

ISSN 2181-9408

Scientific and  
technical journal

# Sustainable Agriculture

№1(21).2024



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The journal "Sustainable Agriculture" is registered in the Press Agency of Uzbekistan on the 12<sup>th</sup> of February in 2018 (license № 0957).

In 2019, the journal is included in the list of recommended scientific publications by the Higher Attestation Commission of the Republic of Uzbekistan.



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# ECONOMIC MECHANISMS OF LAND USE IN AGRICULTURE

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## Abstract

*This article analyzes the basics of improving the economic and environmental mechanisms for regulating the use of land and water resources in agriculture on the example of Surkhandarya region. The article also provides general information on the total area of agricultural land and total arable land in the region, as well as the area of land where agro-clusters and farms operate in the region.*

**Keywords:** agriculture, land and water resources, agricultural lands, Surkhandarya region, agricultural strategy.



**I**ntroduction. Land is a product of nature and is essential for agricultural production. Because it is the main means of production of this industry. Seed into the ground. As a result of planting and processing, various products are grown. Therefore, all products grown online are produced using land and water.

In subsequent years, a reform of agriculture in our country took place, in particular, the improvement of the public administration system in the field, the widespread introduction of market relations, the strengthening of the legal basis for relations between entities growing, processing and selling agricultural products, attract investment in the industry, use resource-efficient technologies, certain work is being carried out to introduce and provide agricultural producers with modern equipment. At the same time, the lack of a long-term strategy for the development of agriculture hinders the efficient use of land and water resources, the widespread attraction of investments in the industry, high incomes for producers and increased competitiveness of products.

Measures for the rational use of agricultural land can be divided into the following four groups:

1) organizational activities, which include:

- scientifically based land preparation;
- rational distribution of production forces across regions;

- implementation of a unified land monitoring system;
- full maintenance of the state land cadastre;
- creation of state and public expertise;
- strengthen control over land use, etc.

2) legal measures, which include:

- improvement of environmental legislation;
- improvement of natural resource legislation;
- improvement of land use standards;
- improvement of the environmental legal mechanism;
- ensuring the inevitability of punishment for land offenses.

3) economic activity, which includes:

- preferential taxation of poor lands;
- lending for soil protection measures;
- increasing the interest of agricultural entrepreneurs in the efficient use of land and water;
- improving state support for land reclamation and reclamation, etc.

4) technological measures, which include:

- development of technologies for radical land reclamation and improvement of land reclamation;
- introduction of a crop rotation system and its strict adherence;
- creation of a unified technology for non-agricultural and industrial development;
- introduction of water protection technology;

- introduction of soil restoration technologies;
- organization of shelters in necessary places;
- Measures against erosion and the construction of structures to prevent the negative effects of siltation are the main means of agricultural production. Because agricultural production takes place on the land. The importance of water resources in agricultural production in the climatic conditions of our country.

Materials and methods. The right to full and efficient use of land and water throughout the year is granted to individuals and legal entities for a long term or for life while maintaining state ownership of land and water.

In addition, in spite of attracting large amounts of investments from the state for the next 18-20 years to improve the amelioration of irrigated arable lands, the productivity index of irrigated soils remains around 54-55 points on average in Uzbekistan. In fact, the return of arable land that has fallen out of agricultural circulation, maintaining and increasing soil fertility as much as possible, and establishing a clear and transparent way of calculating the amount of agricultural land are important factors for the future development of the sector. In this regard, one of the most important areas is the correct introduction of organizational and economic mechanisms for the regulation of land relations.

As the main organizational mechanism used in the regulation of land relations in agriculture, the state land cadastre, in particular, the accurate and transparent accounting of land, has a special place. Specialists in the field are entrusted with great tasks to complete this work correctly and on time. But despite this, the analyzes carried out on the ground show that the lack of a system that allows for accurate accounting of land in agricultural districts has not been created.

It is known that land relations are unique relations that arise between the state and various legal and physical entities on the ownership of land, its use and disposal. Of course, such land relations are regulated for the purpose of rational use of these land areas and their necessary protection. Such regulation is carried out in two ways, namely by the state and from the point of view of today's market economy.

It should be noted that the conducted analysis, the comparison of the results of the practical work with the available data show that there are still major shortcomings in the quantitative calculation of lands. In particular, by defining the administrative boundaries of districts and cities based on the regulations "On the procedure for demarcating the borders of administrative-territorial units" and "On the procedure for the transfer of land resources" approved by the decision of the Cabinet of Ministers of the Republic of Uzbekistan No. 299 dated April 23, 2018

In order to clarify the general area, during the years 2018-2022, the "Uzdavyerloyiha" scientific planning institute determined the administrative boundaries of 63 districts of Uzbekistan, based on the global coordinate system.

