

THE PROBLEM OF ACCOUNTING OF BIOLOGICAL ASSETS ACCORDING TO INTERNATIONAL STANDARDS

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Introduction

Agriculture is one of the most important branches of economy in the Republic of Armenia, the same way as in any other countries, as it carries out the function of providing with food reserves, meantime, supplies series of branches of industry with raw materials.

Agriculture is connected with living organisms - biological assets, which are reproduced along with growth, productivity (yield), due to the peculiarities of agricultural activities. The latter are the reason why IAS 41 "Agriculture" standard is included in the list of the international accounting standards for this branch of the economy.

As a result of the amendments to IAS 41, some of the biological assets are no longer included in the scope of the standard, therefore, the revelation of these amendments and the development of theoretical approaches are important for preparing financial statements for agricultural organizations.

Measurement and management of a biological transformation for sale

According to IAS 41 "Agricultural activity is the management of biological assets' biological transformation and product's receipt by the organization, either

for sale, or for agricultural products, or for conversion of additional biological assets"¹.

A biological asset is a living plant or a living animal which is capable of biological transformation as a living organism: i.e. to grow, to regenerate, to give food (crop) and to propagate itself.

The use of the term "biological assets" for living plants and living animals, as separate objects of accounting, is very substantial, as the name already implies the innate essence of development and self-reproduction of animals and plants².

According to this standard, agricultural activity is conditioned by both the measurement and the management of a biological transformation of living plants and living animals, with an aim to sell the result of that transformation. Therefore, the inclusion of living plants and living animals in the scope of IAS 41 is conditioned by the circumstance of both the management a of biological transformation and the sale of living plants and living animals, otherwise, IAS 16 "Fixed Assets", is applied for the cases, when the biological transformation of living plants and living animals is not managed by the organization or there are another purposes for their usage (graph 1).

Let's discuss the following situations: the organization carries out the security of the area with the help of Armenian gampr guard dogs in parallel with the security systems.

At first site, the guard dog, Armenian wolfhound, is a living organism, therefore, it is a biological asset, it should be accounted as non-current biological asset. It should be added, that the organization looks for the growth and takes care of the dog and implements the vaccinations diligently. It seems, that a measurement and a management of a biological transformation is carried out too.

However, the organization would consider the Armenian wolfhound as a biological asset and would account it in accordance with the "Agriculture" standard, if the measurement and the management of a biological transformation had been carried out for sale, as it is set in IAS 41. While in the presented situation, the management of the biological transformation of the Armenian gampr is carried out not for sale, but for the preservation of the organization's own territory, therefore, the Armenian wolfhound should be accounted as a depreciable fixed

¹ ՀՀՄՄ 41, 2010, 5.

² Бєрєзє 2019, 60.

asset, be included in IAS 16 by that organization and be evaluated by the primary value, as it is presented in graph 1.

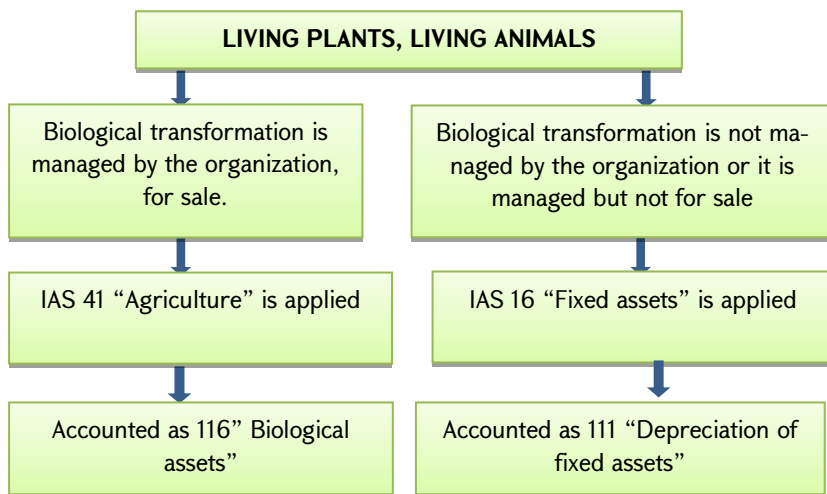
The scope of accounting animals of a zoo can be interpreted in the same context, as their presence in a zoo as well as the measurement and the management of their biological transformation serves any other purpose but not sale. Thus, the activity of a zoo can't be considered as an agricultural activity, even if those animals breed naturally, during their whole lifetime.

Consumable Biological Asset, Only at the Point of Harvest

Within the scope of IAS 41 "Agriculture", are included:

- Biological assets (excluding fertile plants),
- Agricultural product at the point of harvest,
- Conditional and unconditional State's Interest concerning biological assets.

