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## DETERMINATION OF THE ACCOUNTING OF THE COST OF AGRICULTURAL PRODUCTION AND WAYS OF ITS REDUCTION

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### Key words:

cost price, internal control, production, crop production, material costs, mechanism, agricultural enterprises, organizational model of control

The article is devoted to a critical analysis of the current state of accounting of agricultural products through the prism of the inconsistency of the economic practices of agricultural enterprises with the existing and effective methodical provision of accounting in the agrarian sphere. Conceptual disagreements have been established, which are primarily related to the widespread use of customary law in the accounting of the agricultural sector and taking into account the specifics of land relations. The variety of approaches of modern scientists and economists to the essence of determining the cost of production is considered, analyzed and systematized. The theoretical basis for the recognition of agricultural products as an accounting object is outlined, the main categorical and conceptual apparatus is investigated. Progressive scientific and methodological developments and practical experience of using separate methodical techniques (estimation and calculation, accounts and double entry) for adaptation of domestic accounting practice to modern requirements, as well as further development and improvement of accounting of agricultural products, as the basis of information support for agricultural enterprise management, are summarized. Legislative documents and regulations regulating the accounting of production costs were studied. The basic principles of organization and methods of formation of material costs and cost of production were considered, an organizational model of control of material costs of an agricultural enterprise was formed, which reveals the main aspects: objects of control, information sources, methodological techniques, methods of summarizing results. The classification and grouping of types of costs by separate characteristics is the basis of accounting, analysis and calculation of the cost of production. The main reserves for reducing the cost of production of agricultural products are considered. Ways to reduce the cost of production have been studied and systematized, and a number of measures and proposals have been proposed to optimize costs and increase the profitability of the enterprise.

## ОСОБЛИВОСТІ ОБЛІКУ СОБІВАРТІ ВІРОБНИЦТВА СІЛЬСЬКОГОСПОДАРСЬКОЇ ПРОДУКЦІЇ ТА ШЛЯХИ ЇЇ ЗНИЖЕННЯ

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### Ключові слова:

собівартість, внутрішній контроль, виробництво, продукція рослинництва, матеріальні витрати, механізм, сільськогосподарські підприємства, організаційна модель контролю

Статтю присвячено критичному аналізу сучасного стану бухгалтерського обліку сільськогосподарської продукції через призму невідповідності господарської практики сільгосп підприємств існуючому та діючому методичному забезпеченню обліку в аграрній сфері. Встановлено концептуальні розбіжності, які пов'язані передусім з широким поширенням в обліку сільськогосподарської галузі звичаєвого права та з врахуванням специфіки земельних відносин. Розглянуто, проаналізовано та систематизовано розмаїття підходів сучасних науковців та економістів до сутності визначення обліку собівартості виробництва. Окреслено теоретичний базис визнання сільськогосподарської продукції як об'єкта бухгалтерського обліку, досліджено основний категоріально-понятійний апарат. Узагальнено прогресивні науково-методичні напрацювання та практичний досвід використання окремих методичних прийомів (оцінка і калькуляція, рахунки та подвійний запис) для адаптації вітчизняної облікової

практики до сучасних вимог, а також подальшого розвитку та вдосконалення обліку сільськогосподарської продукції, як основи інформаційного забезпечення управління сільгосп підприємством. Досліджено законодавчі документи та нормативні акти, які регулюють облік витрат виробництва продукції. Розглянуто основні засади організації та методики формування матеріальних витрат та собівартості продукції, сформовано організаційну модель контролю матеріальних витрат сільськогосподарського підприємства, яка розкриває основні аспекти: об'єкти контролю, інформаційні джерела, методичні прийоми, методи узагальнення результатів. Проведено класифікацію та групування видів витрат за окремими ознаками є основою обліку, аналізу та калькулювання собівартості продукції. Розглянуто основні резерви зниження собівартості виробництва сільськогосподарської продукції. Досліджено та систематизовано шляхи зниження собівартості продукції та запропоновано ряд заходів та пропозицій, щодо оптимізації витрат та підвищення прибутковості підприємства.

### Statement of the problem

The economic crisis that is present in our country requires the solution of many issues that arise in various sectors of the economy. The main tasks of economic development at the current stage are the comprehensive increase in production efficiency, as well as the occupation of unshakable positions of agricultural enterprises in the domestic and international markets.

Agriculture is one of the main areas of material production, which provides the population with food, and industry with raw materials. This vital branch is the basis of the agricultural sector of the country. At its expense, 75% of the population's demand for consumer goods is provided.

