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Implementation of Biological Asset Accounting Based on PSAK 16 and PSAK 69 at PT Pradiksi Gunatama

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A B S T R A C T

The differences in accounting treatment between PSAK 16 and PSAK 69 have direct implications for the recognition, measurement, and reporting of biological assets. This study aims to analyze the application of both standards at PT Pradiksi Gunatama. The research method uses a descriptive qualitative approach with interview, observation, and documentation techniques. The results show that PT Pradiksi Gunatama recognizes plant assets based on acquisition cost according to PSAK 16, records the reclassification of immature plants, depreciates mature plants, and has not applied fair value as required by PSAK 69. A comparison between the two standards shows significant differences related to initial measurement, treatment of harvest results, and subsequent measurements. This study emphasizes the importance of the readiness of plantation entities in adopting PSAK 69 comprehensively to improve the relevance and transparency of financial reports.

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INTRODUCTION

The palm oil plantation industry is a strategic sector in the Indonesian economy due to its significant contribution to job creation in various regions, particularly rural areas (BPS, 2023). Furthermore, this sector contributes to the country's foreign exchange earnings through exports of crude palm oil (CPO) and its derivatives, which continue to increase annually (Ministry of Trade, 2022). Palm oil plantations also attract foreign direct investment, both in the upstream and downstream sectors of the palm oil industry (BKPM, 2022). With this significant contribution, the sustainability and efficiency of industry management are key issues in the national economy (World Bank, 2020). Therefore, the presentation of accurate and transparent financial information is crucial for the decision-making process by various stakeholders (IAI, 2020).

As business entities, plantation companies are required to present relevant financial reports for use by investors, creditors, regulators, and other external parties (IAI, 2020). This information must be presented reliably, verifiably, and free from material misstatement to reflect the true economic conditions (Scott, 2015). Consistency in presentation between periods and between entities is also necessary to ensure comparability of financial statements and provide a basis for objective performance evaluation (Kieso, Weygandt, & Warfield, 2019). One important item in the plantation industry's financial statements is biological assets, which include oil palm plantations and their harvests (PSAK 69, 2018). These biological assets are the primary indicators in determining a company's profitability, productivity, and future prospects (Ernst & Young, 2011).

The accounting for biological assets is regulated by two main standards: PSAK 16 on Fixed Assets and PSAK 69 on Agriculture, both of which are adopted from IFRS (IAI, 2018). PSAK 16 regulates the use of the historical cost approach, so that asset values are recorded based on acquisition costs and accumulated depreciation (PSAK 16, 2018). In contrast, PSAK 69 requires entities to measure biological assets at fair value less costs to sell, which reflects the biological transformation of the plant (IAS 41; PSAK 69, 2018). These differences in approach result in significant variations in asset values, profit and loss, and financial statement volatility (Herbohn & Herbohn, 2006). With the implementation of PSAK 69, entities are expected to be able to present financial statements that are more representative and relevant to the actual economic changes of biological assets (IAI, 2018). However, the implementation of PSAK 69 in practice still faces various challenges, particularly in measuring fair value, which depends on the availability of an active market or adequate comparable data (IAI, 2018). Many plantation companies struggle to determine fair value due to the opaque nature of the palm oil market and its heavy reliance on global commodity prices (Purba & Siregar, 2020). Furthermore, the cost of appraisals by competent independent appraisers is considered an additional burden for companies, especially mid-sized companies (Deloitte, 2019). Another challenge is the need to adjust internal accounting policies, information systems, and human resource training to ensure compliance with PSAK 69 (PwC, 2020). PT Pradiksi Gunatama is a relevant object of study due to its management of large

biological assets and its position in an industry facing this accounting standard transition.

This study analyzes in depth the application of PSAK 16 and PSAK 69 in the recognition process of biological assets at PT Pradiksi Gunatama (Fuad, 2023). The analysis was conducted to evaluate how the company measures the acquisition cost, depreciation, and reclassification of plants in its financial statements. This study also examines the extent to which the company applies the fair value aspect as required by PSAK 69 (IAI, 2018). In addition, this study compares the company's practices with formal provisions in accounting standards and the findings of previous research on biological assets (Khotimah, 2020; Anggraini & Hastuti, 2019). Thus, this study provides a comprehensive overview of the company's readiness to comprehensively adopt PSAK 69 and the obstacles still faced.