It should be noted that agricultural products are the crop, food obtained from biological assets, at the point of harvest. Even if the reprocessing of agricultural products is the logical and normal sequel of an agricultural activity, however the crop obtained after harvest is included in the scope of IAS 2 "Inventories", as it refers to the process of reprocessing of agricultural products after harvest.



Graph 1: Inclusion of living plants and animals in the scope of IASs

From this point of view, it is noteworthy, that the organization can carry out a re-processing industrial activity in parallel with an agricultural activity.

Let's discuss the following: the pharmaceutical company has several separate types of animals, and produces drugs against diabetes, thyroid and other diseases, using their hormonal secretions. It is clear that the pharmaceutical company manages the biological transformation of separate types of animals – growth, development, breed, and its goal is clear – production of drugs using animal hormones.

As a result, the pharmaceutical company carries out two types of activity: Agricultural activity in the scope of IAS 41, for the production of those animals and the hormones derived from them (at the point of receipt), and the production of medicines using animal hormones that are already included in IAS 2.

The analogic picture of what has been said, is the production of vineyards, products obtained from them and wine: when the organization cultivates vines, which are fertile plants, and "the unharvested crop belongs to the fertile plant from which it is going to be obtained, so it cannot be accounted separately until the harvest"³.

The product obtained during harvest is a biological asset, although it is consumable. Therefore, the organization should apply IAS 41 for the evaluation of the latter.

The assets included in the scope of IAS 41 "Agriculture", should be evaluated as actual value, subtracted sale expenditures, and the assets are reflected in the financial statements of agricultural organizations on this basis. This is the reason, why the evaluation of biological assets is so essential while preparing the financial statements of agricultural organizations⁴. Moreover, the evaluation of biological assets should be made at the moment of primary identification, as well as at the end of each accounting period⁵.

The clause of reflection of biological assets according to IAS 41 "Agriculture" standard, ejects the traditional system of evaluation of assets according to actual expenditures, which is applied by industrial organizations.

In the case when the organization uses the harvested grape for wine production, the IAS 2 standard is applied for that grape after harvest (graph 2), moreover, the actual value of the grape is accepted as primary value of a raw material.

Fertile Plants are in the Sphere of Action of IAS 16

It should be noted that fertile plants have been excluded from the scope of IAS 41, by the way, this exception is one of the latest amendments to the "Agriculture" standard.

According to IAS 41, fertile plant is a living plant, which

a) is used for the production of an agricultural product or for supply,

³ Клычова, Закирова, Ситдигов 2015, 17.

⁴ Шелест, Гонтаренко 2016, 225.

⁵ Гасанов 2013, 292.

- b) it is expected to have production during more than one period, and
- c) it has less probability to be sold as an agricultural product, than as a waste for side sale⁶.

Whereas, the product obtained from a fertile plant is a biological asset, moreover, it is consumable, it is included in the scope of ISA 41 and is evaluated as actual value subtracted sale expenditures: "Some plants, such as tea bushes, vines, olive palms, rubber trees, usually meet the definition of fertile plant, and are within the scope of action of IAS 16. However, the products obtained from the crop, such as tea leaves, grapes, olive palms, and latex, are within the scope of IAS 41"⁷.

According to the amendment to IAS 41, fertile plants are living organisms, that are used in the production of agricultural products if this process is likely to be repeated in the following years. That is to say, the fertile plant is a long-term supplier of an agricultural product (at least more than 12 months), it is at its ripeness's zenith, and it is only a carrier of consumable biological asset (product). Therefore, the fertile tree should be accounted separately according to the actual cost price, and the crop of the tree should be accounted separately according to the actual value subtracted sale expenditures.

Before this amendment, IAS 41 stated clearly, that "At the moment of primary identification and at the end of each accounting period, a biological asset should be measured by its actual value subtracted sale expenditures, except the case, when it is not possible to measure the actual value for sure"⁸. When there are conditions which allow to measure the actual value of a biological asset for sure, it is necessary to start to evaluate by the actual value. And the actual value is determined on the basis of the recent transaction prices in the active market⁹. It should be noted that actual value of biological assets, subtracted sale expenditures, may be changed due to the changes in physical properties of biological assets, as well as to the market price¹⁰.

The basis of the classification of biological assets is the supposition, that biological assets are able to propagate and to grow while submitting to qualitative and quantitative changes¹¹. From this point of view, it is expedient to differentiate biological assets between fertile and consuming groups, which are also grouped as mature and immature biological assets¹².

