ECONOSCITECH INTEGRATION

ISSUE 5

INTERNATIONAL SCIENTIFIC ELECTRONIC JOURNAL

TASHKENT STATE UNIVERSITY OF ECONOMICS

American University of Technology
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ISSN: 3060-5075

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CONTACT: +998 94 3540880 https://econoscitech-integration-journal.uz 2026

THE SCIENTIFIC-POPULAR ELECTRONIC JOURNAL **"ECONOSCITECH-INTEGRATION"** HAS BEEN REGISTERED UNDER THE NUMBER C-5669651 BY THE AGENCY FOR INFORMATION AND MASS COMMUNICATIONS (AOKA) OF THE REPUBLIC OF UZBEKISTAN, EFFECTIVE FROM OCTOBER 9, 2024.

In accordance with Resolution No. 384/6 dated April 10, 2026, issued by the Presidium of the Supreme Attestation Commission under the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, this journal is included in the list of recommended international scientific publications for publishing the primary research findings of doctoral dissertations in the field of Economic Sciences.

Partners: Tashkent State University of Economics / American University of Technology in Tashkent (AUT)

Electronic publication, Issue 5. 374 pages.
Approved for publication on May, 2026.

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IMPROVING THE ORGANIZATION, PLANNING, AND METHODOLOGICAL ASPECTS OF THE AUDIT OF BIOLOGICAL ASSETS

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Abstract. The article examines ways to improve the organization, planning, and methodological aspects of auditing biological assets in agricultural enterprises in accordance with International Standards on Auditing. The study applies the methods of scientific abstraction, comparative analysis, grouping, and systems analysis. The forms of the audit strategy and audit plan are substantiated, and a system of internal control indicators for biological assets is proposed, together with a comparative analysis of traditional and improved control systems. Methodological approaches to auditing animals for growing and fattening, a set of audit procedures, and forms of the auditor's working papers are developed. The results contribute to enhancing the reliability of accounting information and financial reporting.

Keywords: biological assets, audit, audit strategy, audit plan, internal control, control indicators, audit procedures, financial reporting, International Standards on Auditing, agriculture.

Аннотация. В статье рассматриваются направления совершенствования организационных, плановых и методических аспектов аудита биологических активов сельскохозяйственных предприятий в соответствии с Международными стандартами аудита. В исследовании применены методы научной абстракции, сравнительного анализа, группировки и системного анализа. Обоснованы формы стратегии и плана аудита, предложена система показателей внутреннего контроля биологических активов, а также проведён сравнительный анализ традиционной и усовершенствованной систем контроля. Разработаны методические подходы к аудиту животных на выращивании и откорме, комплекс аудиторских процедур и формы рабочих документов аудитора. Полученные результаты способствуют повышению достоверности учётной информации и финансовой отчётности.

Ключевые слова: биологические активы, аудит, стратегия аудита, план аудита, внутренний контроль, контрольные показатели, аудиторские процедуры, финансовая отчётность, Международные стандарты аудита, сельское хозяйство.

INTRODUCTION

In the context of agricultural reform in Uzbekistan and attracting foreign investment to the agricultural sector, ensuring the reliability of the financial reporting of economic entities is of great importance. A significant part of the balance sheet of agricultural enterprises is made up of biological assets—livestock, animals for growing and fattening, as well as perennial crops. The biological nature of these assets, their continuous change in the process of transformation, and their assessment at fair value require the audit process to be provided with specific methodological approaches.

In current audit practice, a single methodological basis for auditing business transactions related to biological assets has not been fully developed. The issues of assessing the effectiveness of the internal control system at the audit planning stage, applying audit procedures that take into account the specifics of the industry, and identifying the risks of misstatement of animals for growing and fattening remain relevant. Therefore, the purpose of the study was to improve the organization, planning, and methodological aspects of the audit of biological assets based on international auditing standards.

LITERATURE REVIEW

The issues of the valuation and auditing of biological assets have been widely studied by foreign and domestic scholars. Arbidane and Mietule (2018) examined problematic aspects of the accounting and valuation of biological assets, while Argilés et al. (2011) and Gonçalves et al. (2017) analysed the impact of fair value and historical cost measurement on the reliability of financial information. Sedláček (2010) studied valuation methods in agricultural accounting, and Węgrzyńska and Nowotarska (2021) examined practices related to the measurement and valuation of biological assets.

From the perspective of audit control, Stepanyan (2023) studied the testing of the internal control system for transactions involving biological assets in agriculture, while Klychova et al. (2015) examined methodological approaches to accounting for biological assets in crop production. Among Uzbek scholars, Menglikulov (2023) studied the methodology of cost accounting, cost calculation, and auditing of biological assets in livestock farming, while Boltayev (2023; 2025) examined the classification of biological assets in business processes and the development of a methodology for accounting for agricultural activities. This journal also published research on the methodology for analysing the activities of agricultural enterprises (Akramov, 2024).

