



Review Article

Volume 1 Issue 3 - April 2018
DOI: 10.19080/JOJHA.2018.01.555562

JOJ Hortic Arboric

Copyright © All rights are reserved by Alojnovich RR

The System of Material and Technical Resources Supply to the Cotton Industry Directions of Improvement



Alojonovich RR*

Department of agriculture, Namangan Engineering Technological Institute, Uzbekiston

Submission: March 19, 2018; Published: April 10, 2018

*Corresponding author: Alojnovich RR, head of the department of Namangan Engineering Technological Institute Namangan, Uzbekiston, Email: rrashidov84@mail.ru

Abstract

In the process of economic reforms carried out in the country, along with the development of farms, great attention is paid to the establishment of a system of material and technical support in the cotton industry and the state support of this process. The development of the material and technical basis of farms directly contributes to agricultural producers to reduce the costs of their production and transportation, to increase productivity, to ensure financial stability, and to involve some agricultural workers in non-agricultural activities allowing productive employment.

Keywords : Lagenaria siceraria; Momordica charantia; Praecitrullus fistulosus; Cucurbitaceae; Tinda

Introduction

The issues of development of the cotton sector and increasing its effectiveness need to consider together with the cotton processing sector. Before passing on the cost reduction opportunities it is needed to separate the cost factors and the sources from each other. Agricultural farms with when we speak about efficient means we understand achieving economies of resources and economic elements and costing items. Cutting of production costs, and reducing the net cost and increasing labour productivity in the sector is an important factor.

Brief Literature Survey

It is known that efficient usage of existing resources is the basic factor in development of any sphere. In this case, we can observe different opinions about the economical importance of the concept of a resource. For example, Zokirov O. describes a resource as, from the society's point of view, a combination of natural resources which are necessary for an uninterrupted manufacturing and reproduction enough for quenching the needs of the society. Resource, being a French word, is described as an additional means [1]. According to Ulmasov A., all of financial and non-financial means, materials and workforce needed for the creation of a product and service, its manufacturing and providing it for general use are the economical resources [2]. In agriculture, agricultural resources include capital, main and working assets, land and water resources, entrepreneurial activities and labor. Each element of agro-resources is of the vital importance and therefore any one of them being more or less

than necessary will lead to an imbalance of resources and create difficulties in getting the expected result [3].

Today, it is required to manufacture quality products and provide their competitiveness by efficiently using available agrarian resources in the cotton rearing. In this case, a proper consideration of many factors which include the climate of every part of the country, soil and water supplies and the ways they are used, being provided with enough workforce and the meliorative state of the cotton field are important to increase the amount of yield by keeping the amount of spent resources unchanged. For example, our president, in his book [4], puts forward the idea that efficient and careful usage of natural resources, especially soil and water resources which are considered as not renewable, is the leading factor of social and financial development of the country.

Methodology

Research for the implementation of the process of economic and statistical analysis, monograph abstract thinking, observation methods used.

Main Trends in Reducing Prime Cost

However, today a number of problems have been adversely affected by the development of the system of providing basic types of material and technical resources to cotton-producing farms. Including:

I. Failure to meet the requirements of the system of production and market invitation especially for the cotton industry, especially for the resource-technical resources.

II. The difficulty in establishing adequate technical support due to the low level of financial difficulties in many cotton-growing farms and the relatively low solvency of farms.

III. Poor quality service of farms due to the lack of equipment of farming enterprises with a sufficient number of agrochemical machinery and mechanisms.

IV. There is a system of financial incentives in the use of waste-saving techniques and technologies in cotton and lack of specialists with modern technological knowledge.

Solving the problem of resource saving in cotton is mainly the following three factors: agrochemicals used for crop production; the composition of agricultural machinery; it will be directly linked to the supply of staff with modern technological knowledge.

Agro-technical equipment for cotton cultivation-manual handling-autumn planting, preparation of soil for sowing in spring and sowing seeds; processing between cotton and spring in the spring and summer; to do so; watering and feeding cotton; protection of cotton from diseases and pests; Implementation of cotton fertilizers; harvesting cotton; The cleaning of the cultivated area from the cotton fields and the preparation of the fall fertilizer includes practical measures.

