### UNIVERSITY "BABEŞ-BOLYAI" CLUJ-NAPOCA THE FACULTY OF ECONOMIC SCIENCE AND BUSINESS MANAGEMENT ACCOUNTING AND AUDIT DEPARTMENT

Title of the thesis:

# FINANCIAL MANAGEMENT - ACCOUNTING IN AGRICULTURAL HOLDINGS IN ROMANIA AND IN OTHER EUROPEAN COUNTRIES

Scientific coordinator: Prof. univ. Dr. Partenie Dumbravă

PhD. Bercean Radu Vlad

Cluj-Napoca 2018

#### **ONTENTS**

List of tables, graphs and figures / page 7

Abbreviations / page 11

INTRODUCTION / page 12

MOTIVATION, RELEVANCE, PURPOSE AND OBJECTIVES OF RESEARCH / page 13
RESEARCH METHODOLOGY USED IN DEVELOPMENT SCIENTIFIC WORK / page 15
ACTUAL STAGE OF RESEARCH IN PLAN NATIONAL AND INTERNATIONAL / page 19
GENERAL FRAMEWORK OF WORK / page 25

LIMITS OF RESEARCH / page 27

CONFIRMATION OF RESEARCH RESULTS / page.28

### HEAD. 1. AGRICULTURE THE BASIS OF ECONOMY NATIONAL IN THE ACTUAL ECONOMIC CONTEXT / page.29

- 1.1 Importance, characteristics and impact on financial accounting management in agricultural entities in Romania and some European countries / page 30
- 1.2 Structures of operational entities in the production branch agricultural policy in Romania and their implications on organizing evidence in "general" and accounting in "special" / page 33
  - 1.2.1 Conceptual delimitation of agricultural holdings from Romania and their significance / page 33
  - 1.2.2 Operational agricultural structures in Romania / page.35
  - 1.2.3 Romanian agricultural co-operation, a possibility for agricultural holdings in our country / page. 38
- 1.3 Agricultural entities in some EU countries / page 41
  - 1.3.1 Agricultural holdings in some European countries / page 41
  - 1.3.2 European agricultural co-operation / page 45
- 1.4 Opinions, suggestions and preliminary conclusions from first chapter of the doctoral thesis / page 47

## HEAD. 2. ASPECTS ON ORGANIZATIONAL STRUCTURE ACTIVITIES OF AGRICULTURAL HOLDINGS AND THEIR IMPACT ON MANAGEMENT FINANCIAL ACCOUNTANT / page. 52

- 2.1 The concept of organization in agricultural entities / page 53
- 2.2. Activity on livestock farming in Romania compared to some U.E.its implications on the financial accounting system / page 54
  - 2.2.1 Zootechnics in statistical data in Romania and some European countries / page 54
  - 2.2.2 Practical application on zootechnical activities implications
  - on Financial Accounting Management / page.58
- 2.3 Plant cultivation activity on farm holdings Romania and some western European countries and its impact on financial accounting system / page 66
  - 2.3.1 Vegetal production in statistical data in Romania and some European countries / page 66
  - 2.3.2 Practical application on the implications of the plant cultivation on the financial accounting system / page.69
- 2.4 Exports and imports of agricultural products into statistical data and their consequences on the balance of payments and external payments / page.72
- 2.5 Other activities on agricultural holdings from Romania / page 76
  - 2.5.1 Local agriculture and direct sales / page .76
  - 2.5.2 Organic farming / page 77
- 2.6 Opinions, suggestions and preliminary conclusions from Exposure to Chapter 2 / page 78

### HEAD.3. ACCOUNTING POLICIES AND TREATMENTS ABOUT BIOLOGICAL ACTIVITIES / p.81

3.1 Organizing and conducting accounting according to the Law accounting 82/1991 republished and OMFP provisions 1802/2014 to agricultural entities in Romania / pagE. 82

- 3.1.1 Productive biological assets: initial and subsequent recognition, transfer and exit from management / page 81
- 3.1.2 Biological assets such as stocks and agricultural products / page.82
- 3.2 International Opinions and Controversies on Treatment accounting prescribed by IAS 41 Agriculture / pag.88
  - 3.2.1 Current state of international knowledge on  $\,$  implementation of IAS 41 / page 88
  - 3.2.2 IAS 41 Agriculture / page 89
- 3.3 Organizing and conducting simple billing accounting a of agricultural holdings (OMFP 170/2015 of 1 March 2015) / page 94
- 3.4 Practical case regarding the accounting of assets biological according to the new Romanian regulations / page 98
- 3.5 Opinions, suggestions and preliminary conclusions regarding treatment accounting of biological assets / page.100

