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Efficient use of agricultural machinery park and improvement of technical services system

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Abstract. The article is devoted to the effective use of agricultural machinery to improve the system and technical services and solve the problems posed. To do this, in the Tashkent region, the Bekabad district, there are agrotechnical solutions for a number of analyses, especially technically modern, park equipment, which has extremely complex structures, and the effective use of agrotechnical services recommended for improving the system and proposals.

1. Introduction

Today, information technologies are represented in all spheres of the economy. In the current period of development, trends go hand in hand with the issue of food security to ensure the consistent implementation of reforms, which also occupies a special place. Therefore, with the productive use of irrigated lands in the republic, offering highly effective methods and technologies for obtaining high yields of agricultural crops, special attention is paid to the introduction of resource-saving. For the further development of the Republic of Uzbekistan in 2017-2021 within the framework of strategic actions, including "... by 2030, the size of the gross domestic product will more than double, the rational use of land and water resources, the introduction of modern intensive agricultural technologies, agrotechnologies from the park with the effective use of their technical condition to ensure the stability of the task. The fulfillment of these tasks in agricultural machinery for the effective use of the park is one of the important issues of technical and technological modernization, including [1, 2].

2. Materials and methods

Currently, foreign and local conditions in the agricultural sector of our republic are produced in large quantities, which is the result of the use of agricultural machinery. From the point of view of quality, the agro-industrial equipment fleet is being updated. These are technical hydraulic structures widely used in automatic control systems and electronics. As a result, technically modern technology, which has extremely complex structures of the park system, continues to require improvement in the effective use of agricultural technical services [1, 2].

Analysis in the subsequent time and progress in agricultural production in the country and abroad, based on the level of use of a modern tractor, shows that it is not at the required level. Because this tractor of high power, with a lack of agricultural machines that are suitable for them to use energy efficiently, and meet existing standards, is not respected. This procedure and the development of rules



for their use continue to increase the level of demand. In a market equipped with modern computer systems and technical management, in order to increase the level of training of highly qualified specialists in the implementation of the use, there is also a need for the presence of [5, 6, 7, 8, 9, 10, 11, 12, 13].

In foreign countries (USA, UK, Germany) divisions and for remote administration of the computer and the operator of their agricultural board at the level of modern requirements, as well as to create conditions for the performance of high-level work, work is underway to train highly qualified specialists.

Based on the above information, it can be concluded that the park of the level of use of agricultural machinery is insufficient, as a result of the improvement of agricultural machinery, complete structures, the quality of work is not high, the use of technical, managerial and maintenance services will require the necessary improvements at the system level.

3. The solution of the problem.

As you know, our technical agrarian republic in the field of agricultural production, delivery, maintenance and technical services, a technical specialist in the field of agricultural production, has created a system of mutual communication by himself. Nevertheless, it is necessary to improve the indicators of agricultural machinery and their fleet of activities. Since the park is full of agricultural machinery resources, the use of content ensures that regulatory requirements at the level of modernization and improvement of their efficiency are not noticeable. The allocated land for agriculture is not enough to provide the necessary technical support with full coverage. The park also effectively uses agrotechnical techniques from events, during their agrotechnical work, quality, control units to adjust in accordance with the requirements of the agronomic use of indicators in the analysis, many problems have not found their own solution, such as too complete diagnostics and proper storage.

It should be noted that, despite the achievements made in the field of food security and agricultural development in Uzbekistan, the existence of a number of problems in the use of irrigated lands was recognized from the ground, in particular, including: lack of water; land use efficiency is low, optimization (placement) of agricultural crops on the ground (acceptable), which are surrounded by the necessary technical support in full; on the ground, the main tillage, among a number of processing crops, agronomic non-compliance with the rules for the protection of full; timely and high-quality planting of crops, maintenance, there are shortcomings in ensuring timely implementation of agrotechnical protection measures. There are a number of effective ways to use energy resources, but at the same time there are disadvantages, namely: a relatively low level of labor productivity; the high energy intensity of agricultural products, the production of which is spent (250-280 kg per 1 hectare of acreage in Uzbekistan, USA - costs account for 140 kg of fuel), the energy consumed by them is technical years from effective use, technical indicators of use are low (a lot of outdated technical on the balance sheet at the district level, insufficient suitability for work). One of the main factors of competitiveness of agricultural products grown in this way is its energy density. This requires increased attention to the issues of saving resources and energy in agriculture. In this matter, resources are effective agronomic methods are technical, equipment and equipment must be effective, resource-saving technologies can reduce the negative consequences of the introduction of effects by 20-40 percent. The end result of this course is management and applied technologies that depend on an acceptable combination of agricultural production.

