

Common Issues and Countermeasures in Accounting of Agricultural Public Institutions

Lei Shi*

Xiangyang City Plant Protection Station, Xiangyang, Hubei, 441000, China

*Correspondence to: Lei Shi, Xiangyang City Plant Protection Station, Xiangyang, Hubei, 441000, China, E-mail: sl0304@163.com

Abstract: Common issues in accounting for agricultural public institutions include incomplete data collection, mismatched accounting cycles, difficulties in asset valuation, risks from fluctuations in agricultural product prices, and inadequate information systems. These issues directly affect the accuracy and efficiency of accounting, limiting the improvement of financial management in agricultural public institutions. To address these problems, this paper proposes countermeasures such as improving the data collection system, adjusting the accounting cycle, establishing a unified asset valuation standard, strengthening price risk management, and enhancing the information system to improve the accuracy and efficiency of accounting in agricultural public institutions.

Keywords: Agricultural public institutions; accounting; issues; countermeasures

Introduction

Agricultural public institutions play an essential role in the national economy, and their accounting work is crucial for ensuring the healthy development of agricultural affairs. However, there are still many problems in the accounting of agricultural public institutions, such as inaccurate data collection and unreasonable accounting cycles. These issues severely restrict the financial management and operational efficiency of these institutions. Therefore, this paper aims to explore these problems in depth and propose corresponding solutions.

1. Overview of Accounting in Agricultural Public Institutions

Accounting in agricultural public institutions refers

to the accounting practices of institutions under the leadership of agricultural departments that do not fully implement an economic accounting system. These institutions mainly include state-owned seed breeding farms, livestock and poultry farms, horticultural specialty farms (collectively referred to as the "three agricultural farms"), and agricultural research institutions. They are all socialist public institutions with enterprise management characteristics, operating under the ownership of the state. The characteristics of accounting in agricultural public institutions are primarily reflected in their business nature and financial operations. These institutions focus on research and seed production, with production quota subsidies provided by higher authorities to ensure balanced revenues and expenditures with a slight surplus. In



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terms of financial operations, agricultural public institutions have two primary sources of funding: funds provided by investors, mainly the national financial department, and funds provided by creditors. These funds are categorized as net assets and liabilities within agricultural public institutions and are converted into assets during usage. The accounting of agricultural public institutions involves a diverse range of activities, including recognition, measurement, recording, and reporting. To ensure scientific accounting practices, these activities must be broken down into fundamental accounting elements such as assets, liabilities, net assets, income, and expenditures. These elements maintain specific relationships that form the foundation of the accounting equation, which serves as the basis for double-entry bookkeeping and the design of financial statements.

2. Common Issues in Accounting for Agricultural Public Institutions

Agricultural public institutions often face multiple challenges in the accounting process. These issues not only affect the accuracy and efficiency of financial management but also hinder the sustainable development of these institutions.

2.1 Issues in Data Acquisition and Recording

Data acquisition and recording are crucial aspects of accounting in agricultural public institutions, yet they frequently encounter various problems. The agricultural production process is complex, involving numerous stages with large and intricate data sets. However, many agricultural public institutions lack professional accounting personnel, making the collection, organization, and recording of original data inaccurate and incomplete. Additionally, agricultural production activities are often dispersed across vast rural areas, further complicating the data collection process^[1]. There are also deficiencies in data recording within agricultural public institutions. Many institutions still rely on traditional manual bookkeeping methods, which are not only inefficient but also prone to errors. Due to the unique characteristics of agricultural production, some critical production data, such as land use and pesticide and fertilizer application, are often difficult to accurately record, leading to inaccurate accounting results.

2.2 Mismatch Between Agricultural Production Cycles and Accounting Periods

Agricultural production is characterized by long cycles and strong seasonality, which often results in a mismatch between the accounting periods of agricultural public institutions and the actual production cycles of agricultural products. The production cycle of agricultural products is usually long, involving multiple stages from sowing to harvest, whereas accounting periods are typically based on annual or quarterly schedules. This discrepancy prevents accounting records from timely reflecting the production status and financial position of agricultural products, creating challenges for financial management.

2.3 Challenges in Asset Valuation

The primary assets of agricultural public institutions include land, agricultural machinery, and biological assets, making asset valuation a complex issue. First, land value is influenced by multiple factors such as location, soil quality, and climate conditions, making it difficult to assess accurately. Additionally, the value of agricultural machinery and biological assets is also challenging to determine, as factors such as lifespan and performance conditions affect their valuation.

2.4 Price Fluctuations in Agricultural Products Affect Accounting Accuracy

The prices of agricultural products are highly volatile due to market supply and demand, weather conditions, and policy changes. These fluctuations negatively impact the accuracy of accounting in agricultural public institutions. On one hand, price volatility creates uncertainty in agricultural product sales revenue, making it difficult to predict and accurately reflect financial outcomes. On the other hand, fluctuations in prices also affect cost calculations, leading to inaccuracies in cost accounting.

2.5 Deficiencies in Accounting Information Systems

With the continuous advancement of information technology, accounting digitalization has become a crucial trend in modern accounting. However, the construction of accounting information systems in agricultural public institutions remains inadequate. On one hand, many institutions still rely on traditional manual bookkeeping methods, resulting in a low level of digitalization. On the other hand, even when accounting information systems are implemented,

they often suffer from incomplete functionalities and complex operations, limiting their effectiveness in financial management ^[2].

