

## Biological Asset Valuation and its Impact on Corporate Profitability

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**Abstract:** Agricultural and plantation-based businesses rely heavily on biological assets in their financial reports. Because it affects reported profits and financial performance, the fair value accounting valuation of biological assets has gotten a lot of attention. Profitability, earnings quality, and financial information are all touched upon in this literature review on biological asset appraisal. This study builds on prior work that examined topics such as the appropriateness of financial information derived from fair value assessment, earnings management methods linked to biological asset valuation, and the relevance of biological assets' value under IFRS. According to the analysis, stated earnings and financial situation are very sensitive to changes in the value of biological assets. There are potential downsides to using fair value assessment, such as increased profits volatility and more room for executive discretion, despite the fact that it makes financial reporting more transparent and relevant. According to the research, stakeholders (such as investors and managers) should give serious thought to biological asset value when trying to make sense of financial statements since it is a key factor in determining financial performance.

**Keywords:** Biological Asset, Valuation, Agriculture, IFRS, Corporate Profitability

### 1. Introduction

The processing of financial data in the agricultural sector is incomplete without biological assets, which include things like livestock, crops, and forest resources. These assets are unique and subject to constant change. In light of this context, the credibility of the financial data obtained from these evaluations has started to attract the attention of both academics and accountants. According to International Accounting Standard (IAS) 41, there is a recurrent problem in the literature about the reliability of estimates that are derived from the application of fair value. Although a reliable estimate of the fair value of biological assets must be determined in accordance with the accounting standard, this value need not be recognized in advance. Because of this, I have doubts about the usefulness and accuracy of the following financial data. Financial statement users prioritize accurate and trustworthy values above the applicability of the fair value, which is particularly true in agricultural markets characterized by high levels of volatility and unpredictability.

When it comes to financial data, reliability is a major factor in how consumers perceive its quality. Recent studies have shown that the importance individuals place on reliable information affects their economic decisions. Furthermore, studies show that external verification, including sustainability audits, may help firms by making biological asset-related data more reliable. Accounting measurement is approached in this way to highlight the importance of both quantitative and qualitative aspects, since the former influence users' capacity to comprehend and depend on financial reports. Revenue forecasts and profitability for agricultural businesses depend on accurately valuing biological assets, which also impacts the reliability of financial data. Due to their status as the primary resource for agricultural and animal activities, these assets are crucial to the financial health of rural organizations and must be properly recorded in financial statements. An organization's ability to accurately evaluate the value of its biological assets influences several strategic decisions, such as crop planning, livestock rotation, technology investment, and climate risk management.

Accounting for biological assets at fair value is mandated by International Accounting Standard (IAS) 41) to effectively reflect changes in the economic worth of biological resources. The stated financial performance, however, is very susceptible to inaccuracy because of this regulatory obligation; this, in turn, may affect the company's perceived profitability and the ease with which it may get loans or investments. In order to prevent financial statements that are skewed or misleading due to the use of fair value, it is crucial to use an accurate and technically sound valuation. The relationship between these biological assets and the return on investment depends on a number of factors, including whether the investment is for short-term crops, long-term crops, or animal rearing, and on the particulars of the agricultural or livestock activity. Accounting management should be mindful of the fact that every business has its own productive environment if they want to provide an accurate picture of the assets' life cycle, inherent risks, and economic potential.

Any living being that can be biologically altered to provide monetary value in the future is considered a biological asset. Many biological assets must be valued at fair market value instead of their historical cost in order to comply with modern accounting requirements. Companies in the agricultural and plantation industries now report their assets and profitability using this new method of accounting. Gains or losses from revaluation are reflected in profit or loss, therefore the income statement is immediately impacted by the value of biological assets. Consequently, reported profits might change even in the absence of monetary transactions. Academics have looked at the possibility that these valuation techniques impact profitability metrics and enhance the value of financial data. While prior research has shown that biological asset valuation makes accounting data more relevant, it also raises the prospect of earnings management and increases profits volatility. Consequently, there has been a significant uptick in study on the connection between the pricing of biological assets and financial success.

