https://doi.org/10.52326/csd2025.70

ENSURING RELIABLE FINANCIAL INFORMATION THROUGH INVENTORY PROCEDURES: IMPLICATIONS FOR SUSTAINABLE AGRIBUSINESS DEVELOPMENT

Maryna Dubinina

Mykolaiv National Agrarian University, Mykolaiv, Ukraine

Abstract. The paper examines the role of inventory procedures in ensuring reliable financial information as a foundation for the sustainable development of agribusiness. It is demonstrated that under wartime challenges, inventory extends beyond a technical verification of assets and liabilities, evolving into a strategic management tool. The key functions of inventory – control, accounting, analytical, and forecasting – are identified, along with their practical importance for agricultural enterprises. The study argues that properly organized inventory ensures transparency of financial reporting, enhances investor and partner confidence, facilitates resource mobilization, and strengthens competitiveness. Particular attention is paid to its relevance in wartime as a mechanism for recording damages and providing documentary evidence of losses for compensation purposes. The findings indicate that inventory results have not only economic but also social and environmental significance, as they contribute to fostering a culture of responsibility, reducing resource losses, and promoting rational use of natural assets. The conclusion emphasizes the need to consider inventory as a multidimensional element of the strategic management system for sustainable agribusiness development.

Keywords: *accounting, agribusiness, financial reporting, inventory, internal control, sustainability.*

JEL code: *M41, M42, Q14, Q56*

The modern development of Ukraine’s agrarian sector is characterized by growing requirements for transparency and reliability of financial information, which determine the conditions for ensuring sustainable business operations. Under wartime threats and heightened risks, the inventory of assets and liabilities acts as one of the key instruments for restoring accounting and monitoring the efficient use of resources [1].

Inventory procedures have a comprehensive nature: they ensure the consistency of accounting data with the actual state of assets, create an informational basis for managerial decision-making, and perform a preventive function in safeguarding resources. For agricultural enterprises, where biological assets constitute a significant share of resources, the accuracy of inventory directly affects the level of financial stability [3].

The regulatory framework for inventory is defined by the Law of Ukraine “On Accounting and Financial Reporting” and the Regulation on the Inventory of Assets and Liabilities, adopted by the Ministry of Finance of Ukraine. These acts establish requirements for the organization of procedures, rules for documenting results, and their reflection in financial statements [2; 5]. However, in practice, a formal approach prevails, where inventory is performed only as a mandatory task, while the obtained data remain underutilized for analytical purposes and strategic management.

The control potential of inventory lies not only in verifying the physical existence of assets but also in providing a basis for assessing the efficiency of their use. For instance, the inspection of stocks in agricultural enterprises helps identify losses related to grain or feed storage, assess seed quality, and determine the level of material responsibility of employees [4].

The functioning of the agricultural sector is highly dependent on seasonality and natural-climatic factors, which complicate the inventory process, increase labor intensity, and raise the risk of errors. Under such conditions, proper organization of inventory procedures and high-quality documentation acquire particular importance [6].

The results of inventory have a dual meaning. On the one hand, they ensure the validity of financial statements for external users – investors, creditors, and regulatory bodies. On the other hand, inventory data serve as an analytical basis for internal resource management, which directly influences the competitiveness of enterprises in the agrarian market [1].

During wartime, inventory gains strategic importance as it enables the registration of asset losses caused by hostilities, destruction of production and storage facilities, and restricted access to property. The data obtained are used not only for internal accounting but also for substantiating losses before state authorities and international institutions, which creates grounds for compensation mechanisms [4].

The existence of a clear methodology for conducting inventory contributes to the formation of a transparent financial environment in agribusiness. Such an approach increases the confidence of partners and investors, becoming a prerequisite for attracting additional financial resources. In this regard, inventory procedures represent an important factor of long-term stability for agricultural enterprises [3].

The effectiveness of inventory largely depends on the organizational culture of the enterprise. If it is perceived merely as a mandatory legal requirement, its results will not significantly influence managerial decisions. By contrast, when integrated into strategic planning and internal control systems, inventory becomes an effective tool for improving management efficiency [1; 6].

