

SCIENTIFIC AND THEORETICAL FOUNDATIONS FOR THE DEVELOPMENT OF MAPS OF THE LEGAL STATUS OF STATE LAND CADASTERS IN THE TERRITORY USING GIS TECHNOLOGIES

Yokubov Sherzodbek Shavkat ogli (ORCID: 0000-0001-7118-073X)

Doctoral student of Fergana Polytechnic Institute.

E-mail: sherzodbekyokubov95@gmail.com

Abstract: In this article, the development of maps of the legal status of state land cadastres in the region using GIS technologies, the development of maps of the legal status of cadastres based on the obtained data, analyzes and practical results, recommendations and information on improving the legal status of cadastres using GIS technologies information provided.

Key words: GIS (Geographic Information System), cadastre, map, information, data location, geographic location, models.

INTRODUCTION

State land cadastre is an information system that collects legal information about all types of settlements, places and owned land of a country or territory. It is understood that the legal status in the cadastre has also changed when changes, updates and changes are made to this information.

In this, GIS (Geographic Information System) technologies will be important. GIS is an information system that facilitates data location, study, analysis, and representation of data in the form of maps or models. The following GIS technologies can be used to better understand and manage the legal status of state land cadastres:

GIS is necessary for displaying geographic information and displaying maps. The technological system of mapping is used to display cadastres in the form of maps, to display information about their geographical location, area [1,2,3].

The database of cadastres contains information about the status of rights. These databases are stored in GIS technologies and allow them to be written to, read from, and modified.

With the help of GIS technologies, it is possible to conduct spatial analyzes to analyze the legal status of cadastres. This analysis helps in providing insights into the geographic location and other features of the cadastres.

GIS technologies help in monitoring the legal status of cadastres. It provides an opportunity to collect, analyze and monitor information on legal changes, updates and problem solving [4,5].

RESEARCH METHODS

Research methods used to create maps of the legal status of state land cadastres in the region include:

- Data meshing and analysis: First of all, it is necessary to mesh the data of the state land cadastre and analyze it. This analysis process provides the necessary information to study the legal status, rights holder, area and other characteristics of the state.
- Use of GIS technologies: with the use of GIS technologies, information about cadastres in the area is collected and displayed on maps. These systems allow displaying cadastres on maps along with location, area, rights holder, and other information.
- Teranitization: Teranitization, that is, the geodetic distribution or description of the area, is an important part of data acquisition in the case of full consideration of cadastral data. The teranitization process provides more complete and accurate information about the area of cadastres in the region.
- Information grid: it is possible to get a grid of cadastre, legal status, and other information about the owner of the territory. This information is used for displaying on maps using GIS technologies.
- Economic and legal analysis: It is very important to conduct economic and legal analysis about the legal status of cadastres and the right holder. With the help of these analyses, the legal status of cadastres and their changes are understood.
- Problems: It is very important in the process of developing state land cadastre problems and recommendations for their solution, classification of legal cases, development of maps and their management [6,7].

These research methods are used in the development and management of maps of the legal status of state land cadastres in the region. Each method provides information related to its topic and helps to better understand cadastres [8].

RESEARCH RESULTS

Development of maps of the legal status of cadastres based on the received data, analysis and practical results;

Recommendations on improving the legal status of cadastres using GIS technologies;

DISCUSSION

In order to develop maps of the legal status of cadastres, the following information is required based on the analysis and practical results:

In order to analyze the legal status of cadastres, it is necessary to gather information about the right holder, territory, area, country coverage and other information [9,10]].

Data is collected and analysis is carried out on the legal status of cadastres. In this analysis, the owner of the cadastral rights, the legal situation, changes and problem solving will be considered in detail.

With the help of GIS technologies, the legal status of cadastres is displayed on maps. GIS technologies are very important for mapping the geographical location of the legal status of the territory and other information.

Based on the results of the analysis, maps and indicators showing the legal status of cadastres will be developed. These maps help in understanding and managing data.

Maps and indicators will be placed in a database and related guides will be developed. These manuals are used in the process of understanding, analyzing and managing the legal status of cadastres [11].

PRACTICAL RESULTS

The practical results obtained on the basis of maps and indicators showing the legal status of cadastres are used for discussion. These results show how to make decisions about the legal status of cadastres.

GIS technologies are designed to perform a very important task in improving the legal status of cadastres. The following recommendations provide information on how to use GIS technologies to improve the legal status of cadastres:

First of all, it is necessary to collect the necessary information to improve the legal status of cadastres. This information includes cadastral owner, legal status, territory and other information. It is also important to integrate existing data systems (old cadastral data, topographic maps, city maps, etc.) in the process of data gridding.

Mapping and analysis are important to understand the legal status of cadastres using GIS technologies. Representation of legal status areas on data maps and analysis of legal statuses is very easy [12,13].

