

ISSUES OF ANALYTICAL ACCOUNTING OF BIOLOGICAL ASSETS

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Abstract: In agricultural enterprises, "biological assets" are an important object of financial reporting. Correct classification and accounting of biological assets in financial reporting further increases the quality and significance of reporting indicators. In the article, the author gives scientific definitions of the concepts of biological assets, and also considers the problems associated with their accounting and ways to solve them.

Keywords: *Food security, limited resources, foreign investment, biological assets, agricultural activity, agricultural products, livestock products, primary products, secondary products, additional products, high profitability, low profitability.*

BIOLOGIK AKTIVLARNI ANALITIK HISOBINI YURITISH MASALALARI

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Annotatsiya: Qishloq xo'jaligi korxonalarida "biologik aktivlar" moliyaviy hisobotning muhim obyekti hisoblanadi. Moliyaviy hisobotda biologik aktivlarni to'g'ri tasniflash va hisobga olish hisobot ko'rsatkichlarining sifati va ahamiyatini yanada oshiradi. Maqolada muallif biologik aktivlar tushunchalariga ilmiy ta'riflar beradi, shuningdek, ularni hisobga olish bilan bog'liq muammolar va ularni hal qilish yo'llarini ko'rib chiqadi.

Kalit so'zlar: *hisob siyosati, ishchi hayvonlar, mahsuldor hayvonlar, qishloq xo'jaligi hayvonlari, chorva mollari, ko'p yillik daraxtlar, daraxt ko'chatlari, ko'chatlar, baholash, tarixiy qiymati, tannarxi, amortizatsiya, adolatli qiymat, birlamchi bozor, imtiyozli bozor.*

ВОПРОСЫ АНАЛИТИЧЕСКОГО УЧЕТА БИОЛОГИЧЕСКИХ АКТИВОВ

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Аннотация: На сельскохозяйственных предприятиях «биологические активы» являются важным объектом финансовой отчетности. Правильная классификация и учет биологических активов в финансовой отчетности еще больше повышает качество и значимость отчетных показателей. В статье автор дает научные определения понятий биологических активов, а также рассматривает проблемы, связанные с их учетом, и пути их решения.

Ключевые слова: Продовольственная безопасность, ограниченные ресурсы, иностранные инвестиции, биологические активы, сельскохозяйственная деятельность, сельскохозяйственная продукция, животноводческая продукция, первичная продукция, вторичная продукция, дополнительная продукция, высокая рентабельность, низкая рентабельность.

INTRODUCTION

As countries strive for economic and political dominance and seek to gain immense prestige, the excessive release of waste gases into the atmosphere has resulted in the greenhouse effect. This has led to a serious environmental issue—global climate change—which is currently a matter of great concern for the international community.

According to research conducted jointly by the World Wildlife Fund (WWF), the Global Footprint Network, and experts from the Zoological Society of London, since 1970 the number of wild animals and birds worldwide has decreased by 3,430 species, and the Living Planet Index has declined by 52 percent (a 76 percent decrease among terrestrial and air-dwelling creatures, and a 39 percent decline among those living in water and on land).

Agriculture is one of the key sectors globally, providing food for the population and raw materials for the agro-industry. As such, these environmental problems inevitably affect human capital and their survival.

Food security, as defined at the World Food Summit in 1996, is “a situation in which all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life” [2, 3].

The growing global demand for safe food products is increasingly challenging the scientific communities of the world to use natural resources more efficiently and to meet rising needs by employing scientifically based innovative technologies. Therefore, the issue of limited resource scarcity in the global economy requires the effective use of biological assets and the ability to influence the biotransformation processes they undergo.

In international financial accounting, “biological assets” are recognized as an important element of financial reporting. However, the information currently presented in the financial reports used in the accounting systems does not fully meet the needs of users regarding agriculture and biological assets.

Therefore, improving the regulatory, organizational, and methodological frameworks that enable the preparation of reliable reports useful for all categories of agricultural enterprise stakeholders is a top priority.

Harmonizing national accounting with international financial reporting standards entails effectively leveraging the experience of countries with advanced agricultural sectors. Focusing on these standards helps increase the efficiency of enterprise operations, attract foreign investment into the agricultural sector, boost the competitiveness of the industry, and promote economic growth in the country.

