

## FEATURES OF THE USE OF MANAGEMENT ACCOUNTING BY SEGMENTS OF AGRICULTURAL ENTERPRISES

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**Abstract.** A distinctive feature of the modern organizational system for managing agricultural enterprises is its meaningful effect on the growth of agricultural production efficiency. External financial accounting and internal management accounting at agricultural enterprises require continuous improvement of various functions of accounting, audit, and analysis. This situation makes it possible to generate and use reliable and timely accounting and analytical information. All this requires a comprehensive study of the theoretical and methodological provisions development for the organization of management accounting and its adaptation to international agricultural management standards, which formed the basis of our study.

**Key words:** socio-economic development, agriculture, business entities, management accounting, financial accounting, information base, analysis and diagnostics.

### 1 Introduction

The development of agricultural production in the Russian Federation, the increasing of its effectiveness is associated with the creation of the necessary prerequisites for this, and also with the improvement of management accounting, since it is economic relations (through management accounting) that form the basis for the effective increase in agricultural production, while ensuring its safety, timely implementation and efficient use.

The formation of market relations has also necessitated fundamental changes in the system of accounting and agricultural production management. Undoubtedly, the success of agricultural development, the restructuring of the entire system of socio-economic life required a deep restructuring of the organization and methods of conducting financial and management accounting, and the improvement of the theory and methodology of management accounting based on the functional stages of the circulation of economic assets. At the same time, the dialectically interconnected construction of the components of the production and financial activities of agricultural enterprises should be the basis for improving the theory and methodology of management accounting organization (Neuman A. 2019; Petrakova N.I. 2008; Misakov V.S., Misakov A.V., Tsurova L.A., Adzhieva A.Yu., Eskiev M.A. 2017).

It should be noted that the orientation of management accounting to analysis of situations, making consumer decisions, using modern technologies, studying consumer demands, diagnosing

deviations from cost standards, etc. allowed it to become an active and effective tool for optimizing the production process. Moreover, management accounting, unlike ordinary accounting, which was purely registration in nature, has turned into a mobile toolbox for optimizing production aimed at maximizing profit.

Effective organization of management accounting involves the use of scientifically grounded cost classification, which, in turn, serves as the basis for the proper organization of management accounting. Its use allows us to more deeply explore the composition and features of cost accounting, increase control in the production processes for their formation, and use a variety of different techniques and methods in management accounting and management decisions.

### 2 Research Methodology

The theoretical and methodological basis of the study was composed of the most important laws of dialectics, the main provisions and categories of economic science, the works of leading foreign and domestic scientists in the field of management accounting in the agricultural sector.

In the course of our study, general scientific methods and methods were used, such as abstract-logical, analytical, statistical, and also modeling, comparison, grouping, and generalization.

### 3 Research Results

In modern conditions, solving urgent problems of improving and development of the theory and methodology of management accounting requires the active use of computer technology, which operates with a large array of interrelated variables that characterize different aspects of the production process. The use of computer technology in the modeling of management accounting allows us to very quickly set quantitative and logical relationships and logical relationships of various elements of the production process for the strategic management system.

Management accounting through the use of computer technology receives a new dialectic form of its existence and development.

At the same time, many accounting models are practically incapable of reflecting the essence and specificity of production relations in which they are implemented. It seems to us that this necessitates the development of mathematical analogues for the entire system of categories and concepts of socio-economic phenomena (Vakhrusheva O. B. 2019; Anthony R., Rees J. 1996; Misakov V.S., Tsurova L.A., Yandarbieva L.A., Thamadokoval.Kh., Goigova M.G. 2019).

Accounting information about production costs, as well as the presence of complex and numerous reporting and analytical indicators are always distinguished by their massiveness and great variety. All this can no longer be processed without computer technology, which has a special speed and high memory capacity, and, moreover, is capable of performing logical operations.

When using the model for constructing management accounting, modern computer technologies allow us to effectively systemize and organize arrays of accounting information, to increase significantly the level of their accuracy, completeness, reliability and timeliness; to improve operational processing of accounting data and reporting preparation, to mobilize the control and analytical functions of accounting information, etc. As can be seen from the foregoing, computer technologies in management accounting not only form new information productivity, but also change its content. And this is natural, because the modeling of accounting information about production costs a priori changes the idea of conducting analytical accounting, especially regarding accounts for management accounting.

In our opinion, the purpose of management accounting in these conditions is the timely satisfaction of requests from interested parties in order to fulfill their functional responsibilities regarding the development and adoption of effective management decisions.

