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# TAX PROCEDURE LAW AND AMORTISEMENT PRACTICES IN AGRICULTURAL ACTIVITIES WITHIN THE SCOPE OF 41st INTERNATIONAL ACCOUNTING STANDARD

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## **Abstract**

With globalization, there have been many developments in the accounting area. Among these developments, the Institute of International Accounting Standards proposed the standards for accounting and reporting. 41st one of these standards is on agricultural activities. This standard comprises Biological assets and agricultural products in the time of harvesting. Biological assets and agricultural products are classified under the biological assets heading in the balance sheets. Among agricultural facilities, biological assets go through biological processes such as growing in quality and quantity, deterioration, production and breeding. Thus recognition of these goods is an important issue. Biological assets like farm animals and fruit trees produce goods during their lifetimes. According to this standard, for biological assets, depreciation must be allocated. As in the other standards, in this standard the method for calculating the depreciation is crucial. However when we examine the depreciation calculating and recording practices in Turkey, there are differences between Tax Procedure Law and 41st International Accounting Standards.

This study examines and compares amortisement practises according to Tax Procedure Law and 41st International Accounting Standard and also, it propounds the discrepancy between different practices.

## **Introduction**

The contributions of agricultural sector especially on the economies of developing countries are certainly undeniable facts. Agricultural sector consists of family businesses, private sector enterprises and enterprises within public (YAZAN and KAYA, 2011). Livestock breeding and crop production are amongst the first activities coming to the mind carried out by these enterprises. However, the scope of agricultural activities has also expanded upon execution by large enterprises with a more professional approach at the present time.

Assets owned by agricultural enterprises can be evaluated within the scope of current assets and fixed assets. Assets that will be sold within a year or will have a biological change in their nature are classified as current assets on the other hand assets that will be present inside the enterprise more than a year are included in fixed assets. It is clear that the assets in this group will experience depreciation in the progress of time since they will be within the enterprise in the long run. Therefore, depreciation necessity arises.

The purpose of this study is to evaluate depreciation calculation and recording practices within the framework of Tax Procedure Law (TPL) and Agricultural Activity Standard (IAS 41) and to identify the differences between these practices.

### **Agricultural activities**

While the agriculture is described as livestock production and plant production in narrow sense in terms of economics, it can be defined as production of plant and livestock products with the use of soil and seed and evaluation activities of these products at different stages in the broad sense (İNAN, 1998).

Although there are different opinions on definition of agricultural activities, it is possible to define agriculture as producing plant and livestock products with the use of soil and seed and manufacturing and semi manufacturing these products. As is apparent from this definition, agricultural activities comprise both plant production and obtaining animal products by means of livestock farming

Agricultural activities were described as "producing, hunting, conservation, transportation, selling plants, forests, animals, fish and their products by hunters and producers by means of improvements and sowing, planting, maintenance, manufacturing in land, lake, sea and river or directly benefiting from the nature" Article 52 of Income Tax Law (I.T.L).

Income Tax Law evaluated agricultural activities in a broad sense and it also included all fishing activities and forestry within the scope of agricultural activities (AKDOĞAN, AKTAŞ, DERAN, ERHAN and ACAR, 2011).

Agricultural Activity Standard (IAS 41) described agricultural activity as "Converting biological assets subject to sale or recycling into agricultural products and management of harvesting by an enterprise." According to standard agricultural activity is a comprehensive activity comprising livestock farming, forestry, annual or longer period crop production, orchards and plantation, floriculture and aquaculture (IAS 41 Article 5 and Article 6). In order to be regarded as agricultural activity; an activity should have a change capacity, its change should be managed and measured (ÖRTEN, KAVAL and KARAPINAR, 2013). The fact that biological assets within agricultural activities have the stages

of birth, growth, aging and death is among the distinctive features separating agricultural activities from other activities (TUĞAY, 2013).

## DEPRECIATION PRACTICES

Since the life and service period of tangible and intangible assets are limited they wear off as a result of physical abrasion or they are likely to be outdated due to technological developments and changes in the tastes of consumers thus these assets are subject to depreciation (KOÇ YALKIN, 2012). Depreciation was described as follows in TMS 16 (Agricultural Activity Standard AAS) "it refers to systematic distribution of depreciable amount of an asset throughout its useful life"(TMS 16). According to Tax Procedure Law, eliminating realties which are used for more than one year in an enterprise and subjected to wear, abrasion or devaluation and the value of economic assets, paraphernalia, furnishing, fixtures and motion pictures appreciated as realties determined on the basis of principles of the first section, in accordance with the provisions of this Law constitute the depreciation subject (Tax Procedure Law Article 313).