An important agro technical arrangement is the use of cutting-edge technologies and agricultural machinery and equipment in cotton-growing farming, which is one of the key areas of resource saving. It has been noted that in the field of agricultural science and practice, the plowing of the land is still a good result, and this agro technological method is still being used.

Soil processing techniques and mechanisms are also produced and delivered to farms in accordance with the above-mentioned method. In particular, it is currently advised to plow the soil at a depth of 40-45centimeters in the cotton processing with two-way turning plows. Taking into account the reasons for the introduction and survival of such a method, the main objective was to destroy many long-term weeds. At the same time, if we take into account the cost of plowing soil at a depth of 40-45centimeters by means of two-sided turning plows in the course of processing of the land, as a result of the fact that the area of the plow is limited by two times less than the four-leaf plow, the costs associated with the area of the crop area are twice as high.

In addition, the fuel consumption will increase proportionally with the decrease in the speed of the tractor by 15-20percent due to the soil resistance of the plowing soil due to the plowing of the soil at a depth of 40-45centimeters.

The aforementioned factors directly reflect the excess costs associated with an increase in fuel consumption and depreciation costs per hectare. There are other aspects that denied the plowing of cotton fields by dip plowing into deep plowshares. Specifically:

1) Due to the collapse of the soil mechanical composition due to the drainage of the tractor by the double-sided plowing of the tractor in the field by plowing the soil at a depth of 40-45 centimeters with two-round turning plows, is a factor leading to a decrease in cotton fertility;

2) When deeply dripping the soil, the lower layer of the soil becomes lower, and the above-fertile portion drops down to 40 centimeters, which leads to a decrease in cotton yields. At the same time, the low fertile layer will not be able to provide sufficient nutritional support to the plant, while reducing the use level in the fertile soil. In addition, the low-density low-damped soil increases the appearance of cotton fertility in the early spring and creates a strong negative impact on the growth and well-being of the seeds.

So, today's agrarian science and practice ignore the notion of "the deeper the plowing of the Earth will produce, the better it will be when plowing the soil." As can be seen from this, the agro technical method aimed at burying the seeds and roots of deep-willed soil against perennial weeds is generally not economically justified. It is best to use this method as a one-off event on a regular basis, but also on separate crop areas.

The solution to the problem. Nowadays, in developed countries, the use of soil preparation for cotton cultivation, the soil is softened at a depth of 30-35cm, with the use of perennial herbicides for weeds. At the same time once every four to five years, the sown areas will be softened at a depth of 50-55cm, without sinking the soil.

This method is now known as "minimal tillage" or "zero tillage", which is widely used in soil treatment in the United States and European Union, and plays an important role in the absolute and relative savings of resources in cotton production. For that, farmers are required to provide land softening devices.

Seed sowing costs at the expense of one hectare of cultivation in cotton is one of the most important resources currently spent on optimal standards. In particular, in the US, one of the largest cotton-growing countries in the United States, average 20kg per hectare of crops, 18-20kg in Israel, 8-12kg in China, and 5kg in India, while average 40-45kg seeds Seed production.

The over-sown seeds are not only a product that is rich in nutritional value (but also products that can be deducted from reducing seed sowing costs), but also a factor that reduces the cost of farmers and reduces cotton yields. Including:

a) After the sowing of cotton over the sowing costs, additional manual labor is spent (excessive cottonseed).

b) Excessive sowing costs due to crop area require labor and material spending on seed preparation, harvesting and transportation.

c) Over 25-30 thousand tons of cotton seeds are spent annually on the average in the republic due to excess seed sowing, and in addition to these seeds, the production capacity of cotton oil, grass and cabbage will be reduced.

Given the reasons for the excessive use of seed sowings, in many cases the low yields of seeds for sowing seeds, the lack of seeding seeds at the required level, and the uncertainty of the seeds, lead to the provision of sufficient number of seedlings due to the increase in cotton seeds sowing costs. Here is another important issue to consider. This sowing seedling sowing is poorly sown on seeds. That is, the technical capability does not allow sowing of the seeds in a certain area on a clearly marked basis, but also leads to excessive cotton seeds consumption.