### HEAD. 4. MANAGERIAL ACCOUNTING OF ENTITIES AGRICULTURE IN ROMANIA / page 102

- 4.1 Concept, necessity and role of managerial accounting / page.103
- 4.2 Documents specific to agricultural activities / page.104
- 4.3 Organization of the management accounting of the entities in agricultural field / page.106
- 4.4 Methods and procedures for calculating the costs applied to the entities in Agriculture of Romania / page.110
  - 4.4.1 The method of calculating the costs by phases in the Romanian agricultural entities / page.110
  - 4.4.2 Process of quantitative equivalence of the by product with the main product in Romanian agricultural entities / page.113
- 4.5 Methods of determining the cost and the records made in management accounting on a farm / page.115
- 4.6 Reviews, Suggestions and Preliminary Conclusions on Accounting Management in Romania / page.120

### HEAD. 5. FINANCING AND INSURANCE OF HOLDINGS AGRICULTURE IN ROMANIA / page.121

- 5.1 Financing of agriculture from own sources of farms Farming in Romania / page.121
- 5.2 Financing of Romanian agriculture from public funds / page.122
- 5.3 Methods of accounting for grants and funds non-refundable in agriculture / page.125
- 5.4 The Need and Importance of Credit in Agriculture / page.129
- 5.5 Animal and crop insurance a means of limiting a risk / page .131
  - 5.5.1 Risks and insurance of animals / page .131
  - 5.5.2 Risks and insurance of agricultural crops / page.133
  - 5.5.3 Ensuring Catastrophic Risks in Agriculture Experiences European / page.135
  - 5.5.4 Ways of accounting for losses and damages as due to extraordinary phenomena / page.136
- 5.6 Opinions, suggestions and preliminary conclusions on funding of agricultural holdings / page.139

## CHAP 6. EMPIRICAL STUDY ON VALORIFICATION ACCOUNTING FINANCIAL INFORMATION IN GIVING MANAGERIAL DECISIONS FROM AGRICULTURAL ENTITIES / page.141

- 6.1 Current state of knowledge / page.141
- 6.2 Aspects of Research Methodology / page .143
- 6.3 Analysis of data provided by questionnaires / page. 150
  - 6.3.1 Sample analysis / page.150
  - 6.3.2 Testing of some hypotheses relative to the variable determinate influence each other / page.167
  - 6.3.3 Study of links between variables / page.182

### CHAP 7. GENERAL CONCLUSIONS AND PERSPECTIVES OF THE RESEARCH OF AGRICULTURAL HOLDING ROMANIA / page.190

SELECTIVE BIBLIOGRAPHY / page.204 ANNEXES / page.215

### **Keywords:**

Agricultural holding, financial accounting system, managerial decisions, accounting financial information, biological assets, IAS 41 Agriculture.

#### INTRODUCTION

Agriculture is a basic branch of the national economy with considerable potential, traditionally occupying an important place in the structure of the Romanian economy - being considered the vital sector.

Romania's accession to the European Union required an extensive process of preparation, which involved the understanding of Common Agricultural Policy mechanisms, legislative and institutional harmonization efforts, implementation and enforcement of the acquis communautaire, as well as the compatibility of the Romanian agricultural structures with those of the Romanian agricultural structures Community.

The financing of agriculture was mainly made from the own sources of agricultural entities, support from the state budget, credits, reimbursable and non-reimbursable external funds, and other sources.

The accession to the European Union represented for the Romanian village "a turning point of its evolution" (B. Scholz 2008: 1) where the Romanian farm presents real chances of development "from the unique source for family survival" (B. Scholz 2008: 1) to a creative business of economic and social welfare.

Agriculture as a branch of activity is integrated into the market economy in Romania, representing at present one of the country's biggest problems, especially in terms of competitiveness and alignment with the requirements of the European Union.

The biggest problem nowadays for farmers, farmers and / or farm owners is finding the best solutions for allocating their own financial resources and / or borrowing to achieve the desired structural investments.

The purpose of agricultural holdings in the zootechnical and vegetal sector, in the present period, is the quantitative and qualitative increase of the yields obtained in order to meet the requirements imposed by the EU, namely the possibility to form agricultural cooperatives, according to the Law 566 of 22 December 2004, it being the most efficient form of organization, currently predominantly in countries with a developed agriculture.

