

RECOGNITION AND VALUATION OF BIOLOGICAL ASSETS IN TOURISM AREA. INTERNATIONAL ACCOUNTING STANDARDS

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Abstract

Consistent with the Financial Reporting Standards Board's international convergence and harmonization policy it is proposed that a new accounting regime will prescribe the financial reporting practice and minimum disclosure requirements for agricultural activities, including the fair value of biological assets. In any financial report, the inclusion of biological assets may confuse the reality of the income profit and the wealth profit. There are many reasons it may provide misleading figures, the most obvious would be because the entity may have reported the value of heritage properties that do not actually generate any income but rather they are properties, which actually generate expenses for the entity, for example in maintenance costs. For any regime that requires entities to account and report on biological assets there should be a clear classification system that takes into account the different types of ownership structures in a society. Therefore in Romania, it is important that any financial reporting regime on biological assets should provide for the difference between business assets and cultural assets.

Key words: biological assets, fair value, accounting treatment, financial reporting.

JEL classification: Q14

1. INTRODUCTION

More than any other activity, the rural tourism is dependent on the environment, which represents in fact *its raw material*, on the object and development field of the tourism, which is its frame-support, i.e. *the carrier of its resources*.

2. AGRO-TOURISM – A CHALLENGE FOR ACCOUNTING

The relief, the forests, the rivers, the lakes, the sea, the natural or art and architecture monuments, the air or mineral waters, etc., component parts of the environment, constitute also themselves as agro-touristy resources, supporting the development of rest and recreation agro-tourism, balneal treatment, seaside or cultural tourism, hiking etc. The more various and complex and, especially unspoiled, are these resources, with properties closest to the primary ones, the more greater is their touristy interest and as such more valuable and attractive are the activities they generate, responding to very diverse touristy motivations.

Therefore, we think that the rural tourism - environment relation has a particular significance, as the development and protection of the environment is representing a prerequisite for agro-tourism and any change in the environment is also detrimental to the touristy potential by depletion or even destruction of its resources.

A series of factors should be considered in the planning of a sustainable strategy for rural tourism arrangement, such as: natural touristy resources and heritages, including their extent of development, tourism-related material, human, financial resources, short-medium-long term economical and political objectives, materialization of touristy activities concerning the boarding structures, touristy circulation and social-economical results.

The mountain area owns an important natural potential, which cannot be found in other regions, that is the existence of ample surfaces covered by forests and natural grasslands, with rich and various fauna and flora, having great landscape diversity suitable for merriment. Acknowledgement of the mountain area significance comes from the global concept concerning the economical growth on the entire territory of the country although each region has its own particularities.

The measures to be taken to capitalize the natural, economic and human potential in the mountain regions should consider the differentiations existing both between and within different areas. For this, it is required to develop a growth strategy for the mountain areas that should include the living space and economical environment, the agriculture and forestry, the conservation of natural environment, the rural tourism activity, the cultural customs, arts, and handicraft.

The agro-tourism is regarded as a major element of the rural areas development, especially of localities owing favorable conditions to practice

tourism as long as possible during the year. For this purpose, the agro-tourism should meet certain essential requirements, derived straight from the functions to be achieved, namely:

- possibility of supplementary incomes for the local population, allowing them to cope with the crisis of agricultural systems and rural society;

- diversification of economic activities by increasing the supply of services and local products, which may constitute factors for a solid tourism attraction;

- maintaining an optimum balance between the ecological, socio-economical and cultural systems in the area, no less than promoting a process of growth and hence of changing;

- promoting cultural exchanges as solidarity and social cohesion factor, supporting a coordinated politics with regard to territorial arrangement, which allows the amelioration of competitiveness between different economical activities within the less favored areas and provision of infrastructures and equipment required to improve the living and holiday conditions for the local population and visitors.

As the mountain type agro-tourism is closely dependent on the entire human and socio-economical activity within the area, certain norms and rules based on international criteria and standards should be adopted with regard to the systematization and aesthetic issues of the mountain village and dwellings construction.

Keeping in mind the complexity of the organizational matters and first of all the financial difficulties, the growth of agro-tourism in Romania starts with the selection and inventory of the rural area, followed by the analysis of the geographic position and of the infrastructure components condition and goes further by determining the offer of recreation in the area. Other elements of this aspect are: the description of natural landscape, familiarization with historical and cultural objectives and practiced agricultural system (preferably agriculture of natural type).

Being aware of the benefits from the growth of rural area in view of tourism, Romania has succeeded, via the National Strategic Plan 2007 – 2013, to obtain EU funds for improving the environment and rural regions, as well as for increasing the living conditions and diversification of economy within rural areas. Practically, non-reimbursable European funds shall be granted for the following types of investments: modernization of agricultural exploitations, growth of forests' economic value, and stimulation of touristy activities.

