other areas identified by the project) in nature (on the ground), as well as the requirements for the copyright supervision of the implementation of the results of the

land management project. The section should contain a list of materials that are formed as a result of work on the transfer of the project to nature (on the ground).

The last section of *Forming an electronic document* establishes requirements for electronic documents for land plots, their format, content, composition, coordinate system, etc., for entering data into the Automated system of management of land and property complex (ACU) of NAAS. An important point is the verification of the electronic document by the Administrator of the ACU NAAS, after the positive conclusion of which an exchange file in XML format is formed for entering data into the State Land Cadastre.

Particularly noteworthy is the issue of the subjectivity of initiating the drafting of such a land management project, the unification of the Terms of Reference for the drafting of the project and the project itself.

The content of this industry standard can be used as a model for developing standards for the preparation of land management documentation for lands with other purposes.

It should be emphasized that such industry standards should establish rules, regulations and restrictions on the use of land for the intended purpose and must be taken into account when developing standards for land management documentation.

Conclusions. Scientific approaches to the development of an industry standard of land management project for the organization of the territory of scientific institutions, the lands of which are allocated for agricultural research and educational activities, will provide an appropriate level of quality in the work of land management for scientific institutions, organizations and agricultural enterprises, taking into account the specifics of such institutions, organizations and businesses. According to these approaches, the standard should contain six sections, each of which regulates the implementation of certain land management actions, taking into account the particularities of land use for agricultural research and educational activities.

Such a land management project could be an example of improving the legislative support for land management in Ukraine. Approaches to an improved

system of regulations are given with regard to land use by category and main purpose.

References

1. Dorosh Y.M., Dorosh O.S. Derzhavni standarty, normy i pravyla yak mekhanizm formuvannia instytutsionalnoho seredovyshche terytorialnoho planuvannia zemlekorystuvannia. Zemleustrii, kadastr i monitorynh zemel. 2015. № 2/3. S. 3–12.

2. Dorosh Y.M., Tarnopolskyi A.V., Avramchuk B.O. Metodychni pidkhody do provedennia robit iz inventaryzatsii zemel pry zdiisnenni zemleustroiu potrebuiut zmin. Zemleustrii, kadastr i monitorynh zemel. 2019. № 1. S. 6–15.

3. Zemelnyi kodeks Ukrainy vid 25.10.2001 r. № 2768-III. Verkhovna Rada Ukrainy. Vidomosti Verkhovnoi Rady Ukrainy. 2002. № 3–4. St. 27.

4. Konstytutsiia Ukrainy vid 28 chervnia 1996 r. № 254k/96-VR. URL: https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80.

5. Novakovskyi L.Ia., Bulenok V.M., Vahin Yu.M. Spravochnyk po zemleustroistvu. K.: Urozhai, 1989. – 352 s.

Novakovskyi L.Ia. Dovidnyk iz zemleustroiu. K.: Ahrar. Nauka, 2015. –
492 s.

7. Novakovskyi L.Ia., Dorosh Y.M., Tarnopolskyi A.V., Ibatullin Sh.I. Kontseptualni pidkhody do formuvannia avtomatyzovanoi systemy upravlinnia zemelno-mainovym kompleksom Natsionalnoi akademii ahrarnykh nauk Ukrainy. Zemleustrii, kadastr i monitorynh zemel. 2019. № 2. S. 4–12.

8. Tretiak A.M., Druhak V.M., Kolhanova I.H. Standartyzatsiia ta normuvannia u zemleustroi : navch. posib. K.: «Ahroosvita», 2013. – 224 s.