Romania's accession to the European Union has generated major challenges for Romanian farmers, regarding the alignment of the competitiveness standards of the products obtained on the European market. This is because the legislation and the lending banking regulations do not stimulate the achievement of a performing agriculture on the European agricultural market.

An efficient agricultural management should, in our opinion, first and foremost involve the widespread employment of young people as a priority labor force and, secondly, the increased attraction of sources of funding of a kind banking.

#### MOTIVATION, RELEVANCE, PURPOSE AND OBJECTIVES OF RESEARCH

The rationale behind this scientific research is based on fewer considerations.

First of all, the Romanian literature on agricultural holdings offers a small number of research concerns in relation to the specialized literature of the Western countries.

Secondly, from investigating specialized studies, we do not find the existence of an integrated material that includes an interdisciplinary approach to management, accounting and finance, applied to economic entities with an agricultural profile.

Thirdly, another decisive factor in the choice of the theme was represented by the desire to continue the research efforts made in the elaboration of the dissertation thesis, entitled "Accounting management in agricultural holdings".

We appreciate the fact that engaging in a thorough scientific research topic in the field of financial management of agricultural holdings creates the premises for carrying out fundamental and applicative research with a decisive role in the re-evaluation of the Romanian agriculture development strategy

Also, the specificity of the subject allows the realization of fundamental and applicative research, with a decisive role in the strategy of development of Romanian agriculture.

We consider the approach of this scientific research to be relevant for the following reasons:

- Contributes to the development of knowledge knowledge in the field of accounting, with direct implications on financial accounting management of agricultural holdings;
- contribute to knowledge of the organizational structure of agricultural activities and their impact on financial accounting management;

- conducts research on international views and controversies on accounting policies and treatments for biological assets;
- highlights the peculiarities of the costing of the main products obtained from the zootechnical and vegetal sector;
- points out that, in the current economic and financial context, financing, lending and insurance of agricultural holdings are of particular importance in making them more efficient;
- conducts an empirical research on the capitalization of financial accounting information on Romanian agricultural holdings.

**The purpose** of this scientific approach is to answer a series of questions, current, in the context of the current economic conditions in our country, namely:

- What is the specificity and particularities of agriculture in relation to other branches of material production?
- What is the position of Romania's agriculture in the present period, compared to the agriculture of some states in the EU?
- What activities on agricultural holdings have an impact on the financial accounting system?
- How much does the national accounting regulations regarding the accounting treatment of biological assets resemble the regulations proposed by IAS 41 Agriculture?
- What are the particularities of costing in the livestock and vegetable sectors?
- What are the main sources of funding for agricultural entities in Romania?
- How are financial accounting information used by agricultural entities used to make managerial decisions?

#### The objectives of scientific research

In order to respond to the proposed goal of this scientific research, we have definitely defined the overall objective as follows: Identification of problems, in particular financial accounting problems encountered by managers, farmers and / or owners of agricultural holdings, namely finding viable solutions for reducing resource consumption in order to become competitive within the European Union.

The research is guided by a set of objectives meant to relate in a scientific manner the problems of Romania's agriculture, detailing the secondary objectives pursued, which aim at:

- Establishing the positioning of Romania's agriculture in the current period, compared with the agriculture of some states from the EU, as well as the prospects for development in agriculture;
- Identification of activities on agricultural holdings and their influence on the financial accounting system;
- Establishing similarities / differences in basic accounting treatments, as well as
  establishing alternative accounting treatment of biological assets according to
  internal regulations in comparison with international regulations;
- Studying the peculiarities of costing, in agriculture, and how to record, in the management accounting, the operations concerning the calculation of production costs in agriculture;
- Determining the main sources of financing as well as the place of insurance in the agricultural entities in Romania;
- Conducting an empirical study showing how financial accounting information from agricultural entities is harnessed in managerial decisions.

#### THE GENERAL FRAMEWORK OF WORK

Scientific research begins with the introduction, motivation, importance, purpose and objectives of scientific research, methodology of scientific research, highlighting the current state of knowledge on national and international level and is being conducted in seven chapters, finalizing with general conclusions, limits and perspectives of research.

In the first chapter "Agriculture the basic branch of the national economy in the current economic context" we wanted to establish the positioning of Romania's agriculture in the current period, compared to the agriculture of some EU countries, as well as the prospects for development in agriculture.

To achieve this goal, we highlighted the peculiarities of the agricultural sector and their impact on financial accounting management, we identified the structures of agricultural entities operating in Romania according to the legislation in force, their role, their importance and their charteristics.

