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IMPROVING THE METHODOLOGY OF ACCOUNTING FOR INVENTORIES AND FIXED ASSETS OF AGRICULTURAL ENTERPRISES

Olha Maletska
PHD, Associate Professor,
ORCID ID: 0000-0002-0004-7605
Department of Accounting and Taxation
Stepan Gzhytskyi National University of Veterinary Medicine and Biotechnologies Lviv, Ukraine

Abstract. *The article examines current issues in the methodology of accounting for inventories and fixed assets in agricultural enterprises. Particular attention is given to the evaluation, recognition, and revaluation of fixed assets, as well as the classification and accounting treatment of inventories according to the National Accounting Standards of Ukraine. The authors analyze the shortcomings in regulatory provisions and propose methodological improvements to harmonize domestic standards with international accounting practices. It is noted that inconsistencies in the classification and reporting of assets hinder transparency and accuracy in financial statements. The article also suggests ways to optimize documentation procedures and apply automated systems to improve the accuracy and efficiency of accounting for inventories and fixed assets. These improvements aim to increase the competitiveness of agricultural enterprises and ensure better management decision-making.*

Keywords: *inventory accounting, fixed assets, valuation, revaluation, financial reporting, accounting methodology, agricultural enterprise, national standards, automation, asset management*

Introduction.

Inventories constitute the core of current assets in agricultural enterprises. Due to this specific feature, accounting for inventories should hold a significant place in the overall accounting system. One of the main objectives of accounting for fixed assets is to provide complete, truthful, and unbiased information. However, the information contained in financial statements about fixed assets is not always reliable due to the imperfection of national legislation and its constant changes, making this area a subject of further research. The aim of the article is to explore key methodological aspects of accounting for fixed assets. The research tasks include improving the evaluation and revaluation of fixed assets, enhancing their accounting methods, and providing proposals to harmonize national standards with international standards for fixed asset accounting.

Main text.

Inventories are assets intended for consumption in the production process or provision of services. These include raw materials, basic and auxiliary materials, components, and other tangible assets intended for production, work performance, and service provision; finished goods produced by the enterprise; work-in-progress; and goods as material values.

These assets must meet the following conditions:

- held for sale in the ordinary course of business;
- in the process of production for future sale;
- held for consumption during the production of goods, performance of work, or provision of services, as well as for administrative purposes.

According to NAS (National Accounting Standard) 9, inventories are recognized as assets if:

- it is probable that future economic benefits associated with their use will flow to the enterprise (e.g., raw materials that lose their qualities and are not used in production must be written off as current period operating expenses);
- the cost of inventories can be reliably measured, meaning the value must be free from significant error or bias. [7]

Fixed assets are tangible non-current assets held by an enterprise for use in the production or supply of goods and services, for rental to other entities, or for administrative purposes, with an expected useful life of more than one year (or operating cycle if longer).

At agricultural enterprises, the structure of fixed assets has specific characteristics, with a significant portion comprising biological assets (working and productive livestock), specialized agricultural machinery (tractors, combines, implements), and facilities for storing produce.

Accounting for fixed assets is conducted in accordance with NAS 7 "Fixed Assets", which sets the rules for their recognition, valuation, depreciation, and presentation in accounting records.

Inventories are reported in accounting at the lower of cost or net realizable value. Acquired and manufactured inventories are initially recognized at cost, which includes actual expenses incurred during production. This cost remains unchanged except as specified in NAS 9.

Costs not included in the initial cost of inventories:

1. Excessive losses and shortages of inventories. These are losses that exceed established norms for natural wastage or justified technological losses. They are not necessary for inventory formation and are therefore recognized as other operating expenses of the enterprise.

2. Interest on loans. Financial expenses related to loans or borrowings are not included in the cost of inventories, even if the funds were used for their acquisition or production. These costs are accounted for as financial expenses.

3. Selling costs. These are expenses related to the sale of inventories (e.g., delivery to customers, advertising, packaging before sale). They do not affect inventory formation and are recognized as expenses of the reporting period.

4. General administrative expenses. These are expenses not directly related to inventory formation, such as costs of maintaining the administrative office, personnel, or security. They are accounted for as administrative expenses.

Costs included in the initial cost of inventories:

1. Inventories purchased for consideration. The initial cost of such inventories includes:

- The amount paid to the supplier under the contract;
- Import duties and other taxes that are not refundable;
- Transportation and procurement costs, including delivery, loading/unloading, insurance during transportation, and storage prior to receipt at the enterprise's warehouse.

2. Inventories manufactured internally. The initial cost includes the production cost, which consists of:

- Direct material costs;
- Direct labor costs;
- Other direct costs;
- Allocated variable and fixed manufacturing overheads.

3. Inventories contributed to the authorized capital. They are recorded at the value agreed upon by the founders of the enterprise. This valuation must be documented (e.g.,

in an appraisal report, minutes of the founders' meeting, etc.).

4. Inventories received free of charge. The initial cost is determined based on the fair value at the date of receipt. Typically, this is established using market prices for similar inventories.

5. Inventories received in exchange for similar inventories. These are measured at the carrying amount of the inventories given up. Similar inventories are those with the same functional purpose, similar quality, and value.

6. Inventories received in exchange for dissimilar inventories. These are measured at the fair value of the inventories given up (i.e., those transferred in exchange). If this value cannot be reliably determined, the fair value of the inventories received may be used.

