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OPPORTUNITY TO USE GIS TECHNOLOGY OF AGRICULTURE IN TASHKENT REGION

Abstract: *In this research paper analyzed of the problems of land management and the land cadastre in regulatory, organizational, scientific, technological and geographic information components allows us to consider the possibility of solving them, as well as to determine the prospects for the development of land management and improving the creation of the land cadaster in Tashkent region.*

Key words: *agriculture, cadastre, GIS technology, territory, land.*
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Introduction

At all stages of human evolution, the well-being of society depended on his ability to use the irreplaceable land resource. Unlike other factors of production, the land is limited in space, non-moving. Earth is the basis of material wealth, the most important component of the natural environment. The social significance of land is most fully revealed in agriculture, where the production process is directly related to the properties of the land. Land serves as the main means of production and acts in the form of agricultural land with various fertility: natural and economic. As a means of labor, land is characterized by soil quality and plant productivity, as a subject of labor by technical and spatial properties. The functioning of all sectors of the economy depends on the proper use of soils.

The need for land for non-agricultural purposes is constantly growing. The best lands have been mastered almost completely or alienated for settlements, industrial enterprises, airfields, roads, pipelines, communication lines for the disposal of industrial and agricultural waste, household waste.

Therefore, the most important task of public administration in the field of environmental protection and rational nature management in general and land resources, in particular, is the organization of monitoring of land resources (lands), as an integrated system of monitoring the state of land resources, assessing and forecasting changes in their condition under the influence of anthropogenic and natural factors.

Materials And Methods

The long-term use of extensive agricultural methods on agricultural lands has led to a catastrophic decline in soil fertility. The general decline in agriculture led to the formation of a large number of fallow lands. The revival of agriculture, the attraction of investment in agriculture, the formation of competitive, highly efficient agricultural enterprises should be based on modern progressive farming technologies.

Digital cartographic products are increasingly being used in young rapidly developing farms.

At the early stages of agricultural land development, digital high-precision orthophotomaps are used to compare real field boundaries with legal fields, revisions and inventories, assess the chemical composition and moisture of soils with an exact coordinate reference to the terrain.

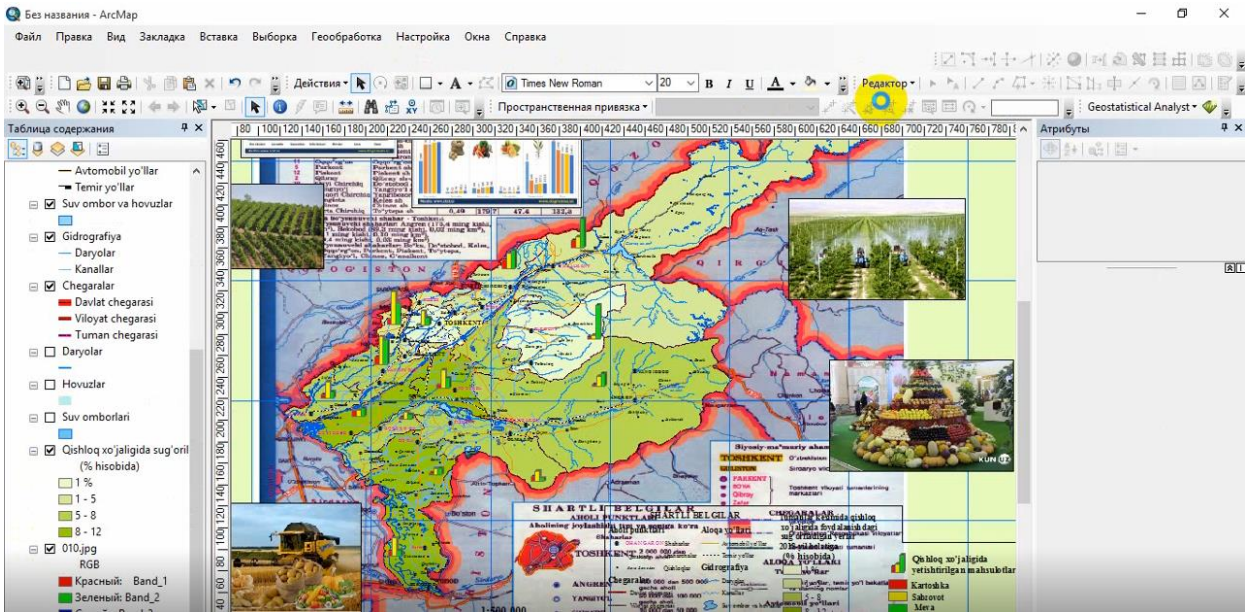

Fig.1. The process of preparing the agricultural map of Tashkent region in the program ArcGis

