



## Evaluation of biological assets and agricultural Disclosures required by companies in Philippines

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### ABSTRACT

The standard applicable to the agriculture sector is IAS 41 which is PAS 41 in the Philippines. The standard was issued by IASC to address the unique nature of agriculture sector, the biological transformation of biological assets, not addressed by historical cost. Thus, the standard prescribes the use of fair value for biological assets. But moving away from the traditional historical cost made the standard controversial which has implications on its widespread application.

The study was conducted to determine whether cost is still being preferred by agricultural companies in Davao Region over fair value or fair value is now being widely applied or companies value some assets at fair value and some at historical cost. Furthermore, the study aimed to determine the extent of compliance with IAS 41 mandatory disclosures by the agricultural companies. The factors that influence both are also determined.

The study is descriptive and correlational and employed descriptive statistics, multiple regression analysis and multinomial logistic regression.

The results of the study provided valuable insights on the valuation methods of biological assets being used by agricultural companies. Despite the controversies associated with fair valuation and the confirmed challenges face by both accountants and auditors with respect to fair valuation, the banana and coconut plantations have proven that fair valuation method is widely applied which is in contrary for piggery, poultry and other livestock sectors that still prefer the historical cost.

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### Keywords:

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## **1. Introduction**

Kakalta1988The Davao Regional Development Plan of 2011 to 2016 recognizes the role of agriculture sector in the region's economic development and sustainable growth. One of the region's goals for the agriculture sector is to increase its investments through providing efficient credit facilitating services to improve credit supply through designing incentives for investors and lenders who take higher risks in supplying agricultural investments. However, these incentives of the local government units would be useless if the potential investors and lenders themselves are not attracted or worst do not trust our local agricultural companies.

Investors and lenders make economic decisions based on the financial performance, financial position and cash flows reflected on the financial statements prepared by companies. There are certain accounting rules, procedures, practices and standards known as generally accepted accounting principles (GAAP) that must be followed in the preparation and presentation of financial statements in order to achieve its objective of providing useful information to various decision makers. In the past, accounting for agricultural sector did not receive much attention from accounting researchers, practitioners, and standard setters. Consequently, accounting principles did not respond well to the particular characteristics of agricultural business and information needs of farmers and their stakeholders until IAS 41(Argiles & Slof, 2001). However, IAS 41 has become controversial since it was issued because of its departure from the traditional historical cost though historical cost is permitted in cases where fair values cannot be determined reliably. The standard allows agricultural companies to use either cost or fair value. Thus, the study was conducted to determine the companies' choice and the factors that influence their choices. The study of Elad and Herbohn (2011) on the compliance with IAS 41 disclosure requirements showed that there are systematic differences in the disclosure practices of agricultural entities in Australia, France and the UK that have adopted IAS 41. Furthermore, the study showed that there was an extremely poor level of compliance with the mandatory disclosure requirements for entities that adopt historical cost under IAS 41 where fair values cannot be determined reliably. If such is the scenario for rich economies, then it is interesting to know if the same is the case for less developed economies like in the Philippines. The study in Australia, France and the UK is descriptive in nature. Studying about the relationship of compliance score with company characteristics would be an added contribution to the body of knowledge. The compliance and noncompliance of disclosure requirements have implications on the importance of IAS 41 disclosures. Banana, coconut, hog and poultry sectors are the focus of the study because these are the top four agricultural commodities of Davao Region as of 2011 according to the Bureau of Agricultural Statistics.

## **2. Literature Review**

This study is anchored on the principle that preparation of financial statements should conform to what is generally accepted to ensure its integrity and usefulness to various users of financial information. For agricultural companies, IAS 41 should be followed. IAS 41 sets out the

accounting for agricultural activity- the transformation of biological assets (living plant and animals) into agricultural produce (harvested product of the entity's biological assets). The standard generally requires biological assets to be measured at fair value less costs to sell. IAS 41 presumes that fair value can be reliably measured for most biological assets. However, that presumption can be rebutted for a biological asset that, at the time it is initially recognized in financial statements, does not have a quoted market price in an active market and for which other methods of reasonably estimating fair value are determined to be clearly inappropriate or unworkable. In such a case, the asset is measured at cost less accumulated depreciation and impairment losses (IAS 41.30). Thus, IAS 41 permits agricultural companies to use historical cost instead of fair value.