LITERATURE REVIEW

Biological Asset Accounting Standards in Indonesia

The development of accounting standards in Indonesia is heavily influenced by the IFRS convergence process, which aims to improve the quality and comparability of financial reports across countries (IAI, 2018). This convergence is being implemented in stages by the Financial Accounting Standards Board (DSAK) to align Indonesian reporting practices with international standards. One important outcome of this process is the adoption of PSAK 69 on Agriculture, a translation of IAS 41 Agriculture (IASB, 2015). This adoption is intended to improve the transparency, consistency, and relevance of accounting information presented by companies with biological assets. Thus, IFRS convergence is not merely a technical matter but also part of the reform of financial reporting governance in Indonesia (Scott, 2015).

PSAK 16 regulates the accounting treatment of biological assets based on the historical cost approach, so that the asset value is recorded at the historical cost incurred until the asset is ready for use (IAI, 2018). This approach is considered to provide stability in reporting figures because it is not affected by market price fluctuations that often occur in the agricultural industry (Kieso, Weygandt, & Warfield, 2019). However, the historical cost approach is often criticized for not reflecting the current economic conditions of biological assets undergoing biological transformations such as plant growth (Herbohn & Herbohn, 2006). In the palm oil plantation industry, this biological transformation is particularly significant because plants continue to change in value with age and productivity. Therefore, the use of historical cost is considered limited in providing truly relevant information to users of financial statements.

In contrast, PSAK 69 stipulates that biological assets should be measured using fair value less costs to sell, so that changes in fair value are recognized directly in the income statement (IAI, 2018). This fair value approach is considered to better reflect the economic condition of biological assets because commodity price fluctuations and plant biological changes are reflected in real time in the financial statements (Ernst & Young, 2011). PSAK 69 also emphasizes the importance of information relevance because fair value is considered to provide the most up-to-date picture of the economic potential of a company's assets (IASB, 2015). Therefore, users of financial statements, such as investors, can assess a company's prospects and risks more accurately than when using the historical cost approach. Therefore, PSAK 69 improves the quality of financial reporting by reporting asset values that are more responsive to market dynamics and plant biological changes.

Definition and Classification of Biological Assets

According to PSAK 69, biological assets are living animals or plants undergoing biological transformations such as growth, degeneration, production, or procreation (IAI, 2018). These biological transformations result in changes in economic value that must be recognized in accounting because they impact potential future cash flows (IASB, 2015). This concept was introduced to illustrate the dynamic nature of biological assets, which differs from conventional fixed assets. PSAK 69 adopts many provisions from IAS 41, which emphasizes the need for fair value measurements to reflect current economic conditions (Ernst & Young, 2011). Therefore, biological assets are treated specifically in accounting standards because changes in their value arise not only from transactions but also from natural biological processes.

In oil palm plantations, biological assets include immature plants (TBM) and mature plants (TM), which have different functions and roles in the production process (Purba & Siregar, 2020). Immature plants represent the initial growth stage of oil palm plants before they are capable of producing fresh fruit bunches (FFB), so all costs incurred are capitalized as acquisition costs (IAI, 2018). Meanwhile, mature plants are biological assets that are already productive and provide direct economic benefits to the company through the harvest produced each period (Ministry of Agriculture, 2021). This division is important because it affects cost recognition, depreciation or amortization treatment, and fair value estimation in financial statements. Therefore, a proper understanding of the classification of TBM and TM is crucial to the quality of a plantation company's financial reporting.

TBM and TM have different biological characteristics and accounting implications, so accounting standards regulate specific treatment for each category (Herbohn & Herbohn, 2006). TBM is not depreciated because it has not yet generated economic benefits, but is reclassified as TM when the plant enters its productive period (IAI, 2018). Conversely, TM must be measured at fair value or acquisition cost depending on the standard adopted by the company, and its economic value can change as plant productivity grows or declines (Anggraini & Hastuti, 2019). These implications indicate that biological assets have higher value uncertainty than ordinary fixed assets. Therefore, the measurement and disclosure of biological assets require greater professional judgment from accountants and auditors.

