# IAS 41 Implementation Challenges – The Case of Romania

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Abstract—Although agriculture is an important part of the world economy, accounting in agriculture still has many shortcomings. The adoption of IAS 41 "Agriculture" has tried to improve this situation and increase the comparability of financial statements of entities in the agricultural sector. Although controversial, IAS 41 is the first step of a consistent transition to fair value assessment in the agricultural sector. The objective of our work is the analysis of IAS 41 and current accounting agricultural situation in Romania. Accounting regulations in Romania are in accordance with European directives and, in many respects, converged with IFRS referential. Provisions of IAS 41, however, are not reflected directly in Romanian regulations. With the increase of forest land transactions, it is expected that recognition and measurement of biological assets under IAS 41 to become a necessity.

**Keywords**—Accounting Agricultural, Biological Assets, Fair value, IAS 41

#### I. Introduction

GRICULTURE is an important sector of the global Acconomy. However, for a long time accounting in agriculture was not a priority for researchers and standard issuers. Internationally, a standard dedicated exclusively to agricultural field was only issued in December 2000: IAS 41 "Agriculture" [1]. This standard introduced a model of fair value to agricultural accounting. Reactions to it were immediate. Advantages and disadvantages of switching from historical cost to fair value have been widely debated. Although views are far from converging, many authors are afraid that this is a major departure from the convenient valuation method required and will entail serious drawbacks for the agricultural sector [2]. On July 19th 2002, the European Parliament adopted a regulation requiring that starting with 2005, International Financial Reporting Standards (IFRS) are applied for the preparation of consolidated accounts of listed companies. On January 1st 2007, Romania joined the European Union. A number of Romanian companies and groups began to apply the international accounting referential. In parallel, the Romanian accounting regulations have been harmonized to some extent with international accounting referential. Our research puropse is to analyze IAS 41 and current agricultural accounting situation in Romania, to highlight the gap between the two referentials.

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The rest of the paper is organized as follows: Section 2 discusses the background literature on implementation of IAS 41. Section 3 presents the letter and spirit of IAS 41. Section 4 describes the applicable accounting regulations in the agricultural sector in Romania. In the final section, the conclusions are accompanied by a description of tentative avenues of research. Provisions of IAS 41, however, are not directly reflected in these regulations.

## II. BACKGROUND LITERATURE ON THE IMPLEMENTATION OF IAS 41

In this section, we provide a brief overview of the theoretical and the empirical literature on the implementation of IAS 41. The literature focusing on these aspects is extremely rich. Some studies have analyzed the impact of implementing IAS 41 in only one country ([3] on Estonia; [4] on Latvia; [2] on Spain; [5] on Sweden etc.). Other papers are multi-country studies ([6]-[8], etc.). In addition, some studies analyze the effects of the implementation of IAS 41 on the agricultural sector as a whole ([9] - [11], etc.) and others consider various agricultural industries (forestry ([12] - [13]; farm: ([14] - [15]; wine: [16], animal husbandry: [17], etc.).

The thematic approach is also different. Some studies investigate the implications IAS 41 has over the harmonization of international accounting standards. Thus, [9] argues that through a radical departure from historical costs, the standard causes some theoretical and practical problems that might affect its widespread adoption. Moreover, it is not only incompatible with francophone countries accounting models but raises major problems of implementation in different national settings.

Other studies analyze the ideological role that IAS 41 plays in legitimating social conflict in the context of companies being compelled to adopt the fair value evaluation model [18] or highlight the increased volatility, manipulation and subjectivity of reported earnings under this standard ([8], [19] - [20]).

The problem is that the IAS 41 has generalized fair value assessment for all biological assets although not all of these assets are designated for capital appreciation or sold, which leads to a misleading information [21]. In addition, there are several models to determine fair value. The use of different assessment models leads to differences of earnings quality in agricultural sector internationally [6]. Interviews conducted in the agricultural companies have shown that IAS 41 demands a lot of extra work and it is hard to establish the fair value ([5] - [6]). Even though most studies are positioned against the requirement of IAS 41 to assess the biological assets to their fair value, there are also supporters of this treatment. Thus,

#### World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering Vol:6, No:3, 2012

[14] points out that the generalization of this model is good for small family farms that do not have the resources and skills to calculate their costs. [22] argues that fair value accounting also provides a complete full disclosure and it is compatible with transparency. In other words, the fair value entails a more consistent valuation method, as well as a more reliable and comparable source of information [2].