LITERATURE REVIEW

The number of academic sources related to the theoretical issues of accounting for biological assets and their practical application is limited. Furthermore, problems related to this topic and non-compliance with International Accounting Standard (IAS) 41 “Agriculture” have not been sufficiently explored in current research. Most of the literature focuses primarily on principles rather than practical application.

In our country, the classification, composition, recognition, valuation, and accounting procedures of biological assets as accounting objects, as well as methods for determining their fair market value and reflecting this information in reports, have not been fully developed. This, in turn, affects the completeness and reliability of financial statements.

Some of the procedures specified in current standards used in practice for organizing biological asset accounting significantly differ from those outlined in international standards.

The American Institute of Certified Public Accountants (AICPA) emphasizes that effective information is defined as data that contributes to decision-making, regardless of its cost-benefit ratio. Effective information must be reliable, unbiased, and neutral. With access to such data, decision-makers can better assess a company’s future prospects [4].

According to International Financial Reporting Standard (IFRS) 41 “Agriculture”, biological assets are animals and plants controlled by an entity as a result of past events, from which future economic benefits are expected, and whose fair value or cost can be reliably measured [5].

It should be noted that IFRS 41 “Agriculture” is designed to present financial reports and disclose information related to agricultural activity. When applicable to agricultural activity, IFRS 41 is relevant to the following elements:

Biological assets;

Agricultural produce at the point of harvest or processing;

Government grants related to agricultural activity.

Biological assets constitute an essential part of the assets of agricultural enterprises.

The research conducted also required studying definitions and descriptions of the terms “agriculture” and “biological assets” across various sources.

Currently, due to the absence of national accounting standards (NAS) in our country specifically regulating the accounting of biological assets and their components in agricultural activity, clear definitions of these terms do not exist.

According to IFRS 41 “Agriculture”, a biological asset is defined as “a living animal or plant” [5].

Similarly, “agricultural activity” is defined as “the management by an entity of the biological transformation and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets.”

Biological assets are animals and plants controlled and identified by an enterprise as a result of past biological processes, which may be used in its operations, transferred to others for use, or disposed of to gain economic benefit, and whose value can be reliably determined [6].

An entity must recognize a biological asset or agricultural produce only when:

the entity controls the asset as a result of past events;

it is probable that future economic benefits associated with the asset will flow to the entity.

METHODOLOGY

During the research, to study the methodology of accounting for biological assets and the products obtained from them, scientific research activities employed various methods such as economic-statistical analysis, synthesis, and comparison.

DISCUSSION AND RESULTS

According to International Accounting Standard (IAS) 41 “Agriculture,” biological assets are classified based on the following criteria [8]:

Living animals or plants;

Agricultural produce and livestock products at the time of harvest or during processing;

Government grants covered under IAS 41 “Agriculture,”

if the government grant is related to a biological asset measured at fair value less costs to sell, or if the government grant requires the entity not to engage in certain agricultural activity.

In our opinion, biological assets are not just any animals or plants; it is appropriate to describe them as tangible assets created as a result of past economic activities, intended for consumption, having value, and controlled by an entity[9].

Similarly, we believe that “agricultural activity” can be defined as:

“The process managed by an entity that involves the cultivation, purposeful maintenance, reproduction, harvesting, and delivery of biological assets for consumption.”

One of the main characteristics of biological assets is their dependence on nature and the environment for their cultivation and productivity. Another feature is that the quality and quantity (i.e., biotransformation) of biological assets depend significantly on human intervention.

Plants and animals in natural forests, oceans, seas, natural lakes, and rivers are not considered biological assets because, to be recognized as biological assets, they must meet the following conditions:

They must result from past events and be controlled by an entity;

There must be a probable flow of future economic benefits associated with the asset to the entity;

The asset’s fair value or cost must be reliably measurable.

Based on the above definitions, we propose the following definition for biological assets:

“Biological assets are living animals and plants whose biotransformation or harvesting is managed by an entity for the purpose of obtaining economic benefits.”

We believe this definition more accurately reflects the true essence of biological assets.