⁶ ՀՀՍՄ 41, 2010, 5:

⁷ ՀՀՍՄ 41, 2010, 4:

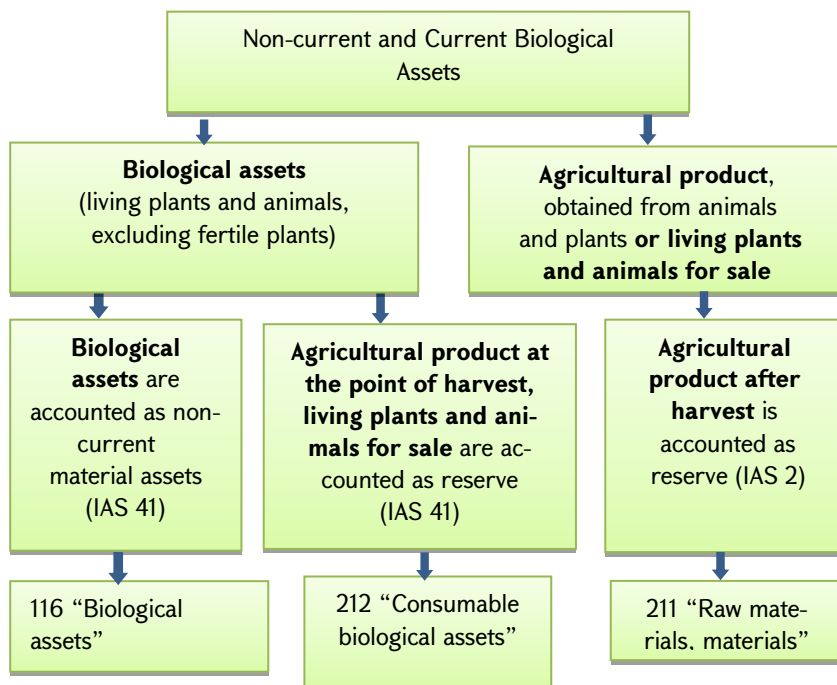
⁸ Гренадерова, Петрова 2020, 120-126.

⁹ Балашова, Цепляева 2018, 5.

¹⁰ Никитина, Буранбаева, Мазитов, Ханова, Сибгатуллин 2021, 331.

¹¹ Яковлева 2020, 204.

¹² Левчук, Горбач 2019, 154.



Graph 2: The inclusion of biological assets within the scope of IASs

The evaluation of biological assets by the actual value, ensures the exact possibility to synthesize the data of such an organization¹³.

Before the amendments in IAS 41, there was a question, whether it was possible to sell a "fertile tree" product in the current market, otherwise, it became impossible to determine the actual value of the fertile tree.

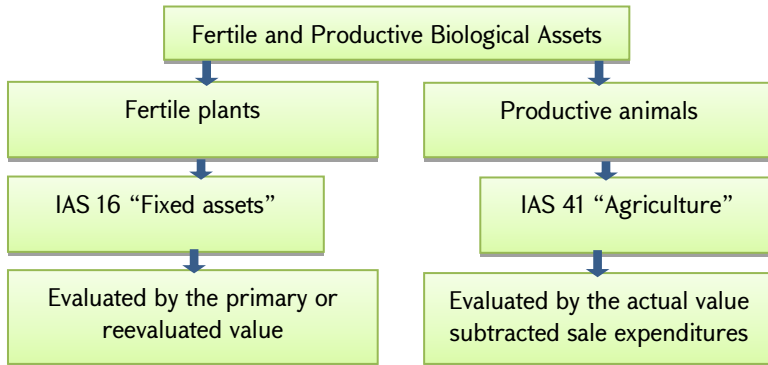
The biological assets are often connected with the soil inseparably (for example, forest trees). Maybe there is not a separate market for the biological assets, that are inseparably connected with the soil.¹⁴ So it is logical, that fertile plants as biological assets, were ejected from the scope of ISA 41, and many people greeted this amendment.

Note, that this exception doesn't refer to productive animals, but only to fertile plants, that is to say, the amendments of the standard differentiate fertile plants and productive animals, in the sense, that fertile plants are included in the scope of ISA 16, and evaluated by the primary or reevaluated value, subtracted accumulated depre-

¹³ Терехов, Терехова 2015, 30-31.

¹⁴ Парасоцкая 2012, 58.

ciation and losses from devaluation, and the animals are in the scope of ISA 41, irrespective of the fact, whether they are fertile or consumable (graph 3).