#### III. THE LETTER AND SPIRIT OF IAS 41

IAS 41 deals with recording of transformation of biological assets. Biological assets include any living plant or animal. Biological transformation is the process of growth, aging, production and procreation of biological assets. This transformation leads either to the production of an agricultural product or a change in the biological asset. Recognition of biological assets and agricultural products happens when: (i) the company controls the asset as a result of past events, (ii) it is probable that future economic benefits associated with the asset will be generated and (iii) the fair value or cost of the asset can be measured appropriately.

With the initial recognition and with each accounting yearend, biological assets should be valued at their fair value minus estimated costs of sale. In determining fair value, the standard establishes a hierarchy of approaches. Firstly, fair value corresponds to the price in an active market. An active market is a market where the following conditions are met: (i) the items traded in that market are homogeneous, (ii) there are willing buyers and sellers any time and prices are publicly available.

Secondly, in the absence of an active market, fair value can be estimated in various ways: in relation to the price of recent transactions, in relation to market prices of similar assets, adjusted to take into account the differences; by reference to criteria commonly used in the respective industry.

Thirdly, if market-determined prices or values are not available for biological assets, the entity may determine fair value by discounting expected cash flows from the asset, using a current market-determined pre-tax rate. For calculation of this value IAS 41 provides the following rules:

- (i) any increases in value of biological assets as a result of additional biological transformation and future activities of the entity shall be excluded, such as enhancing the future biological transformation, harvesting and selling;
- (ii) cash flows for financing the assets, taxes or restoring of biological assets after harvest shall not be included (e.g., cost of replanting trees after harvest in a plantation forest), and
- (iii) estimates of the possible variations in cash flows will be included either in estimated cash flows or in the discount rate or a combination of both.

IAS 41 allows, however, an exception to the fair value assessment. Thus, in case that at the time of initial recognition for a biological asset, there is no market price and other methods of estimating fair value are not reliable, the asset may be valued at acquisition or production cost minus the amortization and necessary depreciation. This exception,

however, ceases to apply when a reliable estimate of fair value can be made.

Biological assets are sometimes physically attached to land (for example, trees in a plantation). Often, there is no active market for these assets separately, but there is a market for both (land and plantation). In this case, the plantation can be assessed by deducting the fair value of the land out of the whole price.

Gains or losses arising on initial recognition of a biological asset recognized at fair value minus the estimated selling costs and the change in fair value minus estimated selling costs should be reflected in the profit and loss sheet of that year.

Grants related to biological assets at fair value should be accounted for in income when all conditions of awarding the grant are met. If a government grant is awarded for a biological asset that is valued at cost value less any accumulated amortization and any accumulated depreciation loss, IAS 20 Accounting for Government Grants and Disclosure of Government Assistance applies.

#### IV. ACCOUNTING IN THE ROMANIAN AGRICULTURAL SECTOR

In Romania, financial accounting is oriented in two different directions. A number of groups and companies are applying International Financial Reporting Standards including IAS 41. Most companies still apply the regulations of the Minister of Public Finances' Decree 3055/2009. These regulations are consistent with the provisions of the Fourth Directive of the European Council 78/660/EEC regarding the annual accounts of certain types of companies and those of the Seventh Directive of the European Council 83/349/EEC regarding consolidated annual reports. However, the accounting regulations in Romania are converging with IFRS referential for a number of issues.

The general criteria for recognition of national regulatory assets are taken from the International Framework for the Preparation and Presentation of Financial Statements. Provisions of IAS 41, however, are not reflected directly in Romanian Accounting Regulations (RAR). Thus, in terms of biological assets, they are found both in the category of fixed assets and current assets.