The application of modern technologies in inventory significantly expands its potential. The use of digital platforms and automated systems reduces the likelihood of errors, shortens the time required for procedures, and ensures transparency at all stages. For large agricultural companies, this is particularly critical, as the scale of production complicates control over every category of assets [3].

Therefore, inventory procedures should be regarded not only as a technical process of data verification but as a comprehensive management tool that ensures the reliability of financial information and strengthens the resilience of agricultural enterprises in the long term [1; 2].

Taking into account the specifics of agricultural production, inventory fulfills several functions, including recording the actual presence of assets, monitoring their preservation, assessing their condition, and identifying cases of inefficient use of resources. In academic research, four major functions of inventory are highlighted: control, accounting, analytical, and forecasting [1; 3].

The control function is realized through the comparison of physical stock with accounting data. In agricultural practice, this allows timely detection of shortages in seeds, feed, or fertilizers, as well as identifying cases of mismanagement. Under wartime conditions, this function acquires particular relevance, as it provides legal evidence of losses [4].

The accounting function aims to ensure the reliability of financial statements. It guarantees that all assets and liabilities of the enterprise are accurately reflected in the balance sheet and that financial results correspond to the actual situation. According to the Law of Ukraine “On Accounting and Financial Reporting”, such verification is mandatory before the preparation of annual financial statements [2].

The analytical function consists in using inventory results to evaluate the efficiency of resource management. For example, an analysis of actual grain stocks compared with planned figures helps determine the scale of losses during storage and transportation. These data form the basis for recommendations on improving logistics and warehousing conditions [1; 6].

The forecasting function of inventory enables the identification of trends in resource use and the planning of future needs. In agribusiness, this is applied to forecasting yields based on the availability of seeds or fertilizers and to estimating the need for renewal of technical equipment in upcoming production cycles [3].

To systematize the main functions of inventory in the agrarian sector, it is advisable to present them in a tabular form (Table 1).

The introduction of a systematic approach to the implementation of inventory functions makes it possible to transform inventory from a routine accounting procedure into a fully-fledged tool of strategic management. Such an approach corresponds to the contemporary challenges faced by agribusiness in conditions of economic and social instability [3].

Table 1. The Functions of Inventory in Agribusiness

Function	Content of the function	Examples of implementation	Expected management outcome
Control	Verification of consistency between actual data and records	Detection of shortages of grain, seeds, and feed	Reduction of losses and strengthening of discipline
Accounting	Ensuring the reliability of financial reporting	Reconciliation of balances with the enterprise’s accounting	Preparation of accurate financial statements
Analytical	Assessment of the efficiency of resource use	Analysis of grain stocks and storage losses	Optimization of logistics and warehousing
Forecasting	Identification of trends and forecasting of needs	Calculation of fertilizer and machinery requirements	Planning of future expenditures and procurements

Source: compiled by the author based on [1; 2; 3; 6]

Inventory plays a particularly important role in shaping confidence in financial reporting among external users. For investors, banking institutions, and regulatory bodies, inventory results serve as evidence of the reliability of financial indicators, which directly influences the enterprise’s business reputation and its ability to attract additional financial resources [2; 5].

An inadequate organization of inventory procedures creates risks of financial misrepresentation. A formal approach to asset verification, the absence of in-depth analytical work with the results, or their delayed reflection in accounting registers reduces the managerial value of the process. These circumstances highlight the need for comprehensive improvements in the methodology and practice of conducting inventory [6].

Improving the efficiency of the process is possible through the application of automated data collection and processing systems. The use of modern digital platforms enables faster implementation of inventory procedures, integration of their results into electronic reporting, and ensures transparency at all stages [3].

The documentation of inventory results is of particular importance. As noted by Stankevych, the proper preparation of acts, descriptions, and comparative statements provides legal validity to the data obtained and minimizes the risk of litigation regarding the liability of materially responsible persons [6].

In wartime conditions, inventory results acquire additional significance, as they are used to assess and substantiate losses. Documented data may be submitted to state and international institutions in order to obtain compensation for lost or damaged assets [1; 4].

The social dimension of inventory is manifested in defining the level of employee discipline and their responsibility for safeguarding enterprise property. This strengthens the control functions of management while also reducing cases of inefficient resource use [3].