It is very important to study and analyze the legal status of cadastres using GIS technologies. It helps to provide insights into the geographical location, area, right holder and other information of cadastres.

The legal status of cadastres may change. Using GIS technologies, it is very important to monitor the legal status of cadastres and follow updates. With the help

of such monitoring processes, areas where problems need to be solved can be identified and necessary technological systems can be developed to solve the problem.

It is important to create remote and web interfaces for users using GIS technologies to manage the legal status of cadastres. These interfaces help users to learn, search and obtain information about the legal status of cadastres.

RESEARCH DEVELOPMENT

Continuing research and development using GIS technologies is very important in improving the legal status of cadastres. New technologies and approaches can help improve the legal status of cadastres [14].

CONCLUSION

These data and processes are very important in understanding, managing and making decisions about the legal status of cadastres. Maps developed on the basis of analysis and practical results, discussion, legal situations and information about the legal owner of the cadastre will help.

Using the above recommendations will help to use GIS technologies to improve the legal status of cadastres. These methods are very effective in the management, analysis and problem solving of cadastres.

REFERENCES USED

1. Yusufovich G. Y. et al. The use of remote sensing technologies in the design of maps of agricultural land //Texas Journal of Agriculture and Biological Sciences. – 2023. – T. 23. – C. 17-21.
2. Yusufovich G. Y., Shavkat o'g'li S. Y. CARTOGRAPHIC RESOURCES USED IN THE CREATION OF ELECTRONIC AGRICULTURAL MAPS OF FERGANA REGION //Finland International Scientific Journal of Education, Social Science & Humanities. – 2023. – T. 11. – №. 3. – C. 1001-1009.
3. Abduvakhovich A. A., Shavkat o'g'li S. Y. IMPROVING THE METHOD OF MAPPING AGRICULTURE USING REMOTE SENSING DATA //Finland International Scientific Journal of Education, Social Science & Humanities. – 2023. – T. 11. – №. 3. – C. 1093-1100.
4. Eshnazarov D. et al. Describing the administrative border of Koshtepa district on an electronic digital map and creating a web map //E3S Web of Conferences. – EDP Sciences, 2023. – T. 452. – C. 03009.
5. Khakimova K. et al. Application of GIS technologies for improving the content of the tourist map of Fergana province, Uzbekistan //E3S Web of Conferences. – EDP Sciences, 2023. – T. 386.

6. Khakimova K., Yokubov S. CREATION OF AGRICULTURAL ELECTRONIC MAPS USING GEOINNOVATION METHODS AND TECHNOLOGIES //Science and innovation. – 2023. – T. 2. – №. D1. – C. 64-71.
7. Mamatqulov O., Qobilov S., Yokubov S. CULTIVATION OF MEDICINAL SAFFRON PLANT IN THE SOIL COVER OF FERGANA REGION //Science and Innovation. – 2022. – T. 1. – №. 7. – C. 240-244.
8. qizi Olimova D. S. et al. THEORETICAL BASIS FOR THE USE OF MODERN GIS TECHNOLOGIES IN THE CREATION OF NATURAL CARDS //RESEARCH AND EDUCATION. – 2022. – T. 1. – №. 4. – C. 4-10.
9. Mavlyankulova S. Z. et al. THE ESSENCE OF CARTOGRAPHIC MAPS IS THAT THEY ARE USED FOR CARTOGRAPHIC DESCRIPTION OF THE TERRAIN. GENERALIZING WORKS IN THE PREPARATION OF MAPS //RESEARCH AND EDUCATION. – 2022. – T. 1. – №. 4. – C. 27-33.
10. Alakhanov Z. M. et al. THE STATE CADASTRE FOR THE REGULATION OF INFORMATION RESOURCES FOR THE FORMATION AND IMPROVEMENT //Educational Research in Universal Sciences. – 2022. – T. 1. – №. 1. – C. 47-53.
11. Shavkat o'g'li Y. S., Zuxriddinovna M. S., Qizi O. D. S. ARC Create an Agricultural Card in GIS and Panorama Applications //Central Asian Journal of Theoretical and Applied Science. – 2022. – T. 3. – №. 6. – C. 429-434.
12. Arabboevna A. M., Shavkat o'g'li Y. S. The Use of Geoinformation Systems in the Study of the Land Fund of Household and Dekhkan Farms //Texas Journal of Multidisciplinary Studies. – 2022. – T. 8. – C. 163-164.
13. Khakimova K. R. et al. SOME TECHNOLOGICAL ISSUES OF USING GIS IN MAPPING OF IRRIGATED LANDS //Galaxy International Interdisciplinary Research Journal. – 2022. – T. 10. – №. 4. – C. 226-233.
14. O'G'Li S. Y. S., Zuxriddinovna M. S., Qizi A. S. B. THE USE OF MAPINFO PROGRAM METHODS IN THE CREATION OF CADASTRAL CARDS //Science and innovation. – 2022. – T. 1. – №. A3. – C. 278-283.