

Improving audit costs of agricultural products under economic modernization

Dilshod Mamadiyarov^{1,*}, *Shakhlokhon Dekhkanova*¹, *Dilobar Khaitboeva*¹, and *Feruza Uzokova*¹

¹Tashkent State Agrarian University, 2, University street, Tashkent, 100140, Uzbekistan

Abstract. General production costs are reflected in the item "Costs of production and organization of management". This article also takes into account insurance payments for buildings, structures, machinery, equipment, inventory and other fixed assets directly used in the production of products. Insurance payments are distributed by crops and types of products in proportion to the costs of production. Insurance payments are reflected in the accounting records in the debit of the "Agriculture" account and in the credit of the "Insurance settlements" account. The article "Other expenses" reflects the expenses directly related to the production of products, but none of the above items is included. This article reveals modern methods of intra-company management of the formation of the cost of agricultural products, the composition of the costs of agricultural firms, the procedure for their control, optimization and audit. A structural model is proposed that represents the methodology of internal control and audit at the macro- and micro-levels of the hierarchical management of an agricultural enterprise. The composition of the information necessary for the implementation of the methodology of intra-company control, accounting and analytical procedures used to evaluate cost items and make management decisions are determined. The features of the audit (external, internal) of production costs are revealed - establishing the validity of the formation and correctness of accounting for production costs, identifying unused reserves. The conceptual scheme of the technique of this type of audit is given.

1 Introduction

In market conditions, an effective organization of cost accounting and costing of products in agricultural production should be aimed at ensuring effective control over the use of resources at any stage of the technological process and obtaining the accounting data necessary to achieve management goals [1]. The improvement of technologies and organizational aspects of the activities of economic entities that have occurred in recent years have had a significant impact on the composition and structure of costs, but could not fully ensure the increase in the economic efficiency of production in agriculture [2].

In solving this problem, the leading role belongs to the system of complex organizational and managerial measures, which also include the improvement of the state of cost accounting and calculation, based on the use of various methods in the field of collecting, documenting,

* Corresponding author: dilshad.mamadiyarov@gmail.com

processing and summarizing information on production costs and costs [3]. Practice shows that at present, due attention is not paid to identifying the causes of high costs and unprofitability, finding on-farm production reserves, improving the quality indicators of agricultural organizations, resulting in excessive production costs and loss of finished products [4].

An objective description of the production process is given by the organization and maintenance of scientifically based cost accounting and calculation of the cost of production, which allows agricultural producers to optimize the results of production activities [5]. In market conditions, the sufficiency and reliability of information on costs and costs are one of the ways to obtain competitive advantages of a commercial organization used in the practice of economic management and management [6]. In this regard, the development of cost accounting and costing methods is of particular importance, aimed at increasing their adequacy to the field of production activities in market conditions, and supplemented by provisions that reveal a variety of ways to influence costs for making management decisions, in the system of the cost accounting method in force in the organization. for production [7].

Before starting a documentary audit, the auditor needs to study the organizational and technological features of the enterprise, specialization, scale and structure of each type of its production activity [8]. Based on the analysis of accounting policies and production features, the auditor finds out the validity of the method of accounting for production costs used in practice and the option of consolidated cost accounting [9].

When conducting an audit, auditors should examine not only the specified features of cost accounting, but also the factors that determine the level of production costs (works, services). At the same time, analytical procedures and statistical methods for studying the influencing factors on the level of costs and prime cost of agricultural products should be widely used [10].

The aim of the study is to develop a set of theoretical and methodological provisions and practical recommendations for improving the organization and methods of cost accounting and calculating the cost of production, contributing to the further development of accounting science and aimed at improving the efficiency of agricultural organizations in market conditions.

2 Materials and methods

The object of the study is the legislative and regulatory acts governing the accounting of business transactions in organizations, the practice of cost accounting and costing in agricultural production. The subject of the study is a set of theoretical, organizational, methodological and practical issues of the development of cost accounting for production and calculation in agricultural organizations.