Also, in this chapter I studied the evolution of agricultural structures and the retention of the experience of some countries in the United States.

We concluded the chapter by studying the governmental strategy for development and efficiency of Romania's agriculture in the future, and we have formulated the main suggestions and preliminary opinions.

Our opinion is that, due to the lack of experience in other sectors of the economy, agriculture will play an important role in the national economy due to pedoclimatic conditions, opportunities and tradition.

This can be achieved by stimulating the setting up of young farmers as active farmers, a national subsidy system close to that of EU countries, a special lending policy for agricultural entities and a legal framework favorable to associative forms.

During the economic crisis, agriculture had a certain effect on the stabilization of the economy, especially through the contribution made on the basis of good agricultural production, but this is not the case also in the poor agricultural years.

Another objective is to identify the structures of agricultural entities operating in Romania according to the legislation in force, their role, importance and their characteristics.

We consider that a definition that captures all types of agricultural holdings is quite difficult to formulate, since they start with the individual household and end with holding units. We also believe that the term "entities" would be best suited to defining all agricultural holdings.

We appreciate that Law 37/2015 on the classification of farms and agricultural holdings is made according to their economic and financial efficiency as is normal and their legal form is in accordance with the provisions of the legislation in force.

We also believe that, through an appropriate legislative framework, the former agricultural structures of Romanian agriculture could be the basis of Western-type agricultural cooperatives (only in 2004 the first law on agricultural cooperatives was adopted), thus avoiding the specific problems of agriculture such as: lack of ownership, deficiencies in technical endowment, and marketing of agricultural products.

The research revealed that, through APIA, the Government is pursuing the constraint to tax the natural person who benefits from direct payments and exceeds the amount of EUR 5,000, to register with the National Trade Register Office or to have the normative act of establishment which will show the agricultural activity.

We also consider that subsistence farms without legal personality have a social role, a role in keeping the tradition and contribute significantly to food security of the country being an important factor in a global food crisis.

With regard to farmers, individual individuals consider that they are acting freely on the market, make decisions about production, and its destination, decide the price on demand and supply.

The marketing of products is usually done in traditional markets, uncertain in terms of obtaining incomes, ad hoc in small quantities, to potential buyers, and under specific market conditions.

We consider that due to the APIA obligation for natural persons who benefit from direct payments exceeding the amount of 5,000 Euros per year to be registered with the National Trade Register Office, most farmers will be organized according to GEO 44/2008 of April 16, 2008 being the most simple organization.

We appreciate that agricultural holdings in Romania fall into two categories: agricultural holdings without legal personality and agricultural holdings with legal personality. The structure

of the agricultural holdings with legal personality includes the structures stipulated by Law 31/1990, Law 36/1991, Law 566/2005.

Another objective was to study the evolution of agricultural structures and to retain the experience of some EU countries, concluding that:

At the beginning of 2015, Romania is far behind the Western European countries in the development of the associative sector in the field of agriculture, both in terms of diversity and presence on the market.

An interesting experience for vegetable producers in our country is given by the example of a group of producers in Hungary who created a cooperative for storing and marketing the products as well as supplying its members with inputs.

The French experience is to be taken into account for the Romanian agriculture, which is overly territorial. Shortening the period of transformation of semi-subsistence agricultural holdings into viable holdings and the general upgrading of the entire farm system requires structural adjustment measures through specific national legislation. Only community support is not enough. The management of this process is difficult to implement and requires a lot of professionalism in decision making and implementation.

The latter secondary objective of research, namely studying the governmental strategy for the development and efficiency of Romania's agriculture in the future, has made it possible to highlight some useful aspects for this branch of material production.

Our opinion on the National Strategic Framework for Sustainable Development of the Agro-Food Sector and Rural Area 2014-2020-2030 is of particular importance given that ensuring food security must be one of the priorities of any government.

As a result of analyzing the secondary customs, we discover the main objective of the research for this chapter, namely the positioning of Romania's agriculture in the current period, compared to the agriculture of some EU countries, as well as the prospects of development in agriculture.

Our opinion is that in the EU member states the agricultural co-operation has developed and improved through the Common Agricultural Policy, and through the reforms it has promoted, it was aimed at achieving the legislative and organizational framework for supporting agriculture and farmers to produce quantitatively and under conditions to ensure self-

consumption, availability for export, in terms of economic efficiency and in accordance with the requirements imposed by environmental protection.

