



Article

Organization of Biological Assets Accounting Based on International Standards and Comparison with National Practice

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Abstract: This article examines the organization of biological assets accounting based on international accounting standards and compares it with national accounting practice. The study analyzes the accounting principles of biological assets under IAS 41 Agriculture, including recognition, measurement, fair value assessment, and disclosure requirements. Furthermore, the research highlights the advantages and challenges of implementing international standards in agricultural enterprises. The findings indicate that harmonization with international financial reporting standards improves transparency, investment attractiveness, and the efficiency of accounting systems in the agricultural sector.

Keywords: biological assets, IAS 41, agriculture accounting, fair value, international accounting standards, financial reporting, agricultural enterprises.

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1. Introduction

Agriculture is one of the most important sectors of the economy and plays a vital role in ensuring food security and economic stability. In agricultural enterprises, biological assets differ significantly from other types of assets because they undergo continuous biological transformation, including growth, degeneration, production, and reproduction processes. These unique characteristics require specialized accounting approaches and reporting systems [1].

The adoption of international accounting standards has significantly influenced accounting practices worldwide. In particular, International Accounting Standard IAS 41 Agriculture regulates the accounting treatment of biological assets and agricultural produce. The standard requires biological assets to be measured at fair value less costs to sell, which increases the transparency and comparability of financial statements [2].

In many developing countries, including Uzbekistan, national accounting systems are gradually adapting to international financial reporting standards. However, differences still exist between international requirements and national accounting practices regarding valuation methods, recognition procedures, and disclosure standards [3].

The modernization of agricultural accounting systems is essential for improving financial reporting quality, attracting foreign investment, and strengthening international economic cooperation. Therefore, studying the organization of biological assets accounting based on international standards and comparing it with national practice remains an important scientific and practical issue [4].

2. Methods

The research is based on qualitative, comparative, and analytical methods. International accounting standards, scientific literature, regulatory documents, and national accounting practices related to biological assets were analyzed.

The study focused on the provisions of IAS 41 Agriculture and compared them with existing national accounting procedures used in agricultural enterprises. Comparative analysis was applied to evaluate differences in recognition, valuation, and reporting of biological assets.

In addition, theoretical approaches and practical accounting issues related to fair value measurement and financial reporting transparency were examined. Statistical and descriptive methods were also used to identify implementation challenges and opportunities for harmonization with international standards.

3. Results

The study revealed that IAS 41 provides a more transparent and market-oriented approach to accounting for biological assets compared to traditional national accounting practices. Under international standards, biological assets are recognized based on fair value measurement, which reflects current market conditions and improves the reliability of financial reporting.

The findings show that fair value accounting enhances comparability between agricultural enterprises and increases investor confidence [5]. International standards also improve the quality of financial information by requiring detailed disclosure of biological transformation processes and valuation methods.

However, the research identified several challenges in implementing IAS 41 within national accounting systems. One of the main difficulties is the absence of active markets for certain biological assets, making fair value determination more complicated. In addition, limited professional expertise, insufficient digital infrastructure, and lack of practical guidelines create barriers for effective implementation [6][7].

The analysis also demonstrated that national accounting practice mainly relies on historical cost methods, which may not fully reflect the actual economic value of biological assets. As a result, financial statements prepared under national standards can differ significantly from those prepared according to international standards.

Furthermore, the integration of digital technologies and automated accounting systems can significantly improve the efficiency of agricultural accounting and facilitate the implementation of international standards [8].

4. Discussion

The transition to international accounting standards in the agricultural sector requires significant institutional and methodological reforms. Harmonization of national accounting systems with IAS 41 can improve financial transparency, strengthen investor trust, and increase access to international financial markets [9-12].

Agricultural enterprises need professional specialists who possess sufficient knowledge of fair value accounting and international reporting standards. Therefore, improving accounting education and organizing professional training programs are important steps in the modernization process.

At the same time, digital transformation plays a key role in improving accounting systems. The use of modern accounting software, electronic reporting systems, and digital databases can simplify valuation procedures and enhance reporting accuracy [13].

The study also emphasizes the importance of state support and regulatory reforms in implementing international standards effectively. Cooperation between government institutions, educational organizations, and agricultural enterprises is essential for ensuring successful adaptation to global accounting practices [14][15].

5. Conclusion

In conclusion, biological assets require specialized accounting approaches because of their biological transformation and valuation uncertainty. International Accounting Standard IAS 41 provides a transparent and effective framework for accounting and reporting biological assets in agricultural enterprises.

The study confirms that harmonization of national accounting systems with international standards improves the quality of financial reporting, increases investment attractiveness, and supports the modernization of the agricultural sector.

However, successful implementation requires the development of professional competencies, improvement of digital infrastructure, and strengthening of institutional support. In the future, the integration of international accounting standards and digital technologies will contribute to more efficient and transparent agricultural accounting systems.

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