Table 1. Differences Between PSAK 16 and PSAK 69

Aspect	PSAK 16	PSAK 69
Initial measurements	Acquisition cost	Fair value less costs to sell
Further measurements	Historical cost – accumulated depreciation	Fair value at each reporting date
Yields	Separated as inventory	Recognized at fair value at harvest
Change in value	Does not always reflect biological transformation	The difference in fair value is recognized in profit or loss.

Detailed Explanation of PSAK 16 vs PSAK 69 Table

1. Initial Measurement
   In PSAK 16, the initial measurement of biological assets is based on acquisition cost , which is all costs incurred until the asset is ready for use or ready to enter the production phase (IAI, 2018). The acquisition cost approach includes the costs of land preparation, seeding, planting, fertilization, labor, and other indirect costs associated with the asset formation process. This method is conservative because the asset value is not affected by market price fluctuations and only reflects historical investment (Kieso, Weygandt, & Warfield, 2019). In contrast, PSAK 69 stipulates that the initial measurement of biological assets should be made using fair value less costs to sell , in accordance with the principles adopted from IAS 41 Agriculture (IASB, 2015). This approach emphasizes that the initial value of an asset should reflect current economic conditions and potential future economic benefits, not simply historical cost (Ernst & Young, 2011).

2. Further Measurements
   In PSAK 16, subsequent measurements are made using the historical cost method less accumulated depreciation and impairment losses , in accordance with the basic principles of fixed assets (IAI, 2018). Using the historical cost approach results in relatively stable asset values and does not experience significant fluctuations from period to period, but can be less relevant in reflecting the biological development of assets, especially for productive crops such as oil palms (Herbohn & Herbohn, 2006). In contrast, PSAK 69 stipulates that biological assets must be measured at fair value at each reporting date , so that the financial statement value reflects changes in market conditions and biological changes in the plant (IASB, 2015). The fair value approach provides more relevant information for investors because it reflects economic gains or losses that occur in the current period (PwC, 2020). The values presented are more dynamic and reflect the actual condition of the biological assets at the reporting date.
3. Treatment of Harvest Results
   Under PSAK 16, the harvest obtained from biological assets is treated as inventory , so that its recognition occurs after the separation process from the plant, and the inventory value is recorded at the lower of cost or net realizable value (IAI, 2018). This treatment distinguishes between biological assets as plants and their harvests as agricultural products, following the traditional accounting concept in PSAK 14 Inventories. Meanwhile, PSAK 69 stipulates that the harvest should be recognized at fair value at the point of harvest , and changes in value are immediately recognized in profit or loss (IASB, 2015). This is based on the principle that the point of harvest is the moment when fair value can be measured reliably because the product is in a marketable condition (Ernst & Young, 2011). This approach makes the financial statements more reflective of the actual economic value of the harvest at the time it is acquired.
4. Changes in the Value of Biological Assets
   In PSAK 16, changes in asset value do not always reflect biological transformation , because assets are recorded at historical cost and only change when depreciation or impairment occurs (IAI, 2018). This results in the performance of companies that depend on plant growth processes not being fully reflected in the financial statements (Scott, 2015). In contrast, PSAK 69 requires that differences in fair value (gains or losses) due to biological transformation or changes in market prices must be recognized in profit or loss in the period in which they occur (IASB, 2015). This provision makes financial information more relevant because changes in biological value and fluctuations in market prices are directly reflected in company performance (Herbohn & Herbohn, 2006). Thus, PSAK 69 offers a more accurate economic representation of the benefits and risks inherent in biological assets.