It is necessary to develop a comprehensive definition of biological assets and incorporate it into the national “Law on Accounting” and the “Conceptual Framework for the Preparation and Presentation of Financial Statements.” In our opinion, these legal documents should also include clear definitions of the following related concepts:

Agricultural produce: Products obtained from biological assets as a result of an entity’s actions aimed at deriving economic benefits.

Depending on the characteristics of the agricultural sector and their placement, agricultural products can be categorized into biological assets physically attached to land and biological assets not physically attached to land.

Examples of biological assets physically attached to land include ornamental and fruit trees, as well as agricultural crops.

Examples of biological assets not physically attached to land include livestock activities such as cattle breeding, horse breeding, camel breeding, sheep breeding, poultry farming, and others.

The products obtained as a result of the biotransformation of biological assets physically attached to land are considered crop yields.

Crop yield refers to the products obtained from biological assets physically attached to the land as a result of the entity's positive intervention.

Livestock products are those obtained from living animals and other similar biological assets not physically attached to the land, as a result of the entity's positive actions.

We believe that the definitions provided above more fully describe the true nature of biological assets.

In addition, biological assets can be classified into operational and non-operational, as well as depreciable and non-depreciable biological assets.

Operational biological assets refer to those currently in use.

Non-operational biological assets refer to those being prepared for use.

Depreciable biological assets are mature long-term biological assets recorded at their initial or fair cost. These include working animals and perennial plants.

Non-depreciable biological assets are also recorded at initial cost or fair value and include productive animals, young animals raised for a short period, both young and mature animals being fattened, short-term saplings, and various crop plants (e.g., cotton, wheat, etc.).

Classifying biological assets into the above groups and reflecting them accordingly in accounting increases the reliability and qualitative characteristics of financial reporting.

Additionally, for fair valuation of biological assets in the accounting and reporting of an economic entity, it is practical to further classify them. For example:

Animals can be grouped by species, breed, age, and gender.

Crops can be grouped by type, variety, age, and geographical location.

When determining the cost and accounting for biological assets, particular attention is given to the following types of products obtained:

Primary products

By-products

Additional or secondary products

The categorization of products from agricultural activity into such groups depends on the nature of the economic entity's operations.

For example:

In dairy farms, the primary product is milk, the by-product is calves (offspring), and additional products include manure, horns, etc.

In grain farming, the primary product is grain, the by-product is grain residue (bran), and the additional product is straw.

Therefore, in order to provide a more detailed representation of biological assets in financial statements, their classification must be supplemented with features that are not reflected in current local and international standards.

To fill the classification gaps, we propose the introduction of the following classification criteria:

Based on usage purpose (biological assets used in core, auxiliary, or general farm activities);

Based on physical attachment (biological assets physically attached to land or not);

Based on intended purpose (intended for sale, intended for processing);

Based on profitability level (highly profitable and low-profit biological assets).

Biological assets used in core activities include animals on livestock farms, types of crops on farming enterprises, and similar assets.

Biological assets used in auxiliary activities include cart-pulling horses, plow oxen (bulls), and others.

Biological assets used in general farm activities include horses used by guards to protect farm premises and other animals involved in general farm operations.

Biological assets intended for sale are final products ready to be sold.

Classifying such biological assets improves the clarity of their representation in financial position statements.

Biological assets intended for processing are those used as either stand-alone products or as components in final product manufacturing. They may also serve in maintaining the operational condition of other production assets.

Highly profitable biological assets possess several features, including:

production of high-value goods,

breeding capability,

high economic benefit.

Low-profit biological assets are characterized by:

low productivity,

high mortality rates,

low economic return.

This classification of biological assets aligns with international standards which consider asset liquidity in balance sheet structuring.

Such categorization is especially relevant for large agricultural organizations to properly maintain analytical accounting and provide users with accurate and reliable information.

The presence of highly profitable assets in a company increases its attractiveness to potential investors. Thus, showing them separately in financial reports is advisable.

Providing detailed disclosures of biological assets in financial statements allows for:

- a more in-depth analysis of their composition,
- and a better assessment of the organization's economic potential.
- Assets that meet the following criteria are considered hard to sell:
- low consumer demand or require complex production technologies;
- high transportation costs or difficult to transport;
- limited or inactive markets;
- high production costs of final products.
- Easily marketable biological assets feature:
- high demand or targeted for daily needs;
- ability to be stored under normal conditions;
- low cost of final product production.

