Promoting The Development Of Improved Cleaning Technology

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ABSTRACT

Improving product quality and maintaining its quality indicators as a result of reducing the cost of cleaning machines and increasing their efficiency due to the introduction of improved technologies into production information about

Keywords: stewardship, impurities, seed cotton, cleaning machines, mesh surface, revolver, economic efficiency.

Introduction

The reforms implemented in our country to create a stable and efficient economy are showing their results today. In particuv deep structural changes in the econsignificant achievements were made in implementing, ensuring the growth of the population's incomes, strengthening effective foreign trade and investment processes, reforming agriculture, sustainable development of small business and private entrepreneurship, and strengthening the banking and financial system.

The prestige and position of Uzbekistan in the international economic field is growing significantly and regularly. In this regard, Sh.Mirziyoyev, the leader of our country, carefully developed the strategy of socio-economic development, the goals and tasks of economic reforms, and the clear and correct indication of the ways of implementation. made it possible.

The main part

In the current period, it is necessary to distinguish between the social and economic development of the countries of the world, its absolute social labor efficiency and comparative economic efficiency. Absolute efficiency can be found separately for each object or for a new technique. It is represented by the total return amount of the expenses spent. Comparative efficiency is determined by comparing these options in the case of two or more production or farms. Therefore, comparative effectiveness shows the superiority of one option over other options and the alternative of the selected option. Comparative efficiency is carried out at the stage of computational planning and in the design of visible objects to select appropriate options. Absolute efficiency can be known only after the construction of the object [1].

Relevance of the research: Taking into account that the insufficient improvement of cleaning machines used in cotton ginning enterprises has a negative effect on the quality indicators of cotton in the technological process of cleaning

raw cotton, it was suggested to introduce an improved cleaning machine into the technological process.

Among the main indicators that describe the efficiency, the following can be included: the unit price of the product, labor productivity, profitability, profit, the payback period of additional tariff funds, or the standard coefficient of efficiency. The payback period (T) is determined by the following formula.

$$T = \frac{K_1 - K_2}{S_1 - S_2} \qquad (1)$$

$$E = \frac{S_1 - S_2}{K_1 - K_2} \qquad (2)$$

where K_1, K_2 are the amount of capital required to implement the options.

S_1, S_2 - the cost of a unit of production when this option is introduced.

Included costs are an indicator of the comparative efficiency of capital funds, and are used to select the best options for solving technical and economic situations. The quoted costs are determined by the following formula:

$$S_i + E_H K_i \rightarrow K_i - K_H \rightarrow \qquad (3)$$

Where K_i is the capital expenditure for each option.

S_i is the price of a product produced according to a specific option.

Tn is the standard payback time of capital funds.

Yen is the standard efficiency coefficient of capital funds.

Annual economic efficiency is determined using the following formula:

$$E = (Z_1 - Z_2) A_2 \qquad (4)$$

here, Z_1, Z_2 are the amount of costs for the production of one unit of product using old and new technology, soums; A_2 - volume of product production using new technology, in natural units. [2]

Tables 1 and 2 provide the necessary information for calculation.

As a result of the introduction of improved technology into production, the quality indicators of finished products will also be improved. As a result of improvement of the equipment in the main production process and improvement of its working parts in the cotton ginning enterprises, the output of the cotton fiber, passing from class to class, improvement of the quality indicators of products such as fluff, seed, and reduction of the amount of free fiber occurs.

Therefore, when calculating the annual economic efficiency from the introduction of improved technology into production, it is necessary to take into account the additional economic effect from the improvement of quality indicators.

It is necessary to calculate the economic efficiency obtained from the introduction of improved

Table 1. DATES

№	INDICATORS	Unity	Options	
			Bazis	New
1	Annual production volume	tons	33755	33755
2	Number of tools	piece	2	2
3	Equipment performance	t /hour	10	10
4	Installed power	kVt	18	18
5	Demand coefficient	-	0,7	0,7
6	Consumed electricity	Soum	250,0	250,0
7	Paying for installed capacity	Soum	36400	36400
8	Depreciation Allowances for Equipment	%	15	15
9	Allowance for daily recovery	%	5	5
10	Minimum wage	Soum	202730	202730
11	Payment to social insurance	%	25	25

The results of the calculations of the operating costs are given according to the basic and proposed options, thousand soums

Table 2.

№	INDICATORS	Options	
		Bazis	New
1	Until improved cost of equipment	1094533	1094533
2	Carrying equipment delivery and installation costs	109453	109453
3	Correct capital expenditure	951149	951149
4	Costs of ITIs	-	11240
5	On the creation of tools and equipment production funds are capital investments	951149	962389
	To prepare tools and equipment quoted costs	1346659	1348345
6	Operating expenses, total including:	572211	543680
	depreciation allowances	180598	182284
	- daily maintenance	60199	60761
	cost of electricity	331414	300005
	material consumption	-	630

Taxonomy in a short economic efficiency from improving quality indicators is determined using the following formula:

$$Э_c = (Ц_2^1 - Ц_1^1) * A_2 \qquad (5)$$

here, - the price of the product in the base option;
- the price of the product in the new version;
- annual product production in a new version volume.

Research facility.
A total of 33,755 tons of cotton raw materials were prepared at the Toshloq cotton ginning enterprise in 2022, of which 25,872 tons were 1st grade, 2,757 tons were 2nd grade, 1,323 tons were 3rd grade, 2,870 tons were 4th grade, and 933 tons were 5th grade. 8435.0 tons of 1st grade, 869.0 tons of 2nd grade, 404.0 tons of 3rd grade, 817.0 tons of 4th grade and 245.0 tons of 5th grade fiber were produced from them, of which 3430 tons were of 1st grade. , 510 tons of 2nd grade, 180 tons of 3rd grade, 387 tons of 4th grade and 180 tons of 5th grade, a total of 4687 tons of fibers were upgraded to 1st grade.

Using the above formula, we calculate the annual economic efficiency of the enterprise.
Es=(E1+E2+E3+E4+E5)-K
K = 15,000 thousand soums, - the capital cost spent on improving the cleaning machine.
E1=(4510993-4449108)* 3430.0=212265.0 thousand soums;
E2=(4308000-4240116)* 510.0=34621.0 thousand soums;
E3=(3496020-3395819)* 180.0=18036.0 thousand soums;
E4=(3007330-2919370)* 387.0=34040.0 thousand soums;
E5=(2067540-1929580)* 180.0=24833.0 thousand soums.
The expected total economic efficiency will be:
Es=(212265.0+34621.0+18036.0+34040.0+24833.0)-15000000=323795000-15000000=308795000 soums.
When the results of the research were applied to the production, as a result of the increase in the quality indicators of the fibers obtained from the processed cotton raw materials, an economic benefit of 308,795 thousand soums was achieved.

Conclusions:

If we say that the amount of active impurities in seeded cotton obtained from the Garam area is 0.28%, after drying in drying drums, the amount of active impurities increased to 0.5%, and after cleaning aggregates from small and large impurities, the amount decreased to 0.15%. The amount of impurities released in the process of separation of small impurities from the content of seeded cotton fiber was determined. The total amount of impurities released depending on the useful part of the mesh surface and the speed of movement of seeded cotton was determined. The process of separation of impurities from the composition of two or more pieces of cotton moving at different densities in mutual elastic was theoretically studied riod of time.

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