The scientific novelty of the study lies in the theoretical and methodological substantiation, practical development and solution of a set of issues related to the improvement of cost accounting and costing methods in agricultural organizations aimed at optimizing and increasing the efficiency of their activities.

The practical significance of the study lies in the fact that the obtained theoretical and methodological provisions of the work and complex practical developments develop and form the main provisions of cost accounting and costing, provide a solution to important applied problems and determine the main directions for their further development in agricultural organizations.

An audit of cost accounting and the formation of the cost of agricultural products is necessary to establish the compliance of the methodology used in the organization for calculating the cost, valid in the audited period, with regulatory documents, as well as confirming the correctness of its calculation. Checking the correctness of the allocation of

costs for the production and sale of products is currently considered one of the most important issues, since the cost of production is an important characteristic of the activities of the organization, its branches, large divisions, segments and activities, which determines the quality of their work.

The definition of the term "cost" is disclosed by the Methodological recommendations for cost accounting, according to which "the cost is characterized by the amount of costs in monetary terms for the production of specific types of output (gross) products and for its calculation unit" [11].

During the audit, as Ivashkevich notes [12], the validity of attributing certain expenses of an enterprise to production and distribution costs, including them in the cost of production, work and services of an economic entity is analyzed. The cost price is a set of costs associated with the production and sale of products (works, services) of the enterprise [13].

3 Results and discussion

Cost reduction is one of the primary and urgent tasks of any society, every industry, and enterprise. The search for reserves to reduce it helps the economy to increase its competitiveness, avoid bankruptcy and survive in a market economy [14]. The level of production cost determines the amount of profit and the level of profitability, the financial condition of the enterprise and its solvency, the rate of expanded reproduction, the level of purchase and retail prices for agricultural products [15].

As Alborov notes, reducing the cost and increasing on this basis the profitability of the production of agricultural products (works, services) requires proper organization of accounting for production costs and adherence to a positive methodology for calculating the cost of products (works, services).

The composition of the costs included in the cost of production is determined by the Accounting Regulations (PBU) "Expenses of the organization", and the calculation methods are determined by the enterprises themselves [16]. As Chupakhina notes, in agricultural organizations, the costing method includes several techniques and methods [17], namely:

- 1) direct attribution of costs by type of product; exclusion of the total cost;
- 2) application of established coefficients;
- 3) distribution of costs in proportion to the cost of related products;
- 4) distribution of costs according to established bases;
- 5) summation of costs;
- 6) combined calculation of production costs [4].

Ivashkevich distinguishes between calculation methods based on:

- 1) dividing the total amount of all costs associated with the manufacture and marketing of products by the volume of production and sales;
- 2) accumulation (summation) of costs by types of products, orders, works with the help of additional rates of the distributed part of the costs.

Akhrushina combines the methods of cost accounting and costing, highlighting the following classification features [18]:

- 1) completeness of cost accounting;
- 2) cost accounting object;
- 3) efficiency of accounting and cost control (Figure 1).