The literature review shows that the planning of biological asset audits, the development of internal control indicators, and the methodological aspects of auditing animals for growing and fattening have not been sufficiently studied. This identifies a research gap.

RESEARCH METHODOLOGY

The research used scientific abstraction, comparative analysis, grouping, systematic and logical analysis, and expert evaluation methods. Audit procedures and working document forms were developed based on the requirements of International Standards on Auditing—No. 300, "Planning an Audit of Financial Statements"; No. 315, "Identifying and Assessing the Risks of Material Misstatement through Studying the Entity and Its Environment"; No. 320, "Materiality in Planning and Performing an Audit"; No. 500, "Audit Evidence"; No. 520, "Analytical Procedures"; No. 530, "Audit Sampling"; and No. 700, "Forming an Opinion and Reporting on Financial Statements." The empirical basis consisted of audit practice materials collected from "Mehnat-Bakhtli-Sut" LLC and other agricultural enterprises.

ANALYSIS AND RESULTS

1. The current state of the organization of biological asset audits. Proper organization of audits in agricultural enterprises requires the auditor to have in-depth knowledge of industry characteristics, the biological nature of the assets, the information base used, and the current regulatory and legal framework.

The analysis of practice shows that it is advisable to summarize recurring errors in the accounting of biological assets using a systematic classifier. Such a classifier provides practical assistance to auditors in identifying and assessing errors and reduces the labour costs associated with summarizing audit results. The most common violations related to biological assets include failure to record offspring, artificial overstatement of livestock weight gain, and understatement of the number of animals that died. The cost, market, and income approaches are used to determine the fair value of assets; the choice of a particular approach depends on the characteristics of the biological asset and the availability of relevant information.

2. Audit planning and assessment of the internal control system. The main goal of the auditor when conducting an audit of business entities is to plan the audit process thoroughly to the extent that it allows for effective organization. Audit planning includes the development of an audit strategy and the creation of an audit plan. The developed audit strategy makes it possible to determine the necessary resources, distribute them among audit areas, determine the terms of their use, and manage and control them.

At the planning stage, the auditor conducts a special questionnaire (test) to confirm the reliability of the enterprise's internal control system and accounting data on cost accounting and output. The questionnaire consists of two blocks—an assessment of the internal control system and the accounting system—and covers the issues of accounting for biological assets as a separate accounting object, their correct classification, inventory, and the distribution of responsibilities among responsible persons. In accordance with Article 14 of the Law of the Republic of Uzbekistan "On Accounting," No. O'RQ-404 dated April 13, 2016 [1], primary accounting documents recording completed transactions constitute the basis for recording business transactions.

In order to strengthen internal control, it is proposed to introduce a system of internal control indicators for biological assets. This system will allow all business operations related to biological assets to be monitored within a single control framework (Table 1).

Table 1
System of internal control indicators for biological assets[1]

No.	Control object	Internal control indicator	Evaluation objective
1	Availability of biological assets	Inventory results	Determining the actual existence of assets
2	Movement of biological assets	Completeness of input and output documents	Ensuring the reliability of accounting information
3	Biological transformation	Growth, maturation and reproduction indicators	Assessment of the biological condition of assets
4	Changes in value	Fair value differences	Determining the impact on financial results
5	Agricultural products obtained	Productivity and product output	Assessment of production volume and efficiency
6	Profitability level	Expected economic benefits	Estimating future cash flows
7	Report data	Reconciliation of analytical and general ledger records	Increasing the reliability of financial reporting

In order to ensure the practical application of the proposed indicator system, the unit of measurement and monitoring frequency for each indicator were determined (Table 2).

Table 2
Recommended key internal control indicators for biological assets[2]

No.	Indicators	Unit of measurement	Inspection frequency
1	Number of biological assets	head	Once a month
2	Productivity level	kg/ha	At the end of the season
3	Milk yield	litres	Once a month
4	Live weight gain	kg	Once a month
5	Percentage of animals that died	%	Quarterly
6	Change in fair value	thousand UZS	Quarterly
7	Product output	tonnes	At the end of the season
8	Inventory variances	head	Once a year
9	Profitability ratio	%	Quarterly

In order to substantiate the effectiveness of the proposed approach, a comparative analysis of the current (traditional) and improved internal control systems was carried out (Table 3).

Table 3
Comparative description of the traditional and improved internal control system[3]

Indicators	Current system	Improved system
Inventory control	Implemented	Implemented
Biological transformation monitoring	Not implemented	Implemented
Monitoring changes in fair value	Partially	Complete
Productivity indicators	Not implemented	Implemented
Assessment of expected economic benefits	Not implemented	Implemented
Transparency of financial statements	Average	High
Quality of audit evidence	Average	High
Ability to identify risks	Limited	High

It is evident from the data in Table 3 that the improved internal control system significantly increases the transparency of financial statements and the quality of audit evidence compared to the traditional system by controlling changes in biological transformation, productivity, and value.