METHODOLOGY

This study uses a descriptive qualitative approach, which aims to understand phenomena in depth through a systematic description of the research object without variable manipulation (Creswell, 2016). This approach was chosen because the characteristics of the study focus on the analysis of biological asset accounting practices in a real company context, thus requiring a comprehensive understanding of the policies, processes, and professional judgments carried out by management. Qualitative research also allows researchers to obtain a comprehensive interpretation regarding the application of PSAK 16 and PSAK 69, especially when these standards require high judgment in the recognition and measurement of biological assets (Moleong, 2017). Thus, the descriptive qualitative method is considered most appropriate to explore the accounting reality at PT Pradiksi Gunatama comprehensively.

Data collection was conducted using three main techniques. First, in-depth interviews with the Corporate Secretary, Internal Audit, and Finance Manager to obtain information related to accounting policies, the biological asset measurement process, and challenges in implementing PSAK 69 (Sugiyono, 2017). The interviews were conducted semi-structured so that researchers could explore additional information beyond the prepared question guidelines. Second, direct observation of the accounting recording process, plant asset grouping, and supporting documents such as plant mutations and the company's accounting journals was conducted. This observation was important to ensure that the data obtained was consistent with actual practices, as recommended by Miles, Huberman, and Saldaña (2014). Third, documentation studies of financial reports, accounting policies, and other relevant internal documents were conducted to confirm the information obtained from the interviews and observations.

The data analysis in this study follows the interactive analysis model of Miles and Huberman, which consists of three main stages: data reduction, data presentation, and verification and conclusion drawing (Miles, Huberman, & Saldaña, 2014). In the data reduction stage, researchers select, focus, and simplify data obtained from interviews, observations, and documentation to make it easier to analyze. This stage is important because qualitative research produces abundant data that requires filtering to maintain relevance to the research objectives (Creswell, 2016). The data presentation stage is carried out by organizing information in narrative form, tables, and thematic structures to make it easier for researchers to see patterns and relationships between variables. Next, the verification and conclusion stage is carried out by interpreting the data logically, comparing findings between sources, and ensuring consistency of information before drawing final conclusions.

In addition to the general qualitative analysis, this study also uses a comparative analysis to compare the implementation of PSAK 16 and PSAK 69 at PT Pradiksi Gunatama. This analysis is conducted by examining the differences in accounting treatment, including recognition, initial measurement, subsequent measurement, presentation, and disclosure of biological assets in accordance with the provisions of the standard (IAI, 2018). This approach is highly relevant because the two standards have different underlying concepts—PSAK 16 is based on historical cost, while PSAK 69 is based on fair value—which affect asset values, profit and loss, and financial statement transparency (Herbohn & Herbohn, 2006). The results of the comparative analysis provide an in-depth overview of the extent to which the company has implemented the standards appropriately, while also identifying challenges faced in the transition to PSAK 69. Thus, this comprehensive analysis contributes to the understanding of agricultural accounting practices in the context of the Indonesian palm oil plantation industry.

RESEARCH RESULT AND DISCUSSION

Grouping of Biological Assets of PT Pradiksi Gunatama

The company groups plant assets into two categories:

1. Immature Plants (IMT)
   Are recorded at acquisition cost, including land preparation, planting, fertilization, maintenance, and capitalization of borrowing costs. Not depreciated.
2. Mature Plants (TM)
   Reclassified after the trees are 36 months old or 60–70% of the trees have produced fresh fruit bunches (FFB). Depreciated using the straight-line method at a rate of 4% per year.

Recognition and Reclassification of Biological Assets

The plant mutation report shows:

a. TBM 2022 initial balance: Rp 1,059,001,639,767.
b. Development & capitalization: Rp 157,900,101,712.
c. Reclassification to TM: Rp 322,848,729,653.

Reclassification occurs when the plant meets the productive criteria. This is in accordance with PSAK 16, but has not yet adopted the fair value measurement of PSAK 69.

Plant Asset Measurement

PT Pradiksi Gunatama:

a. Measuring TBM and TM based on historical costs ,
b. Performing depreciation on TM,
c. Does not measure the fair value of biological assets as required by PSAK 69.

Thus, the financial statements reflect the cost approach, not the fair market value approach.