The main goal of agriculture is to preserve stability and further increase production of products with a constant reduction of labor, material and monetary resources for its production, comprehensive improvement of its efficiency in agriculture and animal husbandry, to meet the needs of the population in products provided for by consumption norms, and industry in raw materials, creating necessary reserves of agricultural products.

One of the most important indicators of the economic activity of agricultural enterprises is the cost price, since it shows exactly what it costs the economy to produce the corresponding type of product and how economically profitable it is in specific natural and economic conditions of management. Calculating the cost of production of crop production is extremely important, because crop production is one of the most important branches of production of most agricultural enterprises, without which the normal functioning of the livestock industry is impossible.

The urgency of studying the cost of agricultural products and ways to reduce it is that in the system of indicators characterizing the efficiency of production, one of the leading places belongs to the cost of products. It reflects all aspects of the production and financial and economic activity of the enterprise: the level of use of material, labor and financial resources, the quality of work of individual employees and management as a whole.

The main tasks of economic development at the current stage are the comprehensive increase in production efficiency, as well as the occupation of stable

positions of enterprises in the domestic and international markets. The cost of production reflects all aspects of the economic activity of enterprises, their achievements and shortcomings. A systematic reduction in the cost of agricultural products is one of the main conditions for increasing production efficiency. It has a direct impact on the amount of profit, the level of profitability, as well as on the budget.

### Analysis of recent studies and publications

Theoretical and methodological issues of crop production accounting and the organization of internal control of production costs at the enterprise, as well as the search for ways to reduce the cost of production are constantly in the field of view not only of scientists, but also of practicing accountants. Scientists such as G.V. Savytska, F.F. Butynets, E.V. Mnykh, Yu.S. Tsal-Tsalko, O.V. Isai, and V. Polishchuk dealt with the problem of reducing production costs and the cost of agricultural products. I.V. Lobastov, A.I. Moroz, V.P. Savyn, as well as other scientists. However, the analysis of a number of literary sources in this area allowed us to conclude that the question of the cost of agricultural products and ways to reduce it requires more thorough further research.

### Objectives of the article

The urgency of studying the cost of agricultural products and ways to reduce it is that in the system of indicators characterizing the efficiency of production, one of the leading places belongs to the cost of products. It reflects all aspects of the production and financial and economic activity of the enterprise: the level of use of material, labor and financial resources, the quality of work of individual employees and management as a whole. The purpose of the research is the analysis of the cost of production as an indicator of the production and economic activity of the enterprise, as well as the development of proposals for reducing costs under modern economic conditions.

### The main material of the research

Cost as an economic category appeared in 1912 in the works of A.P. Rudanovsky, M.P. Ter-Davydov and M.F. Von Ditmar. Before that, the terms: "own cost", "total cost", "own cost" were used, "production cost", "factory

cost”, “cost”, “actual cost”, “productive cost”, “factory cost”, “actual cost”, “full price”, “true price” [1, p. 47]. In the economic literature, the concepts of “cost of production” and “production costs” are constantly equated. L.V. Napadovska notes that the cost of production includes all the costs of production and sale of products. According to V.V. Sopko, all the various substances and forces of nature used in the production process for the production of a new labor product form the concept of cost, and the monetary expression of the amount of costs for the production of a specific product is defined as the cost price. The essence of the above-mentioned terms of the cost category comes down to its interpretation as a monetary expression of the enterprise’s costs for the production and sale of products. However, the difference between production costs and cost price still exists and consists primarily in the fact that cost price is reflected only in monetary form, and production costs can be expressed both in money and in kind. Moreover, the cost price includes separate costs that are part of the added product.

In our opinion, “product cost” is an independent economic category that expresses a complex system of economic relationships between business entities in the process of production and circulation of products. At the same time, the cost price as an indicator of economic activity shows the costs of a specific enterprise for the production and sale of a certain type of product in monetary form, which gives grounds for drawing conclusions about the efficiency of using the production potential of the relevant business entity.

The analysis of the cost of production of agricultural products both in general and of its individual types determines the need for appropriate information support. The main sources of information support for analysis of production costs include: financial and statistical reporting, primary documents, accounting registers, cost estimates, audit materials, results of cost analysis for previous periods, etc.

The cost price, as one of the main economic indicators, is used in planning, analysis and control, which form the general accounting and analytical management system of the production enterprise. When planning, the cost of costing objects in the process of economic activity under various alternative conditions is calculated in order to choose the most optimal option with the maximum result, as well as the formation of planned costings [12, p. 78].

Various types are used for planning purposes, accounting for the cost of production and analysis of its level. For example, M.I. Skrypnyk proposes to classify the cost according to the following characteristics: according to the complete coverage of costs (full, production, technological); for the needs of planning, accounting and analysis (individual, industry, company); depending on the time and purpose of the calculation (planned, actual, provisional (expected), normative); depending on the calculation time (annual, quarterly, monthly).