We believe that the EU countries have had rural policies embodied in rural development and rural development laws that supported the process of combining and growing agricultural holdings while in Romania there was no coherent policy of concentration and capital stimulation in agricultural holdings commercial and efficient, with persistent, inefficient, productive productive structures with production for own consumption and less for the market. This was due to the lack of a restructuring and development strategy in agriculture, the aging of the population and an incoherent credit and financing system.

Our view is that, through an appropriate legal framework for the organization of Westerntype agricultural cooperatives, the collection, storage, registration and capitalization of agricultural products would be improved, with beneficial consequences for the prevention of tax evasion and product quality for the consumer.

Valuing the information from the international scientific articles we study, we can not speak of a spectacular development of the agricultural entities in the U.E. countries, having the possibility through a coherent policy to approach the agriculture of the countries of the EU.

We propose to the competent authorities, MADR and the subordinated structures, to develop a strategy to enable the family farm (subsistence) farm to move as quickly as possible to the commercial holding, which will be the basis of modern, market-oriented agricultural cooperatives.

At the same time, we propose the efficient and timely use of non-reimbursable funds during the period 2018-2020.

Also, the research resulted in necessity, utility and efficiency of the use of non-reimbursable funds, as well as boosting their allocation for the agricultural production branch.

**In chapter two** "Aspects of organizational structure of farm activities and their impact on financial accounting management", the main objective of the research is to identify the activities of agricultural holdings and their influence on the financial accounting system.

In order to achieve the main objective we aimed the drawing up of the general framework regarding the organizational structure of the vegetal production and zootechnical production. At the same time, an important aspect was the study of statistical data.

At the conclusion of the chapter we studied other activities carried out on Romanian agricultural holdings.

From the reading of chapter 2 of the doctoral dissertation we have discovered that the organization operates with subdivisions, positions, functions, organizational variables whose combination and whose influence determines different structure variations for various economic entities.

It is also confirmed once again that agriculture is a feature of the production of living organisms (plants and animals), which are considered to be true "living machines".

We also conclude that livestock farming presents some particularities with major influences on the financial accounting system, such as:

- Animals may have dual use as a means of work as a consumer goods;
- the existence of young and fattened animals requires separate financial accounting treatment and their financing until the basic herd and livestock products are acquired when the recovery period for investments made with these animals actually starts;
- In order to ensure the continuity of the activity in order to ensure the renewal of the livestock, it is necessary to maintain a certain number of the livestock, specific for each animal species;
- The animal welfare process does not start from the moment they are used as a
  means of production, but this process depends on the biological curves of
  production, taking place much later in time;
- In direct connection with the above, animals can not be subject to partial replacements, such as other means of production (machines, constructions, buildings), therefore the duration of their use is determined by the biological laws specific to each species.

Our opinion on the zootechnical activity in Romania and the ways of its evolution resulting from the exemplified case is the following:

• Switching to the industrial animal breeding system with a high concentration of highly productive herds, with technologies based on scientific nutrition and on the mechanization, automation and computerization of production.

- Application of stabling maintenance systems whereby animals are fed to shelters throughout the year based on scientifically determined feed standards.
- Improving the structure of livestock by reproducing them with high and specialized biological material (milk and meat) and practicing industrial crosses to obtain valuable products.
- Application of feed systems to ensure optimization of the quantitative and qualitative assortment structure and the use of fodder balances as a managerial tool.

We also consider that the particularities of the vegetal sector have a decisive influence on the accounting financial management, namely:

- o unlike other branches of material production, agriculture uses land as the main means of production without which agricultural production could not exist;
- agriculture synthesizes and transforms the kinetic energy of the sun into potential energy, a process that takes place on the basis of photosynthesis of green plants.
   Animals re-transform plants used as feed into organic matter necessary for human nutrition;
- the process of economic reproduction intertwines with the biological (natural)
   process of reproduction;
- As a result of the biological breeding process, part of the finished products obtained within a production cycle represent the means to resume a new production cycle;
- o In agriculture, the production process is strongly connected with natural factors;
- o in agriculture, there is a mismatch between the production time and the working time required for agricultural production;
- In agriculture, the production costs are gradually allocated at the rate required by the biological process, and their recovery is usually only once at the time of harvesting and harvesting the products;
- the production process generates, besides the main products, also by-products, with consequences on the organization of the accounting and the methods for calculating the costs;

o the by-products obtained are used either as animal feed (straw, chaff, pulp, corn, etc.) either for the purpose of fattening agricultural land (manure) or as raw material for non-agricultural branches paper, leather, sugar, consumer goods, etc.), which also ensures the restoration of the financial resources of the farms.