When designing management accounting at an enterprise, it is necessary, first of all, to investigate the composition of information, the nature of information flows and relationships, their compliance with optimality criteria; the structure of the current and planned management accounting system and the prospects for its improvement in the production process (Blake D., Amat O. 2018; Shim Jay K., Siegel Joel G. 1996; Misakov V.S., Khamzatov V.A., Temroková A.Kh., Misakov A.V., Dikareva I.A. 2018). As a rule, the used system of accounting information on production costs in today's realities is still distinguished by the redundancy of primary documents with a simultaneous lack of information necessary for production management; difficulties in the search and a small degree of application of the initial indicators can also be noted.

The priority area of management accounting is the segmentation of the activity of a business entity. Worldwide, segments are seen as critical business elements and ways to build a firm's competitive advantage.

An analysis of the specialized literature allows us to conclude that researchers are actively considering various aspects of the segment regarding the market and business, using the principles of geographical and industry orientation (Kotler F. 1993; Shim Jay K., Siegel Joel G. 1996; Ugurchiev O.B., Dovtaev S.A.Sh., Misakov V.S., Misakov A.V., Temmoeva Z.L., Gyatov A.V. 2018). But they all agree with the provision that business segments are the processes of accounting for the functions of all kinds of enterprise segments in the form of structural units, manufactured products, and sales territories.

It is appropriate to cite the statement of F.B. Ripol-Zaragozi "A company within the selected segment either tries to achieve advantages in reducing costs, or enhances product differentiation, trying to stand out among other companies operating in the industry.

In this way, it can achieve competitive advantages by focusing on individual market segments." (Ripol-Zaragozi F.V. 199).

We can cite more than a dozen statements by various authors, but all of them are united by the fact that they consider business segments in the form of enterprise units, manufactured products and retail outlets on the market.

Today, the cases are not uncommon when certain large banking structures seek to absorb profitable enterprises and control their activities. This situation requires careful consideration and the correct determination of business segments from production and commercial positions. Note that, in general, business segments act as centers of responsibility associated with the production of a particular product and its marketing. At the same time, they can be differentiated with respect to geographical location and sectoral nature.

In the first case, we are talking about areas of sales of industrial products, and in the second, we are talking about specific types of products.

The totality of all segments can be reduced to the following hierarchical system consisting of a logical chain: production - products - sale, since each segment is an integral part of a particular activity sphere of a company and its main link. At the same time, any segment can consist of either one or several parts of an enterprise.

Regarding the segmentation of agricultural enterprises, here, any segment is directly related to the production of agricultural products or servicing business entities. The need to reduce their scale is the level of purpose and completeness of the production and organizational processes of agricultural enterprises.

(Volkova O.I. 2006; Sergeeva I.A. 2019; Misakov V.S., Turova L.A., Yandarbieva L.A., Thamadokova I.Kh., Goigova M.G. 2019).

The process of segmenting the activities of agricultural enterprises in production and marketing of products is divided into spheres in accordance with the phases of the circulation of economic assets and coordination of various aspects of activities and management. Such isolation of segments occurs due to their different economic content and importance in creating a product of new value, their belonging to various fields of activity of agricultural enterprises. It is at this phase that the processes of the formation of segmentation in management accounting take place, where the production unit in the form of a separate responsibility center acts as the main link in segmentation.

Note that in the USA, production infrastructure itself is equated with a responsibility center, because it already unites several cost centers (Chumachenko N.G. 1971). Indeed, it seems to us that any production unit should be considered as a separate center of responsibility of the appropriate level.

It is noteworthy that in Western countries the production unit very often is combined with a center of responsibility, taking into account their intended purpose.

In Russian practice, structural units of an enterprise are considered as production units. This is based on the principles of homogeneity and their comparability on specific grounds intended for solving a number of problems, including ensuring control over the performance of the separate divisions of an enterprise, to compare the final results for each of them; improving the accuracy and objectivity of detailing their costs, etc.

It is necessary to consider territorial isolation and production isolation, the possibility of determining personal responsibility for individual segments of activity, and the possibility of differentiating costs in the established manner as the main conditions for the formation of segments of activity in an agricultural enterprise in management accounting (Ivashkevich O.V. 2017; Sergeeva I.A. 2019).

Taking into account the peculiarities of agricultural production, its technological cycles, the initial, intermediate and final stages of segmenting the production, financial and marketing activities of agricultural enterprises are involved.

