METHODOLOGICAL APPROACHES TO THE LAND INVENTORY WITHIN LAND MANAGEMENT REQUIRE CHANGES

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On the basis of the conducted researches it was clarified that the current legislative and regulatory acts regulating the carrying out of works on inventory of land under land management can not be applied equally to all objects of land management with peculiarities of use for the intended purpose. At the present time, in the field of land management there has been a situation in which the implementation of land management, in the sense of a set of measures aimed at the rational use of land, almost does not occur, but the whole land management system is reduced to the implementation of works related to registration of land plots, restrictions on their use, registration real rights to them, and encumbrances.

It is substantiated that for scientific institutions, organizations and agricultural enterprises with special features of land use there is a need for the development of different methods during carrying out this type of work with a clear definition of the stages of such works.

It is proved that the introduction of this methodology will allow to provide a systematic approach to the work of inventorying the lands of scientific institutions, organizations or agricultural enterprises in land management, taking into account the features of land use, depending on the specificity of use, unifying their content and improving the quality.

Keywords*: inventory, land cadastre, land management, topographical and geodetic surveys, land type, legal status of lands.*

Problem statement. With the adoption in 2011 of the Law of Ukraine "On the State Land Cadastre", the Cabinet of Ministers of Ukraine relied on a duty within six months from the date of its entry into force of the elaboration and approval of the State Target Program for the Development of Land Relations in Ukraine for the period up to 2020, in which, in particular , to provide for inventory of land [2].

At the same time, we note that in the field of land management there has been a situation in which the implementation of land management in the sense of a set of measures aimed at the rational use of land, almost does not occur, but the entire land management system is reduced to the implementation of works related to registration of land plots, restrictions on their use, registration real rights to them, and encumbrances. In addition, the current methodology for carrying out land management works for land inventory does not take into account the specifics and features of land use of a number of specific land users, such as the subjects of the National Academy of Agrarian Sciences, agricultural enterprises, including the Ministry of Agrarian Policy, the subjects of the Ministry of Defense, Ukrzaliznytsya and others.

Therefore, there is a need to revise the approaches to land inventory surveys in the field of land management of scientific institutions, organizations, agricultural enterprises and other land uses that have specific features of land use, in certain composition and content of the stages of such works. Inclusion in the land inventory stage of the analysis of the use of land and the unification of documentation will solve a number of land legal problems.

Analysis of recent research and publications. From the point of view of legal provision, carrying out works on inventory of land under land management in Ukraine is regulated by a number of legal acts [2, 3, 5, 11, 12].

In relation to the execution of these works, scientific researches are being carried out, which are reflected in the writings of A. Tretyak, M. Kalyuzhnyj, Y. Dorosh, A. Martyn, O. Dorosh and others In particular, the legal aspects are disclosed in the developments of A. Tretyak and A. Martyn [8]. Methodological approaches to inventory of agricultural lands with value are highlighted in the writings of M. Kalyuzhny and Y. Dorosha [7], and in relation to the inventory of lands of settlements and non-agricultural lands outside their borders O. Dorosh [1].

Purpose if the article – is to highlight the problems of the current methodology for conducting works on inventory of land under land management for scientific institutions, organizations and agricultural enterprises with special features of land use.

Main material. The implementation of works on inventory of land, the procedure for their implementation is regulated by a number of legislative acts and normative documents, including: Land Code of Ukraine, Laws of Ukraine "On Land Management", "On State Land Cadastre", Resolution of the Cabinet of Ministers of Ukraine of 23.05.2012, No. 513 "On Approval the order of inventory of land ". Land inventory is an important tool for obtaining up-to-date and reliable information on land-use facilities, their limits, sizes, legal status, land use status (land that is not used, used inappropriately or not for its intended purpose, identifying lands that require conservation, contaminated land land), the establishment of quantitative and qualitative characteristics [3].

In accordance with the provisions of the Land Code of Ukraine No. 2768-III of 25.10.2001, the inventory of lands of state and communal property in the cases stipulated by law has a significant influence on the formation of land plots. Article 186 of the Code also regulates the procedure for the approval and approval of technical documentation on land inventory for inventory of land, which is approved by the territorial body of the central executive authority, implementing the state policy in the field of land relations, and approved by the customer technical documentation.

In order to achieve the appropriate level of quality in conducting works on inventory of land under land management for scientific institutions, organizations and agricultural enterprises, account should be taken of the principles of planning, reliability and completeness of data, consistency and standardization of procedures, availability of information bases, generalization of data with observance of unified principles, and technologies of their processing [12]. For this purpose, a phased implementation of works in a logical sequence is offered:

1) conducting topographic and geodetic works when carried out by land management;

2) determination of land use limits and determination of land use;

3) study of documents and materials developed in previous years documentation on land management and the implementation of a comparative analysis of the current state of land use;

4) formation of information about land users and landowners, identification of rights to land plots within land use;

5) identification of regimen-forming objects within the limits of land use;

6) forming zones of restrictions and determining the regime of land use in these zones;

7) formation of inventory plan;

8) conclusions and proposals for registration of land based on the results of inventory of land under land management.