The solution to the problem. The seedlings thickness in the cotton fields is the key to achieving high productivity. This can be solved by sowing cotton seeds at 60cm wide.

Therefore, in order to provide a viable plantation process, cotton farmers are required to deal with the supply of high quality, 8-line cotton seeds, with a wide range of cutting-edge technical solutions that enable seedlings to be sown precisely and precisely. By means of this event, the amount of resources will be saved absolutely.

Water consumption in cotton is an important aspect of resource saving. Because today cotton-growing farms do not have much water than norms.

In particular, it was noted that a hectare of cotton crop area due to optimum water consumption standards, an average of

5000-6000cubic meters, which is almost 11000-12000cubic meters, and the situation in agriculture is expected to increase in the future water shortages, water scarcity has occurred in the conditions of water consumption the reduction of the issue.

Usually, the excess water consumption in the cotton industry of the Republic depends on many factors, there are legal, socio-economic, technical, technological, selection, agro technological and spiritual mechanisms for resolving the problem. For example, the sown area of each cotton and cotton plant is based on the soil conditions, and the amount of water consumption is recommended by scientists, and the delivery of this amount of water to the field does not yet lead to high yields. Because of the optimal timing of irrigation also plays an important role. In other words, if the rest of the thirsty cotton irrigation or water the plant will need to be watered early harvest reduction has been proven in practice.

Therefore, the impact of other factors is taken into consideration while raising the technical capacity to resolve the issue within the framework of our task.

The solution to the problem. As a technical solution for reducing water consumption, water metering devices should be installed at hydro posts for the account of the water supplied to each farm within the Water Consumers Association (SIU). Today, in most cases, farmers have no control over water consumption, although water has been devastated.

At present, drip irrigation technologies, rainwater irrigation technologies are being introduced in the cotton fields of the republic. However, at the same time, the main cotton fields are irrigated by furrows that use a lot of water. Therefore, the production of drip irrigation equipment and organization of supply to farms should be considered as an important issue.