In accordance with the intended purpose, segments of the production sector of agricultural enterprises are grouped into main, auxiliary and related ones.

In the conditions of everyday realities, which are characterized by extreme complexity of the socio-economic situation in the rural territories, a drop in labor productivity, etc., the introduction of management accounting and segmentation of agricultural enterprises into production is very important; this will make it possible to organize proper control over the economic aspects of production, including calculation of the cost of agricultural products manufactured in divisions of an agricultural enterprise.

Differentiation of product segments is associated with the need to distribute their costs to compensate for the cost of fixed assets, depreciation of tangible assets, depreciation of the low-value and short-living items, reserve write-offs and accruals.

An exceptional feature of agricultural production (in contrast, for example, to industry) is that in a single production process, most types of crops and animals simultaneously create basic products with different composition and consumer value and other products for their intended purpose (the so-called by-products).

The availability of a wide variety of methods for forming segments of agricultural enterprises' activity necessitates their systematization and consistency with the functions of management accounting, taking into account the functional

belonging of costs to a particular stage of segmentation of the business entity. However, at the same time, we must remember that each of them has its own, separate object and its own conditions for the formation of costs. For example, in production units, the writing-off objects for the corresponding expenses are the number of seeds and planting materials, mineral fertilizers, plant and animal protection products, fuel and lubricants, low-value and short-living items, labor remuneration, work in progress, etc.

The effectiveness of using management accounting by responsibility centers as segments of accounting units depends on the strength of the impact of many multidirectional factors, including on the production structure of agricultural enterprises, the features of technological processes, the level of technical equipment and organization of labor. Under these conditions, the most preferable for engaging management accounting by segments are departments (agro-economic divisions), and then, in turn, agricultural enterprises consisting of several production units. At the same time, it is desirable to group them according to the homogeneity of the technological process (especially where manual labor prevails), and it is advisable to take into account costs when performing mechanized work (Ivashkevich O.V. 2017; Vakhrusheva O. B. 2019; Sergeeva I.A. 2019).

There is no doubt that the level of use of management accounting for the segments of a unit for each agricultural enterprise is individual. But in any case, the main criteria for its isolation are the number of cost items or elements, the relevance and reliability of the information base. Due to the fact that the above parameters are present in different directions, the optimal solution can be made only after a thorough analysis of the current conditions and the needs of management accounting.

Regarding the determination of the cost composition by segments of the agricultural enterprise, the following options are possible:

1. The costs structure by the activity segments of the business unit of an agricultural enterprise should include the totality of direct and indirect costs associated with this unit, regardless of what products they relate to.
2. The costs structure by the activity segments of the business unit include only indirect costs, which cannot be attributed directly to specific types of agricultural products. (At the same time, direct costs are directly included in the cost of production, work and services).

Each of the above variants has its positive and negative sides, as a result of which they require preliminary methodological and organizational research, taking into account the peculiarities of management accounting in a particular unit of an agricultural enterprise. But in any case, it is advisable to attribute costs directly related to the end results of business units to the segments of the business unit activity in these variants.

Management accounting in practice is not able to provide maximum coverage of all direct and indirect costs, because this involves the development of cost estimates, but is not directly related to determining the cost of production.

In foreign practice, analysis of the management accounting organization by segments of company activity suggests that they need to be carried out through clear budgeting. In this case, budgeting is expressed in a quantitative reflection of the plan, and it is an effective tool for coordination and controlling its implementation.

The master budget is compiled regarding production, sales, distribution and financing, future profits, cash flows and other business plans.

Undoubtedly, such budget programs are very useful in any organization of accounting by responsibility centers.

#### 4 Conclusions And Proposals

- One of the priority areas for the development of management accounting is the segmentation of enterprise activity, which allows objectively detailing the production and organizational spheres of an economic entity, taking into account the functional belonging of costs to a particular stage of segmentation of an enterprise.
- The development of the activity segments of any enterprise is associated with many factors, including with its production structure, features of technological processes, the level of technical equipment and organization of labor, etc. The organization of management accounting requires taking into account not only existing systems; it also assumes on its basis to lay down the purpose of the activities of a particular unit.
- Such a methodology for organizing management accounting in divisions allows for greater uniformity of costs in terms of their types and content, best comparability with indicators of the involvement of agricultural machinery, the correct write-off of costs for relevant types of products, which, ultimately, creates the conditions for an objective calculation of the cost of production.

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