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Costs Management Model Of Agro-Industrial Associations In The Regional System.

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ABSTRACT

As the main goal, the rationale for managing the costs of organizations of the agro-industrial complex and developing recommendations for reducing the cost of manufactured products is chosen as the main objective, using the example of a multi-sectoral economy that integrates several industries: production, storage, processing, commercial activities, wholesale and retail trade. The main trends in the development of agricultural agrarians are revealed in the work, priority directions of this sector of the economy are determined. The principles and mechanism for managing the costs of an agricultural organization are presented. The model of management of the planned cost price for the achievement of high financial results is proved. As a scientific novelty, we can note the development of the concept of cost management, by introducing a set of measures aimed at production planning, preventive control of costs and calculating the planned cost in accordance with market realities. The theoretical generalizations contained in the work can be used as materials for discussion in a scientific discussion. In addition, they may be of interest to scientific and educational activities.

Keywords: agricultural production, financial results, efficiency, cost, concept.

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INTRODUCTION

In the conditions of market relations, economic agents are faced with the issue of increasing the efficiency of production and efficiency of financial and economic activity, increasing competitive positions, and the effectiveness of the production management apparatus. When all conditions are met, companies try to realize their mission - to get the maximum amount of profit. The main goal of the organization can be achieved through the financial and reasonable planning of production activities. This can be achieved due to various factors: increasing production capacity, introducing new management methods, improving the quality of products, etc. However, taking into account the specifics of agricultural companies, the current issue in economic activity is to reduce the cost of manufactured goods.

Krasnodar region is a significant agricultural sector of the country's economy. The territory of the region is comparable with the area of Austria and is equal to 75.5 thousand km², the number of the registered population is more than 5.1 million people. Almost half, 47% of whom live in rural areas.

The results of the conducted analysis of the results of the agrarians' activity in the region made it possible to establish that the rate of growth in the value of agricultural products produced in 2010-2017 increased by 2.08 times (compared to 2.17 times in the Russian Federation and 2.4 times in the Southern Federal District), as shown in Figure 1. In the structure of agricultural production, the share of crop production in the region in 2016 accounted for 77.3%, and livestock - 22.7%.

The bulk of crop production in 2017 was produced by agricultural organizations - 62.8% of farms of all categories. The share of peasant (farmer) households accounted for 19.2%, and for households - 18.0% of production.

For the period 2013-2017 growth rates of livestock production in all categories of farms amounted to 135.9%. In 2013, the amount of output in the Krasnodar Territory in value terms was 3.4% lower than in 2010 - 70233 million rubles. Further, since 2014 there has been an increase in production volumes.

Thus, the efficiency of agricultural production in the Krasnodar Territory over the analyzed period had a growth trend in both animal husbandry and plant growing.

The analysis showed that the largest share belongs to crop production, the rate of profit growth has a positive trend. In this regard, as a way to increase financial results of agricultural organizations, we can propose a model for reducing the cost of production.

MATERIALS AND METHODS

The advantage of the proposed concept is the possibility of estimating costs up to the time of their actual payment, as well as revealing the advantages of producing goods with specified consumer properties (Fig. 1).

The introduction of this concept into the economic entity under study will occur in seven stages, each of which will include a certain set of procedures and will be the basis for each subsequent stage. It should be noted that each of the stages assumes the performance of works of various specialists of the organization, therefore, when implementing this concept, one of the factors of its successful impact on the economic effect is the professionalism of the employees of the organization. Let's consider the stages of carrying out the concept of cost management in the organization under study:

1. Analyzed are actually the achieved results for the last 3-5 years (depending on the direction of economic activity and the duration of functioning in the market);
2. The analysis of the actual cost price for 3-5 years;
3. Determination of the planned annual sales volume;
4. Definition of a possible retail price taking into account internal and external factors;
5. Definition of the planned cost price;
6. Comparison of the target and estimated cost of production in order to determine the value of the required cost reduction;

