

IMPROVING THE METHODS OF CREATING DIGITAL CADASTRAL MAPS

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Abstract: The article is compared with modern geodetic equipment and its relevance today, making digital cadastral mapping and accuracy, completeness and accuracy of determining the location, area and quality of the area, updating and clarifying. examples of how to use data as a key to go to the electronic system.

Key words: point, real estate, map, resource, state cadastre, land cadastre.

Maintaining the cadastre of land and buildings in residential areas depends on the country's state land cadastre system, the accuracy, completeness and accuracy of information about the location, area and quality of the territory; It is determined by the updating of cadastral data and regular clarification of them. "A national report on the state of land resources and buildings is prepared every year, and the quantity and quality of land and their value for the whole country and administrative-territorial units, information on the division of land into categories, sectors, land plot owners, land plot users, land plot tenants, owners and other land cadastre related information contains information" [1].

In our country, we need to do a lot of work on the effective use of land resources. Therefore, the land cadastre of settlements is a necessary and valid information bank that describes the territory, as well as the legal, natural and economic conditions of other real estate objects closely related to the land.

As a modern definition of the cadastral system, it can be said that the cadastre is a system of storing and providing users with information on the latest state of natural resources and human-made material and spiritual wealth on the territory of our country.

The cadastral system consists of a system of updated information and documents on the geographic location, legal status, quantity and quality descriptions, and evaluation of certain types of natural, economic or other objects [5].

Settlements are a part of the whole land category and refer to the area of land demarcated for settlements. Among the land types of settlements, it is necessary to take into account land features (residential areas, areas of cultural-domestic and industrial buildings, meadows, parks, etc.). In the names of land types, the entire functional importance of the area is reflected.

In addition, it is necessary to have information for the description of the land occupied by various constructions, forests, vacant lands, unused and other lands, which serve as a basis for the width of settlements.

It is known that the land cadastre of settlements

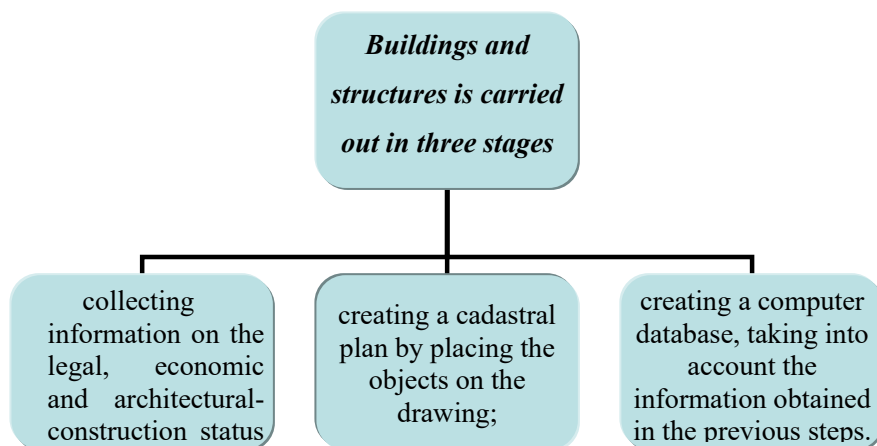
provides for registration of land users, economic assessment of land. Registration of land users and land owners consists in clarifying information about the availability of land areas, their areas, and the composition of land types in the territory of the settlement. "In the district (city) state land cadastre book, the area and quality of the land are noted, and their value is given. Occupying the necessary and sufficient total area of the city limits of the settlement is legal principles of effective land use it is necessary to create an opportunity for strengthening" [3,7]. In this case, it is recommended to make a map based on the installation of special symbols on the borders of each city.

The state cadastre of buildings and structures consists of district and city cadastral registers, cadastral plans, cadastral documents and geofunds, as well as computer data generated in the prescribed manner. Therefore, quality performance of these cadastral records is required.

Layers of the geographic information system are being created on the basis of state cadastre data. Land cadastral data is particularly important here. The main purpose of land cadastre management is to create a legal basis for the use of cadastral data for the development of the economy, ensuring the guarantee of rights to land plots, rational use of land, and their protection. "When cadastral documents are prepared and the rights of legal entities and individuals to land plots are registered, and the information during the registration process must be entered into the cadastral cards on duty" [2] .