## 2. Literature Review

**Domo and Utami (2022)** study set out to analyze how the Indonesian agriculture industry's disclosure quality and the fair value of biological assets affected firm valuation. For the years 2019 and 2020, they looked at data from 13 out of the 19 agricultural firms traded on the Indonesian stock market. As part of the analysis, ROA and DAR were included as control variables. Based on the data, it seems that the quality of disclosure index for biological assets has not been successful in raising the value of the business. At the same time, there is a positive correlation between the fair value of biological assets and company value. The financial accounts of companies that value their biological assets using the fair value technique seem good.

**Alfarisyi, Naupal & Diantimala, Yossi & Yahya, Rizal & Saleh, Muhammad. (2022)** The purpose of this research is to find out whether the fair valuation and disclosure of a company's biological assets affect the value of that company. Between 2018 and 2020, 51 firm-year observations were used to sample agricultural firms listed on the Indonesia Stock Exchange. Based on multivariate analysis, this research concluded that the disclosure level of biological assets does affect company value, and that the fair value of biological assets has a positive and statistically significant influence on firm value. Profitability, leverage, and growth are the control factors that have a substantial impact on business value. Focusing on the effects of applying Indonesian Statement of Financial Standard No. 69, which regulates the fair value of assets and disclosure of biological assets, on company value, this study offers a fresh viewpoint and empirical data in the research issue.

**Rajeev and Sindhuja (2021)** managers' claims of biological assets in financial reports is a problem with effective decision-making processes. The study's authors state that biological assets have a positive effect on company value. A company's value rises in proportion to the breadth of its disclosure of its biological assets.

**Osiorenoya (2018)**, For Nigerian publicly traded enterprises; Osiorenoya examined how financial reporting affected financial performance. Financial reporting quality, return on equity (ROE), return on assets (ROA), and profit after tax were the financial performance and reporting factors in the research. The research found a strong

correlation between financial reporting quality and profit after taxes, and that financial reporting quality positively affects return on assets. Therefore, it is imperative that business leaders make sure their enterprises follow industry standards for financial reporting, as advocated for by the author.

**Argilés et al. (2018)** conduct an empirical research to determine the accounting information's importance in determining the fair value of biological assets. Companies having biological assets are selected from a global sample. Biological assets impact uncertainty when estimated at historical cost (HC), according to our findings. As the share of biological assets in total assets grows the predictive power of accounting data for future cash flows decreases. This negative impact of biological assets is turned into a positive one when they are valued at fair value (FV). As the proportion of biological assets to total assets rises, we see that when evaluated at FV, the accuracy of predicting future cash flows improves. Various measurements of forecast accuracy and the gradual development of accounting standards (regardless of FV) are not able to undermine this data. Bearer plants have less strong evidence.

### 3. Methodology

This research relies totally on secondary sources for its theoretical and descriptive components. Academic sources, journals, and research papers on the topics of biological asset assessment and financial performance provided the data used in this analysis. To learn how biological asset valuation affects financial reporting, earnings quality, and profitability, the study examines and evaluates previous research. Conclusions have been drawn by comparing and interpreting relevant results from prior research.

### 4. Results & Discussion

#### 4.1 Value Relevance of Biological Assets under International Financial Reporting Standards (IFRS)

Fair value adds extra information to financial accounts, causes outcomes to be volatile, and encourages some management discretion. Distinguishing between recognition and disclosure is crucial for analyzing how investors perceive this supplementary information. The distinction between the two acts of acknowledging and reporting a sum is important because they both serve to guarantee that information included in financial statements is decision-useful. According to Choudhary (2011), there is a difference between the criteria for recognized values—those established by management and updated by auditors—and revealed values. As a result, investors place a higher value on recognized values than declared ones. When deciding on matters of recognition and disclosure, this is especially helpful for those who establish standards. It is true that "standard-setters prioritize financial recognition over disclosure; the empirical evidence on the value relevance of note disclosures is mixed."

Fair value is a hotly debated topic in academia and the financial markets, but the standards of IAS 41 bring it to the agricultural sector as well. Specifically, "IAS 41 is a 'true' fair value standard: the firm's balance sheet reports the fair value of biological assets and any change in the fair value of the biological assets over the reporting period is recognized in the periodic income as an unrealized gain or loss." The adoption of fair value for all biological assets in agriculture has actually caused standard setters to break with past accounting standards. There is some evidence that agents in the agriculture industry make more accurate decisions when using fair value. But "does not diminish the fact that the process will still handle a subjective valuation model"—the certainty of standardization provided by IAS 41 in this particular case. One major issue with using fair value is that not all biological assets have active markets.