Currently, conducting expensive land management works lies on the shoulders of landowners, as there is not enough state funding. For the organization and financing of land management, a competent policy on the part of the state is necessary. An inventory has not been made on agricultural lands, most of the land plots are not registered with the cadastre, and thus are not considered registered].

Land survey work on transferring non-agricultural land to agricultural organizations or citizens to ownership or use (lease) has not been carried out. All this does not allow to obtain reliable information about land, borders, quality characteristics and location.

Such shortcomings indicate an unformed cadastre. As a result of this, the state suffers losses by reducing the total amount of budget revenues from registration of transactions with land shares and other land plots.

The main drawback of the land cadastre is its fragmentation, the information in it only about 10% of legally used land plots, that is, the information in the Unified State Land Register is available only about land plots put on cadastral registration on a declarative basis.

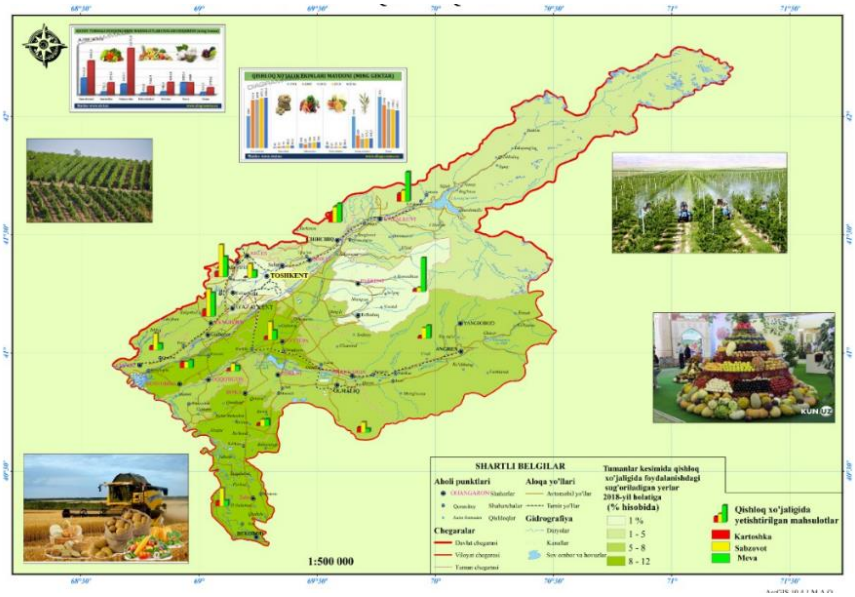

Fig.2. Agricultural map of Tashkent region

According to the accepted terminology in the scientific and technical literature, land management refers to measures to study the state of the land, plan and organize the rational use of land and its protection, create new ones and streamline existing land management objects and establish their borders on the ground. This view gives a general description of the idea of modern land management. One of the scientific, technical and socio-political parts of the state management of land resources is land management, as a technical and economic component of the regulation of land - property relations. However, land management is currently a more sustainable component in the land management system. The formation of new and the streamlining of existing land management objects is carried out on the basis of information from the state land cadastre, state urban planning cadastre, land management, urban planning and other documentation related to the use, protection and redistribution of land.

Conclusion

Thus, a number of problems have arisen in land management, the necessary condition for solving which is a competent policy on the part of the state regarding the design, organization and financing of land management works, their legal regulation, as well as training and retraining of personnel for activities in this area. An analysis of the problems of land management and the land cadastre in regulatory, organizational, scientific, technological and geographic information components allows us to consider the possibility of solving them, as well as to determine the prospects for the development of land management and improving the creation of the land cadastre.

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