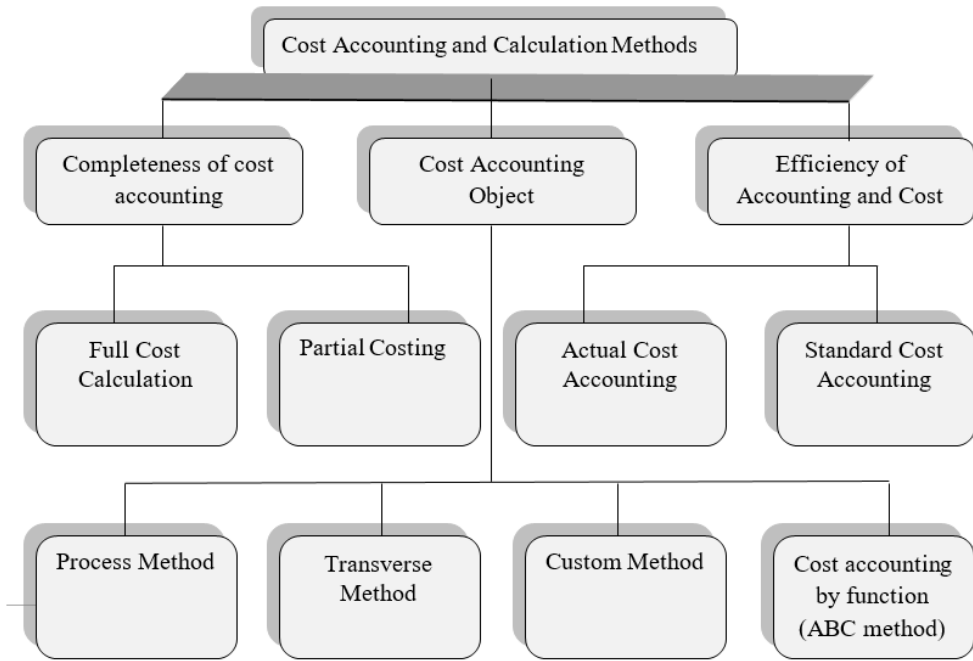


Figure 1. Classification of cost accounting and costing methods.

According to the objects of cost accounting, there are per-process, per-order and order-by-order methods of costing, ABC-method (cost accounting by functions). Horngren and Foster identify two costing systems [19], shown in Figure 2.

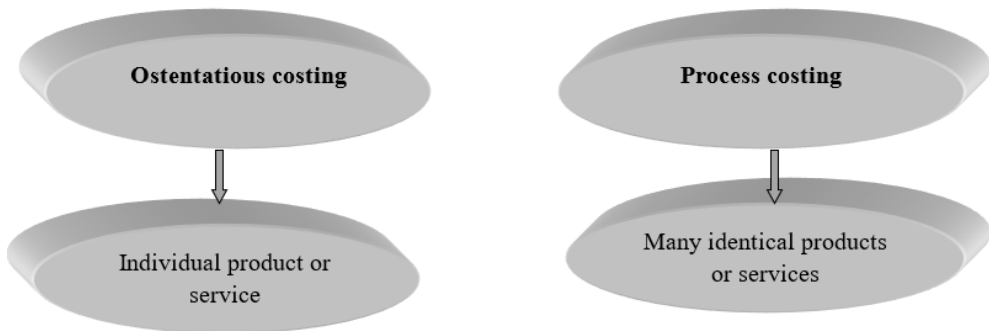


Figure 2. Calculation systems.

In the process of verification, the auditor needs to analyze the correctness and validity of the applied cost accounting method, for example, for agricultural organizations, the most acceptable and common method of accounting for actual costs and the alternate method, which is also used in processing agricultural organizations.

The generally accepted classification of cost accounting methods in domestic practice needs to be improved. Cost accounting methods are currently grouped according to the following criteria:

- 1) the time of occurrence;
- 2) completeness of inclusion;

- 3) organization of the production process;
- 4) the impact of price changes.

The cost of production, representing the costs of the enterprise for production and circulation, serve as the basis for comparing costs and income, that is, the self-sufficiency of the fundamental feature of economic market calculation. The cost price is one of the generalizing indicators of the intensity and efficiency of resource consumption.

According to PBU "Expenses of the organization", "the cost of goods sold, products, works, services is formed on the basis of expenses for ordinary activities recognized both in the reporting year and in previous reporting periods, and carry-over expenses related to the receipt of income in subsequent reporting periods, taking into account adjustments depending on the specifics of the production of products, the performance of work and the provision of services and their sale, as well as the sale (resale) of goods. Costs attributable to the cost of production, as a rule, must meet the following requirements [20]:

- reasonableness - economically justified costs, the assessment of which is expressed in monetary terms;
- documentary confirmation – registration of costs with documents in accordance with the law;
- Expenses are recognized as expenses, provided that they are incurred for activities aimed at generating income.