Foreign agricultural system technical technical innovations to solve the problem and existing management systems and their use on the basis of improving the level of service to create and manage the development of new procedures and rules can be achieved by [1-11]. To do this, starting with the technical aspects and improving technologies for the production of agricultural products, good technical management of agricultural machinery, the operation of agricultural technical solutions in the parking system of the technological park, also connected to each other, ordered and requiring that they be collected. Thus, agricultural activities bring the greatest benefits from their work in terms of

productivity. Maintaining the successful operation of the economy in modern conditions with the next new development of production requires skilled labor and management. Such demand in the field of agriculture includes ways and means of ensuring "precision farming". "It is clear that agriculture" is for process management if it is one of the main elements of two factors, i.e. to know exactly the tools and processes that are most likely to require monitoring and control in this case [7, 9, 10, 11, 12, 16]. For this and technical technological modernization in the republic for the production of agricultural crops and agricultural machinery available for entering the park management system, agrotechnical methods recommend an institution that needs to ensure the effective use of agrotechnical services and technical solutions to improve the mechanism of the park (Figure 1).

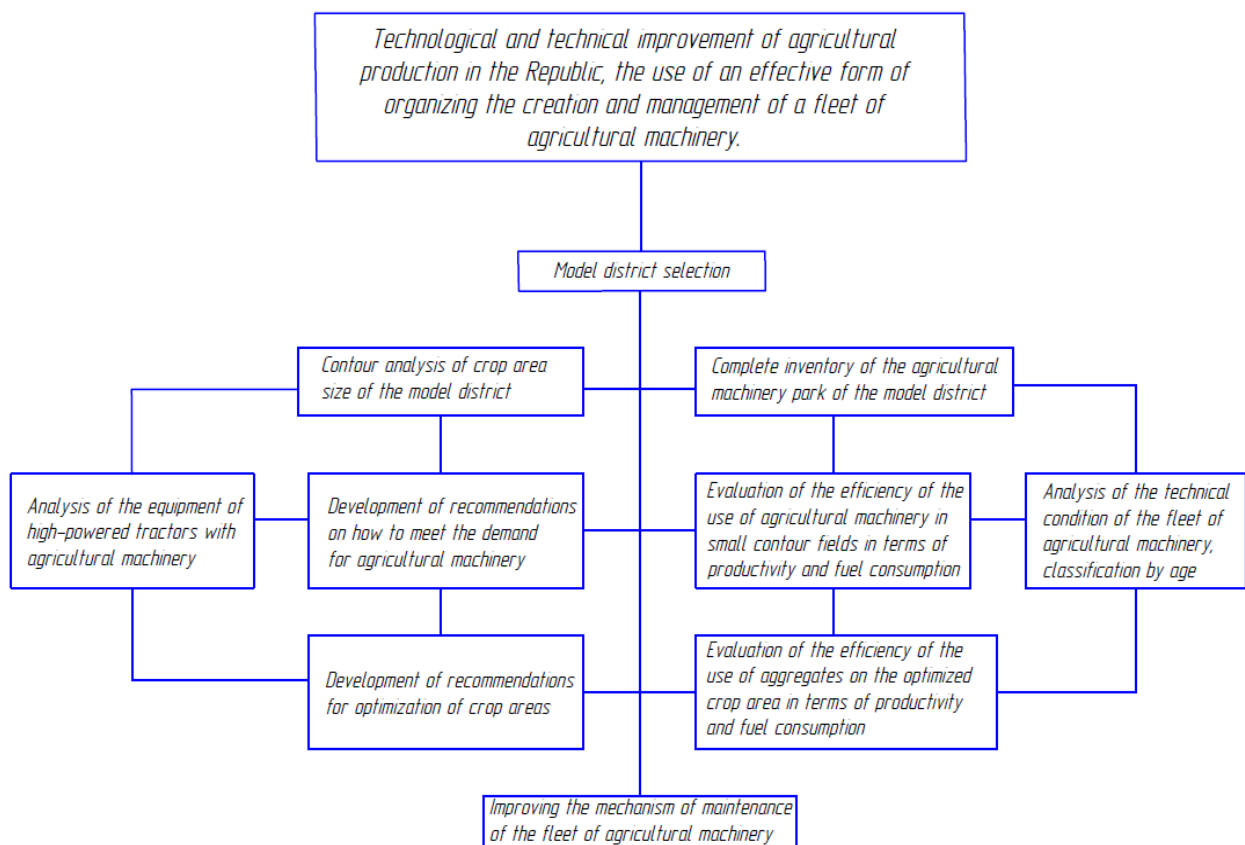


Figure 1. Technical solutions for improvement of the mechanism of the park is the recommended model

This system technical services (to use the technical implementation of the regulations, maintenance, storage), technical service (dealer) (settled and mobile services), technical implementation recovery (the technical implementation of a system purchase, componentry and re-sales, spare parts sales and exchange), science and production integration (technical innovation and technology, used in the production of the achievements of science and technology) will be offered to the introduction of (figure 2).

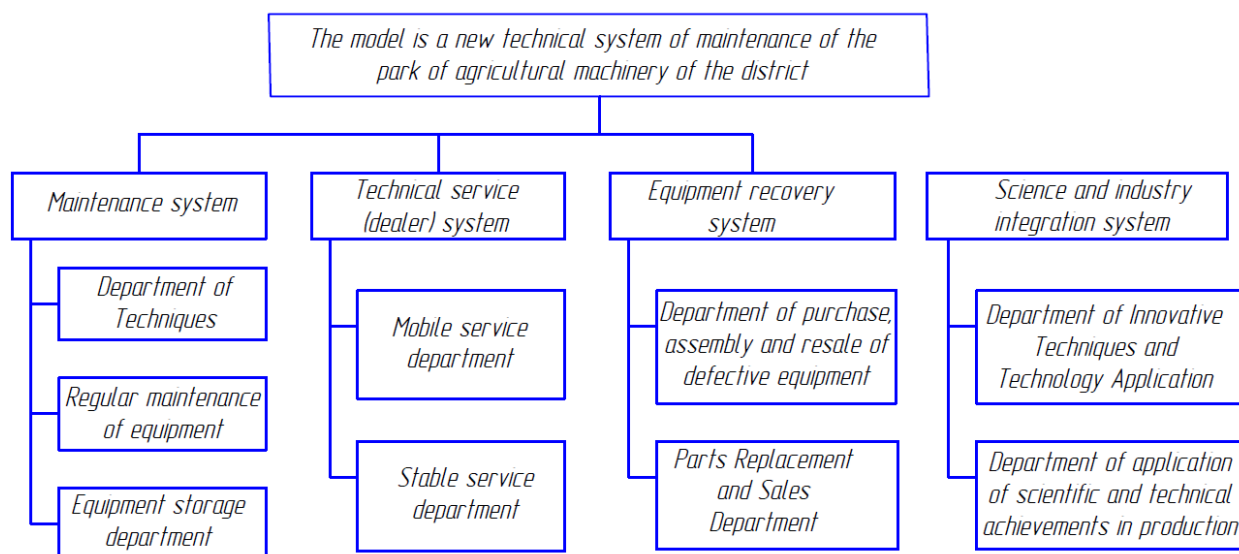


Figure 2. Technical innovation and technology, used in the production of the achievements of science and technology