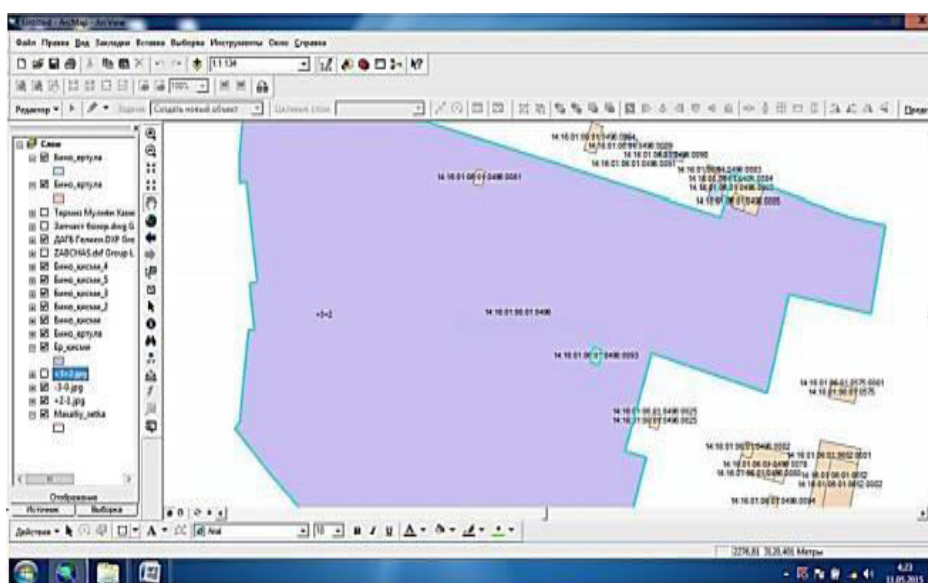
In accordance with the decisions made by our government in recent years, work is currently underway to create a unified national computerized system of state registration of rights to real estate. In the future, it is planned to create a single bank containing attributive and graphical information about real estate. In our republic, issues of cadastre of buildings and structures are improving day by day. It is traditional to maintain the state cadastre of buildings and structures in the city (registration in the cadastral register, inclusion in the cadastral plan), and automated (creating a computer database) methods are widely used. It is known that the maintenance of the state cadastre of buildings and

structures is carried out in three stages:



Picture 1. Three stages buildings and structures.

The data of the state cadastre of buildings and structures are compiled by districts and cities.



Picture 2. A fragment of a digital cadastral map compiled in Arc GIS 9.3.

The cadastral survey is prepared in the AutoCad program in accordance with the local coordinate system, and in the ArcMap main component of the ArcGis program, it is written to the conditional view of the object. their territory is divided into accounting sections.

"The main purpose of registration of land and buildings and structures is to determine the actual existence and composition of real estate (land and buildings and structures) on personal or long-term lease, to check the existence of documents confirming the right to own or long-term lease of real estate, to verify the technical status of real estate. It consists of determining the condition and assessing the value, as well as checking the existence of insurance documents related to real estate" [6].

It is appropriate to use geographic information system technologies in the creation of digital cadastral map data for the purposes of the unified system of state cadastres. Ministers of the Republic of Uzbekistan In

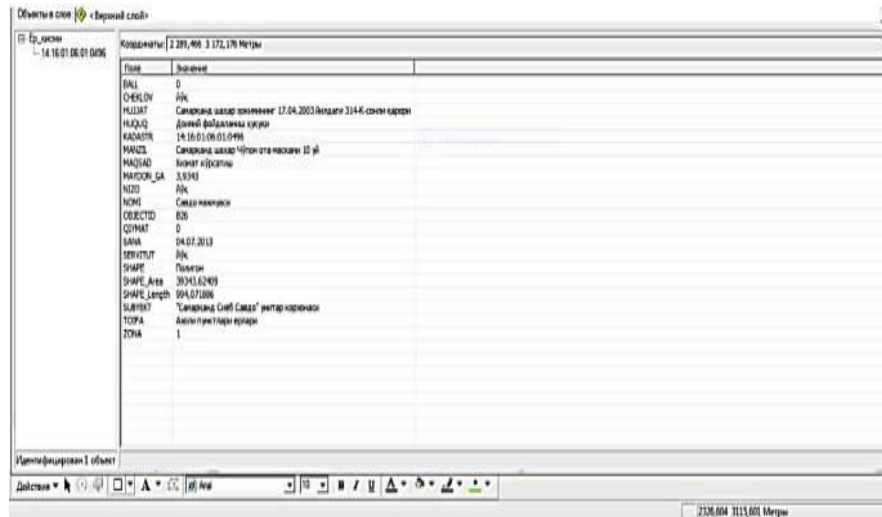
accordance with the "Regulation on the procedure for state registration of rights to real estate and transactions concluded on it" [4], approved by the decision of the Court No. 1 dated January 7, 2014, the rights of legal entities and individuals to land plots, buildings and structures (including underground structures), perennial trees, as well as mortgages and agreements on mortgages of physical rights to buildings, structures and land plots, using information and communication technologies, "a The state registration procedure was introduced according to the "window" principle.