We consider that the technical and organizational structures have a decisive influence on the accounting financial system, in family farms not talking about a financial-accounting system, the patrimony of the holding confusing itself most often with that of the entrepreneur.

Our opinion on the functions of agricultural holdings is that they do not identify with the majority of Romanian agricultural structures (most agricultural holdings are subsistence, over 90%), and the other structures can not be fully identified, exemplifying here the commercial function that does not can be achieved without the wholesale market, compared to the EU countries where they are heavily regulated and developed.

Our view of the agricultural production structure is that although the model of the Western countries must be followed, it must be adapted to the pedoclimatic conditions existing in our country or in each country, the tradition (the grain of Europe) and the market requirements.

We appreciate that organic farming, although it currently has a fairly low share (below 1%), represents the future in the agricultural sector, given the beneficial effects on consumers.

The objective of Chapter 3 "Accounting Policies and Accounting Policies on Biological Assets" is to establish the similarities / differences in basic accounting treatment, as well as to establish alternative accounting treatment of biological assets according to internal regulations, as compared to international regulations.

In order to achieve the objective, we used a comparison of the ways of assessing the biological assets according to the internal regulations and the ways of assessing the biological assets according to the international regulations. At the same time, we focused our attention on the international opinions and controversies regarding the accounting treatment of biological assets.

We also presented the ways of accounting for biological assets under the new Romanian regulations.

Thus, in terms of biological assets, in Romanian regulations, they are found both in the category of fixed assets and in the category of current assets.

Initial recognition of biological assets is made at acquisition cost or cost of production, as appropriate, and cost-over- the-minus accruals and accumulated depreciation adjustments.

Although in the Romanian accounting regulations there are alternative valuation rules for tangible assets, the biological assets have traditionally not been presented in the balance sheet at fair value.

The biological assets recognized as current assets are included in the inventory category. It is specified that stocks intended for the production of meat, animals held for sale, fish from fish farms, crops such as maize and wheat and trees grown for timber are considered to be stocks.

Stocks are valued using historical cost model. Under this model, assets are initially recognized at cost and are presented in the balance sheet as a minimum of the cost and the value that can be obtained from their sale or use.

We believe, however, that there are large entities in Romania that carry out agricultural activities, but they are not interested to apply voluntarily the provisions of IAS 41 for the time being.

Another objective pursued is the way of assessing biological assets according to international regulations.

IAS 41 is the exception to the frequency with which entities use historical cost as the basis for measurement in their financial statements. The general rule in IAS 41 on valuation is that any biological asset will be measured at fair value less estimated sale costs both at the time of initial recognition and at each balance sheet date.

Following the analysis of the secondary objectives, we uncover the main research objective for this chapter, namely to establish the similarities / differences in basic accounting treatments, as well as to establish alternative accounting treatment of biological assets according to internal regulations compared to international regulations.

In Romania, financial accounting is oriented in two different directions. A number of groups and companies apply International Financial Reporting Standards (IFRS), including IAS 41.

However, most companies apply the provisions of the Order of the Minister of Public Finance no. 1802/2014. These Regulations partly transpose the provisions of Directive 2013/34 / EU of the European Parliament and of the Council on the annual accounts, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43 / EC of the European Parliament and of the Council repealing Council Directives 78/660 / EEC and 83/349 / EEC, published in the Official Journal of the European Union no. L 182 of 29 June 2013.

At the same time, Romanian accounting regulations are convergent, for a number of issues, with the IFRS reference. The general criteria for the recognition of assets in national regulations are taken from the international conceptual design and presentation of financial statements.

From the review of the legal framework, we decipher two fundamental differences between IAS 41 and national regulations, namely:

- "According to the Standard, the depreciation of biological assets begins
  from the date when the biological assets are held by the entity in the
  desired manner of management, practically from the date of reception and
  not from the following month;
- O According to the Standard, the amortized cost is the cost or, as the case may be, the fair value less the residual value of the asset under standard in conjunction with IAS 16 Property, Plant and Equipment, and in accordance with European directives, the amortized cost is the acquisition cost or revalued amount to take into account the residual value. "(P. Dumbravă & RV Bercean: 2018)

The new accounting regulations transpose the provisions of the International Accounting Standard IAS 41 Agriculture into national law. In this respect, the costs of realizing the agricultural production stocks will be separately accounted for and new accounts will be found for the production of biological assets.