The totality of inventory results forms a multi-level information base used for accounting, control, analysis, and forecasting purposes. This underscores the role of inventory not only as an element of accounting, but also as a tool of strategic management for agrarian companies [1; 2].

The practice of agricultural enterprises shows that the inventory process is accompanied by a number of both objective and subjective difficulties. Key problems include the formal nature of procedures, insufficient qualification of inventory commission members, inconsistency of results with documentation requirements, and the lack of unified methodological approaches adapted to the specifics of agribusiness [1; 6].

A significant share of these difficulties arises from the lack of proper control by the enterprise’s management structures. As a result, inventory is often reduced to a mere reconciliation of figures, while its analytical potential remains unutilized. This problem is most evident in the case of biological assets, where an interdisciplinary approach involving agronomists, veterinary specialists, and technologists is required [3].

Another widespread shortcoming is the untimely reflection of inventory results in accounting registers, which leads to distortions in financial reporting. Such situations create risks for investors and partners who base their decisions on unreliable data. For external users, these cases are perceived as a sign of weak management systems, thereby reducing trust in the enterprise [2; 5].

Additional challenges arise during wartime, when agricultural enterprises face limited access to certain assets. Under such conditions, traditional inventory procedures cannot be carried out in full, necessitating the adaptation of methodological approaches. The use of digital technologies for recording and verifying the actual condition of property is considered one of the solutions to this problem [4].

To summarize the main difficulties of the inventory process and outline possible ways of addressing them, the results can be presented in a tabular format (Table 2).

Table 2. Challenges of the Inventory Process and Directions for Improvement in Agribusiness

Problem	Consequences for the enterprise	Ways of improvement
Formal approach to inventory	Distortion of accounting data, reduced managerial value	Development of internal standards and regulations [6]
Insufficient qualification of commission members	Calculation errors, inaccuracies in documentation	Training programs and methodological workshops [1; 3]
Lack of unified methodological approaches	Inconsistency in approaches to different objects	Introduction of sectoral methodological guidelines [2; 5]
Untimely reflection of results	Distortion of financial reporting	Automation of data entry into accounting systems [3]
Limited access to assets during wartime	Inability to verify the condition of property	Use of digital technologies, photo and video recording [4]

Source: compiled by the author based on [1; 2; 3; 4; 5; 6].

The analysis of practice confirms that the effectiveness of inventory procedures largely depends on the level of organizational culture within an enterprise. When management perceives inventory as a component of strategic governance, the process acquires substantive significance and becomes a basis for development planning. Under a formal approach, however, inventory turns into a routine obligation that fails to deliver meaningful managerial value [3].

The use of modern digital solutions creates new opportunities for optimizing inventory processes. Mobile applications, QR and barcoding technologies, and electronic document management systems accelerate data processing, increase accuracy, and minimize human error. These innovations are consistent with current requirements for business process transparency and positively affect the investment attractiveness of agricultural enterprises [1; 3].

A significant outcome of well-organized inventory is the reduced likelihood of fraud and abuse. Systematic monitoring of assets lowers the risk of their misuse, while proper documentation of results provides grounds for holding responsible persons accountable in cases of losses [6].

In the medium term, integrating inventory procedures into internal audit systems may establish a unified control framework. Combining accounting, managerial, and legal aspects would foster a comprehensive system of asset management aligned with international business standards [2].

In this dimension, inventory emerges as a multifunctional tool that combines accounting, control, analytical, and strategic objectives. Its proper implementation ensures the generation of reliable financial information, serving as a basis for the sustainable development of agricultural enterprises.

The resilience of agribusiness requires balancing economic performance, social responsibility, and environmental considerations. In this context, inventory ensures the reliability of data used to assess the economic impact of enterprises, design social policy, and promote rational use of natural resources [1].

Up-to-date inventory results form the foundation for determining the actual use of land resources, the efficiency of equipment operation, and the structure of production costs. This information provides the basis for developing strategies aimed at increasing productivity and reducing losses, thereby shaping the economic dimension of sustainable development [3].