Presentation and Disclosure

Plant assets are presented as non-current assets. Company disclosures include:

a. Development costs.
b. Accumulated depreciation.
c. Loan capitalization, but has not disclosed changes in fair value, valuation methods, and market assumptions in accordance with psak 69.

Comparative Analysis of PSAK 16 vs PSAK 69

The most significant differences:

a. Fair value measurement (PSAK 69) has the potential to change total assets and profit or loss.
b. Harvest yields are recognized at fair value in PSAK 69, so that harvest profits increase significantly.
c. PSAK 69 better reflects biological transformation and market volatility.

This finding shows that PT Pradiksi Gunatama is still focused on the cost approach according to PSAK 16, so that the information presented does not reflect the actual economic condition of biological assets.

CONCLUSIONS AND RECOMMENDATIONS

From the results of research and discussion regarding the application of biological asset accounting based on PSAK 16 and PSAK 69 at PT. Pradiksi Gunatama. This study aims to determine the treatment related to the recognition, measurement and disclosure of biological assets at PT. Pradiksi Gunatama, the author draws the following conclusions:

1. The application of biological assets at PT. Pradiksi Gunatama is that PT. Pradiksi Gunatama groups productive plants into non-current asset groups in the plantation crop account. Where there are two groupings of plant assets, namely immature plants and productive plants. Recognition and measurement of plant assets at PT. Pradiksi Gunatama are measured using acquisition costs. Immature plants are stated at acquisition cost which includes the costs of land preparation, planting, fertilizing and maintenance until the plant is ready to be harvested. Mature plants are measured at acquisition cost after deducting accumulated depreciation and accumulated impairment losses. The depreciation method used by PT. Pradiksi Gunatama uses the straight-line method with a provision of 4% for oil palm and the disclosure of biological assets at PT. Pradiksi Gunatama is the acquisition cost of oil palm plants minus accumulated depreciation so that the book value of plant assets at the end of the financial year can be seen.

From the science of LP , we discuss the application of science and technology in PT . Gunatama Prediction. There is also the suitability of the biologi assets of PT . Gunatama predictions with PSAK 16 and PSAK 69 as follows :

a. Biological assets based on PSAK 16 are recognized and measured using acquisition costs. PSAK 16 depreciates productive plants that have been able to contribute benefits to the company in the form of the ability to produce an agricultural product. Regarding the recognition of inventories, PSAK 16 only regulates fixed assets and does not specifically regulate how inventories are recognized. So, in general, the application of biological assets at PT. Pradiksi Gunatama is in accordance with PSAK16, the difference is the recognition of inventories that are not recognized in PSAK16.
b. Biological assets based on PSAK 69 are recognized and measured at fair value. PSAK 69 means the company does not depreciate its biological assets so that it will have an impact on increasing the company's profit because there is no depreciation expense. PSAK 69 recognizes inventory by crediting the inventory valuation gain account. Based on PSAK 69, there will be a profit or loss that arises when the initial recognition of biological assets at fair value less costs to sell biological assets is included in the profit and loss. The difference in the application of biological assets at PT. Pradiksi Gunatama with PSAK 69 is in the initial recognition and measurement of its biological assets. Where PT. Pradiksi Gunatama still uses acquisition costs in the recognition and measurement of its biological assets, but based on PSAK 69 biological assets are recommended to be recognized and measured using fair value, another difference is that PT. Pradiksi Gunatama recognizes depreciation in biological assets, namely in productive plants, while PSAK 69 only regulates agricultural product yields up to the harvest point so it does not recognize depreciation.

For companies, they must immediately overcome the difficulties in obtaining information regarding costs related to biological assets in the form of plantation crops so that the information presented is more reliable, relevant and so that the information presented is not misstated. PT. Pradiksi Gunatama must also pay attention to how to recognize costs from biological assets, by replacing the acquisition cost with fair value in accordance with PSAK 69 which regulates agricultural assets.

ADVANCED RESEARCH

For further research, it is hoped that we can gain a better understanding of financial reports based on PSAK 16 and PSAK 69 agriculture, especially in agricultural companies that have unique characteristics.

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