In order to calculate depreciation shares of long-term assets per year involved in production for more than a year following elements must be known:

- **The value of the asset subject to depreciation:** The value of the fixed asset subject to depreciation is its cost values i.e. its acquisition value. Sometimes a value named salvage value remains at the end of life cycle. In some cases depreciable value is obtained by deducting this salvage from cost value.
- **Average life expectancy of fixed asset:** Although average life expectancy which may vary based on the structure, quality, repair and maintenance degree of fixed asset differs from country to country, it is recognized as 10 years on average in our country (ÇETİN and TİPİ, 2007).
- **Methods used to calculate the annual depreciation allowance:** According to Tax Procedure Law there are 3 methods including ordinary depreciation method, declining balance method and exceptional depreciation method. Useful life of economic asset is calculated over the rates determined by Ministry of Finance in ordinary depreciation method (Tax Procedure Law Article 315). Period of depreciation is calculated according to ordinary depreciation period in declining balance method and it is double the ordinary depreciation rate for the maximum of 50%. The balance value transferring to last year of this period is completely removed in that year (Tax Procedure Law Duplicated Article 315). Exceptional depreciation is applied in economic assets which are losing value as a result of disasters such as fire, flood; becoming unserviceable by decreasing in technical efficiencies and values due to new inventions or wearing off due to overworking according to rates determined by Ministry of Finance (Tax Procedure Law Article 317).

Enterprises use two methods while they are accounting the depreciation amount calculated according to preferred depreciation methods.

- **Direct method:** In this method, depreciation amount is registered as debt in depreciation expense account representing operation expense account and registered as receivable in the account of related fixed asset.
- **Indirect method:** In this method depreciation cost depreciation amount is registered as debt in depreciation expense account representing operation expense account and registered as receivable in the account of "Accumulated Depreciation" (KOÇ YALKIN, 2012).

### **Tax procedure law and amortisement practices in within the scope of t.p.l. and ias 41**

The scope of agricultural activities expanded with the adoption of capital-intensive production structure from traditional production structure and this brought the necessity of agricultural activity recognition. However, available regulations remained inadequate on recognition of these activities as a consequence of this International Accounting Board put the International Accounting Standard no 41 (IAS 41) into effect on the date of 01.01.2003 (GÖKGÖZ, 2013). The purpose of agricultural activity standard is to determine recognition methods and explanations of the event related to agricultural activities. The standard is applied on biological assets other than carrier plants, agricultural products in harvesting period and government incentives which are given without condition or conditionally on biological assets evaluated by reducing the cost of sales from the fair value (IAS 41, Article 1.). Agricultural activities may be grouped as follows in general terms;

- Plant production,
- Livestock production,
- Production of forestry products
- Aquaculture production (AKSOYLU, 2013).

Since the accounting is a complement of systems offering the most detailed and reliable information on enterprise, it provides the most important information in agricultural enterprises as well. Thus, consideration should be given to accounting in agricultural enterprises as well as other enterprises for an effective and successful method (TOKAY and DERAN, 2011).

As is known, Uniform Accounting Plan has been implemented within the framework of General Communiqué on Accounting Practices in our country since 1994. But, the required accounts to register the biological assets do not exist. Small

and large biological assets in nature of current assets (stock) are observed in the account of 152 Goods and 153 Commodities; small and large biological assets in nature of fixed assets are observed in the account of 256 Other Fixed assets or 255 Fixtures. However these accounts cannot fully explain the biological assets (ÖZULUCAN and DERAN, 2008).

Thus, it is necessary to form a group in Uniform Accounting Plan for biological assets with the aim of facilitating the application of Agricultural Activity Standard (TMS 41). Since the biological plants and livestock to be kept within the enterprise for a year or less are the current asset elements of enterprise, they should be included in the group of current assets in the balance. Likewise, plants to be kept in enterprise for longer than a year and livestock to be kept in enterprise with the aim of benefiting from their products continuously should be included in the group of fixed asset in the balance since they form the fixed asset elements of the enterprise (AKDOĞAN et al., 2011). Therefore AKDOĞAN and SEVİLENGÜL (2007) suggests forming an account group by using the Code no 16 and Code no 21 which are empty in Uniform Accounting Plan.

The Draft of Uniform Accounting Plan prepared within the body of Public Oversight Accounting and Auditing Standards Authority is given below ([http://www.esmmmo.org.tr/docs/hesap\\_plani\\_taslagi.pdf](http://www.esmmmo.org.tr/docs/hesap_plani_taslagi.pdf), 30.06.2015).