The access of investors to the non-reimbursable European funds is however conditioned by the elaboration of technically and economically feasible projects. The requested documentation implies the preparation of financial situations based on international accounting regulations.

This is the reason for which we find opportune to go further by approaching the aspects related to financial reporting with particularization on the domain of biological assets utilized in the tourism activity, mainly the rural one.

The international regulation institution for financial reporting, International Accounting Standards Board (IASB), has approved in December 2000 the IAS 41 International Accounting Standard: *Agriculture*.

The IAS 41 International Accounting Standard is the first of such type destined to cover specifically this primary sector. The standard has become operable for the annual financial situations since January 1, 2003. The standard is useful to the accounting of biological assets (living animals or plants), agricultural production at the reporting point and specific government subventions, all being the result of the development of agricultural activities.

From the standard point of view, the agricultural activity stands as the modality, in which an entity transforms the living animals or plants designated to selling into agricultural products or additional biological assets. Here there are included the multiple and single year crops, breeding of animals, fruit tree growing, flower growing, forestry etc.

IAS 41 introduces a model for **fair values** in the agricultural accounting. It represents a major change as compared to the model of traditional costs, which also explains the extended time interval until the new standard became operable.

IAS 41 aims mainly to the agricultural activities, where the biological production factors (flora, fauna) exceed as regards lifetime the accounting reporting periods. In this category are to be found the consumable biological assets, such as a tree following to be transformed into a log and fruit-bearing biological assets such as fruit-bearing grape-wine producing fruits, without being an agricultural product by itself. On the other hand, the application of the fair value model shall not have a huge impact in the case of annual wheat crops, when the lifetime of the cropped plants does not exceed the one of the accounting balance-sheet per year.

IAS 41 refers to:

- Biological assets (animals and plants, such as: orchards, sheep, cattle) correlated with agricultural activities

- Agricultural produces of the point of harvest.

IAS 41 is not applicable for:

1. Agricultural produces after the point of harvest: meat, fruits, rubber, stump of tree – produces that can be used and IAS 2 is applicable for them;

2. The land uses to grow, regenerate and/or degenerate biological assets – IAS 16 “Property, plant and equipments” or IAS 17 “Leasing” or IAS 40 “Investment property is applicable in this case.

3. Any intangible asset related to agricultural activities such as licenses or other rights – in this case IAS 38 “Intangible assets” is applicable.

4. Other agricultural activities that can not be managed (oceanic fishing activities)

5. Minerals, oils, gases and other non-regenerable resources.

IAS 41 answers to the following questions:

1. When a biological asset or an agricultural product is recognised in the balance sheet?

2. Which is the value of a biological assets or agricultural product?

3. How should be recorded the differences between net book value and fair value of these items at balance sheet date?

RECOGNITION: IAS 41 enumerates the tests that justify when a biological asset or an agricultural product is recognised in balance sheet.

CONTROL: the entity has the owner right or control right similar to owner right as a past event.

VALUE: future economic benefits will be obtained by entity.

EVALUATION: the cost or fair value is estimated using a professional judgment.

3. EVALUATION

The value of biological assets is estimated at initial recognition and at date of each balance sheet is used the fair value less estimated selling costs.

The agricultural products are evaluated at fair value; not taking into account the cost at time of sells.

The harvest time represent the moment of transfer of goods recorded under IAS 41 to inventories under IAS 2.

The cost at time of sells includes: fees to brokers and dealers, taxes to fiscal bodies and stock exchange, transfer taxes and custom taxes.

The costs at time of sells are free of transportation and other cost necessary to sell the goods.

IAS 41 supposes that fair value can be estimated for each category of biological assets and agricultural products; this supposition is contested by specialists, because:

- The prices can not be estimated on an active market, because it doesn't exist;
- There aren't goods available otherwise;
- Some estimation is ill-intentioned.

In order to estimate the fair value, are used:

- The prices on active market for similar biological assets and agricultural products;
- Prices used in most recently transactions when an active market is not available;
- Present value of cash-flows, when the prices for a certain biologic asset or agricultural product.

IAS 41 offers a guideline to calculate discount rate: The aim of IAS 41 is to calculate correctly net present value of a biological asset or agricultural product at present date and location. The present value of these assets excludes future benefits as a result of future transformation or future activities in order to make easier the harvest and selling process.

IAS 41 requires that net present value not to be calculated using a future selling contract. The contract prices aren't necessary the fair value, because the fair value reflects the result of negotiation between a willing seller and willing buyer as a participants to a transaction.

The difficulty in establishing the fair value of biological assets increases when these goods are related to fruit-bearing asset with a long life: productive vines that are over 100 years old and which are capable of continued production for a similarly long time. The Standard does not require external independent valuations but, in such cases where fair values are otherwise difficult to determine, it may be possible and appropriate to apply IAS 36 to determine both the value in use and the net selling price of the asset and to use the higher of the two amounts to represent valuation.

