

# The Concept of Cost and Determination of the Production Cost of a Finished Product on a Agricultural Holding

Claudiu – Florin Deac

*"1st of December 1918" University of Alba Iulia, Romania*

[deac.claudiuflorin@yahoo.ro](mailto:deac.claudiuflorin@yahoo.ro)

## Abstract

*Most often economic specialists who have direct links with the accounting and financial reporting of entities carrying out agricultural activities have encountered a number of problems due to the diversity of activities and the lack of general regulations regarding the substantiation of the costing methodology based on the specifics of the activity. It is very important for an entity to calculate and record the costs of carrying out the business after which they depend on the success of the entity. Cost accounting is not seen as a source of information, but as an important pillar in the development of future development strategies.*

**Key words:** cost of a product, agricultural holding, accounting

**J.E.L. classification:** J43, O13, Q10

## 1. Introduction

In this paper I wanted to highlight how to calculate and account for costs on a farm, both theoretically and practically. I studied and treated this topic with great interest, out of the desire to know the economic-financial links that are established between actual costs and estimated costs, but also to improve my knowledge in the field of determining and accounting for costs, because based on the results obtained are based on the most important business decisions. The economic fundamentals approached were based on national legislation and accounting doctrine, and in terms of practicality was made so as to meet the information needs of economic agents and the Romanian legislator. The use of cost information in decision making, the application of modern and efficient costing methods can lead to rethinking the information and decision-making system of the company and can be the solution to survive the impact of the crisis.

## 2. Literature review

The issue of costs is of particular importance in the literature. It was concluded that there is no unitary definition of it, and the different forms of cost serve the need for internal information of the entity in different contexts. Costs are recorded in each organizational structure of the enterprise, the role of management accounting being to measure, impute and control them through calculation methods.

The use of cost in the management of economic entities by managers is an action of first interest. In the conditions of the current economy, marked by globalization and the increase of competition through the use of modern technologies, the knowledge of management techniques through the use of cost information is a necessity.

From a practical perspective, the consumption of values is not made to obtain a single unit of product, but for a predetermined quantity, depending on the particularities of the technological process. The unit cost of a product can be obtained by a simple mathematical calculation, as a ratio between the value of consumption generated by obtaining and selling its production over a certain period of time and the quantity of products obtained. Therefore, it can be said that two components that define the unit cost are: the value expression of the production and sales expenses and the

production that occasioned them, from these phrases we can draw the conclusion that the management accounting studies the value side of the production process. Two important aspects can be studied in relation to the cost of production, namely: the composition and mode of formation of production and sales costs and the characterization of costs and costs in relation to certain criteria underlying their formation and leading to their classification. in a certain typology.

The notion of production and sales expenditure is easily assimilated to the production process, which is based on three essential productive elements: natural resources, capital and labor. The use of these three factors in the production process determines in a way their consumption aspect that generates production costs. Natural resources are represented as a primary, raw production factor, being used to obtain various goods, perform some works and provide services. The capital factor is divided into fixed capital, which fully participates in obtaining goods, works, services, keeping its form and working capital that materially becomes part of the new product. The labor factor highlights the physical and intellectual potential of the staff employed in creating the new utility value, this factor is rewarded for the effort made, in the form of salaries.

The phenomenon of development and change of everything around us, has led companies to adopt the idea that the most effective way to survive in a constantly changing market is to reduce costs without affecting the quality of products, works, services and maintaining an optimal level of profitability that allows the continuous development of the business. The measures implemented in order to reduce costs must be sustainable, i not produce negative effects on the future results of the entity, be effective, by applying those measures to obtain results far superior to investments and be realistic or more precisely that company to achieve them can implement.

The most important step that is part of the cost analysis is to increase the efficiency of resource consumption in internal value creation processes, ie by implementing cost reduction measures the company must ensure that product quality is not affected and has no negative influence, over time, on the indicators of activity results. The effort made by the company to implement strategies and methods to reduce costs must be justified by the effect obtained by increasing the ratio between resources consumed and value created.

Reducing costs does not automatically increase the efficiency of consumption because there are quite complex relationships between the resources consumed and the value created. There are resources that by optimizing consumption lead to increasing the efficiency and effectiveness of the whole value creation process (examples: reducing raw material losses, reducing waste), but there are also resources that by optimizing costs lead to short-term effects of increasing efficiency activity or may lead to a decrease (for example: reduction of costs for modernization, innovation in a changing market).

Reducing direct costs means optimizing the volume of raw materials and consumables directly attributable to obtaining products and reducing the purchase prices of these materials. The second way to reduce costs involves rethinking the production process and the default product by reducing the consumption of raw materials and materials, but making us discount the quality of products.