Graph 3: The Inclusion of Fertile Plants and Productive Animals within the Scope of ISAs

In addition, as a result of the amendments in the standard, the tree grown by the organization's own means will be considered as inaccessible fixed asset for use, before it becomes fruitful, that is to say, the expenses incurred on the tree year after year (before it becomes fruitful) should be collected in the corresponding account of 82 groups of an accounting plan, be wrote off in the end of the year and be reflected in the account "Inaccessible fixed assets for use".

Conclusion

Thus, International Accounting Standards have unique approaches to the classification, accounting, and evaluation of living plants and living animals, and the task of accounting is to form reliable information on biological assets and agricultural products, that meets international standards.

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ԿԵՆՍԱՐԱՆԱԿԱՆ ԱԿՏԻՎՆԵՐԻ ՀԱՇՎԱՌՄԱՆ ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ ԸՍՏ ՄԻՋԱԶԳԱՅԻՆ ՉԱՓՈՐՈՇԻՉՆԵՐԻ

Մանյա Պողոսյան, Գոհար Հարությունյան

Ամփոփում

Քանի որ կենսաբանական ակտիվների և գյուղատնտեսական արտադրանքի հաշվառման խնդիրը միջազգային չափորոշիչներին համապատասխան արժանա-

հավատ տեղեկատվության ձևավորումն է, ուստի հաշվառման տեսանկյունից կարևորվում է նորմատիվ ակտերի կիրառման տեսական հիմքերի բացահայտումը:

Քննելով կենսաբանական ակտիվները՝ որպես ՀՀՄՍ 41 «Գյուղատնտեսություն» չափորոշչի կիրառման օբյեկտի առանցքային պայմաններ կենսաբանական ակտիվների վաճառքի համար՝ պայմանավորված կենսաբանական փոխակերպման կառավարմամբ, նպատակ ունենք բացահայտել այն հանգամանքերը, որոնց շնորհիվ ներկայացված կենսաբանական ակտիվները ներառվում են այլ չափորոշիչներում:

Միջազգային չափորոշիչներում ներառվող կենդանի բույսերի և կենդանիների դասակարգման վերաբերյալ տեսական մոտեցումները համահունչ են ՀՀՄՍ 41 չափորոշիչներում կատարված փոփոխություններին, որոնք բացառում են բերքատու բույսերը ՀՀՄՍ 41 «Գյուղատնտեսություն» չափորոշչի գործողության դաշտից:

Բանալի բառեր՝ գյուղատնտեսական գործունեություն, կենսաբանական ակտիվներ, գյուղատնտեսական արտադրանք, հաշվառում, կենսաբանական փոխակերպում, ՀՀՄՍ 41 «Գյուղատնտեսություն», միջազգային չափորոշիչներ:

ПРОБЛЕМЫ УЧЕТА БИОЛОГИЧЕСКИХ АКТИВОВ ПО МЕЖДУНАРОДНЫМ СТАНДАРТАМ

Маня Погосян, Гоар Арутюнян

Резюме

Поскольку задачей учета биологических активов и сельскохозяйственной продукции является предоставление достоверной информации в соответствии с международными стандартами, то весьма важно раскрыть теоретические основы применения нормативных актов с точки зрения бухгалтерского учета.

С этой целью необходимо рассмотреть ключевые условия применения биологических активов в качестве объекта использования стандарта МСФО (IAS) 41 «Сельское хозяйство» для продажи биологических активов под управлением биологической конверсии для выявления обстоятельств, при которых биологические активы включаются в другие стандарты.

Представленные теоретические подходы классификации живых растений и животных, включенных в Международные стандарты в соответствии с поправками к МСФО 41, исключают плодовые культуры из сферы действия МСФО 41 «Сельское хозяйство».

Ключевые слова – сельскохозяйственная деятельность, биологические активы, сельскохозяйственная продукция, учет, биологическая трансформация, МСФО 41 «Сельское хозяйство», международные стандарты.

THE PROBLEM OF ACCOUNTING OF BIOLOGICAL ASSETS TO INTERNATIONAL STANDARDS

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Abstract

As the purpose of accounting for biological assets and agricultural products is to provide reliable information in accordance with international standards, this article is devoted to revealing the theoretical basis for the application of normative acts from the point of view of accounting.

The article discusses the key conditions for the use of biological assets as the subject of IAS 41 Agriculture for the sale of biological assets under the management of biological conversion in order to identify the circumstances in which biological assets are included in other standards.

This article also presents the theoretical approaches to the classification of live plants and animals included in international standards in line with the amendments to IAS 41, which exclude crops from the scope of IAS 41 Agriculture.

Key words – agricultural activity, biological assets, agricultural products, accounting, biological transformation, IAS 41 "Agriculture", international standards.