4.Results

Technological improvement from technical aspects to production and agricultural products, good technical management of agricultural machinery, operation of agricultural technical solutions in the parking system of the technological park, also related to each other, ordered and requiring their collection. Thus, agricultural activities bring the greatest benefits from their work in terms of productivity. Maintaining the successful operation of the economy in modern conditions with the next new development of production requires skilled labor and management. Such demand in the field of agriculture includes ways and means of ensuring "precision farming". "It is clear that agriculture" should manage the process if it is one of the main elements of the two factors, i.e. know exactly the tools and processes that are most likely to be required in the case of monitoring and control of the will.

This condition has not been fully studied for the conditions of our republic, and no solution has been found. But, at present, to provide their farms with farmers, special importance is attached to modern tractors and machines (Table No. 1).

Table 1. Increase in the level of agricultural machinery supply to farms operating in Republic*

Years	Total number of operating farms	Available agricultural technical solutions, pieces		
		Driving tractor	Universal-mowing tractor	Graincombine-harvester
2000	43759	899	1423	56
2005	125668	3738	2500	801
2010	66134	5840	6600	1505
2015	96081	8122	7552	1583

* According to the State Statistics Department of the Republic of Uzbekistan

1-table analysis from the level of growth in the year 2015 are provided with agricultural equipment driving in the year 2000 compared to tractor - 9,1 times- Universal-mowing tractor to 5.3 times, graincombine-harvester a 28.2 times increases can be observed. However the units are provided with

this equipment tractor units farm level 100 8.5 haydov 7,8- universal-mowing tractor and tractors than 1.6 graincombine-harvester come on and this figure is low.

Acceptable for all of the technical and economic management of the parking system technical agriculture of the opening section should be given. They benefit from effective should be used in the manufacture of products at the same time.

Policy based Tashkent region, Bekabad district agricultural technical types and forms of ownership available in the analysis of I am.

Table 2. Types and forms of ownership of existing agricultural technical Bekabad district

N	Agricultural technical solutions name	“Agroservis” Alternativ tractor parking Llcs, %	Farms	
			Total, %	of the including many in band, %
1	Driving tractor	14,9	85,1	72,3
2	Universal-mowing tractor	4,2	95,7	87,3
3	Transport a tractor	3,6	rise to 96.3	89,1
4	Graincombines	38,1	61,9	61,9
5	Tractortrailers	5,5	94,4	55,5
6	Seedsplanting, seeding	grows 12,5	87,5	72,2
7	Cotton machine	10,0	-	-
8	Grainplanting, seeding	-	10,0	-
9	Cultivators	58,8	41,2	41,2
10	Thechizel	-	-	-
11	Plow	66,6	33,3	25,0
12	Songsthisnowstorm	-	-	-
13	Thesprayer	30,7	69,2	61,5
14	Mineral opportunities sowing machines	-	-	-
15	Organic fertilizer sowing machines	-	-	-
	District total:	18,2	81,57	71,4

Table data analysis shows that are available on the district technical approximately 18,2 % “Agroservis” Alternativ tractor parking Llcs to 81,57 % 71,4 including farms % farms diversified comes on.

5. Conclusion

The republic of agricultural technical services produced in joint ventures with local and districts (zones) the size of the field area (surface area, height and width) on the effective use in the classroom that fits their capacity to enable you to use the machine in agricultural tractors and a high level of use and you should base the conclusion from practice.

Spare parts supply, maintenance and repair work to ensure that technical solutions of the low-cost and effective agricultural machines and mechanisms, many of which are concentrated in the park should put an end brand.

At the district level agricultural technical solutions to the park maintenance, repair, and maintain technical services for diagnosis and adapted to the system of birth for the increase of the index will be according to the goals of improvement.

Distribution system technical service guarantee, dealer service development of innovative new technical're getting go out of business, selling to the dealer for warranty service should be done by the implementation of the old techniques.

Specialization for of the service center, delivery mechanisms, it is necessary to develop the necessary components and spare parts.

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