## **16- BIOLOGICAL ASSETS**

160 ACCOUNT OF FIELD CROPS

161 ACCOUNT OF HORTICULTURAL

162 ACCOUNT OF BOVINE

163 ACCOUNT OF OVINE

164 ACCOUNT OF POULTRY

165 ACCOUNT OF AQUATIC ANIMALS

166 ACCOUNT OF OTHER BIOLOGICAL ASSETS

167 ACCOUNT OF PROVISION FOR IMPAIRMENT OF BILOLOGICAL ASSETS

(-)

168

169 ACCOUNT OF ADVANCES GIVEN FOR PURCHASES

## **23 BIOLOGICAL ASSETS**

230 ACCOUNT OF FRUIT TREES

231 ACCOUNT OF FRUITLESS TREES

232 BOVINES

233 ACCOUNT OF OVINE

234 ACCOUNT OF POULTRY

235 ACCOUNT OF AQUATIC ANIMALS and OTHER PHYSICAL ASSETS

236 ACCOUNT BIOLOGICAL ASSET IMPAIRMENTS (-)

237 ACCUMULATED DEPRECIATION (-)

238 ACCOUNT OF CURRENT BIOLOGICAL ASSET INVESTMENTS

239 ACCOUNT OF ADVANCES GIVEN

It is observed that other fixed assets with a physical structure do not undergo change (apart from the changes such as wear out) after their acquisition. Contrary to this, biological assets change in terms of quality and quantity in other words they undergo change with regard to their real value (AKDOĞAN et al., 2011). This brings about the requirement of reserving depreciation for assets to be kept in the enterprise for long term. A fixed asset should be activated and prepared for use in order to allocate depreciation for that physical asset (TAŞTAN, 2013).

It appears that there are some differences in practice from the perspective of depreciation applications. For instance, depreciation amount is calculated by deducting the salvage value (residual value) from cost value of an asset in depreciation applications according to Agricultural Activity Standard 41 (KIRLIOĞLU and GÖKGÖZ, 2012). Agricultural activities improve in value along with cost value according to Tax Procedure Law in other words depreciation is calculated over cost value (T.P.L Article 276 and Article 277). Although it is not specified with a clear statement, IAS 41 (Agricultural Activity Standard 41) adopted the valuation approach in depreciation application for biological asset that is the approach of calculating based on the fair value (KIRLIOĞLU and GÖKGÖZ, 2012). According to standard, fair value is reached by deducting the cost of transportation and costs incurred during the time period of market transfer from market value of asset (GÖKGÖZ, 2013). In the standard it is assumed that fair value of biological assets could always be obtained in a reliable way. However the standard accepts the presence of situations in which fair value relating the biological asset could not be determined in a reliable way as well. In the event that market value or precedent biological asset to be appraised in the market or alternative valuation measures do not exist, fair value is registered through biological asset cost value and it is appraised by deducting accumulated depreciation and impairments from the cost value. Once the fair value is measurable it is appraised through this value (ÖRTEN et al., 2013). An enterprise that has previously measured its biological assets by deducting the sales cost from fair value continues to measure its assets by means of deducting cost of sales from fair value until disposing these assets (TAŞTAN, AZALTUN and MERT, 2013). According to this, biological assets are subject to valuation in every period and

occurring valuation differences are indicated in operating accounts. Costs incurred relating to acquisition and raising of biological assets within the period are indicated in expense accounts ALAGÖZ and ANTEPLİ, 2013).

It is observed that accounting practices are generally examined by distinguishing as small and large biological assets, orchards, poultry and aquatic animals in agricultural activities. However depreciation practices will be examined in a comparative way according to T.P.L and IAS 41 by distinguishing as depreciation procedures in animal assets and depreciation procedures in orchards in this research.

### Depreciation practices in animal assets

Enterprises generally keep animal assets by growing for a certain period or selling their products or permanently benefiting from their products. Since these assets are kept for sales purposes they are disposed at the end of each accounting period and thus included in the group of current asset in accounts chart. Hence depreciation is not allocated for these animal assets. Depreciation is only allocated for animal assets which are kept longer than an accounting period with the aim of permanently benefiting from their products (TUNÇEZ, 2011).

While T.P..L. adopted the approach of reserving depreciation over cost value in depreciation practices for animal assets IAS 41 adopted the principle of depreciation over fair value. In the event that enterprise subjects its assets over fair value it will not be necessary to allocate depreciation again since book value of the asset will show the current value. However, in the event of adopting cost principle it will be necessary to allocate depreciation (GÖKGÖZ, 2013).

**EXAMPLE:** ABC agricultural enterprise calculated depreciation for the cows it purchased over cash prices of 10.000 TL with the aim of benefiting from their milk on 15.02.2013 in the rate of 20% according to straight-line method on 31.12.2013. Fair value of the cows was determined as 12.000 TL due to an increase in milk prices on this date.

