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USAGE OF SPATIAL INFORMATION MODELS IN THE MANAGEMENT OF PASTURE LANDS

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Annotation This article provides ways and guidelines for the use of advanced technologies in the implementation of geodetic and GIS work.

Key words : Geodesy, geoinformatics, technology, project, pasture.

Enter. In our republic, objective conditions are being created aimed at ensuring the level of social, economic and political reconstruction based on the market economy, aimed at the liberalization of all sectors in our society, regulation of land relations, preservation and rational use of land resources.

Relevance of the topic. It is known that meeting the demand of the population of our country for food, including meat and dairy products, depends on the activity of the livestock sector and its development. Today, a number of laws and regulatory documents have been adopted and put into practice by the government of the republic for the development of this field.

In particular, the Law of the Republic of Uzbekistan No. 538 "On Pastures" dated May 20, 2019 was adopted.

According to the law, pastures are lands with a natural cover of plants that are fodder for livestock. Mountain pastures are seasonal and are used only at certain times of the year. Pasture users have the right to organize associations of pasture users for joint use of pastures and their protection. Pastures can be given to permanent ownership, lease and temporary use according to the decision of the governors. On the lands of the Forest Fund, pastures are used according to the permission of the state forestry authorities. [1]

Taking this into account, it is worth noting that sustainable management of pastures, increasing fodder production , increasing the productivity of pasture lands, in particular, combating and eliminating pasture degradation, which has now become a global problem in the whole world, are among the urgent problems of today.

In our republic, geo-information has a special place in conducting geodesy and cartography . The volume , quality and accuracy of pasture lands largely depend on the quality of data collection , analysis , processing and systematization . Spatial data models of grasslands are mainly created in simple ways . It can be considered that the spatial information model of pasture lands will make an important contribution to the actual implementation of the land fund by forming and improving the management through the software system . Because the perfection of the pasture land system reveals the advantages of effective use of the district's land fund. In this regard , scientific research works are being carried out by the State Committee " Dave rgeodezkadastr" , organizations under the authority of the committee, field scientists and independent researchers . However, a holistic and integrated approach to the problem has not been observed.

Research object and subject. Currently, the relations that arise in the development of the spatial information model of pasture land and the control of existing land resources in our Republic

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are the subject of research.

Studying the method of developing the spatial data model of pasture land, analyzing and improving the methods of developing the spatial data model of pasture land in developed countries.

Development of scientifically based proposals and recommendations on the creation of a spatial data model related to the research object of the systemization and improvement of the principles of the establishment and management of the pasture land base , methods of improvement of the pasture land system .

Eliminating pasture degradation by creating a certain systematization in the creation of a spatial data model of pasture lands, solving the problem of pasture degradation on the spot and using world experience in solving this problem, finding alternative sources of income for the population living in the research object, and developing mechanisms for sustainable pasture management. are the main issues and hypotheses of the research.

The level of study of the problem. The analysis of the available scientific literature in the field shows that the monitoring of the current state of agricultural land, the improvement of the organizational and economic mechanisms of the restoration of pasture land in agriculture, and the development of the necessary proposals and specifications is envisaged . To make proposals on the scientific bases and problems of efficient and rational use of pasture lands in accordance with the extensive experience in continuous monitoring of pasture lands in the developed countries of the world. Their scientific work consists of deepening economic reforms and modernization of production, as well as improving the method of regularly monitoring the land condition in the conditions of increasing demand for land resources in all sectors of our Republic, using existing methods of pasture land restoration.

Description of the methodology used in the performance of the work. Systematic analysis of spatial data, study of the fertile layer of pasture land, use of computer programs, formation of a database, implementation of a rapid land-information system. Laws adopted by the Oliy Majlis of the Republic of Uzbekistan, presidential decrees, decisions and normative documents of the Cabinet of Ministers, scientific works of scientists who have conducted and are conducting scientific research were widely used in conducting scientific research.

Summary. For all types of research, GAT-technologies are the perfect guiding tool. It increases work efficiency several times. GAT is a product of new ideas that can show a vivid image in the mind of a person, reflecting the location of events and events from existing information. The technology of developing a spatial data model of pasture lands mainly consists of the above. Spatial data model is very convenient for describing spatial data about the data about the objects in the place with the relief of the place, and the modeling of the landscapes, which has received the term of the current vertual real view, describes the high level of realism and stability of its appearance . In particular, if we use software systems in the productive use of pasture lands, we would achieve high results in the economy of the society and in the agricultural sector. This will ensure the creation of geoinformation systems and, in turn, create an effective data bank for geodesy and cartography.

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