When examining the costs attributable to the cost of production, the auditor must establish whether there have been cases of unreasonable attribution to costs of expenses that are not subject to inclusion in the cost of production. It should not include the costs of non-industrial farms that are not related to the manufacture of products; capital investment costs and other expenses covered by special funds and funding sources; losses to be recovered from the perpetrators or attributed directly to the financial results of the enterprise. Nikolaeva considers four principles of product cost formation [11]:

- connection with the implementation of the entrepreneurial activity of the organization, the essence of which is that the cost of products (works, services) includes costs associated with the production and sale processes;
 - separation of current and capital costs;
 - the assumption of temporal certainty of the facts of economic activity - the accrual principle, according to which the facts of the economic activity of the enterprise relate to the reporting period in which they took place, regardless of the actual time of receipt or payment of funds;
 - the assumption of property isolation of the organization, according to which the property and obligations of the enterprise exist separately from the property and obligations of the owners of this enterprise and other legal entities [7].

Eskindarov [14] also refers to the principles of cost formation already listed above the principle of documenting costs (i.e., attributing expenses that are not documented to the cost of production is not made) and the principle of state regulation of the cost of production (i.e., only legally established costs are included in the cost of production) [8].

Sheremet [15] notes that in some cases, when considering costs and determining the unit cost of production, direct labor costs are combined with general production costs, forming a group of added costs (Figure 3).

When auditing the cost, special attention is paid to its calculation, since these results subsequently affect not only the financial condition of the organization, but also the results of its economic activity.

Consider the calculation of the cost on the example of livestock products, in accordance with the requirements of the Guidelines for accounting costs and calculating the cost of products (works, services) in agricultural organizations.

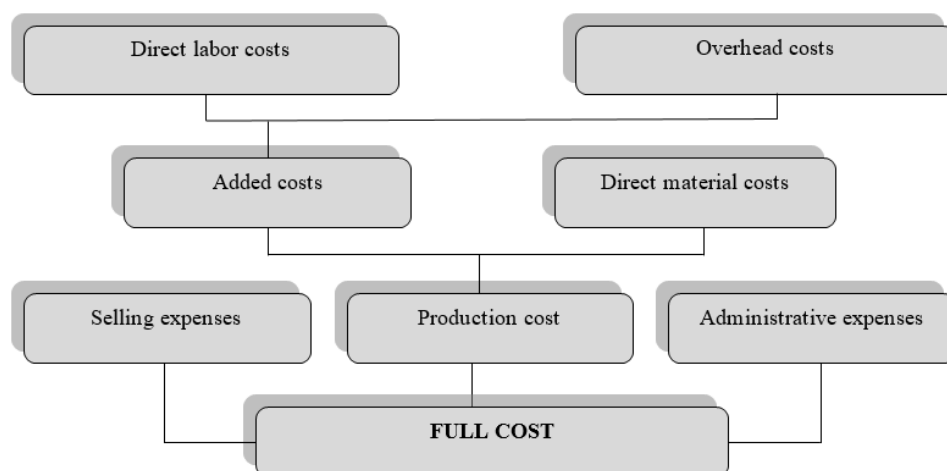


Figure 3. Determination of the total cost of production.

The audit methodology for calculating the cost of production for individual accounting objects in animal husbandry has its own characteristics and general provisions. General provisions for costing include the following:

1. It is necessary to clarify the completeness of the cost records for individual accounting objects.
2. Adjust planned indicators in costs to actual ones.
3. Determine the completeness of posting products (main and secondary)
4. Determine the amount of costs related to the main product by subtracting the cost of by-products from the total cost.

The paper formulates the definition of the method of accounting for production costs, which is expressed in a certain sequence of interrelations of techniques and methods for reflecting costs in documentation, accounting registers and creating information for the subsequent calculation of the cost of products (works, services). At the same time, the author proposes to understand the costing method as “a set of interrelated procedures for identifying costing objects, combining different methods of costing, suggesting a certain sequence of accounting work when affecting costs, generalized in the cost accounting system”. The proposed definitions characterize the designated categories as separate objects of research and contribute, from the author's point of view, to the elimination of contradictory moments in research on this issue.

Of great importance in the field of cost accounting is a properly constructed classification of production cost accounting methods and cost calculation methods. The classification of methods gives a general idea of their content, determines the composition of the Groups that have common characteristics and the scope of their application. This, in turn, allows solving problems that arise in accounting and analytical work and technical support for accounting. The author proposes a general classification of methods for accounting for production costs, which differs from the well-known ones in the systematization and completeness of the distinguished features. The classification of cost accounting methods is shown in Figure 4.