On the compliance with IAS 41 disclosure requirements by agricultural companies, it is anchored on the role of disclosure in enhancing the qualitative characteristics of financial information as well as its role to corporate governance. According to Richard B. Smith's presentation (US SEC Commission), "The corporate governance framework should ensure timely and accurate disclosures on all material matters, including financial situation, performance, ownership and governance of the company." He further presented that a strong transparent disclosure regime is pivotal for market-based monitoring of companies and central to shareholder ability to exercise rights. It can be a powerful tool for influencing companies and protecting investors. It can help to attract capital and maintain confidence in the markets. Why disclosure is important in terms of concrete advantages to the company? Smith presented that reliable and timely information increases confidence among decision-makers within the company and enables them to make good business decision directly affecting growth and profitability. Information also affects decision makers outside the entity-shareholders, investors and lenders, who must decide where and with what risk to place their money.

Studies on the level of compliance with applicable IFRS mandated disclosures showed the variations in the level of compliance. In Kuwait the results of the study showed the average level of compliance with IFRS mandatory disclosures for KSE listed firms, indicating that firms did not fully comply with all requirements (Alfaraih, 2009). Disclosure aspect of consolidation in Hungarian listed companies is still considered a problematic field (Fekete, Matis and Lukacs, 2008). In French firms, disclosure pattern is associated with provision intensity, size, leverage and market expectation, indicating that firms with highest score for disclosures have the greatest provision intensity, firm size, leverage and market expectation (Chavent, Ding, Fu, Stolowy & Wang, 2006). In a study conducted in eight Asian countries namely Australia, China, Hongkong, Philippines (which adopted IFRS), Japan, India, Singapore and Malaysia (which did not) showed that disclosure levels not only differ across countries but also on average improve over time.

In the case of agricultural companies in compliance with IAS 41 disclosure requirements, a study was conducted in Australia, France and the UK (Elad & Herbohn, 2011). The study showed that compliance with the mandatory disclosures under IAS 41 was significantly higher in Australia than in France and the UK. The study further showed that nearly half of the French companies

disclosed less than 40 percent of the required items. There was an extremely poor level of compliance with the mandatory disclosure requirements for entities that adopt historical cost where fair values cannot be determined reliably. Most of the said entities are domiciled in France.

The independent variables identified as factors that influence both the two dependent variables, measurement choice of biological asset and compliance with IAS 41 disclosure requirements are based on the previous studies conducted by Alfaraih (2009), Alsaeed (2006) and Christensen and Nikolav (2008). These variables are firm's age, firm's size and firm's leverage.

Auditors play a very important role in ensuring that financial statements are prepared in accordance with accounting standards. As cited by Joyno (2003), the opinion of the external auditor on the fairness of the financial statements is given high regard by cattle raising companies. Their opinion on what constitute generally accepted accounting practices are considered by companies. The study showed that the auditor's suggestions and recommendations influence extensively to the accounting practices of companies. Thus auditor's opinion on the perceived importance of IAS 41 mandatory disclosures might have an influence on the compliance by agricultural companies. In relation to the measurement choice, auditors' opinion on the merits of fair valuation matters.

Elad and Herbohn (2011) reported that the general feeling on the part of accountants and auditors is that the requirement to value biological asset at fair value is unduly burdensome; hence the continued use of historical cost and a variety of proxies for fair value.

### **3. Methodology**

The study is descriptive and correlational. It focused on describing the valuation method used by agricultural companies in Davao Region for biological assets as well as the extent of the companies' compliance with mandatory IAS 41 disclosures. Furthermore, the study described the challenges face by accountants and auditors in valuing biological assets at fair value and their perceived importance of mandatory IAS 41 disclosures. The factors that influence the choice of companies in valuing biological assets were identified. The study also investigated the factors that influence the compliance with IAS 41 mandatory disclosures.

There were 240 agricultural companies initially considered in the study. However, only 45 companies have financial statements with biological assets. There were 45 companies included in determining the profile of agricultural companies, method of valuation of biological assets, and extent of compliance with mandatory IAS 41 disclosures. There are 25 banana plantations, one coconut plantation, and 19 piggery, poultry and other livestock companies. However, only 36 companies that have complete responses from company auditors and accountants were considered in determining the factors that influence the valuation method of biological assets and the factors that influence the extent of compliance with mandatory IAS 41 disclosures.

The study used primary and secondary sources of data. The primary data collection involved the gathering of data from the accountants and auditors of agricultural companies on the challenges face with respect to fair valuation of biological assets and their perceived importance of mandatory IAS 41 disclosures through the use of a survey questionnaire. The secondary data

involved gathering of 2011 or 2010 or 2009 audited financial statements of the companies to determine the valuation method used for biological assets, age, size and leverage. The financial statements are examined and analyzed to determine the compliance with mandatory IAS 41 disclosures. To determine the factors that influence the valuation choice of companies for biological assets, multinomial logistic regression was applied. In determining the compliance with mandatory IAS 41 disclosures, the study made use of disclosure index proposed by Buzby and further developed by Cooke. This index compares the actual disclosure with total possible disclosure based on the provisions of IAS 41. To determine whether the extent of compliance differs between Group 1 (the banana and coconut plantations) and Group 2 (the hog, poultry and other livestock companies) t-test was employed. Furthermore, the study employed multiple regression in analyzing the data to determine the factors that influence the compliance.