I stage. Conducting topographic and geodetic works when carried out by land management..

Topographic and geodetic works should consist of conducting field and cameral works.

Since the inventory of land is made up of a cadastral plan of the land plot (the content of which is determined by law), field work is carried out in the scope of requirements for topographical withdrawal [4, 6, 9], including the display of relief elements (in the case of such restrictions as coastal protective strips) . The works are performed in the USC-2000 State Coordinate System, or in the original LSC (Local Coordinate System).

The peculiarities of the topographic surveys of enterprises, institutions and organizations of the National Academy of Agrarian Sciences are in the need to survey elements of the organization of the territory of such objects (boundaries of experimental sites and fields, quarantine plantations, objects used for scientific purposes, field roads, etc.).

As a result of the implementation of topographic and geodetic works during the inventory of land we must obtain a topographical plan with a given accuracy on which the data on:

•• buildings and structures (the material from which the building or structure was built, the number of floors, functional purpose, administrative affiliation, etc.);

•• borders, fences (material fences, their appearance, affiliation);

•• elements of relief (artificial and natural forms, heights of embankments, retaining walls, cliffs, depths of the grooves, etc.);

•• objects of hydrography;

•• vegetation (vegetation type, its characteristic, the limit of distribution);

•• Contours and their classification;

•• underground and terrestrial engineering networks as regimens.

Stage II Determination of land use and land use boundaries.

It provides for the definition of the contours of the land in accordance with the existing state of land use (based on the materials of the reconnaissance, field survey, the results of topographical and geodetic surveys, followed by the vectorization of the available cartographic material).

On the basis of conducting topographic and geodetic surveys a set of contours (plane and linear) is obtained within the limits of land use of scientific institutions, organizations and agricultural enterprises in the territory of which the inventory of land is carried out.

The contours that were formed during surveying and geodetic surveys were classified according to the Classifier of Land Types (CoLT) [12].

The result of the work is to create a contour explication of existing lands in digital form. Within each of the land plots (in the case where land use is more than one land plot), planar paths are formed, their areas are determined as the areas of the landfills of individual types of land by coordinates and in the assigned number numbers within the limits of land use. Thus, post-explication explorations for all land plots are formed and the final areas of such land plots and land use in general are calculated.

The final result of this stage is the explicit exploration of lands within the limits of land use of an enterprise, institution or organization, which is created on the basis of contour explications by summing up the contours of each type of land for each plot of land in accordance with the CoLT [12].

Stage III Study documents and materials elaborated in previous years documentation on land management and the implementation of a comparative analysis of the current state of land use.

It is important when conducting land inventory analysis to analyze the documentation developed in previous years on land management. This approach will

allow for a comparative assessment of the changes that have taken place in the structure of land use during the previous years and will help to analyze the state of land use.

However, it is not enough to analyze only the disparity of materials in text form. Any comparative analysis without spatial data (spatial mapping of terrain paths in time space) will not allow for a qualitative result and, as a consequence, analysis of changes, their dynamics, causes and consequences will not be reliable. That is why it is necessary to vectorize the planned materials of all previous works on land management, transform the results into the state coordinate system (or derived from it LSC), create a library of synonyms for classifiers of land for the period of development of documentation on land management. Only after the fulfillment of all the conditions mentioned above, a comparative exploded explication of land is formed, as a year of development of documentation of all such materials, and at the time of inventory.

This is followed by bringing the classification of previously explored land plots up to the current requirements of the legislation. In order to provide a comparative analysis of changes in the composition of lands and to simplify the comparison of the initial and existing use of land, the land of the economy as of previous years is classified according to the current CoLT.

For example: if in the explication of the land for the developed documentation in previous years there are separate gardens, berries, then according to the Classifier types of land, they should relate to the land 002.03 Perennial planting. In the case of explicit separation of pastures on landed and wetlands or on clean, improved and with shrubs, then such categories are summarized to the site 002.02 Pasture.

After bringing the exploration of lands to a single classifier in accordance with the Procedure for the State Land Cadastre, a comparative analysis of the land use structure is performed by finding the difference in area for each type of land.

IV stage. Formation of information about land users and landowners, identification of rights to land plots.

First, in order to identify the rights to land plots, it is necessary to determine the existence of the legal documents of the enterprise or institution for land use

subject to inventory and to determine the coordinates of the limits of such land use on the inventory plan.