Studies carried out in the field of classification made it possible to develop a list of characteristics that reveal the content of the cost accounting method (dependence on production technology, classification of costs in the method system, determining the degree of product readiness, ways to bring semi-finished products of various degrees of readiness to a single meter (indicator), the frequency of including invoices costs into the cost of

production, evaluation of products, control and responsibility of administrative and managerial personnel, a combination of the method with elements of regulation), which allow systematizing the list of domestic and foreign methods in the format of a single classification proposed by the author in order to determine the scope and conditions for their operation.

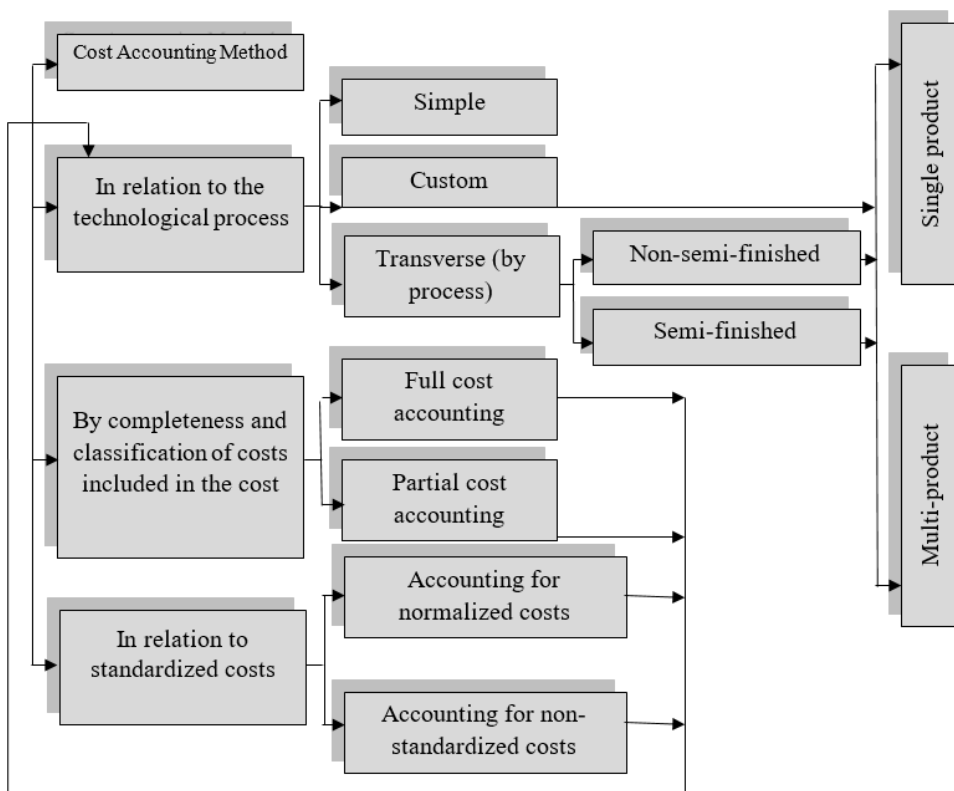


Figure 4. Classification of cost accounting methods.

Studies carried out in the field of classification made it possible to develop a list of characteristics that reveal the content of the cost accounting method (dependence on production technology, classification of costs in the method system, determining the degree of product readiness, ways to bring semi-finished products of various degrees of readiness to a single meter (indicator), the frequency of including invoices costs into the cost of production, evaluation of products, control and responsibility of administrative and managerial personnel, a combination of the method with elements of regulation), which allow systematizing the list of domestic and foreign methods in the format of a single classification proposed by the author in order to determine the scope and conditions for their operation.

According to Melnik [13], the need to improve and develop the audit methodology is associated with the objective need to improve its quality, which does not allow to fully satisfy the needs of society for reliable information about the financial and economic condition of organizations, as well as the need to take into account new areas of activity of business entities when conducting an audit and the requirements of its more complete adaptation to the interests of external and internal users (shareholders, investors, creditors, management of organizations, government bodies).