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НАУЧНЫЕ ПОДХОДЫ К РАЗРАБОТКЕ ОТРАСЛЕВЫХ СТАНДАРТОВ ПРОЕКТА ЗЕМЛЕУСТРОЙСТВА ПО ОРГАНИЗАЦИИ ТЕРРИТОРИИ НАУЧНЫХ УЧРЕЖДЕНИЙ, ЗЕМЛИ КОТОРЫХ ПРЕДОСТАВЛЕНЫ ДЛЯ ОСУЩЕСТВЛЕНИЯ

СЕЛЬСКОХОЗЯЙСТВЕННОЙ НАУЧНО-ИССЛЕДОВАТЕЛЬСКОЙ И УЧЕБНОЙ ДЕЯТЕЛЬНОСТИ

Законодательство, которое эффективно регулировало земельные отношения еще 10 лет назад, требует комплексного обновления и систематического подхода к разработке стандартов, норм, правил и ограничений.

В статье обоснована необходимость совершенствования законодательного обеспечения ведения землеустройства. Предложен концептуальный подход к формированию нормативно-правового обеспечения в сфере землеустройства, основанный на принципах системности, плановости и оптимальности.

В основе такого подхода лежит стандартизация и унификация видов документации по землеустройству с учетом особенностей использования земель в соответствии с их основным целевым назначением.

Показано распределение категорий земель по основному целевому назначению в соответствии с Земельным кодексом Украины, который должен быть основой для создания и совершенствования стандартов, норм и правил в использовании земель.

Обоснованно научные подходы, в соответствии с усовершенствованной системы законодательного обеспечения землеустройства, к разработке, составу и содержанию отраслевого стандарта проекта землеустройства по организации территории научных учреждений, земли которых предоставлены для осуществления сельскохозяйственной научно-исследовательской и учебной деятельности.

Такие стандарты должны устанавливать нормы и правила в использовании земель соответствующего целевого назначения и использования, и быть учтены в обязательном порядке при разработке стандартов документации по землеустройству.

Ключевые слова: землеустройство, земли для осуществления сельскохозяйственной научно-исследовательской и учебной деятельности, категория земель, вид использования, проект землеустройства, организация территории, землепользования, основное целевое назначение.

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НАУКОВІ ПІДХОДИ ЩОДО РОЗРОБКИ ГАЛУЗЕВОГО СТАНДАРТУ ПРОЕКТУ ЗЕМЛЕУСТРОЮ ЩОДО ОРГАНІЗАЦІЇ ТЕРИТОРІЇ НАУКОВИХ УСТАНОВ, ЗЕМЛІ ЯКИХ НАДАНІ ДЛЯ ЗДІЙСНЕННЯ СІЛЬСЬКОГОСПОДАРСЬКОЇ НАУКОВО-ДОСЛІДНОЇ ТА НАВЧАЛЬНОЇ ДІЯЛЬНОСТІ

Законодавство, яке регулювало земельні відносини ще 10 років тому, потребує комплексного оновлення та систематичного підходу до розробки стандартів, норм, правил та обмежень.

У статті обтрунтовано необхідність удосконалення законодавчого забезпечення ведення землеустрою. Запропоновано концептуальний підхід до формування нормативно-правового забезпечення у сфері землеустрою, який базується на принципах системності, плановості та оптимальності.

В основі такого підходу лежить стандартизація та уніфікація видів документації із землеустрою з урахуванням особливостей використання земель відповідно до їх основного цільового призначення.

Показано розподіл категорій земель за основним цільовим призначенням відповідно до Земельного кодексу України, який повинен бути основою для створення та вдосконалення стандартів, норм та правил у використанні земель.

Обтрунтовано наукові підходи, відповідно до вдосконаленої системи законодавчого забезпечення землеустрою, до розробки, складу та змісту галузевого стандарту проекту землеустрою щодо організації території наукових установ, землі яких надані для здійснення сільськогосподарської науково-дослідної та навчальної діяльності.

Такі стандарти повинні встановлювати норми та правила у використанні земель відповідного цільового призначення і видів використання,

та бути враховані в обов'язковому порядку при розробці стандартів документації із землеустрою.

Ключові слова: землеустрій, землі для здійснення сільськогосподарської науково-дослідної та навчальної діяльності, категорія земель, вид використання, проект землеустрою, організація території, землекористування, основне цільове призначення.