7. Determining the economic effect of the concept of cost management.

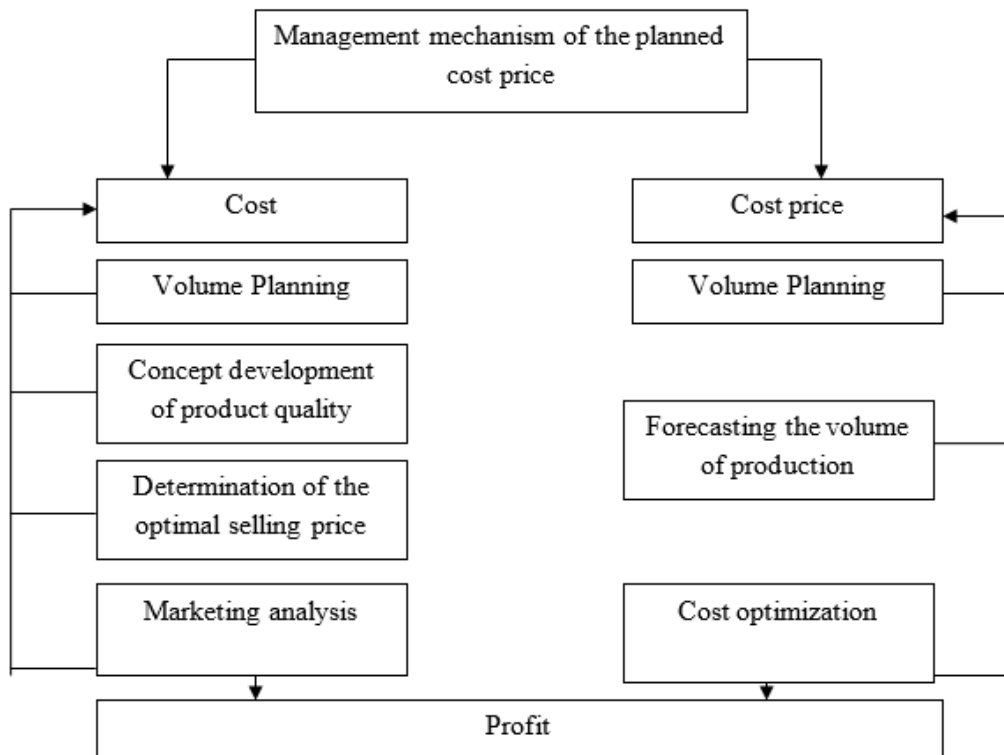


Figure 1: The process of managing the planned cost in agricultural organizations

RESULTS AND DISCUSSION

As an object of research, to evaluate the effectiveness of the proposed concept, JSC "Agrocomplex" NI Tkachev, which has an unsatisfactory financial condition.

Summarizing the results, we can say that in the organization of one of the significant problems is the lack of own current assets.

To prevent such a negative phenomenon, it is necessary to develop a set of measures, procedures, primarily to increase the current assets.

Thus, if you increase the amount of money, it will lead to an increase in current assets, and consequently to the growth of own working capital. In addition, this change will positively affect the liquidity of the organization. From the whole set of ways to increase money, it is possible to identify measures to increase profits from the sales of products. This growth can be affected by a large number of factors. One of them is effective cost management.

Define the economic effect that a firm can get after implementing this system in the practice of cost management. To determine, let's take crop production - wheat.

To determine the possible price of grain sales in the organization, an analysis was made of the actual grain prices for the period from 2014 to 2017, as a result of which it was revealed that the average price for the previous three years was 912 rubles.

Taking into account the average retail price for grain, we will calculate the planned cost price of grain, the results are presented in Table 1.

Table 1: Planned cost calculation of the organization

Index	Value
Planned retail price for 1 cent, rub.	890
Planned Rate of Return,%	21
Planned annual sales, q	2507049
Planned cost of 1 cent, rub.	470
Total planned cost, thousand rubles.	1272313
The difference is the average actual and planned cost per 1 cent, rub.	13

The planned rate of return is 20%. The planned retail price is 890 rubles, which is 2.5% lower than the average for the previous three years. This decrease is due to the increase in the planned annual sales volume. One way to increase sales is to find new sales channels through effective marketing procedures.

During the calculation and analytical procedures it was revealed that with an increase in the volume of sales by at least 20%, the prices for the sale of this product can be reduced by no more than 2.5%. Thus, having increased the annual sales to 2507049 centers, the retail value can be reduced to 890 rubles. for 1 cent.

In the analysis of costing by cost objects, it was found that the greatest costs are attributable to the purchase of fertilizers.

Proceeding from this, in order to reduce the cost, it is advisable to develop and implement measures to reduce fertilizer costs. To this end, the organization as one of the options to reduce the cost of fertilizers can be the cultivation of a new variety of wheat.

In the organization, the following wheat varieties are used as planting material: "Memory", "Thunder", "Strength", "Antonovka". These varieties of wheat have average productivity and require the mandatory introduction of protective equipment to maintain it.

As an optimization, it is recommended to use a new grade of wheat - "Alekseich", which has excellent characteristics. This variety was bred by the scientists of the FGBKU "National Center of Grain" named after. P. P. Lukyanenko.

The application of the Alekseyich wheat variety against the background of the non-sessile soil cultivation technology will make it possible to reduce such cost items as "seeds and planting stock", "mineral fertilizers" and "plant protection products". Consider the change in costs for the costing clauses when growing a new grade of grain. Table 2.