During the audit, the auditor should also determine whether the account "Primary production" is used to record the costs of farming and output in agricultural enterprises. It is also designed to calculate the cost of the product produced. In the debit of the account, indirect costs for the above consumables are reflected directly at the end of the year, and in the credit - the output of products during the year to the planned cost. At the end of the year, the planned cost will be adjusted to the established actual cost. The debit balance of this account at the beginning of the year represents the work in progress on the expenses of the previous year, and at the end of the year - the work in progress on the expenses of the next year. The analytical account of the "Agriculture" account is maintained according to the items of accounting for the cost of production, types of crops, work in progress, types of work and costs.

In addition, the auditor must also know how to account for individual items. The article "Social contributions and labor costs" includes wage payments for the labor of workers directly employed in crop production, payment for regular and additional holidays, as well as relevant social insurance contributions calculated in proportion to these amounts. These costs are directly transferred to the respective crops and types of work on the basis of primary documents. Overtime amounts are allocated to the correct amount of work. At the same time, according to the summary information, the debit of the "Agriculture" account and the credit of the accounts "Payments for wages" and "Calculations for social insurance" are entered.

When checking, the auditor should pay attention to the following: contributions to the central social insurance fund of employees are recorded as social insurance contributions, but the entries are recorded quarterly in the debit of the "Agriculture" account and the credit of the "Insurance settlements" account. It is organized in the same way as accounting for material resources in agricultural sectors. Seeds and plant materials are transferred to the "Agriculture" account at the actual cost by crediting to the "Seeds and Food" account at their direct instruction. The costs of preparing seeds for planting and transporting them to the place of planting are not included in the cost of seeds, but are transferred to the items of expenses associated with crops. The item "Fertilizers" takes into account the costs of fertilizers applied to the soil for agricultural crops, including industrially developed mineral, bacterial and other fertilizers, as well as organic fertilizers. The costs of mineral and organic fertilizers are reflected in the analytical accounting separately. The costs of preparation and fertilization are transferred directly to crop-specific cost items and are not included in this item.

Fertilizer costs are credited to the Materials account or the Livestock account. The article "Plant protection products" includes the costs of purchasing and storing pesticides, chemicals, herbicides and other chemical and biological agents used to control weeds, crops from pests and diseases. The farm itself with these tools is transferred to the cost of the crop according to the items of expenditure in the processing of seedlings, crops.

The article "Works and services" reflects the services of auxiliary production that meet the production needs of one's own enterprise, as well as the costs of paying for production services provided to this enterprise by other enterprises and organizations. The procedure for accounting for auxiliary production and including its cost in the cost of production is described in a separate article. The item "Expenses for the maintenance of fixed assets" includes the costs associated with the maintenance and use of fixed assets used directly in production. They include the cost of maintenance and operation of these property, plant and equipment, depreciation and repair costs. The main tools mentioned in agriculture include tractors, agricultural machinery and equipment, greenhouses, various storage and production buildings, basic ameliorative tools, perennial crops, production equipment, and so on, used directly in the production of products.

Expenses for the maintenance and use of fixed assets include the wages of employees servicing fixed assets, social insurance contributions, fuel and lubricants, auxiliary production, as well as services and other expenses of foreign organizations. Repair costs

primarily include the cost of own repair shops. The auditor should also be aware that depreciation charges consist of depreciation charges on fixed assets mentioned above. Depreciation deductions are reflected on a monthly basis on a separate analytical account "Depreciation allocated to fixed assets used in agriculture". At the same time, the account "Agriculture" is debited and the account "Depreciation of fixed assets" is entered. At the end of the year, the amount of depreciation of fixed assets is distributed by culture and type of work and is drawn up through a special statement. Current adjustment costs previously accounted for in the "Auxiliary production" account are distributed in proportion to the amount of depreciation (Figure 5).