When the presumption that fair value can be established is rebutted, and until such time as a fair value becomes measurable with reliability, the asset is carried on the balance sheet at cost less any accumulated depreciation and any accumulated impairment losses. IAS 41 contains additional disclosure requirements in such a situation.

4. CASE STUDY

Establishing fair value when market-determined prices or values may not be available for a biological asset in its present condition:

As at 31 December 20X1, a plantation consists of 100 Mountain Pine¹ trees that were planted 10 years earlier. Mountain Pine takes 30 years to mature, and will ultimately be processed into building material for houses or furniture. The enterprise's weighted average cost of capital is 6% p.a.

Only mature trees have established fair values by reference to a quoted price in an active market. The fair value (inclusive of current transport costs to get 100 logs to market) for a mature tree of the same grade as in the plantation is:

As at 31 December 20X1: 171

As at 31 December 20X2: 165

¹ **Mountain Pine or Mugo Pine (*Pinus mugo*)** is a high-altitude European pine, found in the Pyrenees, Alps, Erzgebirge, Carpathians, northern Apennines and Balkan Peninsula mountains from (mostly) 1,000 m to 2,200 m, occasionally as low as 200 m in the north of the range in Germany and Poland, and as high as 2,700 m in the south of the range in Bulgaria.

As at 31 December 20X1, the mature plantation would have been valued at 17,100.

As at 31 December 20X2, the mature plantation would have been valued at 16,500.

Assuming immaterial cash flow between now and the point of harvest, the fair value (and therefore the amount reported as an asset on the balance sheet) of the plantation is estimated as follows:

As at 31 December 20X1: $17,100 \div [(1+6\%)^{20}] = 5,332$.

As at 31 December 20X2: $16,500 \div [(1+6\%)^{19}] = 5,453$.

4.1 Gains and losses

At initial recognition, the fair value (less estimated point-of-sale costs) of a biological asset is reported as a gain or loss in the income statement. A loss may arise on initial recognition when the estimated point-of-sale costs exceed the fair value of the asset in its present state. The change in fair value (less estimated point-of-sale costs) of a biological asset between two balance sheet dates is reported as a gain or loss in the income statement. A gain or loss arising on initial recognition of agricultural produce at fair value less estimated point-of-sale costs is included in net profit or loss for the period in which it arises. Referring to the forestry example above, the difference in fair value of the plantation between the two balance sheet dates is 121 (5,453 - 5,332), which will be reported as a gain in the income statement (regardless of the fact that it has not yet been realized). The aggregate gain of 121 is attributed to two factors:

1. The effects of change in market price; and
2. The physical change (growth) of the trees in the plantation.

The aggregate gain is analyzed as follows:

1. The **price** change, which represents, *at the biological asset's state as at the previous balance sheet date*: the value of the biological asset at prices prevailing as at the current balance sheet *less* the value of the biological asset at prices prevailing as at the previous balance sheet date: $= (16,500 \div [(1+6\%)^{20}]) - (17,100 \div [(1+6\%)^{20}]) = 5,145 - 5,332 = 187$ (loss).

2. The **physical** change, which represents, *at current prices*: the value of the biological asset in its state as at the current balance sheet *less* the value of

the biological asset in its state as at the previous balance sheet date: $= (16,500 \div [(1+6\%)^{19}]) - (16,500 \div [(1+6\%)^{20}]) = 5,453 - 5,145 = 308$ (gain).

IAS 41 requires disclosure of the aggregate gain or loss arising during the current period on initial recognition of biological assets and agricultural produce and from the change in fair value less estimated point-of-sale costs of biological assets. In recognising that reporting the aggregate gain or loss according to its distinct causes may not be practical in all circumstances, the Standard does not require reporting of the gain or loss on a disaggregated basis (that is, analysed between the gain and/or loss due to price and physical factors) but encourages such disclosure because it is useful in appraising current period performance and future prospects, particularly when there is a production cycle of more than one year.

4.2 Disclosure and financial analysis

Extensive disclosure is required by IAS 41, including:

- the aggregate gain or loss for the period on:
 - initial recognition of biological assets;
 - initial recognition of agricultural produce;
 - change in fair value less estimated point-of-sale costs of biological assets;
- a description of, and the nature of its activities involving, each group of biological assets;
- non-financial measures or estimates of the physical quantities of agricultural produce output for the period and biological assets as at balance sheet.

5. CONCLUSIONS

In present, Romanian's economy is confronting with a lot of irreversible processes and the disclosure of relevant, reliable, comparable financial information will facilitate obtaining international funds in order to support internal tourism, specially the rural tourism, taking into account the fact that this represents a hope to generate an economical increase in present crisis conditions.

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