With this, the wave land areas have been removed from the map of agricultural cards, whose electronic numbers are created in the order of symbols for delineation of lands with the help of medium photo plans brought to the scale of 1:10000. According to the results of the land survey conducted in the rural districts of the Tashkent region, the analysis of the amounts of the available land areas in practice showed that the land areas allocated to perennial tree groves established on irrigated crop lands, as well as to various district constructions and residential estates, were not comprehensively justified or due to the irresponsibility of some experts in the field. Due to the fact that the changes were not included in the district land balance (report) on time, there were differences in different areas of land.

Discussion. The fact that the territories of towns, villages, farms within the administrative boundaries of the existing rural districts are not fully formed in the prescribed manner, the lack of master plans for their actual boundaries also has a negative impact on the full implementation of the reforms being carried out in our country, especially on the regulation of land relations in agriculture. shows, among other things, causes a number of problems in keeping a quantitative account of land by administrative-territorial units.

In recent years, the introduction of modern, innovative technologies (unmanned aerial vehicles, the use of space probes, remote land surveying, special programs, etc.) into the field has made it possible to significantly simplify the process of accounting for agricultural land, reduce labor and material costs, and improve results. But at the same time, the deepening of land reform in Uzbekistan, the diversity of land user rights, the introduction of new forms of agriculture into land use, require the necessary changes to be made to the system of land accounting and management. In this regard, a great responsibility is assigned to state management bodies with special powers. However, in the following years, the structure and system of such state management bodies changed fundamentally, and various ministries and agencies were assigned the task of managing, organizing and controlling the use of land categories included in the country's unified land fund.

It is known that the cadastral assessment of agricultural land is carried out in two stages: soil inspection and economic (normative) assessment of land. Soil assessment mainly consists of a qualitative comparative assessment of the natural fertility of soils distributed in a certain area. The normative value of agricultural land is determined based on the results of these soil inspection works and using various normative economic indicators. Therefore, the more correct the method of determining the quality assessment of soils, the more accurate the normative value of such lands will be. It is proposed to add an additional correction coefficient for the supply of soil irrigation water to the existing method of determining the quality assessment of soils distributed in irrigated areas, which are considered the main agricultural lands, based on many years of theoretical and practical research. The fact is that in today's conditions of limited water distribution, the level of irrigation water supply to the fields and the scattered soils in them is not the same: Fields located close to the main irrigation canals have a relatively good level of

irrigation water supply, while fields located further away are not so good. The chronic continuation of this situation for 5-6 years has a negative effect on the quality indicators of soils. Therefore, based on the above, the development of special correction coefficients and inclusion in the practice of quality assessment of soils scattered on agricultural lands ensures the accuracy of the results of the assessment work. This, in turn, allows for some regulation of the system of tax collection from agricultural land.

**Table 1.**  
**Distribution of agricultural land in the republic by main land types (as of January 1, 2023).**

№	Main land types	total, thousand	From that			
			Irrigated lands		Dry lands	
			thousand hectares	%	thousand hectares	%
1.	Cultivated land	3993,2	3221,2	76,3	772,5	3,5
2.	Perennial trees	421,2	384,7	9,1	36,5	0,2
3.	Gray areas	81,5	48,33	1,1	33,2	0,1
4.	Pasture and hayfields	16709,6	39,5	0,9	16670,1	175,7
	<b>Total agricultural land types</b>	21206,0	3693,5	87,5	17512,4	179,5
5.	Lands of horticulture, viticulture and vegetable growing	658,8	497,6	11,8	161,2	0,7
6.	Lands under reclamation construction	66,4	66,4	1,6	-	-
7.	Woodlands	154,7	28,88	0,7	125,9	0,6
8.	Other lands	4146,3	-	-	-	-
	<b>Total:</b>	26232,2	4220	100	22012,2	100

**Conclusions.** In conclusion, it should be noted that since the first period of independence more efficient and purposeful use of land resources, regulation of land relations, under all reforms implemented in agriculture. The goals are to increase the productivity of irrigated lands, preserve cultivated lands, and further increase the income of the population. The prosperous life of our people, It is the sacred duty of every citizen living in this country to preserve our motherland, which is the source of sustenance and the basis of the development of our country's economy, to use the land resources wisely, to protect it from various negative effects.

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