Taking into account the specifics of agricultural production, most often the cost price is divided into production and total, individual and industry, planned and actual. In order to more fully provide the management of

enterprises with information at all stages of management decision-making, it is proposed to supplement this classification. Yes, depending on the composition of costs that are included in the cost price, it is necessary to separate the cost price of finished products. And if the production cost is formed from costs directly related to the production of products, their finishing and transportation to the place of storage, and the full cost includes all costs related to the production, storage and sale of products, then to the cost of finished products will include production costs, operating and financial costs that can be directly attributed to a certain type of product (costs for interest on loans, interest and fees for financial leases, costs for storing products) [1, p. 46].

The need to allocate this type of cost of production is due to the fact that a significant share of crop production is not sold immediately and is stored in warehouses for a certain time, and the management of the enterprise needs information about the cost of production, which was at the time of its sale. Depending on the purpose and terms of determining the cost price, it is advisable to separate the normative cost price, which in modern economic literature is often considered as a remnant of the planned and administrative economy. However, the use of scientifically based standards for the use of resources when determining the cost is a guarantee of their more rational use. So, the cost classification, taking into account the proposed additions, looks like this (see Figure 1).

The individual cost price is determined at the enterprise level. Its level for individual types of products depends on local agronomic, technical, zootechnical, organizational, economic and natural conditions.

The industry cost price shows the total cost of production and sale of products of all enterprises of the industry, that is, it is the average cost price of products in the industry.

Zonal cost is the average cost of enterprises engaged in the production of homogeneous products in a certain territory.

The standard cost price consists of costs for production and sale of products, determined on the basis of current norms of resource costs.

The planned cost price is calculated before the beginning of the planned period, which makes it possible to organize control over the expenditure of funds, over the economic activity of enterprises and their production units during the planned period.

The actual cost price is calculated based on the results of economic activity on the basis of actual costs and the volume of products received. It makes it possible to determine the profit of the enterprise and the economic efficiency of the production of each type of product (works, services), to find the reasons for low profitability or unprofitability of certain industries, to determine reserves for reducing costs per unit of production.

The production cost consists of the costs associated with the production of products and their transportation to the place of storage. The cost of finished products includes production costs, operating and financial costs that can be directly attributed to a certain type of product. The full cost

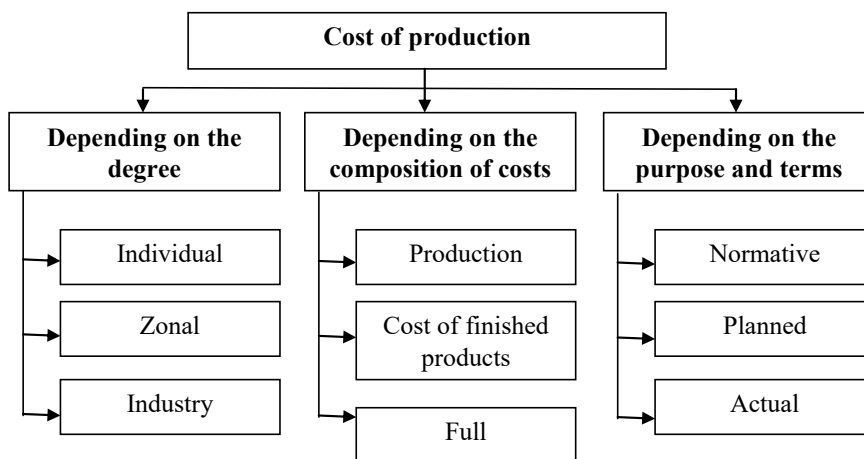


Fig. 1 – Classification of the cost of agricultural products

consists of the cost of finished products and the enterprise’s costs for sale.

According to the Methodological recommendations for planning, accounting and calculating the cost of production of agricultural enterprises, the cost of sold products is formed from the production cost of products that were sold during the reporting period, distributed general production and over-standard production costs. In turn, production costs include: direct material costs, direct labor costs, other direct costs, general production costs [7].

At the same time, administrative expenses, sales expenses, other operational and financial expenses, losses from equity participation and from extraordinary events are not included in the cost of manufactured and sold products and are covered by other sources. But according to the Instructions for filling out the state statistical observation form No. 50-sg “Main economic indicators of the work of agricultural enterprises”, the full cost of sold products consists of production cost, administrative costs, sales costs, other operating and financial costs, which can be reasonably attributed to production and sale of produced

agricultural products [6]. In this regard, we offer the following procedure for including costs in the types of cost depending on the composition of costs (Table 1).

