Land Quality Assessment System

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Abstract: Soil categories and cadastre are carried out to assess the quality and properties of soil as a bioinert body in the process of natural-historical and socio-economic development of society.

Keywords: land use, soil, evaluation, quality score, productivity.

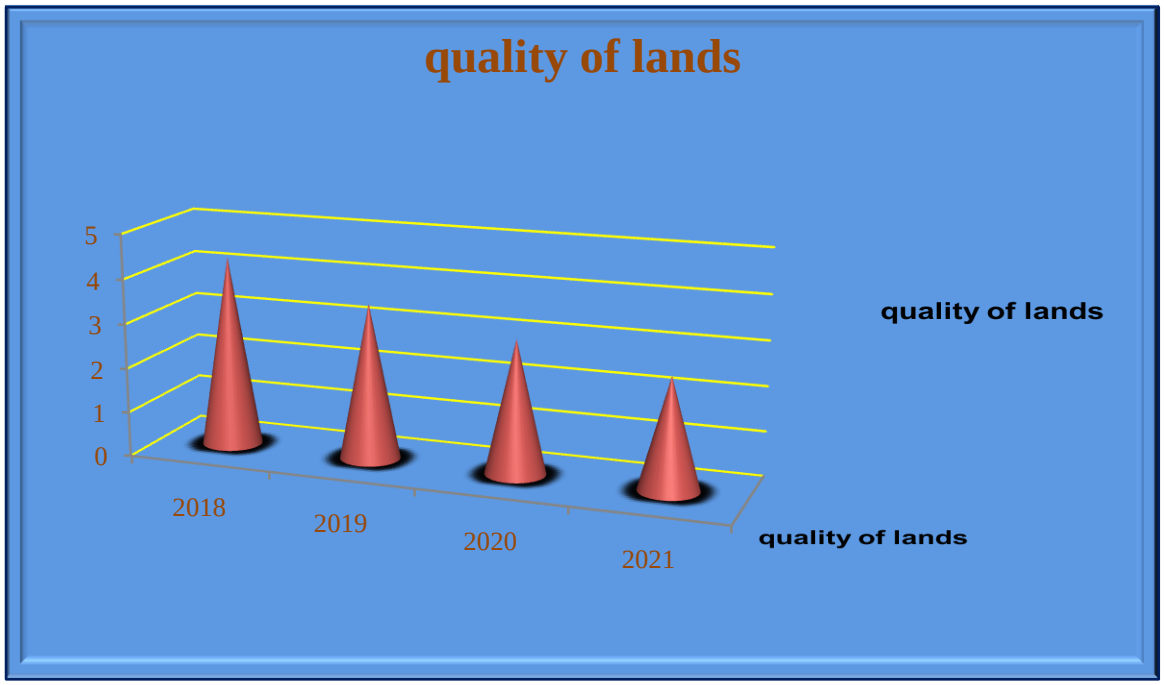
Introduction. Soils, which are most important for crop growth and development, can objectively affect processes and processes. taking into account the quality of the soil according to its fertility, it is represented by nibi units - points. In addition to bonitet, the specificity of agricultural technology can be compared with the documentation of the quality of different soils. The most common is a 100-point scale, in which the best soils are rated 90-100 points (X-class quality) and other soils are compared to them and receive a lower quality grade. The basis of the assessment is to determine the diagnostic properties or approximate parameters of the soil associated with the long-term average yield. Such properties are obtained: the thickness of the humus horizon, the composition of humus and basic nutrients, pH, mechanical composition, then they are reduced to a single rating scale. The project for the creation of an automated system of field planning provides for the development and construction of an automated information-analytical system consisting of the following functional blocks: electronic soil and landscape map of the whole area, including information on the agro-ecological resources of the area, as well as information on transport routes, buildings, etc An electronic database containing all the necessary attributive data related to electronic map objects, as well as its own statistics on productivity over the past few years includes; -expert module for the analysis of productivity indicators for different crops in the past; -expert module that supports decision-making on short-term planning for the use of agro-ecological resources (for a period of one to one year). three years); - Expert module for decision-making on long-term land use planning of agro-ecological resources of the study area (for three years or more);- interface module of the information-analytical system, which provides interaction with the end user of the system (agronomist, expert) without the need for technical assistance from the developer of the information-analytical complex. a detailed analysis of its suitability to real conditions was performed to ensure the parameters.

The creation of agro ecological mapping is based on agro ecological classification, which primarily involves the identification of land groups according to the main soil and

environmental factors and subgroups - the intensity of their manifestation. The main factors of differentiation here are the degree of hydro orphism and soil erosion. It should be noted that the differences between the small groups can be so large that they determine the need for different planting systems.

Analysis and results. Evaluation of agricultural lands and lands by taking into account the soil parameters that determine soil fertility and economic indicators that determine the yield of agricultural crops, mainly cereals. The required data for each complex farm is collected and the average soil indicators, forage land productivity, climatic characteristics (air temperature, annual precipitation and weather) for the last 5-10 years are collected. period when the temperature is above 10 °). C, the amount of productive moisture in the soil, etc.).

Soil varieties are grouped into assessment groups on a number of indicators: - Belonging to a single soil-climatic province; -genetic proximity of soils, similarity of mechanical, physicochemical, agrochemical properties; - similarity of relief; - The need for reclamation measures in the presence of salinity, erosion, rock, etc .; -specific conditions associated with irrigation or drainage.



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- indicators of soil quality and assessment of natural forage areas (hayfields and pastures);
- structure of major agricultural crops and perennial trees;
- normative productivity of agricultural crops, perennial trees and fodder crops;
- normative productivity of agricultural lands;

- Accrued profit of agricultural production on the main types of agricultural crops;
- Average annual prices for the main types of agricultural products sold in farmers' markets and average purchase prices for raw cotton and cereals;
- Percentage of profit capitalization.

№	Categories of land fund	Common land area		Including irrigated lands	
		All	In terms of interest	All	In terms of interest
1	Agricultural lands	24057,1	53,59	4214,3	9,39
2	Landsofsettlements	223,5	0,50	51,8	0,12
3	Lands for industrial, transport, communications, defense and other purposes	876,3	1,95	12,6	0,03
4	Lands intended for nature protection, health and recreation purposes	728,4	1,62	0,6	0,001
5	Lands of historical and cultural significance	14,7	0,03		
6	ForestFundlands	12021,4	26,78	45,4	0,10
7	Waterfundlands	827	1,84	4,7	0,01
8	Reservelands	6144	13,69	2,3	0,005
	Totallands:	**44892,4**	**100**	**4331,7**	**9,65**

Conclusion. The results of the assessment can be used to justify the planned yield of agricultural crops; determination of the planned volume of purchases of agricultural products; In describing the production activities of agricultural organizations and enterprises, the methodology takes into account the regional characteristics of land use. This methodology can be used to determine the resource potential of agricultural production, as well as to address the financial issues of land valuation. In Uzbekistan, special assessments are made for crops in the cotton-grain-alfalfa complex, with the contribution of grain and corn (for grain), and for some regions, rice, tobacco, hemp and vegetables. Based on the calculated base values, a table of land prices by soil groups is compiled. In this assessment, the highest economic efficiency (gross output, cost recovery and differential income) falls on the most irrigated, highly civilized lands. Determining the quality, economic and value of agricultural land in the Republic of Uzbekistan It is used to determine the amount of land tax rates in the allocation and allocation of normative surplus land to farmers, the sale of land plots through auctions and in other cases provided by law to determine the initial price of the land. Soil valuation, normative yields of major crops, gross output and net income (profit) are the criteria for economic evaluation of land.

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