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

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Abstract. This article examines the improvement of the organization, planning, and methodological aspects of auditing biological assets in agricultural enterprises based on International Standards on Auditing. The study applies scientific abstraction, comparative analysis, grouping, and systematic analysis methods. The forms of the audit strategy and audit plan are substantiated; a system of internal control indicators for biological assets is proposed, along with a comparative analysis of traditional and improved control systems. The methodological aspects of auditing animals intended 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 вопросы совершенствования организационных, плановых и методических аспектов аудита биологических активов в сельскохозяйственных предприятиях на основе Международных стандартов аудита. В исследовании использованы методы научной абстракции, сравнительного анализа, группировки и системного анализа. Обоснованы формы стратегии аудита и плана аудита, предложена система показателей внутреннего контроля биологических активов, а также проведён сравнительный анализ традиционной и усовершенствованной систем внутреннего контроля. Разработаны методические подходы к аудиту животных на выращивании и откорме, комплекс аудиторских процедур и формы рабочих документов аудитора. Полученные результаты способствуют повышению достоверности бухгалтерской информации и финансовой отчётности.

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

INTRODUCTION

In the context of agricultural reforms in Uzbekistan and the attraction of foreign investment to the agricultural sector, ensuring the reliability of financial reporting by economic entities is of great importance. A significant part of the balance sheets of agricultural enterprises consists of biological assets, including livestock, animals intended for growing and fattening, as well as perennial crops. The biological nature of these assets, their continuous transformation, and their measurement at fair value require the audit process to be supported by specific methodological approaches.

In current audit practice, a unified methodological basis for auditing business transactions related to biological assets has not yet been fully developed. Issues related to assessing the effectiveness of the internal control system at the audit planning stage, applying audit procedures that take into account the specific characteristics of the industry, and identifying the risks of material misstatement in relation to animals intended for growing and fattening remain relevant. Therefore, the purpose of this study is to improve the organization, planning, and methodological aspects of the audit of biological assets based on International Standards on Auditing.

LITERATURE REVIEW

The issues of valuation and auditing of biological assets have been widely studied by foreign and domestic scholars. Arbidane and Mietule (2018) examined problematic aspects of accounting for and valuing biological

assets. Argilés et al. (2011) and Gonçalves et al. (2017) studied the impact of fair value and historical cost measurement on the reliability of financial information. Sedláček (2010) analyzed valuation methods in agricultural accounting, while Wegrzynska and Nowotarska (2021) examined the practice of measuring and valuing biological assets.

From the perspective of audit control, Stepanyan (2023) studied issues related to testing the internal control system for operations involving biological assets in agriculture. Klichova et al. (2015) examined methodological approaches to accounting for biological assets in plant breeding. Among Uzbek scholars, Menglikulov (2023) studied the methodology for accounting for biological asset costs in livestock farming, cost calculation, and auditing. Boltayev (2023; 2025) examined issues related to the classification of biological assets in business processes and the development of accounting methodology for agricultural activities. In addition, Akramov (2024) published research on the methodology for analyzing the activities of agricultural enterprises.

The literature review shows that issues related to planning the audit of biological assets, forming a system of internal control indicators, and improving the methodological aspects of auditing animals intended for breeding, growing, and fattening have not been sufficiently studied. This identifies a scientific gap in the existing research.

RESEARCH METHODOLOGY

The research employed methods of scientific abstraction, comparative analysis, grouping, systematic and logical analysis, and expert evaluation. Audit procedures and forms of working documents were developed based on the requirements of International Standards on Auditing, including ISA 300, "Planning an Audit of Financial Statements"; ISA 315, "Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment"; ISA 320, "Materiality in Planning and Performing an Audit"; ISA 500, "Audit Evidence"; ISA 520, "Analytical Procedures"; ISA 530, "Audit Sampling"; and ISA 700, "Forming an Opinion and Reporting on Financial Statements."

Audit practice materials from "Mehnat-Bakhtli-Sut" LLC and other agricultural enterprises were used as the empirical basis of the study.

ANALYSIS AND RESULTS

1. The current state of organizing biological asset audits. The proper organization of audits in agricultural enterprises requires the auditor to have in-depth knowledge of industry-specific characteristics, the biological nature of assets, the information base used, and the current regulatory and legal framework. Foreign scholar V.G. Shirobokov emphasizes that the auditor should pay attention to the existence of practices related to the slaughter of underweight livestock in cases where livestock of average fatness has died unlawfully (Shirobokov, 2016). Such controversial business operations may negatively affect the accurate preparation of financial statements and the timely and correct calculation of taxes.