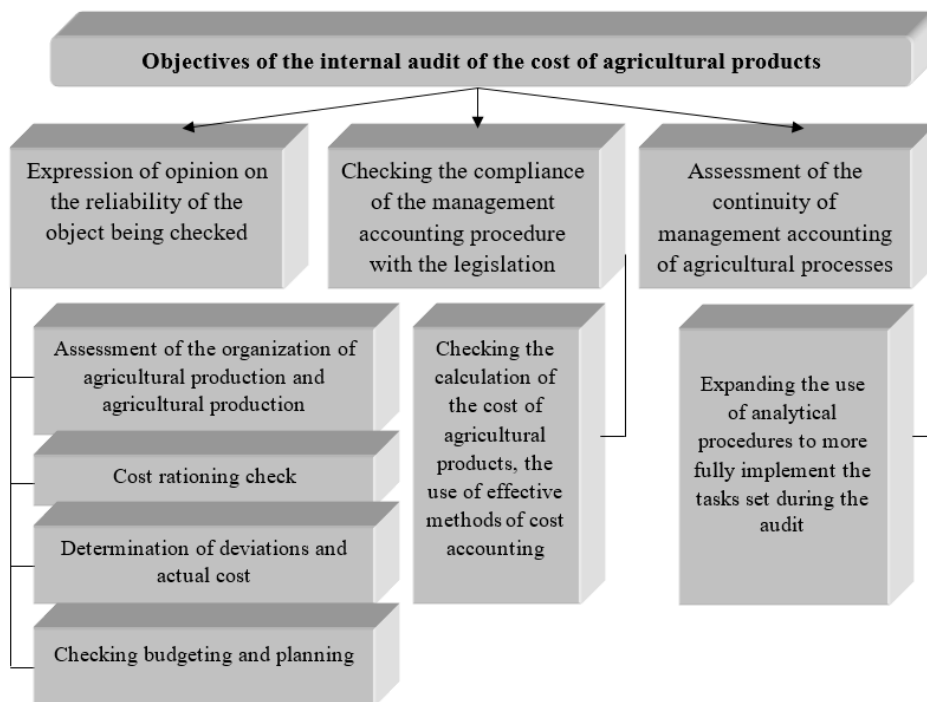


Figure 5. Target settings of the internal audit of the cost of an agricultural enterprise.

General production costs are reflected in the item "Costs of production and organization of management". The article "Insurance payments" takes into account the costs associated with state compulsory insurance payments for the harvest of agricultural crops and perennial crops, farm animals, rabbits, bee colonies and others. These payments relate directly to the value of the respective crops. This article also takes into account insurance payments for buildings, structures, machinery, equipment, inventory and other fixed assets directly used in the production of products. Insurance payments are distributed by crops and types of products in proportion to the costs of production. Insurance payments are reflected in the accounting records in the debit of the "Agriculture" account and in the credit of the "Insurance settlements" account. The article "Other expenses" reflects the expenses directly related to the production of products, but none of the above items is included.

4 Conclusions

In the course of the study of the audit of costing, the author proposed a methodology for calculating the cost of production for individual cost accounting objects in agriculture, including general provisions and features for costing, allowing auditors to better check the costing.

In market conditions, production cost accounting is designed to cover a variety of ways to influence costs for making managerial decisions in sections that form the cost of production precisely in the system of the production cost accounting method that is in force in the organization. The paper formulates the definitions of the method of accounting for production costs and the method of calculating the cost of production.

The method of accounting for production costs is expressed in a certain sequence of interrelations of techniques and methods for reflecting costs in documentation, accounting registers and creating information for the subsequent calculation of product costs. Cost calculation method - a set of interrelated procedures for identifying costing objects, combining various calculation methods that involve a certain sequence of accounting work when affecting costs, generalized in the cost accounting method system.

The proposed definitions characterize the designated categories as separate objects of research and contribute to the elimination of controversial issues in research on this issue.