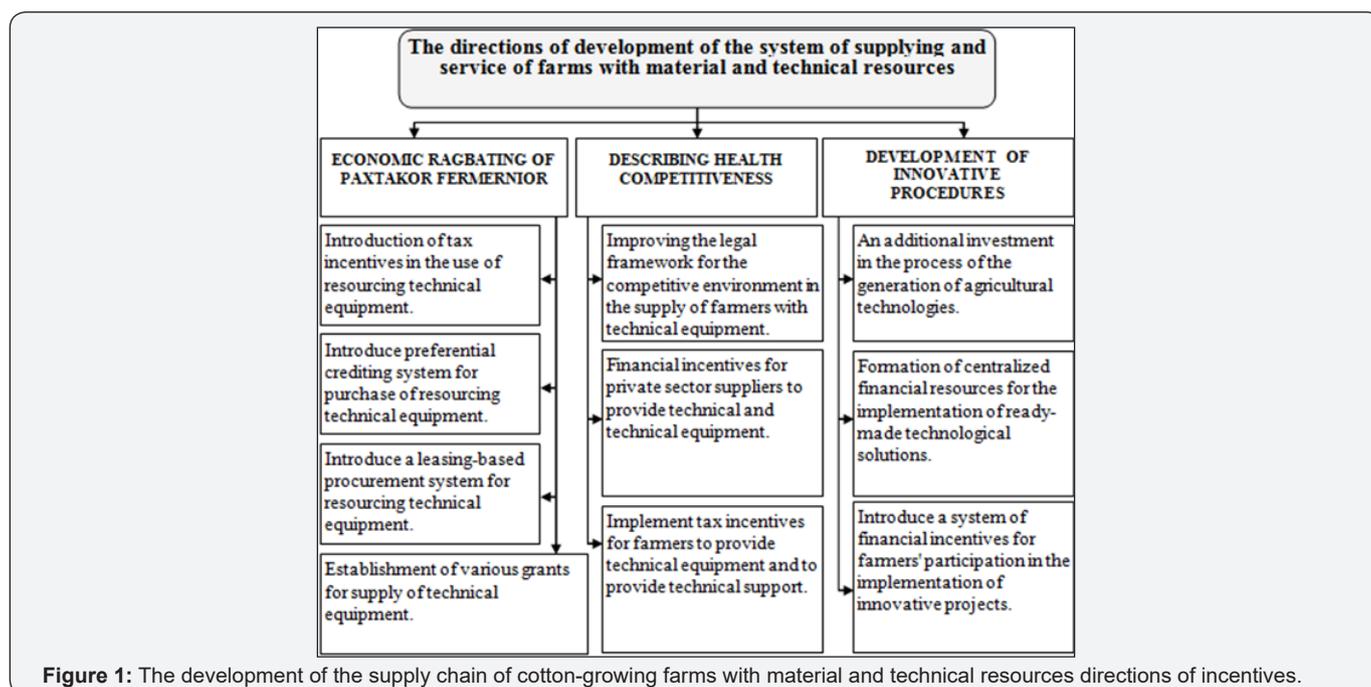


Figure 1: The development of the supply chain of cotton-growing farms with material and technical resources directions of incentives.

Also, it is necessary to pay great attention to raising, training and retraining of swimmers for efficient introduction of drip irrigation. The technology of drip irrigation requires skilled work.

It is necessary to use agro technical methods, which are less cost effective in drip irrigation technologies in cotton fields. In particular, it is important to straighten out the land before sowing. The water level in the well-grounded area has been proven to be 30-35% less than that of land. As a result of the uniform flow of water to all parts of the crop area, it is ensured that the cost savings of water will be achieved by obtaining high yields of cotton seeds.

Cotton harvesting. Mechanization of harvesting is important in cotton-harvesting costs. The current harvesting technology repeated several times in the cotton fields to pick through. That's why picking cotton in the car is not justified. In the world cotton harvest cotton is harvested once in a car. Gathering cotton in the machine is economically more efficient than a manual pickup, replacing 300-350 cars per vehicle, which is of great social importance and saves much of the cost of living.

Taking into account the above, the following guidelines are recommended for state stimulation of improving the system of providing cotton-seed farms with resource-material resources (Figure 1).

In the first direction focusing on the improvement of the system of stimulating the cotton-growing farms in purchasing renewable material and technical resources. If the farmer is not interested, it is impossible to put into practice any residual technical solutions. This is particularly important in the cotton industry. The second approach is to provide farmers with

economic, legal and financial incentives for state-owned, as well as privately owned businesses.

As you know, newly established small service providers often cannot compete with large enterprises. Therefore effective protection mechanisms of the state should be in place so that small enterprises cannot crash into competitive conditions. The importance of this direction is explained by the fact that the generally financially unsustainable farming entities have a negative impact on the financial services of suppliers and service providers. That's why not only farms, which are a strategic product, but also service industries, should also be supported by the state.

Conclusion

In the third direction, the focus will be on promoting the priority of innovative ideas in the introduction of renewable technologies and technologies in the cotton-producing farms. At the same time, additional investment in the process of generating waste-saving technologies in agriculture; Formation of centralized financial resources for the implementation of ready-made technological solutions; it is advisable to focus on encouraging farmers to directly engage with their own funds and participation in innovation implementation.

At the same time, it should be emphasized that there is a need for a state-based approach to stimulate government-supported improvement of the system of providing cotton-seed farms with resource-material resources. Farmers are able to grow crops in different natural and economic conditions. The balanced approach allows for equal economic conditions for all farming enterprises, and the principle of economic justice is in place. It is desirable that the basis for a viable approach to farmers' economic incentives is to create the following factors (Figure 2).