The use of this component allows for quick preparation of software that solves various geoinformation issues. In the creation and management of geographic information systems, data on each object is collected and connected to a single system, using high-precision geodetic tools and software, connected to geodetic base points.

Arc GIS 9.3 was developed by ESRI, which allows

you to work with objects with their geographic information and attribute information. In Arc GIS 9.3, map and data are interconnected. In the database, the textual information of the class of objects is structured as a field line, cadastral number, address, legal owner, name of the object, land category, It can be expressed

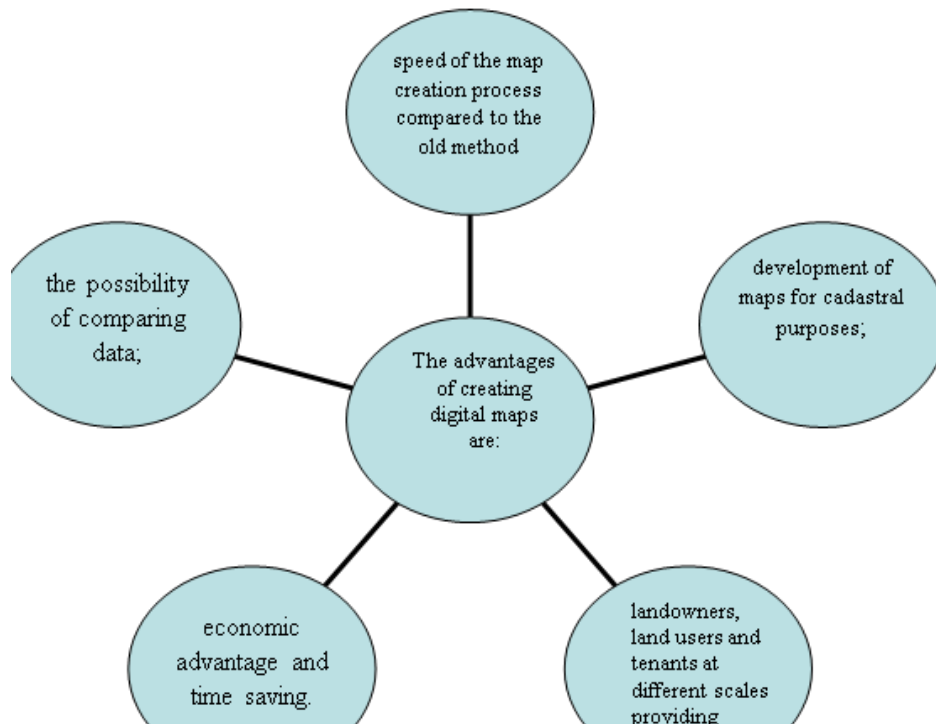
in the form of the type of right, the right document, the date of state registration, the occupied area, the purpose for which it was allocated, servitude and restrictions on the rights to the land plot, disputed issues, credit score, value and tax zone.



Picture 3. Description of objects in the database in the Arc GIS 9.3 program.

During the processing of the image, the coordinates of the turning angles of each individual object are decoded on a scale of 1:2000 for verification. based on topographical plans The purpose of creating and maintaining a land cadastral map is to clearly describe

the location of the land area, taking into account the dimensions and boundaries of the land area, as well as their integration and changes. It can be seen that the level of information and accuracy of the created maps will be high.



Picture 4. The advantages of creating digital maps

Summary. With the help of modern geodetic instruments, the process of spatial data analysis and map creation through computer programs is greatly

accelerated, and the final result is of high quality. Through modern geodetic tools, we have the opportunity to sharply operationalize the decision-

making process, in particular, forecasting, the possibility of simultaneous analysis of several different databases. Surveying and evaluation of land and buildings is important in establishing the right of ownership, state registration and taxation.

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