The classification of expenses is of great practical importance. The grouping of types of costs by separate characteristics is the basis of accounting, analysis and calculation of the cost of production. In addition, the grouping of costs helps to find solutions in non-standard situations, in new areas of activity. Classification of costs is necessary for determining the cost of products and, accordingly, for pricing, and determining the unit cost of production. The grouping of costs is valuable not only for calculating the cost price, but also for establishing a certain relationship between them for the purpose of mutual control and coordination.

Material costs, wages, complex costs (costs of operation and maintenance of equipment, general production costs), as well as losses due to shortages and downtimes are subject to analysis [3, p. 37].

When conducting a factor analysis, it is necessary to take into account the production structure of the enterprise,

Table 1 – The procedure for including costs in cost types

Type of cost			Articles of expenditure
Full cost of sold products	Cost of finished products	Production cost	Salary expenses
			Seeds and planting material
			Fuel and lubricants
			Manure
			Means of protection of plants and animals
			Fodder
			Raw materials and materials (without returnable waste)
			Works and services
			Costs for repairing non-current assets
			Other expenses for maintenance of fixed assets
			Other expenses
			Unproductive costs
			Total expenditures
		Administrative expenses	
Other operating expenses			
Financial expenses			
	Selling expenses		

because its construction determines the components of control and analysis. The activity of the enterprise and its divisions, which is reflected in the system of indicators, most objectively characterizes the daily work results. The analysis is carried out in order to timely identify the causes of deviations from the planned parameters in order to make appropriate management decisions.

In order to achieve success in the future and not to waste extra time on identifying reserves for increasing the volume of products (services) and reducing the cost price for past periods, it is necessary to systematically conduct operational, intra-economic and comparative analysis.

Product cost analysis is carried out in the following stages:

- general assessment of the implementation of planned (estimated) tasks to reduce the unit cost of production, which includes: calculation of the total amount of fixed costs for the production of all products;
- calculation of variable costs per unit of production;
- calculation of unit cost of production;
- comparison of the actual cost with the planned cost, detection of deviation and the influence of factors on this deviation;
- study of individual costing articles of a certain type of product;
- decoding of material costs is an analysis of the costs of certain types of materials that are spent on the production of a certain type of product [4, p. 255].

In general, the change in the unit cost of production is influenced by such factors as: a change in the volume of production; change in the amount of fixed costs; change in production volume; change in the amount of variable costs. The most important method of identifying unused cost reduction reserves is comparative analysis. Clarifying the reasons for failure to implement the cost reduction plan helps management find the right solution for mobilizing unused reserves.

The main reserves for reducing the cost of production are an increase in the volume of production due to more efficient use of the company's production capacity; reduction of production costs by increasing the level of labor productivity, saving the use of raw materials, materials, electricity, fuel, equipment, preventing non-production costs, etc.

An increase in production volumes and a decrease in the cost of production of an agricultural enterprise can be

achieved by increasing yields, which, in turn, is possible by increasing costs per 1 ha. First of all, this concerns the increase in the specific weight of fertilizer costs. Optimizing the size of sown areas makes it possible to reduce the cost of crop production as much as possible.

In addition, optimization of the level of cost of production is an important condition for improving the financial result of the enterprise and ensuring expanded reproduction, which involves increasing the production of agricultural products and reducing the cost of labor and production resources per unit.

Taking this into account, the following measures can be taken to optimize costs and increase the profitability of the enterprise:

- 1) increasing the technical level of production: the introduction of new, progressive technology, the use of new types of raw materials and materials;
- 2) using innovative technology and equipment; automation and mechanization of production processes;
- 3) improvement of the organization of production and work due to changes in forms and methods of work, improvement of the management apparatus, reduction of its costs, as well as reduction of transport costs;
- 4) changing the volume and structure of products, reducing the material and labor intensity of products;
- 5) improvement of the use of natural resources, use of cheaper materials, their reuse, waste-free production technologies;
- 6) studying the causes of defects and reducing cost by reducing losses from defects and other non-productive costs, which will make it possible to reduce and more rationally use production waste.

### Conclusions

In market conditions, the role of the cost price of products and the formation of prices for products increases significantly. Effective management of the cost of production should be focused on ways to reduce it, and for this it is necessary to choose the best method of displaying costs in accounting, which creates the necessary information base for carrying out factor analysis of costs, which will allow it to be carried out in an operational manner. So, the scientific result of this study is the systematization of ways to reduce the cost of production, and the prospect of further scientific research is the development of information and analytical support for estimating the cost of production.

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