### **3. Research methodology**

Choosing the field of research is the starting point in designing and conducting any scientific research. Thus, this paper falls both in the field of cost management issues, as a tool in the management of economic entities, and in the field of accounting research, especially managerial accounting, our research approach falls within the sphere of the predominantly positivist current, and through this we try to bring the necessary explanations for a detailed and in-depth approach on different conceptual and practical aspects of the cost management issue. Through this, we also try to offer forecasts regarding the regulations and practices in the field of management accounting, but also proposals to improve specific methodological steps.

During the paper we ensured the interaction between the different case studies in order to discover new information on the approached topic. These were carried out with the help of models, annexes and interviews conducted directly with people who have skills in the field of management accounting. They provided a priority application component, specific to the field of accounting and supported the intention to improve the methods of calculating the traditional costs currently applied in Romania, with the modern ones existing internationally.

The paper is based on a topic specific to the field of food production in the field of agriculture, and on documentation from the literature. Economic disciplines, through their practical character, form skills but also instigate readers to a more in-depth research, to the desire to discover as much information as possible that is folded to everyday life. It focuses on a deductive approach from the general to the particular, combining quantitative and qualitative studies. The theoretical content came in support of a better understanding of the economic and financial situation within the entity and represented the scientific support of the whole approach. The qualitative research had as a fundamental element the interpretive method to analyze the information - accounting flow within the studied enterprise.

#### 4. Findings

The need to establish a correct and realistic production cost of a finished product obtained on a laying hen farm, the production cost of an egg, has led to finding an optimal calculation method based on the expenses generated by the entity. in order to obtain the necessary, income-producing production. In general, when you think about the value of an egg, you tend to think that it can be determined very easily, but this is not the case, because the production cost of an egg includes a multitude of expenses generated in order to obtain it. We start to determine the production cost of an egg from the trial balance, because it includes all the expenses incurred with its production. The period for which this cost is calculated is 31 calendar days.

*Table no 1. Expenditure taken from the checking balance*

| Cont symbol | Account name   | Total expenses in January (RON) |
|-------------|--|---------------------------------|
| 602.02      | Fuel expenses  | 8,346.84                        |
| 602.03      | Expenditure on packaging materials                     | 2,987.31                        |
| 602.04      | Spare parts expenses                                   | 352.50                          |
| 602.06      | Feed costs   | 813,216.12                      |
| 602.08.01   | Expenditure on office supplies                         | 1,201.67                        |
| 602.08.02   | Expenses with cleaning materials                       | 926.00                          |
| 602.08.03   | Expenditure on other consumables                       | 3,368.24                        |
| 604.03      | Expenditure on other non-stored materials              | 28.32                           |
| 605.01      | Energy costs   | 24,217.75                       |
| 605.02      | Water expenses   | 3,583.23                        |
| 606         | Expenditure on animals and birds                       | 165,879.52                      |
| 607         | Expenditure on goods                                   | 92,469.00                       |
| 608         | Packaging costs  | 31,696.50                       |
| 611.01      | Expenses for car park repairs                          | 1,757.42                        |
| 611.02      | Expenses for repairs of equipment in the hall          | 372.00                          |
| 612         | Charges, rents and rents                               | 1,400.00                        |
| 613         | Expenses with insurance premiums                       | 1,727.55                        |
| 623.03      | Non-deductible protocol expenses                       | 65.07                           |
| 624         | Expenses for the transport of goods and personnel      | 870.00                          |
| 626.01      | Phone expenses   | 3,592.38                        |
| 626.03      | Postal expenses  | 416.54                          |
| 627         | Expenses with banking and similar services             | 321.55                          |
| 628.04      | Expenses with other services provided by third parties | 61,458.31                       |

|                       |   |                     |
|-----------------------|---|---------------------|
| 635                   | Expenses with other taxes, fees and assimilated payments    | 232.24              |
| 641                   | Staff salary expenses                                       | 81,612.00           |
| 642                   | Expenses with meal vouchers granted to employees            | 3,296.23            |
| 658.01                | Compensation, fines, penalties - deductible                 | 152.61              |
| 658.02                | Expenditure on assigned assets and other capital operations | 1,574.45            |
| 665                   | Expenses from exchange rate differences                     | 0.37                |
| 681.01                | Operating expenses on depreciation of fixed assets          | 102,398.21          |
| <b>TOTAL EXPENSES</b> |   | <b>1,409,519.93</b> |

Source: Author's projection

After identifying the expenses that are part of the production cost, using the check balance, we must determine the amount of eggs produced in that month by summing the daily quantity recorded in the daily production reports, during the study period. Also in the daily production reports is mentioned, in a separate section, the quantity of broken eggs on that day that are incinerated because they can no longer be recovered in any form. From the eggs obtained in one day, the broken eggs are subtracted to determine the total number of eggs produced that meet the optimal parameters for consumption and marketing.