3. Methodological aspects of auditing animals for growing and fattening. Animals for growing and fattening constitute a significant share of the assets of specialized livestock enterprises. The main objective of

1 *Source: compiled by the author based on dissertation materials.*
2 *Source: compiled by the author based on dissertation materials.*
3 *Source: compiled by the author based on dissertation materials.*

auditing these assets is to assess whether accounting practices comply with applicable regulatory requirements and to obtain sufficient appropriate audit evidence for forming an audit opinion. At the planning stage, the auditor should evaluate the effectiveness and reliability of the internal control system implemented by the audited entity. The consistent application of well-designed audit procedures is essential for conducting a comprehensive and effective audit (Table 4).

Table 4
A set of audit procedures for auditing animals for growing and fattening[4]

No.	Audit procedure	Purpose and expected outcome
1	Audit of livestock and animal species, groups and head count, placement by farms	Proper distribution is studied and suggestions for improvement are prepared.
2	Audit of the conditions for proper and safe keeping of livestock	Livestock keeping conditions are assessed and recommendations for improvement are developed.
3	Audit of the inventory procedure, timeliness and accounting of its results	Inventory periodicity and results are checked and suggestions are made.
4	Audit of operations related to breeding, group-to-group transfer, sale, forced slaughter and unexplained animal losses	Operations controls are evaluated and recommendations for control improvements are made.
5	Audit of the organization of analytical and synthetic accounting	Recommendations for improving the organization of accounts will be developed.
6	Audit of the methodology for calculating the cost of the resulting offspring	Calculation methodology and compliance are checked and recommendations are made.
7	Audit of the existence and compliance with the document flow chart	Practical recommendations for improving the document workflow schedule are provided.

The study of practice shows that transactions on account 1100, “Animals for Growing and Fattening,” are diverse and numerous. Therefore, it is advisable to organize the audit using a sampling method in accordance with the requirements of International Standard No. 530, “Audit Sampling.” In large livestock complexes, there may be an increased risk of accounting irregularities, including the incomplete recording of offspring and the overstatement of livestock weight gain. In such situations, unannounced inventory counts, livestock weighing, and the comparison of related accounting and zootechnical documents are effective audit procedures.

It is recommended to use the working document “Comparison of Accounting and Zootechnical Accounting Data” to formalize the audit results. This document makes it possible to identify discrepancies between the two accounting systems regarding recorded offspring and animals that died from disease (Table 5).

Table 5
Auditor’s working document: reconciliation record of accounting and zootechnical accounting data[5]

Months	Offspring recorded in accounting records	Accounting records: animal deaths	Offspring recorded in zootechnical records	Zootechnical records: animal deaths	Total variance (+/−)
January	35	2	37	4	-1
February	34	1	38	5	-1
March	34	1	37	5	-2

The data in Table 5 show that there are deviations between the accounting and zootechnical records regarding the number of offspring and recorded animal deaths. Such discrepancies may indicate weaknesses in the completeness and reliability of the accounting records and may require additional audit procedures. The identified data are then compared with the indicators of the “Inventories” item of the statement of financial position, and appropriate proposals are developed. The practical value of the auditor’s recommendations depends on the timely implementation of appropriate corrective measures by the management of the audited entity.

4 *Source: compiled by the author based on dissertation materials.*
5 *Source: compiled by the author based on dissertation materials.*

CONCLUSION AND SUGGESTIONS

Based on the study of issues related to improving the organization, planning, and methodological aspects of the audit of biological assets, the following conclusions and proposals were developed:

Firstly, when conducting an audit of business entities, an audit strategy and an audit plan should first be developed, which should include the planned audit risk, materiality level, risk assessment procedures, and working papers to be used;

secondly, it was proposed to introduce a system of internal control indicators for biological assets. This system will increase the reliability of accounting data and financial reporting by systematically monitoring the availability, movement, biological transformation, and changes in the value of assets;

thirdly, a comparative analysis of traditional and improved internal control systems showed that the improved system significantly increases the transparency of financial statements, the quality of audit evidence, and the ability to identify risks;

fourthly, it is recommended to organize the audit of animals for growing and fattening using a sampling method based on International Standard No. 530, “Audit Sampling,” together with a set of audit procedures and a working document for comparing accounting and zootechnical accounting data. This will allow for the timely identification of risks of misstatement and ensure the validity of the audit opinion.

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Proofreader: Xondamir Ismoilov

Layout and Designer: Oloviddin Sobir ugli

2026. № 5

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