By identifying these characteristics in biological assets, business leaders can make strategic decisions about managing different types of assets—for example, repurposing hard-to-sell resources for other uses and focusing on selling easily marketable ones.

Such decisions improve management effectiveness and simplify the fair value assessment of assets in accounting and active markets.

Transitioning from national accounting practices to IAS 41 is the first step toward gradually implementing fair value measurement in agriculture.

Although IAS 41 allows fair value measurement of biological assets, which increases income volatility, it only covers the period up to the harvest, meaning that for post-harvest processing, IAS 2 “Inventories” must be used to account for agricultural products and biological assets.

In other words, IAS 41 does not regulate the entire agricultural production cycle. Based on the above criteria, it can be concluded that not all production operations are governed by IAS 41.

We believe that biological assets recognized after processing of agricultural products should be regulated and reflected in national standards developed based on international ones. These gaps currently complicate biological asset accounting.

It is known that International Financial Reporting Standards (IFRS) are recommendatory in nature, but it is necessary to align national accounting standards with these recommendations to eliminate existing shortcomings.

While IFRS is advisory, it still provides a sound foundation for accurately assessing the financial condition of agricultural enterprises.

IFRS was created with the goal of harmonizing various national financial reporting standards and bringing them closer together.

IAS 41 serves as a method for comparing the financial reports of agricultural enterprises and evaluating their operations.

CONCLUSION

In conclusion, in international accounting practice, “biological assets” are recognized as a significant component of financial reporting.

Aligning the accounting of biological assets with international financial reporting standards (IFRS) and effectively utilizing the experiences of developed countries in this area remains one of the most important and relevant issues for national financial reporting in all countries.

Although agriculture plays a vital role in the economy of our country, and despite the growing involvement of foreign investments in this sector in recent years, the theoretical, organizational, and methodological foundations for accounting and recognition of such assets in accordance with IFRS requirements have not yet been fully established. In particular, no national standards on biological asset accounting have been developed in Uzbekistan. In current national accounting practice, biological assets are accounted for under NAS 5 (Fixed Assets) and NAS 4 (Inventories) as fixed assets or finished goods.

Based on the study, in order to properly organize the accounting of biological assets through accurate understanding and classification of the concept, the following suggestions are recommended:

Provide clear definitions of the terms: biological assets, agricultural activity, agricultural products, crop products, and livestock products;

Properly classify biological assets based on various classification criteria and organize their accounting accordingly;

In order to harmonize the accounting of biological assets with IFRS, develop a national accounting standard (NAS) that regulates their recognition, valuation, and recording in practice, and improve accounting procedures.

A correct interpretation and classification of biological asset-related concepts will contribute to improving the reliability and quality of information about biological assets in financial statements.

REFERENCES

1. <https://yuz.uz/uz/news/ilmiy--izlanis'hlar--global-yekologik-muammolar-yechimi>.
2. Trade Reforms and Food Security: Conceptualizing the Linkages. FAO, UN,

2003. Qaraldi: 2015-yil 14-fevral.

3. Patel, Raj. „Raj Patel: Food sovereignty’ is next bigidea“. Financial Times (2013-yil 20-noyabr). 2023-yil 15-yanvarda asl nusxadan arxivlangan. Qaraldi: 2014-yil 17-yanvar.

4. Yu-Gui ChEN. Improving Corporate Repors around Information Needs - A Brief Introduction to the American Institute of Certified Public Accountans Research Report "Improving Corporate Repors" [J]. Accounting Research, 1996 (05).

5. Buxgalteriya hisobining xalqaro standarti 41-Qishloq xo‘jaligi.

6. Букур, В. Учет биологических активов / В. Букур, Л. Тодорова. – Кишинев, 2008. – 254 с.

7. Rayimovna, E. S. (2022). Issues of Compliance of Financial Statements with International Standards. Journal of Corporate Finance Management and Banking System (JCFMBS) ISSN: 2799-1059, 2(02), 1-10.

8. No.41 "Agriculture". Lex.uz.

9. K.B. Urazov, S.V. Vakhidov. Features of accounting in other industries. Textbook, 2010. - 445 p.