All the above rules are consistent with the provisions of the Ukrainian Accounting Standard (NAS) 9 "Inventories". Applying the correct approach to determining the initial cost is critical to ensuring the accuracy of accounting records and financial reporting.

Inventories are reported at net realizable value if, as of the balance sheet date, their price has declined, they have become damaged or obsolete, or otherwise lost expected benefits.

Initial Cost of Fixed Assets the initial cost includes the following:

- amounts paid to the supplier (manufacturer);
- registration fees, state duties, and similar charges;
- insurance, transportation, loading/unloading costs;
- installation, setup, and commissioning expenses;
- labor costs (if the asset is created internally).

If fixed assets are received free of charge, the fair value at the date of receipt is recognized as the initial cost, and the corresponding income is recognized under additional capital.

Net realizable value is the expected selling price in the ordinary course of business less costs to complete and sell. Any excess of cost over net realizable value or the cost of completely lost inventories is written off as an expense in the reporting period and recorded in off-balance accounts. The value of completely lost inventories is also reflected in the off-balance account "Unreimbursed losses and spoilage of assets." If those responsible are later identified and reimburse the loss, the amount is recorded as receivables and income of the period.

If previously impaired inventories are subsequently revalued at a higher net realizable value (but not exceeding the amount of the previous write-down), the prior write-down is reversed accordingly.

When inventories are issued into production, sold, or otherwise disposed of, their valuation is based on one of the following methods:

- specific identification of cost;
- weighted average cost;
- standard costing;
- retail method.

The specific identification method is used for inventories or services tied to special orders or projects. The weighted average method distributes the total cost of opening inventories and purchases during the period across total units. The standard costing method is common in mass production industries, using pre-set norms for resource usage. These standards must be regularly reviewed.

The retail method is applied by retail businesses using average markup percentages across product categories with similar margins, although other accepted methods may also be used. For inventories with similar use and purpose, only one valuation method may be applied.

Inventories are critical for determining the cost of goods, works, and services (material costs can make up 57–68% of total cost). Accurate accounting ensures correct profit calculation, preservation of inventories, and reliability of financial indicators, all of which influence audit conclusions.

Classification of Fixed Assets to Instruction No. 291, fixed assets are classified based on their functional purpose:

- productive (machinery, equipment, transport);
- non-productive (social and cultural facilities);

- other (agricultural biological assets).

For agricultural enterprises, it is advisable to maintain records not only by types of fixed assets, but also by divisions, crops, or livestock groups to ensure detailed analytical accounting.

Depreciation is the systematic allocation of the cost of a fixed asset over its useful life. Common methods include:

- straight-line;
- production method;
- declining balance;
- sum-of-the-years'-digits;
- accelerated declining balance.

In agricultural practice, the straight-line method is the most widely used due to its simplicity, although the production method more accurately reflects the actual use of equipment and machinery.

Fixed assets may be revalued if their carrying amount significantly differs from their fair value. In agriculture, this is relevant for machinery that undergoes rapid physical or moral depreciation, as well as for buildings and livestock facilities.

Revaluation ensures that financial statements reflect the true financial position of the enterprise. However, it must be based on expert appraisal and adhere to the principle of prudence.

Revaluation of Fixed Assets is a key tool to reflect fair value of non-current assets in the balance sheet. It is conducted voluntarily, by management decision. If the enterprise chooses not to revalue, historical cost (adjusted for depreciation or impairment) may be used.

An asset may be revalued if its carrying amount differs significantly from its fair value on the balance sheet date. Revaluation adjusts the book value to reflect fair value: an upward adjustment (revaluation surplus) is made when fair value exceeds carrying amount, and a downward adjustment (impairment) is made in the opposite case.

There is no specific threshold for "material difference" in national accounting standards. However, the Ministry of Finance of Ukraine, in para. 2.20.1 of Methodical

Recommendations No. 635, suggests a 10% deviation from fair value as a reasonable materiality threshold. [5].

Methodical Recommendations No. 561 propose another approach: a materiality threshold may equal 1% of net profit (or loss) or a 10% deviation from fair value. [3]. These are guidelines. Management must independently establish materiality criteria.

A problematic issue is accounting for non-current assets held for sale, regulated by NAS 27 "Non-current assets held for sale and discontinued operations." [5]. These assets are recorded in sub-account 286 "Non-current assets and disposal groups held for sale," under account 28 "Goods," which relates to current assets. However, classifying fixed assets as inventories is inappropriate. Instead, sub-account 109 "Other fixed assets" should be used [8].

Conflicting classifications also arise in sub-accounts 943 and 712, which combine cost and income from both inventories and non-current assets. This practice distorts financial statements. To resolve this, sub-accounts 977 "Other ordinary activity expenses" and 746 "Other ordinary activity income" should be used instead. [9]

Conclusions.

Economic changes in Ukraine have allowed enterprises to adopt market principles, improve competitiveness, and support dynamic development. Based on the study, the following recommendations can be made to improve fixed asset accounting:

1. Select optimal accounting data in terms of content and scope to meet fixed asset accounting objectives;

2. Develop and implement rational document flow systems to ensure timely task execution with minimal resource expenditure;

3. Improve the content and structure of accounting records for fixed assets;

4. Fully computerize fixed asset accounting to enable timely tracking, depreciation calculation, and accurate determination of wear in accordance with norms.

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