Table no 2. The total number of eggs that may be marketed

|                                   |              |
|-----------------------------------|--------------|
| Total production, of which:       | 3,874,231.00 |
| Broken eggs                       | 54,196.00    |
| Total eggs produced - broken eggs | 3,820,035.00 |

Source: Author's projection

The next step in our study is to determine the cost of an egg. Knowing the above data we can calculate the cost of an egg in which we include all expenses, the cost of an egg in which we do not include the expense of depreciation of fixed assets and depreciation of birds.

The cost of an egg = the total expenses taken from the checking balance / the total number of eggs that can be sold =  $1409519.93 / 3820035 = 0.369$  lei / egg;

The cost of an egg without depreciation of fixed assets = (total expenses taken from the checking balance - operating expenses regarding the depreciation of fixed assets) / total eggs that can be traded =  $(1409519,93 - 102398,21) / 3820035 = 0.342$  lei / egg;

Cost of an egg without depreciation of fixed assets and poultry = (total expenditure taken from the checking balance - operating expenditure on depreciation of fixed assets - expenditure on animals and birds) / total eggs that may be marketed =  $(1409519,93 - 102398,21 - 165,879.52) / 3820035 = 0.298$  lei / egg.

It can be said that determining the cost of production is important both for the manager in making future decisions and for setting the selling price by adding the commercial addition. Following the calculations we noticed that to produce a single egg we spend 0.298 lei without taking into account the expenses generated by the depreciation of fixed assets and birds. This cost of production varies from month to month because it is influenced by a multitude of factors, such as the change in the price of feed, energy, fuel and various consumables.

## 5. Conclusions

The development of agriculture in general and of Romania's agriculture in particular requires the large-scale implementation of information programs, of processes specific to the agricultural field, from the production of goods adapted to the needs of the agricultural market, to the optimization of the data and information collection process used by the accounting system. in order to streamline agricultural economic activity.

The study was conducted by addressing the concepts of management accounting in the agricultural sector, egg production, which allowed the formulation of general conclusions. Management accounting has evolved progressively from the role of recording information on costing, to the role of information support in making management decisions. Providing cost information in the shortest possible time to substantiate managerial decisions allows the establishment of medium and long term strategies that have as a starting point the management accounting reports. Thus, new objectives are established, calculation methods adapted to them and the human, material and time resources necessary for the implementation of the related operations are established, as well as plans for the improvement of the existing activity.

Another aspect of the research was the identification of the stage of application of management accounting within a company in the agricultural field. The food market is experiencing an intense renewal and diversification due to the satisfaction of the growing desires, preferences, needs and demands of consumers. The achievements in the food field are on an upward trend, witnessing a spectacular evolution in recent decades. If at the macroeconomic level the quality of products is increasingly assessed in close connection with the quality of life, at the microeconomic level the increasing level of consumer requirements, their need for information and education must stimulate entrepreneurs' concerns to diversify and improve food quality.

We can say that setting the cost of production is important both for the manager in making future decisions and for setting the selling price by adding the commercial addition. Following the calculations we noticed that to produce a single egg we spend 0.298 lei without taking into account the expenses generated by the depreciation of fixed assets and birds. This cost of production varies from month to month because it is influenced by a multitude of factors, such as the change in the price of feed, energy, fuel and various consumables.

## 6. References

- Briciu S., Căpușeanu S., Rof M.L., Topor D., 2010. *Accounting and management control, tools for evaluating quality performance*. Alba Iulia: Aeternitas Publishing House.
- Bâtcă-Dumitru, C.G., Sahlian, D.N., 2017. *Managerial Accounting*. Bucharest: CECCAR Publishing House.
- Dumitru, C., Ioanas, C., 2015. *Management accounting and performance evaluation*. Bucharest: University Publishing House.
- Modell S., 2010. Bridging the paradigm divide in management accounting research: The role of mixed methods approaches. *Elsevier Journal*, Vol. 21, Issue 2, pp. 124- 129.
- Pitkänen H., 2011. Three dimensions of formal and informal feedback in management accounting. *Management Accounting Research*, Vol. 22, Issue 2.
- Order of the Minister of Public Finance no. 1802/2014, for the approval of the Accounting Regulations regarding the individual annual financial statements and the consolidated annual financial statements, Part I, published in the Official Gazette no. 963 of December 30, 2014;