In chapter 4 "Managerial accounting in agriculture" are presented the peculiarities regarding the calculation of the costs in agriculture and the ways of recording in the management accounting of the operations concerning the calculation of the production costs in agriculture.

Another issue that we have focused on is the calculation of the cost of production, the products obtained in the zootechnical sector and the calculation of the production cost for the products obtained in the vegetal sector.

We also highlighted the arrangements for recording in the management accounts of operations for the calculation of production costs in agriculture, taking into account the existence of by-products.

We believe that the information provided by the managerial accounting is confidential, intended exclusively for one category of users or the managers of the entity, unlike the information provided by the other component of the accounting system, financial accounting providing public information intended for several categories of users inside and outside the farm.

Therefore, the information provided by gesture accounting is used by managers to substantiate managerial decisions, ensuring success in market economy conditions.

From both the doctrinal research and the practical experience we have separated the importance and the necessity of organizing and managing the managerial accounting by the agricultural entities, ensuring the delimitation of the consumption of resources, the calculation of the unit cost for the products in the zootechnical sector and the vegetal sector, the possibility of determining for each of them profitability and the provision of confidential information useful in a market economy context.

In Chapter 5 "Financing and Insurance of Agricultural Holdings in Romania", we propose the determination of the main sources of financing used in Romanian agricultural holdings, the place of insurance in the agricultural entities in Romania, as well as the ways of accounting for the non-reimbursable funds and the indemnities received after some calamities natural.

In the first part, I presented aspects related to the financing of agriculture in accordance with the Government policy and the European Union norms, reviewing the main institutions for implementing the national and European agricultural policies.

Another aspect studied was the determination of the place and the role of credit in the financing of agricultural entities, given the specific nature of agricultural activities. At the same time, we conducted a study on agricultural insurance in Romania compared to agricultural

insurance in some European countries. In the last part we highlighted the ways of accounting the non-reimbursable funds and the indemnities received from natural disasters.

With regard to APIA, an action plan is required to address the deficiencies related to the parcel identification system technique used to verify that grant applicants have the right to receive them.

We propose, in this respect, the acquisition of a specialized software, modeled on the developed countries in the EU.

Our opinion is that a short, medium and long term credit system is required to take into account a system of guarantees covering: the mortgage on the land and future products, the issuance of mortgage documents on the land and agricultural holdings, taking in guarantee of the creditable object itself, access to the financial guarantees provided by the rural credit guarantee fund.

We have also finalized this chapter with preliminary opinions and conclusions, detailing the need for urgent intervention for financing, lending and insurance in the agriculture sector in our country.

**In Chapter 6** we have conducted an "Empirical Study on Valuing Financial Accounting Information in Making Managerial Decisions in Agricultural Entities.

The main objective is to carry out an empirical study presenting the way in which the financial accounting information from the Romanian agricultural entities is used.

In this context, based on empirical research, we have identified the impact of some factors on the financial accounting system, while at the same time highlighting the significance of financial accounting information in making managerial decisions in these entities.

This analysis is based on descriptive statistics such as one-dimensional frequency distributions, sectorial diagrams, one-dimensional distribution parameters, etc.

The information obtained at the sample level was used in order to obtain conclusions at the population level. This was possible with the help of inferential statistics. We have thus determined confidence intervals for some unknown parameters of the population from which the sample was taken, the confidence level being 95%. Thus, the level of significance used during this research was a = 0.05 (5%). This means that we have 5% chance that the claims made are

erroneous, but we have 95% chance that our affirmations relative to the sample population will be true.

#### Conclusions, suggestions and suggestions resulting from the empirical study

As expected, most agricultural entities do not have legal personality, ie individual individuals, resulting in reduced sizes and subsistence of agricultural entities in Romania, confirming previous articles, studies and statistics. (Lucian Luca & Others 2012) points out that "99.2% were farms without legal personality" and (Daniela Giurca 2011) "concludes that 3 million" farms "or" households "are not eligible for Pillar I support, to support the European Union. The government must continue its former farm consolidation policy through various measures, such as the current life pension measure and the full use of Pillar II measures such as diversification of activities, support for SMEs, and encouraging tourism activities.

Our opinion is that in Romania there was no coherent policy of concentration and capital stimulation in commercial and efficient agricultural holdings, with persistent productive structures, inefficient, with production for own consumption and less the market. This state of affairs was due to the lack of a restructuring and development strategy in agriculture, the aging of the population and an incoherent credit and financing system.

We propose to the competent authorities the development of a strategy that will allow the transfer of the farm (subsistence) farm to the commercial holding, as the basis of the modern, market-oriented agricultural cooperatives, as soon as possible.