Biological assets that are recognized as fixed assets are not accounted for in a special way but just as any other tangible assets. Initial recognition is at purchase cost or production cost and appropriate recognition in the balance sheet at cost less accumulated amortization and accumulated provisions for depreciation. Although the RAR provides alternative evaluation rules for tangible assets, traditionally, livestock, plantations and other biological assets have not been presented in the balance sheet at fair value.

When they are recognized as current assets, biological assets are included in inventories. The RAR states that stock and young animals born of any kind (calves, lambs, piglets, foals, etc.) raised and used for breeding, fattening animals and birds to be sold, bee colonies and production animals - wool, milk and fur - are considered inventories. As for cereal crops,

#### World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering Vol:6, No:3, 2012

from planting to harvest they are accounted for as product in progress, and the yields as stocks of finished products.

Inventories shall be valued using the historical cost model. According to this model, assets are initially recognized at purchase cost and are presented in the balance sheet at a minimum between cost and the value that can be obtained from sale or use.

It is obvious that in terms of biological assets, there are significant differences between accounting rules and regulations of Romania and IFRS. In summary form, these differences relate to:

- (i) the use of different valuation models: historical cost, in Romania, and estimated fair value minus selling costs in IAS 41:
- (ii) clarification of the concept and content of biological assets: while IAS 41 clarifies the concept and content of the biological assets, Romanian regulation contains no specific provisions for this category of assets. It is only the general chart of accounts that contains two specific accounts for agricultural activity: 2134 "Animals and plantations" and 361 "Animals and birds."
- (iii) disclosure: IAS 1 distinguishes between mandatory elements to be included in the main financial statements and those that are presented in the balance sheet or the notes. Biological assets are one of the elements that must be presented in the balance sheet, with the possibility of including some details in the notes. In addition IAS 41 sets out a list of disclosures (aggregate gain or loss during the current period deriving from the initial recognition of biological assets and agricultural products and from the change in fair value minus the estimated cost of sale; narrative or quantified description of each group of biological assets; information about biological assets whose title is restricted or that are pledged as security; methods and assumptions for determining fair value, etc.). In Romania, the financial statements are standardized, hence presenting information in a particular manner is only possible in the notes. As a result, in the balance sheet, information on biological assets is found under two headings: "Animals and plantations in the category of fixed assets" and "Animals and crops under production".

One can assume that if national regulations do not approach certain aspects of IFRS, IFRS can be used as a reference. We believe, however, that although in Romania there are large entities that carry out agricultural activities, they are not yet interested in voluntarily applying the provisions of IAS 41. This attitude can be explained through tax considerations [23], the small number of specialists in international agricultural accounting and the lack of guidelines on assessment techniques.

### V. CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

The agricultural sector is an important part of the global economy. However, agricultural accounting and assessment guidelines in this area are still largely lacking. IAS 41 is an attempt to improve this situation and increase the

comparability of financial statements of companies in the agriculture sector. Its implementation in various countries has led to a radical change in accounting practices of major agricultural companies by switching from historical cost to fair value although reactions were not immediate. The main drawbacks claimed refer to [12]: the cost of recognizing biological assets at fair value exceeds the gains obtained by this evaluation method; the fair value method described in IAS 41 increases the volatility of earnings; selecting a discount rate for the evaluation of biological assets involve subjective judgment. However, IAS 41 remains the consistent first step of a transition to fair value assessment in the agricultural sector.

In Romania, agriculture is a sector with considerable potential, occupying traditionally an important place in the national economic structure. However, IAS 41 is not directly reflected in Romanian regulations. But if we consider the large areas of forest bought by foreign investment funds and several foreign investments in animal farms, we expect that in the near future Romania will need to consider its application.

There is much scope for further research in this area. It is worth exploring longitudinal assessment and disclosure practices in annual reports of European entities subject to IAS 41. In addition, future research could test how IAS 41 is perceived in European agricultural companies and the evolution of these perceptions across years of application.

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#### World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering Vol:6, No:3, 2012

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