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

2. Audit planning and assessment of the internal control system. The main objective of the auditor when auditing business entities is to plan the audit process thoroughly in a manner that ensures its effective organization. Audit planning includes the development of an audit strategy and the preparation of an audit plan. The developed audit strategy makes it possible to determine the necessary resources, allocate them among audit areas, define the timing of their use, and ensure their management and control.

At the planning stage, the auditor conducts a special questionnaire or test to confirm the reliability of the enterprise's internal control system and accounting data related to cost accounting and output. The questionnaire consists of two blocks: assessment of the internal control system and assessment of the accounting system. It covers issues such as accounting for biological assets as a separate accounting object, their correct classification, inventory procedures, and the distribution of responsibilities among accountable persons. In accordance with Article 9 of the Law "On Accounting," primary accounting documents that record the fact of business transactions serve as the basis for accounting records (Republic of Uzbekistan, 2016).

In order to strengthen internal control, it is proposed to introduce a system of internal control indicators for biological assets. This system will make it possible to monitor all business operations related to biological assets within a unified control framework (Table 1).

Table 1
System of internal control indicators for biological assets

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 account 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	Product size and efficiency assessment
6	Profitability level	Expected economic benefits	Estimating future cash flows
7	Report data	Analytical and synthetic calculation compatibility	Increasing the reliability of financial reporting

Source: compiled by the author based on dissertation materials.

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

Table 2
Recommended key internal control indicators for biological assets

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

Source: compiled by the author based on dissertation materials.

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

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

Source: compiled by the author based on dissertation materials.

It is evident from the data presented 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 ensuring control over changes in biological transformation, productivity, and value.

3. Methodological aspects of auditing animals intended for growing and fattening. Animals intended for growing and fattening constitute a significant share of the balance sheets of specialized livestock enterprises. The main purpose of auditing these assets is to assess whether accounting practices comply with the requirements established by regulatory legal acts and to form an appropriate audit opinion.

At the planning stage, the auditor should examine the effectiveness of the internal control system at the client enterprise and assess its reliability. In organizing a detailed and comprehensive audit, the set of audit procedures and their methodological significance play an important role (Table 4).

Table 4

A set of audit procedures for inspecting animals in breeding and stocking

t/r	Auditing practice	Methodological significance
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	Storage 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 unlawful death	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 are given for developing a document flow chart

Source: compiled by the author based on dissertation materials.

The study of practice shows that transactions recorded under account 1100, "Animals Intended for Breeding and Herd Formation," are diverse and numerous. Therefore, it is advisable to organize the audit using the sampling method in accordance with the requirements of International Standard on Auditing No. 530, "Audit Sampling."

In large livestock complexes, intentional violations by responsible officials may occur more frequently, including failure to record offspring and artificial overstatement of livestock weight. In such cases, surprise inventory procedures, livestock weighing, and comparison of logically related documents are effective audit methods.

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 deviations between the two accounting systems regarding received offspring and animals that died due to disease (Table 5).

Table 5

Auditor's working document: reconciliation record of accounting and zootechnical accounting data

Months	Accounting: an acquired breed	Accounting: the bastard is dead	Zootechnician: derived offspring	Zootechnician: the bastard died	General (+,-)
January	35	2	37	4	-1
February	34	1	38	5	-1
March	34	1	37	5	-2

Source: compiled by the author based on dissertation materials.

The data presented in Table 5 show that there are deviations between accounting records and zootechnical records regarding the number of offspring and dead animals. Such deviations indicate deficiencies in the

completeness and reliability of accounting records and require the auditor to apply additional verification procedures.

The identified data are then compared with the indicators of the “Production Inventories” item in the balance sheet, and appropriate proposals are developed. The extent to which the auditor’s conclusions are applied directly depends on whether the management of the client enterprise accepts and implements measures to correct the identified violations.

CONCLUSION AND RECOMMENDATIONS

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

First, when auditing business entities, an audit strategy and audit plan should be developed at the initial stage. These documents should include planned audit risk, the level of materiality, risk assessment procedures, and the working papers to be used during the audit.

Second, it is 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 biological assets.

Third, the 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.

Fourth, it is recommended to organize the audit of animals intended for growing and fattening using the sampling method based on ISA 530, “Audit Sampling,” together with a set of audit procedures and a working document for comparing accounting and zootechnical records. This will allow the timely identification of risks of misstatement and ensure the validity of the audit conclusion.

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