This can be achieved by: stimulating the setting up of young farmers as active farmers; a national grant system close to that of EU countries; a special lending policy for agricultural entities and a legal framework favorable to associative forms.

We appreciate that in the subsistence agricultural entities we can not speak of a proper financial accounting system, most often the farmer's budget is confusing with the entity's budget.

We note that the production structure has major influences on the financial accounting system of agricultural entities because the production cycle time is determined by the chosen production structure, with an impact on fixed and variable costs and implicitly on profit. This result is convergent with that of previous works. (Zahia 1996) concludes that the production structure is the material support of the economic structure, expressed by the proportions of the

production costs generated by the joining and the combination of the branches, especially the proportions of the fixed costs and the variables and the impact of these proportions on the profit.

Our proposal regarding the agricultural production structure is that, although the model of the Western countries must be followed, it must be adapted to the pedo-climatic conditions existing in our country or in each county, the tradition (the grain of Europe) and the market requirements.

From empirical research, it is clear that the organization of double-entry bookkeeping at farm and farm level is the most recommended practice to provide full management information to these management entities.

Our opinion on the organization of accounting of the entities in our country's agriculture is that although 36.36% of the entities have opted for simple bookkeeping because they require a lower cost, they do not provide a detailed view of the situation financial accounting, on the entity, limiting the possibility of capitalizing on financial accounting information.

The conclusions drawn from the empirical study do not exclude the possibility of using and the method of organizing double-entry accounting, being at the discretion of the agricultural entity, which in our opinion should be extended.

In this context, we propose to the agricultural entities a specific accounting plan for this branch of production to serve as a common framework for agricultural accounting practices, whatever their legal and social form and their technical and economic orientation.

We also propose an adapted account nomenclature and a specific balance sheet and profit and loss account usable for agricultural holdings without neglecting the U.E. accounting policies and the provisions of IAS 41.

Our opinion is that from the ones presented during the thesis we can observe the issue of credit to Romanian agricultural holdings, only half of the entities surveyed have used the bank credits as a source of financing. This result is convergent with previous articles, studies and statistics, which explains the modest development of Romanian agriculture at present.

We believe that the reluctance of banks to lend to agriculture is determined by a number of factors, among which:

- discontinuity in obtaining income;
- the instability of the markets for selling and capitalizing on the obtained agricultural products;

- the high risk of production fluctuations depending on natural conditions;
- the lack of an adequate insurance system to ensure a rapid compensation of losses;
- a weak credit guarantee system, etc.

Our suggestion is that a short, medium and long term credit system is required to take into account a system of guarantees covering: the mortgage on the land and future products, the issuance of mortgage documents on the land and agricultural holdings, taking in guarantee of the creditable object itself, access to the financial guarantees provided by the rural credit guarantee fund.

We consider encouraging that 34 entities benefited from non-reimbursable funds. At the same time, as a future direction of research, is the more complex study of the structure non-reimbursable funders and the location of direct payments compared to payments under the rural development program.

From the analysis of the data above, we note that the most used information in the management decision making is the financial accounting. This result is convergent with that of previous studies. However, it is noted that the average values obtained for the two types of accounts are very close

(Jinga Gabriel 2014) concludes that "64 respondents out of 67 consider that information provided by managerial accounting is useful.

We conclude that a mix of all these sources of information would lead to making the best managerial decisions.

**In chapter 7**, we synthesized the general conclusions from the research, we identified the limits of the research and its prospects for the Romanian agriculture.

### Personal input to this scientific research can be justified by at least the following arguments:

- 1. contribute to the development of the knowledge level in the accounting field of these entities, with direct implications for financial accounting management of agricultural holdings;
- 2. contribute to the knowledge of the organizational structure of agricultural activities and their impact on financial accounting management;

- 3. Carry out research on international opinions and controversies on accounting policies and treatment of biological assets;
- 4. highlights the particularities of the costing of the main products obtained from the zootechnical and vegetal sector;
- 5. Points out that, in the current economic and financial context, funding, lending and insurance of agricultural holdings are of particular importance;
- 6. performs an empirical research regarding the capitalization of the financial accounting information from the Romanian agricultural entities;

#### **Future research directions**

Future research directions should aim, in our opinion, on the more rigorous structuring of the entities in our country's agriculture; expanding research for these entities at national level; work hypothesis detailing; highlighting the specificity and particularities of the agriculture branch and their impact on the organization of accounting, in general, and accounting in particular.