References

1. Avlokulov A.Z. Improving the methodology for accounting and auditing financial results. Abstract of the dissertation of a doctor of economic sciences. T.: 2019. P.71.
2. Akbasheva D.M. et al. Features of cost accounting and calculation of production costs. Eurasian Scientific Journal. 2020, No. 6, Vol 1, 123-131 pp.
3. Alikulov A.I. Theoretical and practical issues of accounting and cost analysis. Monograph. T.: "Science and technology", 2011. 196 p.
4. Akhmedzhanov K.B. Improving the methodology of internal audit in business entities. Abstract of a doctoral dissertation. T.: 2016. p. 42.
5. Boronov B.F. Compliance with international standards for accounting and reporting of financial assets of enterprises. Monograph. - Samarkand. "Matbaa Publishing House": 2020. 154 p.
6. Ivashkevich V.B. Accounting management accounting. - 3rd ed. M.: Master, 2015. - 448 p.
7. Alborov R. A. Accounting management accounting (theory and practice) /R. A. Alborov. - M.: Publishing House "Business and Service", 2005. 224 p.
8. Alborov R. A. Methodological aspects of calculating the cost of production in dairy cattle breeding, R. A. Alborov, N. L. Denisova, G. R. Kontsevoy / In: Development of accounting, control and management in agro-industrial complex organizations: Proceedings of the All-Russian scientific and practical conference dedicated to the 60th anniversary of Dr. Econ. sciences, prof. R. A. Alborova. — September 6, 2013. - Izhevsk: FGBOU VPO "Izhevsk State Agricultural Academy", 2014. P. 23–26.
9. Chupakhina N.I., Vinokhodova A.F. Cost in management accounting, The role of the state in the formation and regulation of a market economy: a collection of materials of the All-Russian Scientific and Practical Conference. Penza: PDZ, 2003, p. 255-257.
10. M.A. Vakhrushina, M.A. Accounting management accounting. A textbook for university students studying in economics. specialties / M.A. Vakhrushin. - 4th ed., ster. - M.: Omega-L, 2011. - 576 p.

11. Horngren Ch.T., Foster J. Accounting: management aspect. Per. from English., Ed. Ya. V. Sokolova. -M.: Finance and statistics, 2000. - 416 p.
12. Nikolaeva, Svetlana Alekseevna. Principles of formation and costing / S. A. Nikolaeva. - Moscow: Audit. firm "CBA": Analytics-press, 1997. 142 p. - (Professional library of an accountant and auditor).
13. Eskindarov M. A., Fedotova M. A. Business value assessment: textbook. 2nd ed., ster. M.: Knorus, 2016.
14. Sheremet A.D. Management accounting: textbook. M: ID FBK-PRESS, (2014) 512 p.
15. Melnik, M.V. Audit: Textbook / Ed. M.V. Miller. - M.: Economist, 2005. - 282 p. Mamadiyarov D.U., Khaitboeva D.Z., Bozorova M.T., Uzokova F.B. Improving the financial and credit mechanism based on international standards. Social Science Journal. ResMilitaris, vol.13, n 2, January Issue (2023).
16. Menglikulov B, Mamadiyarov D.U., Ergasheva Sh, Sherali Normuminovich. Peculiarities of the Development of the Financial and Economic System of Agriculture and Water Sector in Uzbekistan. International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-4, (2019)
17. Mamadiyarov D.U., Mengnorov A, Jalilov Sh, Djuraev B. Forecasting vegetable prices on the basis of the markov chain model. Solid State Technology, 63 Issue, 4 (2020)
18. Toshboyev A., Mamadiyarov D.U., Baymuradov Sh, Alimov Uch, Iskandarov S. Efficiency of agrobusiness development in agriculture. E3S Web of Conferences 244, 03019 (2021) <https://doi.org/10.1051/e3sconf/202124403019> EMMFT-2020
19. Abduvasikov A.A., Saidov M.H., Saidova D., Mamadiyarov D.U. Introduction of theoretical and methodological basis of agroclusters to the economy of Uzbekistan. E3S Web of Conference 258, 06069 2021
20. R.Dusmurov, B Menglikulov., Mamadiyarov D.U., Improvement of methodological aspects to calculate the cost of dairy products: a revive. E3S Web of Conferences 258. 04036 (2021) <https://www.doi.org/10.1051/e3s.conf/202125804036>.