During this phase, it is important to determine:

1) land users who use land within the limits of land use subject to inventory without existing legal documents and without legal grounds;

2) land users who use a part of the land within the limits of land use subject to inventory without existing legal documents, but existing legal grounds for land use;

3) land users who use a part of the land within the limits of land use, subject to inventory, which have legal grounds for land use and relevant legal documents;

4) land users who do not use land under land tenure subject to inventory but have legal grounds for land use and relevant legal documents;

5) land users who do not use land within the limits of land use subject to inventory without existing legal documents, but have legal grounds for land use.

It should be noted that the existence of legal documents and legal grounds for land use does not guarantee the registration of a land plot in the State Land Cadastre and registration of the right to this site in the State Register of Real Property Rights to Real Estate. Therefore, in addition to the use of the above mentioned registries, there is a need for an analysis of the developed land use documentation for land plots within the scope of land use subject to inventory.

Table 1

Form of the list of land plots of land users and landowners and identification of rights to them

No.	Given into the ownership (use)		Not given to the property or use	Used without documents	Ued, not for the intended purpose	Unclaimed land shares	From the deceased inheritance t
	with cad. numbers	without cad. numbers					
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*

As a result of this stage, lists of land plots given into the ownership (use) of the cadastral numbers given to the property (use) are created without cadastral numbers

not given to the property or use, used without documents that certify the right to them, used, not for the intended purpose, unclaimed land shares, from the deceased inheritance (Table 1).

V stage. Detection of regimen-forming objects within the limits of land use.

In the course of reconnaissance, surveys, the study of cartographic materials and the implementation of topographic and geodetic works, objects (mode-forming object) of natural or artificial origin (water object, main pipelines object, energy object, object of cultural heritage, military object, other object determined by the law) under which and / or around which, in connection with its natural or acquired properties (in accordance with the law adopted in accordance with it by regulations, the contract, Act authorized about this on the body of state power, official, decision of the court), restrictions on the use of land are established. For the formation of restrictions on the use of land and land, the classification of such objects is carried out in accordance with Annex 6 of the Procedure for maintaining the State Land Cadastre.

VI stage. Formation of zones of constraints and determination of the regime of land use in these zones

Classification of objects is a prerequisite for determining the limits of restrictions (the width of water protection zones, sanitary protection zones, protection zones, sanitary protection zones, strips along the channels, etc.), their content, and the use of land within these limits.

The normative legal acts regulating restrictions on the use of land along (around) regimen-forming objects and which are considered decisive are:

- Land Code;
- Water Code;
- Law of Ukraine dated February 17, 2011 No. 3041-VI "On the legal regime of lands of protected areas of main pipelines facilities";
- Resolution of the Cabinet of Ministers of Ukraine No. 209 of March 4, 1997 "On Approval of the Rules for the Protection of Electric Networks";
- Resolution of the Cabinet of Ministers of Ukraine of December 18, 1998, No. 2024 "On the legal regime of zones of sanitary protection of water objects";

- State building norms of Ukraine DBN V.2.4-1-99 "Reclamation systems and structures";
- State building codes DBN V.2.5-74: 2013 "Water supply for external networks and facilities";
- State sanitary norms and rules of protection of the population from the influence of electromagnetic radiation approved by the order of the Ministry of Health of Ukraine of August 01, 1996, No. 239;
- State Sanitary Rules for Planning and Development of Human Settlements (DSP 173-96) approved by the Order of the Ministry of Health of Ukraine of 19 June 1996 No. 173;
- State sanitary rules and norms "Hygienic requirements for the arrangement and maintenance of cemeteries in settlements of Ukraine" 2.2.2.028-99;
- acts of the official authorities;
- judgment decisions.

Regime-forming objects and limits of restrictions on the use of land and land plotted on working and combined inventory plans boundaries of the zone of constraints are the result of this stage.

However, when performing the work of this stage, attention should be paid to the need to define, in addition to the boundaries of zones, restrictions and their types, as well as the use of land in these areas.

In addition, the explanatory note should contain a list of restrictions, their content, the regulatory act, which this restriction is established and the mode of land use within the limits of the restrictions.

VII stage. Formation of a consolidated inventory plan

On the combined inventory plan, in addition to the information specified in the Procedure for conducting inventory of land [12], the following are applied: buildings and structures, fences, relief elements, hydrographic objects, elements of organization of the territory of enterprises, institutions, organizations of NAAS of Ukraine (boundaries of experimental sites and fields, quarantine plantations, objects used for scientific purposes, field roads, etc.), contours and types of fields, regimens,

landowners and land users identified during the implementation of the IV stage of work. This approach will highlight features of land use of specific objects, which are the land use of enterprises, institutions and organizations of the National Academy of Agrarian Sciences of Ukraine.

VIII stage. Conclusions and suggestions on the coordination of data obtained as a result of inventory of land under land management.