- **Regulatory framework of IAS 41**

Annual periods that began on or after January 1, 2003 were the first to be subject to IAS 41, which was first released in December 2000. This standard lays forth the rules for how assets in the biological transformation phase should be recorded and how agricultural products should be first measured at harvest. The basic guideline

according to IAS 41 is that biological assets must be valued at fair value less selling expenses both at the time of first recognition and at later reporting dates. Also, there is just one situation when fair value assessment may be used, and that is for initial recognition: where there isn't a market-determined price and the business can't guarantee a credible estimate of fair value [IAS 41.30]. Recognizing biological assets at cost minus depreciation and impairment, the corporation employs the unreliability clause of fair value under such scenarios. It is also important to note that when measuring agricultural product during harvest, the fair value should be subtracted from the selling expenses. Bearer biological assets and consumable biological assets are the two main categories of biological assets according to this standard. This categorization causes fair value assessment to differ in relation to the standard's consequences for market valuation. Bearer biological assets, in contrast to agricultural goods, are self-regenerating. Examples of this are cattle that produce milk, grape vines, fruit trees, and trees that may be collected for fuel while still in their natural state [IAS 41.44]. Harvested as agricultural products or marketed as biological assets are consumable assets, on the other hand. This includes animals raised for meat, fish kept in farms, crops like wheat and maize, and trees produced for timber [IAS 41.44]. The fair worth of this kind of biological asset may be readily ascertained since there is usually a market for it.

The International Accounting Standards Board (IASB) has recently updated this standard as it pertains to plants that carry water. Living plants that are used in the production or supply of agricultural products, are intended to bear fruit for several periods, and are not likely to be sold as agricultural produce (apart from occasional trash sales) are considered bearer plants in this context. To account for bearer plants (before they reach maturity), their measurement at cumulative cost, and self-constructed pieces of property, plants, and equipment, these changes are valid for yearly periods starting on or after 1 January 2016. Also, under IAS 16, organizations may choose between the cost model and the revaluation model for mature bearer plants. According to IAS 41, the produce that grows on bearer plants shall be recorded at its fair value.

#### **4.2 Earnings Management and Valuation of Biological Assets**

For users to make informed judgments about resource allocation, accounting must supply consistent and trustworthy data for identifying and assessing organizations' actual economic and financial performance. With the adoption of international accounting standards by Brazilian enterprises, this information system should be strengthened. Stakeholders, who play a crucial role in the continuation of firms, will provide more valuable data. Accounting, according to Paulo, also aims to lessen information asymmetry, lessen conflicts of interest, and help the capital market allocate resources more effectively. With the present situation of convergence to international standards—standards that are based on principles and necessitate greater judgment from individuals responsible for preparing the accounting statements—accounting rules do permit managers a certain amount of discretion in selecting accounting practices and criteria. Both the French study by Cormier et al. (2009) and the Swedish study by Hellman (2011) show that the adoption of IFRS is discretionary. Here, managers have some leeway to manipulate the profits figures that are reported in order to make it seem like something other than what it really is: the firm's reality. Several decisions are often made with the goal of distorting the perception of the actual performance, leading users astray, according to research conducted in Brazil and elsewhere. Consequently, the company's performance and the accuracy and completeness of the financial statements are affected by the decisions made by management on the "what," "how," and "when" of information disclosure.

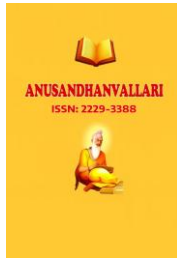
#### **5. Conclusion**

We can conclude that the value of biological assets significantly impacts the financial performance that corporations report. By taking into account the status of the market and the rate of biological change, fair value evaluation makes financial statements more relevant and transparent. Earnings and profitability ratios could change, nevertheless, due to the inclusion of revaluation gains and losses in profit or loss. While prior research has shown that investors find biological asset information helpful for gauging business success, questions about

valuation subjectivity and earnings management opportunities persist. Moreover, according to the research, fair value accounting raises issues with consistency and trustworthiness while making financial statements more decision-useful. Users of financial statements may get a more complete picture of a company's performance by interpreting profitability metrics in conjunction with disclosure information, valuation assumptions, and the numbers themselves.

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