
MEASURES TO SUPPORT IMPLEMENTATION OF NEW IRRIGATION TECHNOLOGIES

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Abstract

This article provides information on measures to improve land use and land with reduced productivity. The information provided in this article can be used to improve soils with reduced soil fertility. Encouraging activities such as further increasing soil fertility and productivity, transition to new irrigation technologies, establishment of plant protection services, involvement of modern laboratories and technologies, training of farmers is effective. Information is presented on the important processes of increasing soil fertility by introducing the mechanism. In addition, a set of measures used to improve soil fertility is mentioned.

Keywords: productivity, land use, modern technology, subsidy, yield, road map, soil fertility.

Introduction

It is known that the population on earth is increasing year by year, which leads to an increase in human needs. And the earth is a means of growing food for people. Today, the demand for land is also increasing, which further increases the impact on the land. The more the land is used, the weaker it becomes, so it is advisable to carry out a number of land-related activities in order to prevent it, that is, to maintain its productivity. Further increase of soil fertility and yield, transition to new irrigation technologies, introduction of plant protection services, modern laboratories and introduction of an effective mechanism for encouraging activities such as attracting technologies and training farmers are important processes in increasing soil productivity. Ministry of Economic Development and Poverty Alleviation, Ministry of Finance, Ministry of Agriculture, State Tax Committee, "Cotton-Textile Clusters of Uzbekistan" Association, "Textile industry of Uzbekistan" Association, Farmer of Uzbekistan, it is planned to carry out the following activities for the measures to be carried out by the agricultural land users of the council of farmers and homestead land owners [1].

Proposals to introduce the following incentive mechanisms on a trial basis during the year at the expense of the state budget funds were criticized.

According to him:

- Providing tax benefits for soil fertility improvement and erosion protection measures;
- Allocation of subsidies and partial exemption from land tax for the implementation of agricultural land restoration, reuse and redevelopment, agricultural land

recultivation and land reclamation activities in accordance with the approved land zoning documents.

The Main Part

In addition, such a procedure was introduced, according to which, during the year, on a trial basis:

- Improvement of soil fertility and cotton yield, introduction of science-based crop rotation and new irrigation technologies and introduction of plant protection services and establishment of modern laboratories as well as innovations and best practices in the field of farming for the training of farmers, a subsidy of one million soums per hectare will be allocated to land users (including clusters) from the State budget funds;
- 70% of the initially estimated subsidy will be allocated to carry out measures to improve soil fertility and productivity in cotton fields;
- The remaining 30 percent of the subsidy will be transferred when the productivity is increased by an average of 15 percent compared to the previous season, reflected in the analytical data of the State Statistics Committee;
- Tax credits for increased soil fertility and productivity in cotton fields are applied to users of land with increased soil fertility according to the results of soil audit analysis.
- For land users, the land tax rate is reduced by 25% in cases where the credit score of the plot of land has increased by 3 points compared to the current credit score, and by 50% in cases of 3 points or more;
- Land tax incentives are valid for a period of three years.

During the year, scientific-based activities were organized to increase soil fertility and improve the ecological condition of the transition to new technologies of irrigation [2,3]. The competent body that implements the state policy on the regulation of land relations in agriculture considered the appeals on the promotion of measures to increase soil fertility and improve the ecological condition. Creation of a list of land users to whom subsidies will be allocated for the implementation of measures to increase soil fertility and productivity was carried out.

Table 1. The list of districts where the experiment of allocating subsidies to increase soil fertility and improve environmental conditions will be tested

No	The name of the areas	Name of districts	The main crop area in the districts (in hectares)	of which, cotton area in districts (in hectares)
1.	Republic of Karakalpakstan	Ellikqal'a	24 208	9,600
2.	Andijan	Ulug'nor	20,727	8 534
3.	Bukhara	Vobkent	20 211	10 494

4.	Jizzakh	Sharof Rashidov	29,923	9 300
5.	Kashkadarya	Qarshi	37,979	15,000
6.	Navoi	Navbahor	23 720	7 555
7.	Namangan	Pop	36,729	10 302
8.	Samarkand	Narpay	21 115	10,762
9.	Surkhandarya	Jarqo'rg'on	19 423	6 665
10.	Syr Darya	Sayxunobod	28 462	10,000
11.	Tashkent	Quyichirchiq	35,969	11 461
12.	Ferghana	Beshariq	20 434	7,995
13.	Khorezm	Qo'shko'pir	23 909	9,600
	Total		342 809	127 268

A list of science-based measures to improve soil fertility and yield, transition to new irrigation technologies

- Prepare a summary of the soil condition based on the existing database for use in developing a plan of actions to improve soil fertility and productivity.
- Determining the norms of feeding cotton with mineral and organic fertilizers depending on the level of soil quality, humus, total nitrogen, phosphorus, potassium and nitrate nitrogen, mobile phosphorus and exchangeable potassium.
- Before plowing, 70% of the annual rate of phosphorus fertilizers (100 kg/ha in pure form, ammophos fertilizer at the rate of 220 kg/ha), 50% of potash fertilizer (50 Conducting a seminar on application of pure potassium (kg/ha or potassium chloride fertilizer 83 kg/ha) and local fertilizer (manure 15-20 tons or compost 20 tons/ha) [4,5,6].
- Conducting seminars on the importance of autumn plowing, the duration, depth and mechanical composition of plowing the sub-plot layer to a depth of 60-70 cm in heavy areas and giving scientific and practical recommendations.
- Levels of soil salinity, salt washing process, methods and standards, effects of harmful salts in the soil on the cotton plant, secondary salinity, implementation of agromelioration measures in saline lands conducting seminars.
- Selection and planting of types and varieties of intermediate and siderate crops to increase soil fertility, development of scientifically based recommendations on alternating and alternate planting and conducting seminars [7,8].
- Based on the type and composition of the soil, conducting seminars on the importance, procedure and duration of activities such as capital and current leveling of cotton fields, preparation for seed planting, harrowing, grinding.
- Treatment of seeds with biostimulants before planting: "Uzgumi" 0.7-0.8 l/t, "Fitovak" 200 – 300 ml/t, "Bioduks" 2-3 ml/t and use of other stimulants, develop recommendations for foliar feeding with growth regulators during the growing season in order to ensure rapid growth and development of wireworms.

- Based on the soil-climatic conditions of the regions, development of seed sowing schedules and completion of the seed sowing season in a short period of time (10-12 days), achieving full and healthy germination.
- Conducting seminars with the participation of heads of farms and agroclusters on the most optimal period of harvesting, depending on the conditions of the meliorating soil of the fields, the planting scheme and the type of cotton - when 1-2 bolls appear.

Conclusion

It can be concluded from this article that if the processes described in this article are implemented, the fertility of the soil in the area where these processes are applied will allow to achieve the expected results. The result of this can be cited as an example of the fact that it is being tested in the regions of Uzbekistan and is giving good results. Organization of science-based activities during the transition to new technologies of irrigation in order to increase soil fertility and improve the ecological condition of the fields throughout the year, increase soil fertility and environmental protection by the competent body implementing the state policy on the regulation of land relations in agriculture. consideration of appeals for the promotion of measures to improve the situation.

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