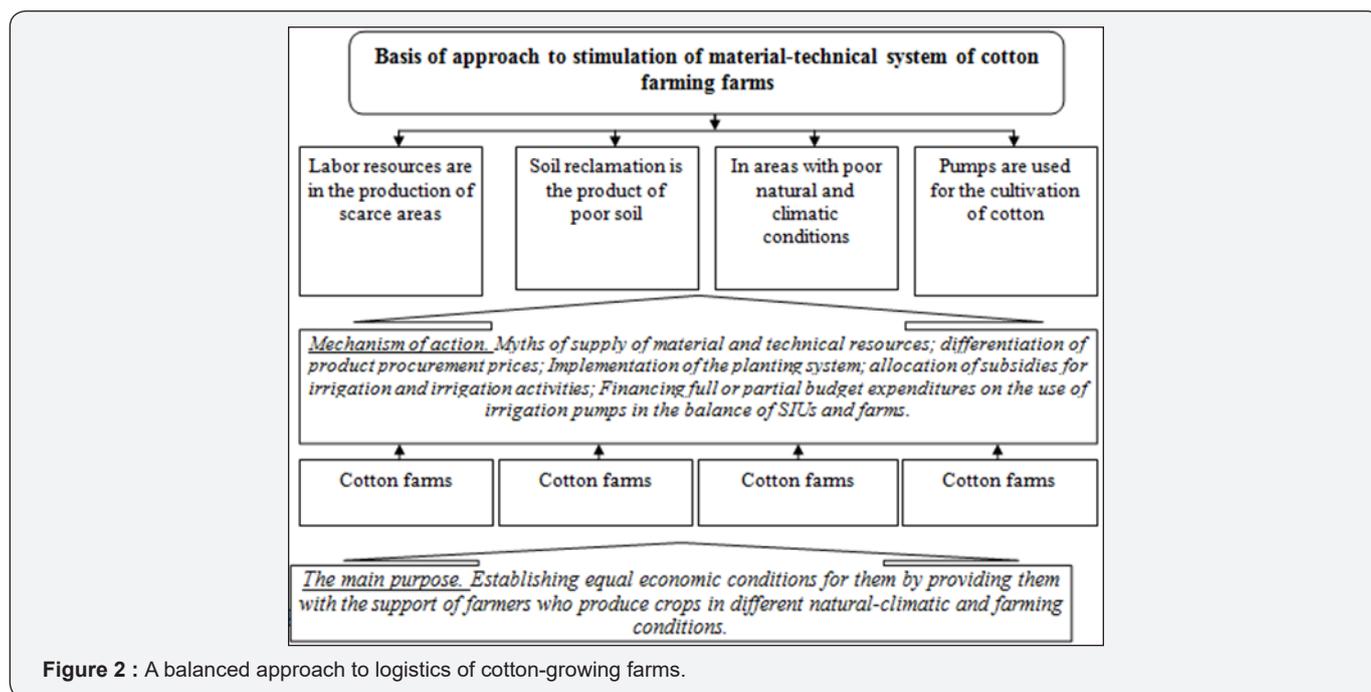


Figure 2 : A balanced approach to logistics of cotton-growing farms.

- I. use of the procurement system of mechanization tools in the production of cotton-growing farms in areas where labor resources are scarce;
- II. support of measures for the use of subsidies allocated by the state for the rehabilitation of land reclamation and irrigation systems, as well as the introduction of crop rotation scheme;
- III. Cotton farmers have the opportunity to cultivate cotton in areas with relatively high concentrations of crops in areas with poor natural and climatic conditions;
- IV. Pump farmers should use government subsidies or tax exemptions to pump pumps under conditions that require the use of pumps for irrigation.

At present, state support for the system of foreign internships and internships for the specialists of the private sector to provide targeted soft loans, the study of the use of modern techniques

and technologies is of great importance. Because the financial position of the supply companies does not allow them to make such expenses at the earliest possible date.

Due to the inadequate development of the free market of material and technical resources in the country by the majority of resources, the lack of capacity of farms to purchase necessary services and necessary resources at the right time and at affordable prices calls for the development of the services sector. The above-mentioned measures will be an important factor in increasing the economic efficiency of cotton production in farms.

References

1. Zokirov O (2004) Economy of agriculture, Tashkent, Uzbekistan, pp. 77.
2. O'lmasov A (2006) The theory of economy, Tashkent, Uzbekistan, pp. 35.
3. Rajabov I (2006) In conditions of a free economy, the balance of the market of agro-resources and efficiency of production. Dissertation Doctor of Economic Sciences, Tashkent, Uzbekistan, pp. 41.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/JOJHA.2018.01.555562](https://doi.org/10.19080/JOJHA.2018.01.555562)

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats (**Pdf, E-pub, Full Text, Audio**)
- Unceasing customer service

Track the below URL for one-step submission

<https://juniperpublishers.com/online-submission.php>