The result of the work carried out on inventory of land under land management of scientific institutions, organizations and agricultural enterprises at this stage are determined:

a) changes in the structure and composition of lands on the basis of a comparative analysis with land use documentation developed in previous years regarding the limits of actual use of land and its compliance with statutory documents (if any) or state statistical reporting [10];

b) the legal status of land use;

c) restrictions on the use of land and land.

The findings will serve as a basis for providing recommendations on the coordination of the data, for example:

- consideration of legality of land use by outside land users within the land use of an establishment or enterprise;
- invalidation of the decision on registration and cancellation of registration of land plots and rights to third party landowners and land users, termination of land use by entities without existing legal documents and / or without legal grounds for use;
- restoration of boundaries of land according to primary documents certifying the right to use land or land management projects of previous (past years).

Conclusion. The proposed methodological approach to carrying out works on inventory of land in land management and strict adherence to the phasing of their implementation will contribute not only to revealing problems regarding the actual use and legal status of land within the limits of land use by scientific institutions, organizations or agricultural enterprises, but will also provide solutions to such problems, and the possibility of registration of land uses in the manner determined by

the Law (registration of the formed land in the State Land Cadastre , registration of property rights in the State Register of Real Property Rights to Real Estate and the formation of an information base for the creation of an automated system of management of land and property complex).

Implementation of this methodology at the practical level will allow to provide a systematic approach to the work on inventory of land of scientific institutions, organizations or agricultural enterprises in land management, taking into account the features of land use, depending on the specificity of use, to unify their content and improve the quality.

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МЕТОДИЧНІ ПІДХОДИ ДО ПРОВЕДЕННЯ РОБІТ ІЗ ІНВЕНТАРИЗАЦІЇ ЗЕМЕЛЬ ПРИ ЗДІЙСНЕННІ ЗЕМЛЕУСТРОЮ ПОТРЕБУЮТЬ ЗМІН

На підставі проведених досліджень з'ясовано, що діючі законодавчі та нормативні акти, які регулюють проведення робіт із інвентаризації земель при здійснені землеустрою не можуть застосовуватись рівнозначно для всіх об'єктів землеустрою з особливостями використання за цільовим призначенням. На даний час, у землевпорядній сфері склалася ситуація, за якої здійснення землеустрою, в розумінні комплексу заходів направлених на раціональне використання земель, майже не відбувається, натомість весь землеустрій зведено до виконання робіт пов'язаних із реєстрацією земельних ділянок, обмежень у їх використанні, реєстрації речових прав на них, та обтяжень.

Обґрунтовано, що для наукових установ, організацій а також сільськогосподарських підприємств, що мають особливості використання земель є потреба у розробленні різних методик при проведенні цього виду робіт із чітким визначенням етапів таких робіт.

Доведено, що запровадження цієї методики дозволить забезпечити системний підхід до робіт з проведення інвентаризації земель наукових установ, організацій чи сільськогосподарських підприємств при здійснені землеустрою, врахувати особливості землекористування в залежності від специфіки використання, уніфікувати їх зміст та підвищити якість.

***Ключові слова**: інвентаризація, земельний кадастр, землеустрій, топографо-геодезичні знімання, земельні угіддя, обмеження у використанні земель.*

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МЕТОДИЧЕСКИЕ ПОДХОДЫ К ПРОВЕДЕНИЮ РАБОТ ПО ИНВЕНТАРИЗАЦИИ ЗЕМЕЛЬ ПРИ ОСУЩЕСТВЛЕНИИ ЗЕМЛЕУСТРОЙСТВА ТРЕБУЕТ ИЗМЕНЕНИЙ

На основании проведенных исследований установлено, что действующие законодательные и нормативные акты, регулирующие проведение работ по инвентаризации земель при осуществлении землеустройства не могут применяться равнозначно для всех объектов землеустройства с особенностями использования по целевому назначению. В настоящее время, в землеустроительной сфере сложилась ситуация, при которой осуществление землеустройства, в понимании комплекса мероприятий, направленных на рациональное использование земель, почти не происходит, зато весь землеустройстве сведено к выполнению работ связанных с регистрацией земельных участков, ограничений в их использовании, регистрации прав на них, и обременений.

Обосновано, что для научных учреждений, организаций, а также сельскохозяйственных предприятий, имеющих особенности использования земель является потребность в разработке различных методик при проведении этого вида работ с четким определением этапов таких работ.

Доказано, что введение этой методики позволит обеспечить системный подход к работам по проведению инвентаризации земель научных учреждений, организаций или сельскохозяйственных предприятий при осуществлении землеустройства, учесть особенности землепользования в зависимости от специфики использования, унифицировать их содержание и повысить качество.

***Ключевые слова**: инвентаризация, земельный кадастр, землеустройство, топографо-геодезические съемки, земельные угодья, правовой статус земель.*