The social aspect of inventory lies in strengthening employee responsibility for safeguarding assets and fostering a culture of discipline within agricultural collectives. This enhances trust in

managerial decisions and serves as a factor of social stability, particularly under wartime challenges [4].

The environmental aspect is directly linked to inventory procedures, as they enable monitoring of material resource use, reducing waste, and preventing the inefficient application of fertilizers and pesticides. Inventory results thus contribute to promoting sustainable resource management and establishing ecologically safe production systems [1; 3].

In the context of globalization, the competitiveness of agricultural enterprises becomes especially important. It depends not only on yields or production costs but also on the ability to provide transparent and reliable financial information. Inventory results serve as indicators of financial discipline and as criteria of reliability in relations with partners and investors [2; 5].

At the same time, inventory procedures perform a communicative function by establishing the basis for interaction between enterprises and stakeholders. The reliability of data supports investment attraction, participation in international support programs, and the development of long-term partnerships [3].

The efficiency of inventory can be further enhanced through innovative approaches. The use of automated systems, artificial intelligence technologies, and analytical platforms improves data accuracy, reduces human error, and increases the adaptability of agribusiness to the challenges of digital transformation [1; 6].

In the long term, integrating inventory with environmental and social monitoring systems will create a comprehensive model of sustainable agribusiness management. Such a model will enhance transparency, strengthen enterprise reputation, and improve positioning in international markets [4].

In the post-war period, inventory will gain additional importance as an instrument for rebuilding agricultural infrastructure. Its results will make it possible to objectively assess enterprise losses and needs, define priorities for state and international support, and stimulate investment activity in the agricultural sector [1; 4].

Therefore, inventory procedures should not be regarded merely as a technical element of accounting, but as a component of the management system that ensures reliable financial information, increases business transparency, and supports the implementation of the concept of sustainable development. The role of inventory in providing reliable financial information for the sustainable development of the agricultural sector is decisive. Its effective execution fosters economic stability, strengthens social responsibility, enhances environmental safety, and improves the competitiveness of Ukrainian enterprises.

In conclusion, inventory represents not only an element of the accounting system but also a tool for long-term development. It ensures the ability of agribusiness to operate under uncertainty, adapt to emerging challenges, and integrate into the global economic environment.

References

1. LYTVYNENKO, S. V., GURENKO, T. O., DEREVIANKO, S. I., BURDYM, Yu. M. Inventory of assets and liabilities as a tool for restoring accounting in agricultural enterprises under martial law. In: *Economics and Business Management*, 2024, 1, pp. 92–109 [online]. [accessed 24.08.2025]. https://doi.org/10.31548/economics15(1).2024.078
2. Law of Ukraine “On Accounting and Financial Reporting in Ukraine” of 16.07.1999 No. 996-XIV [online]. [accessed 24.08.2025]. Available at: https://zakon.rada.gov.ua/laws/show/996-14#Text
3. LEHA, O., KANTSEDAL, N., PESHKOV, A. Inventory as a tool for ensuring financial stability of the enterprise. In: *Entrepreneurship and Innovation*, 2025, 34, pp. 37–44 [online]. [accessed 24.08.2025]. https://doi.org/10.32782/2415-3583/34.5
4. VYSOCHAN, O. S., VYSOCHAN, O. O., KORKISHKO, V. Inventory of stocks under war conditions. In: *Tavriya Scientific Bulletin. Series: Economics*, 2024, 20, pp. 182–189 [online]. [accessed 24.08.2025]. https://doi.org/10.32782/2708-0366/2024.20.21
5. Regulation on inventory of assets and liabilities: approved by the Order of the Ministry of Finance of Ukraine of 02.09.2014 No. 879. Registered in the Ministry of Justice of Ukraine on 16.09.2014 No. 1106/25883 [online]. [accessed 24.08.2025]. Available at: https://zakon.rada.gov.ua/laws/show/z1365-14#Text
6. STANKEVYCH, V. Documentation of inventory at an agricultural enterprise [online]. Uteka. [accessed 24.08.2025]. Available at: https://uteka.ua/ua/publication/agro-4-shkola-bughaltera-selkokhozyastvenoy-otrasli-69-dokumentalnoe-oformlenie-inventarizacii-na-selxozpredpriyatii