Table 2: Costs associated with growing a new wheat variety of the organization

Cost Item	Actual amount of expenses, at the end of 2017, thousand rubles.	Planned value of costs, thousand rubles.	Absolute deviation, thousand rubles.
Pay with deductions for social needs	129594	129594	0
Seed sand planting stock	93964	96070	2160
Fertilizers	434984	380896	54080
Chemical means of plant protection	102273	96590	5683
Electricity	7417	7417	0
Petroleum products	131209	131209	0
Contents of fixed assets	304774	304774	0
Total costs	1204215	1142284	61931

As shown by numerous studies, the best yield of wheat can be achieved with a seeding rate of 3-4 million seeds per 1 hectare or 120-200 kg of grain per unit area. Seeds of wheat "Alekseich" were purchased for 18 rubles for 1 kg. It is necessary to clarify that the sowing of wheat "Alekseyich" is carried out on 27000 ha out of a total area of 30,000 hectares, and the rest of the land was sown with the reserves of cereals used earlier. Thus, the cost of seeds of a new type of wheat amounted to 58,320 thousand rubles. (120x18x27000), and the remaining 37750 thousand rubles this is the sum of the value of the stock of grain crops. There was a decrease in fertilizer costs by 54080 thousand rubles. and costs for chemical plant protection products by 5,683 thousand rubles.

The final stages of implementing the concept of cost management considered are to determine the economic effect of the proposed activities. For this, we compare the data with the average value of the financial result for the last three years, which were considered above; planned indicators and the results achieved from the activities carried out. The results are presented in Table 3 "The economic effect of renewal grain composition and the acquisition of new distribution channels.

Table 3: Economic effect of renewal grain composition and acquisition of new distribution channels

Index	Average from 2014 to 2017	Planned value	The achieved value	Absoluted eviation from	
				actual	planned
Retail price per 1 cent, rub.	912	890	880	-32	-10
Annual sales, q	2218893	2507049	2620000	401107	112951
The cost of 1 cent, rubles.	485	443	435	-50	-8
It is saved, thousand rbl.	2041071	2231274	2305600	264529	74326
Totalcost, thousand rubles	1077955	1110622	1139700	61745	29078
Profit, thousand rubles	963116	1120652	1165900	202784	45248

According to the table, it can be seen that the developed cost management concept, whose main goal was to increase profit by 20% through cost reduction and annual sales growth, positively affected the financial performance of the company.

Growing a new variety of wheat, contributed to a decrease in the costs of care for crops. In addition, due to the special properties of this type of wheat, the gross yield increased by 401107 centers from the actual figure. Due to the acquisition of new sales channels, the annual sales volume has increased, due to its increase, the retail price can be reduced by 32 rubles, while this decrease will not affect the profit indicator.

CONCLUSION

As a result of the conducted studies, it became possible to propose a concept that is to determine the retail price of the product, that is, the unit price at which it will be possible to sell the planned quantity of goods, thereby obtaining a sufficient (planned) financial result. This concept, whose goal was to increase profits by 20% by reducing cost and increasing annual sales, positively affected the financial condition of the organization.

When carrying out the cost analysis for the costing clauses, it was found that a large amount of the cost is spent on fertilizers. Proceeding from this, one of the options for reducing the cost of fertilizers was offered the cultivation of a new grade of wheat "Alekseich". This contributed to a reduction in the costs of care for crops. In addition, due to the special properties of this type of wheat, the gross yield increased by 401107 centers compared to the actual figure for 2016.



REFERENCES

- [1] Bocharov V.V. Financial Analysis. Short course. 2 th ed. St. Petersburg: Peter, 2015. P. 240.
- [2] Popov N.A. Economics of the agribusiness sectors. Lecture course. Moscow: IKF3. "EKMOС", 2016.P. 368.
- [3] Tomashevskaya V.A., Adushev M.N. Analysis of business activity of the organization on the example of LLC "Kashelka". Young scientist. 2016. pp. 1473-1476.
- [4] Fursov V.A., Konovalov V.B., Tikhonov A.I., Sogacheva O.V., Pyanova N.V. Marketing planning in industrial enterprises in the context of import substitution strategy. International Journal of Applied Business and Economic Research. 2017. 15(13). pp. 171-182.
- [5] Popkova E.G., Tyurina Y.G., Sozinova A.A., Serebryakova M.F., Lazareva N.V. Clustering as a growth point of modern Russian business. Integration and Clustering for Sustainable Economic Growth. 2017. pp. 55-63.
- [6] Khotinskaya G.I., Kharitonova G.V. Analysis of the economic activity of the enterprise: Textbook. 3rd edition, revised. Moscow: "Business and Service", 2015. P. 448.