To describe the profile of companies in terms of age, size and leverage, the study made use of descriptive statistics. Furthermore, the same descriptive statistics are used to describe the challenges faced by company accountants and auditors with respect to fair valuation for biological assets and their perceived importance of mandatory IAS 41 disclosures. To test the difference between the auditors and accountants' perception, t-test was employed.

The study examined two models. The first model deals on the factors that influence the valuation of biological assets. The independent variables are firm's age, firm's size, firm's leverage, fair value measurement of biological assets on the company accountant's perspective and fair value measurement of biological assets on the company auditor's perspective while the dependent variable is valuation of biological assets by agricultural companies. The second model deals on factors that influence the companies' compliance with mandatory IAS 41 disclosures. The independent variables are firm's age, firm's size, firm's leverage, importance of IAS 41 disclosure on the company accountant's perspective and importance of IAS 41 disclosure on the company auditor's perspective.

#### **4. Finding**

The results of the study revealed that the age of agricultural companies under banana, coconut piggery, poultry and other livestock categories ranges from one year to 61 years of operations. The mean age for the banana and coconut group is 21 years while 28 years for the piggery, poultry and other livestock group. Majority of the companies are considered to be small and medium enterprises. For the leverage, it is observed that eight companies have negative leverage while the mean leverage for banana and coconut group and piggery, poultry and other livestock group are 0.75924 and 5.2319, respectively. For the valuation of biological assets, it is observed that fair valuation is preferred at 47% over historical cost at 33%. Some companies also apply a combination of fair valuation and historical cost depending on the type of biological asset involved.

For the auditors and accountants' perspective with respect to fair valuation of biological assets, both groups agree that it is a challenge. Furthermore, the test in difference in means proved that there is no significant difference between the auditors' perspective and accountants' perspective with respect to fair valuation of biological assets.

For the factors that influence the valuation choice, only size and the perceived importance of IAS 41 mandatory disclosures by auditors are considered significant. These factors are significant in distinguishing companies that adopt cost and companies that adopt combination of fair valuation and historical cost but not in distinguishing companies that adopt fair valuation and companies that adopt combination.

For the extent in compliance with mandatory IAS 41 disclosures, the banana and coconut group have high compliance in contrary to the piggery, poultry and other livestock group which have low compliance. The test in difference in means proved that the mean compliance score of banana and coconut group and the mean compliance score of the piggery, poultry and other livestock group are significantly different.

For the importance of mandatory IAS 41 Disclosures for companies that adopt fair value, both accountants and auditors believe that they are important. The t test proved that the two groups' perceptions are not statistically different from each other. However, their perception on the importance of the mandatory IAS 41 disclosures for companies that adopt historical cost differs. The auditors believe that the disclosure requirements are extremely important while accountants believe that they are very important. The t test proved that their perceptions are significantly different from each other.

For the factors that influence the compliance with IAS 41 mandatory disclosures by agricultural companies, only the importance of IAS 41 disclosure on the auditor's perspective is proven to be statistically significant.

## **5. Discussion & Conclusion**

The results of the study provided insights on the valuation methods of biological assets being used by agricultural companies particularly in banana, coconut, piggery, poultry and other livestock sectors. Despite the controversies associated with fair valuation and the confirmed challenges face by both company auditors and accountants with respect to fair valuation of biological assets, the banana and coconut plantations have proven that fair valuation method is already widely applied in the Davao region. This is in contrary to the piggery, poultry and other livestock companies that still prefer the historical cost. The study has proven that a number of companies use a combination of historical cost and fair valuation for their biological assets. Moreover, the study has proven that the valuation choice of agricultural companies is significantly associated with firm's size and with company auditor's perspective with respect to fair value measurement of biological asset.

The results of the study provided important information on the importance of mandatory IAS 41 disclosures for companies that adopt fair valuation and historical cost as perceived by company auditors and accountants and how companies scored in terms of compliance. Despite the auditors' and accountants' recognition on the importance of the disclosure requirements, the study has proven that companies have varied compliance scores. Companies in the banana and coconut sectors have a mean compliance score of high, but companies from the piggery, poultry and other livestock sectors have a mean compliance score of low. Moreover, the study has shown that among the five variables considered as factors that influence the extent in compliance,

only the perceived importance of mandatory IAS 41 disclosures by company auditor is significant. This confirms the important role of company auditors in the preparation of financial statements.

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