3. Strategies to Address Accounting Issues in Agricultural Public Institutions

3.1 Improving Data Collection and Recording Systems

To address issues in data collection and recording, establishing a comprehensive and systematic data collection mechanism is essential. Agricultural public institutions should set clear data collection standards and processes, ensuring accuracy and completeness. This involves training data collection personnel to enhance their professional skills and data awareness. Utilizing modern information technologies such as the Internet of Things (IoT) and big data can enable real-time data collection and monitoring, improving efficiency and accuracy. Developing a standardized data recording system is also crucial. Institutions should establish clear data recording protocols, designating responsible personnel to ensure timely and proper data documentation. Categorizing and organizing data, creating structured archives, and implementing regular audits can facilitate future analysis and retrieval. To further enhance data collection and recording efficiency, agricultural public institutions may consider engaging third-party professional organizations for data auditing and verification. These organizations, with their expertise and advanced technical capabilities, can conduct thorough reviews, ensuring data accuracy and reliability. Establishing long-term collaboration with such entities can support the continuous improvement of data collection and recording systems.

3.2 Adjusting the Accounting Cycle to Align with Agricultural Production Characteristics

To address the mismatch between the long agricultural production cycle and the standard accounting cycle, agricultural public institutions should adjust their accounting cycles to better reflect agricultural production characteristics. Institutions should determine reasonable accounting periods based on the growth stages and cycles of agricultural products. For crops with extended growth cycles, production can be divided into different phases, with accounting performed at the end of each phase. This approach ensures a more accurate reflection of financial status

and production progress, providing better financial support for agricultural operations.

Additionally, accounting flexibility and adaptability should be improved. Given the strong seasonality of agricultural production, accounting cycles should be adjusted accordingly. For example, during the harvest season, accounting periods can be shortened to promptly reflect sales revenue and cost data. Conversely, during the growing season, the cycle can be extended to provide a clearer picture of production progress and capital requirements. Moreover, agricultural public institutions should strengthen communication and coordination with regulatory authorities and financial institutions to secure policy and financial support. By adjusting accounting cycles and obtaining additional resources, these institutions can better align with agricultural production needs, ultimately promoting sustainable and healthy development in the sector.

3.3 Establishing Standardized Asset Valuation Criteria and Methods

Establishing standardized asset valuation criteria and methods is crucial to addressing valuation challenges in agricultural public institutions. These institutions should enhance their focus on asset valuation by recognizing its importance and necessity while strengthening coordination with relevant authorities to develop and refine valuation standards. A standardized approach to asset valuation is also essential. Institutions should select appropriate valuation methods based on asset types and characteristics. For instance, land assets can be assessed using market comparison or income-based valuation methods, while agricultural machinery and biological assets can be evaluated through cost or replacement cost methods. Furthermore, training programs should be implemented to enhance the expertise of valuation personnel, ensuring the accuracy and reliability of asset assessments ^[3]. To further improve efficiency and precision, institutions may consider engaging third-party professional valuation firms with extensive experience and technical expertise. These firms can provide comprehensive evaluations to ensure asset valuation accuracy and impartiality. Establishing long-term partnerships with such organizations can contribute to the continuous improvement and development of asset valuation practices.

3.4 Strengthening Agricultural Product Price Risk Management

To mitigate the impact of agricultural product price volatility on accounting accuracy, agricultural public institutions should improve data collection and analysis regarding price trends and influencing factors. Regularly publishing agricultural price reports and analytical insights can provide valuable decision-making support for agricultural operations. Institutions should also develop a structured price risk management mechanism by formulating strategies to address price fluctuations. For example, financial instruments such as hedging can be utilized to mitigate price risks. Additionally, enhanced coordination with regulatory bodies can help secure policy and financial support to counteract adverse price movements. Moreover, increasing awareness and education on agricultural price risk management is vital. Institutions should conduct training programs, workshops, and seminars to equip farmers with the knowledge and skills necessary for managing price risks effectively. By improving risk awareness and preparedness, farmers can better navigate market fluctuations and safeguard their economic stability.

3.5 Enhancing the Accounting Information System

Addressing the shortcomings in accounting information systems is crucial for improving financial management in agricultural public institutions. These institutions should increase investment in accounting information systems by adopting advanced accounting software and equipment to enhance digitalization. Additionally, training programs should be implemented to improve accounting personnel's digital literacy and technical skills^[4]. Optimizing system functionalities and modules is essential to ensure they align with institutional business and management needs. For instance, financial data entry, report generation, and financial analysis modules can be developed to support multi-level financial management. Furthermore, robust security management and maintenance measures should be put in place to guarantee system stability and data protection. To maximize data efficiency, institutions should establish information-sharing mechanisms with other departments and organizations, facilitating data exchange and enhancing accuracy. Collaborative efforts with external entities can further drive the development of a more comprehensive accounting information

system. To further enhance system efficiency and accuracy, agricultural institutions should consider integrating advanced technologies such as cloud computing and big data analytics. These technologies enable rapid processing and real-time analysis of large volumes of financial data, providing more precise and timely support for accounting operations. Moreover, leveraging artificial intelligence can help automate accounting processes, improving efficiency and accuracy while reducing manual workload.

Conclusion

In summary, the common accounting issues in agricultural public institutions should not be overlooked. However, by implementing strategies such as improving data collection, adjusting accounting cycles, standardizing asset valuation, strengthening price risk management, and optimizing information systems, the accuracy and efficiency of accounting practices can be significantly enhanced. Moving forward, agricultural public institutions should continuously focus on refining and innovating accounting processes while strengthening internal management. This will enable them to adapt to new agricultural development demands and provide a solid financial foundation for the sustainable growth of the agricultural sector.

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