### Required journal entry according to T.P.L.

Purchase of cows

15/02/2013

256 OTHER PHYSICAL FIXED ASSETS ACCOUNT	10.000	
100 VAULT CASH ACCOUNT		10.000

Depreciation for cows  
31/12/2013

730 GENERAL PRODUCTION EXPENSES ACCOUNT 257 ACCUMULATED DEPRECIATION ACCOUNT (10.000 x %20 = 2.000)	2.000		2.000
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### Required journal entry according to AAC 41

Since the fair value is determined according to IAS 41 a further depreciation is not necessary.

Purchase of cows  
15/02/2013

232 BOVINE ANIMALS ACCOUNT 100VAULT CASH ACCOUNT	10.000		10.000
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Valuation account of cows  
31/12/2013

232 BOVINE ANIMALS ACCOUNT 605 VALUE INCREASES IN BIOLOGICAL ASSETS ACCOUNT	2.000		2.000
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### Depreciation practices in orchards

Agricultural enterprises that are subject to depreciation can be counted as land, waterways, tools and machinery, olive groves, mulberry groves, nuts, ornamental trees, parks, rose gardens, vineyards, citrus, peach, apricot, plum, almond, quince, figs, pears, apples, figs, cherries, cherry, walnut, chestnuts, pistachios (ODAK, 2003).

Depreciation period begins within the year when the asset is activated. However, according to Tax Procedure Law it is considered that seedling would not be exposed to any wear out until they grow mature and yield fruit. Thus it is accepted that fruit trees are active after yielding fruits and depreciation could be allocated for them (SÖNMEZ, 2006). Furthermore, depreciation is not allocated for uncultivated lands and plots since they will not be exposed to wear out (T.P.L. Article. 314).

Agricultural Activity Standard adopted the fair value approach in orchards. Valuation procedures are performed for orchards on their first recognition dates and at the end of each financial year in accordance with this standard apart from the cases in which fair value is not measured in a reliable way, by deducting cost of sales from fair value (TAŞTAN, 2013).

**EXAMPLE:** X agricultural enterprise purchased a fig orchard with a cash price of 200.000 TL on 20.01.2013. Fair value of the orchard was determined as 210.000 TL on 31.12.2013. Also, depreciation was allocated in the rate of 4% according to straight-line method.

### Required journal entry according to T.P.L

Purchase of fig orchard

20/01/2013

256 OTHER PHYSICAL FIXED ASSETS ACCOUNT		
256.01. Fig. Trees	200.000	
100 VAULT CASH ACCOUNT		200.000

Depreciation for fig orchard

31/12/2013

730 GENERAL PRODUCTION EXPENSES ACCOUNT		
257 ACCUMULATED DEPRECIATION ACCOUNT	8.000	
(200.000x% 4=8.000)		8.000

### Required journal entry according to IAS 41

Purchase of fig orchard

20/01/2013

230 FRUIT TREES ACCOUNT		
230.01. Fig Trees	200.000	
100 VAULT CASH ACCOUNT		200.000

## Valuation account of fig orchard

31/12/2013

230 FRUIT TREES ACCOUNT		
230.01. Fig Trees	10.000	
605 VALUE INCREASES IN BIOLOGICAL ASSETS A.		10.000

**Result**

Agricultural sector is beneficial to national economy in other fields as well as meeting the food need of a country. Developments in agricultural sector as well as in all fields enabled agricultural enterprises to transform into comprehensive large enterprise structure by abandoning traditional small-enterprise structure. This transformation is seen in the subject of recognition of agricultural activities as well. Agricultural Activity Standard 41 (IAS) released with the aim of ensuring integrity in the recognition of agricultural activities meets this requirement. However, there are no accounts fully corresponding to these activities in the current Uniform Accounting Plan. In the event that draft work plan is completed this problem will be diminished. According to draft work plan, group no 16 was allocated for biological assets with the nature of current assets and group no 23 was allocated to biological assets with the nature of fixed asset. An important issue we face at this point is the necessity to allocate depreciation for assets kept in the enterprises for long term goals. The research has shown that there are practice differences about this issue. While the Standard (TMS 41) adopts valuation approach on reserving depreciation, Tax Procedure Law (T.P.L) adopts the cost value approach. In the event that enterprise subjects such assets to valuation over the fair value, it will not be necessary to allocate depreciation again since the book value of asset will indicate the current value. However, the enterprise will need to calculate depreciation in case of adopting cost principle.

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Türkiye Muhasebe Standardı 16 (TMS 16)

Gelir Vergisi Kanunu

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