The Extent of Compliance with International Accounting Standard (IAS) 41: The Case of Selected Agri-tourism Sites in Bohol, Philippines

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Abstract

International Accounting Standard (IAS) 41 sets out the accounting provisions on the recognition, measurement, and required disclosures of biological assets (living plants and animals) in the financial statements. Adhering to the said standard makes the businesses’ financial statements fairly stated. Thus, this study aimed to determine the extent of compliance with IAS 41 of the selected agri-tourism sites in Bohol. The study used a descriptive research design. Primary data was obtained using a researcher-made survey questionnaire and through personal interview. Three agri-tourism sites participated in the study. The accountant or equivalent was interviewed for each site. Findings revealed that the compliance level of selected agri-tourism sites in Bohol with IAS 41 is high in terms of recognition of gains and losses in the financial statements; low in the recognition of biological assets in the financial statements, and disclosure requirements; and non-compliant in the measurement of biological assets, and recognition of government grants in the financial statements. The reason for not complying is that they are not knowledgeable and not aware of the standard. It is recommended that the respondents will attend training and workshops on how to apply IAS 41 to improve the level of compliance with the provisions of IAS 41.

Keywords: IAS 41, Compliance, Agri-tourism Sites, Biological Assets, Agriculture Accounting

Introduction

Bohol, a province in the Philippines, is blessed with lands suitable for tourism and agriculture. Thus, tourism and agriculture are considered as the significant sources of revenue of the province. With that, many entrepreneurs regarded such as an opportunity and invested more capital to venture to agriculture and tourism. As a result, agri-tourism businesses have emerged in the province; they used agriculture as a means of providing tourism. Hilchey (1993) defined agri-tourism as any business undertaking managed by a farmer to introduce the products and services of the farm to the public and the visitors for their enjoyment and education and to earn extra income from those activities. The idea of agri-tourism, according to Bohol Tourism Office (BTO), plays a significant role in the Bohol Development Plan, as Bohol was chosen by the region to be the agri-tourism hub in the Central Visayas Region. With this, in the coming years, agri-tourism businesses are expected to sprout in the province.

Agri-tourism businesses involve agricultural activities in the conduct of their day to day operations. Therefore, it cannot be denied that these businesses will also comply with regulatory requirements and one of which is the compliance to financial accounting and reporting by following the Generally Accepted Accounting Principles (GAAP) and Philippine Financial Reporting Standards (PFRS). Thus, International Accounting Standard (IAS) 41 was crafted to cater to the need for the proper accounting treatment of agricultural activities. The aim of the standard is to handle accounting issues related to agriculture accounting (Dékán & Kiss 2015). The standard was first introduced internationally in the year 2001. However, Argiles & Slof (2010) argued that in the agricultural sector there is a low level of accounting and bookkeeping practices. Sharma (2012) added that, in agriculture, proper financial accounting is not maintained, and records are incomplete. In recent years, private companies, including agri-tourism businesses, over 100 countries around the world are required to use International Financial Reporting Standards (IFRS) (Kaya and Koch, 2014).

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As a result, the investigation about the IAS adoption is primary research subjects in the area of accounting in both developed and developing countries (Uyar, Kılıç, & Ataman Gökçen, 2016). However, Wen-hsin Hsu, Liu, Sami, & Wan (2018) noted that the proper treatment of agricultural activities is given less focus by accounting researchers notwithstanding the contribution of the industry to the global economic growth. Therefore, this gap should be addressed because firms tend to have better growth opportunities if they use IFRS (Bassemir, 2017). Moreover, noncompliance with these standards and requirements would lead to misstatements and irregularities of the financial reporting, and irrelevant information will be generated to the stakeholders which lead to social conflict.

Given the lack of research about IAS 41 compliance, the main thrust of this research study is to determine the extent of compliance with IAS 41 of the selected agri-tourism sites in Bohol. Further, this study maps out the reason/s of not complying the provisions of IAS 41.

This research adds to the body of knowledge in numerous ways. First, given the dearth of studies about IAS 41 compliance in the Philippines, this research adds to the literature about the topic. Second, the study contributes to the literature of the emerging industry in Bohol which is agri-tourism. Lastly, this study spreads the awareness of the provisions of IAS 41 to local businesses.

Theoretical Framework

The provisions of IAS 41 are clearly discussed in IAS PLUS. Accordingly, International Accounting Standard (IAS) 41 Agriculture sets out the accounting treatment for agricultural activity – the transformation of biological assets (living plants and animals) into agricultural produce (harvested product of the entity's biological assets).

As to compliance, there were few studies conducted, and it showed that there was low compliance to the said standard. In other countries, the study of Elad and Herbohn (2011) showed that there were systematic differences in the disclosure practices of agricultural entities who have implemented IAS 41 in UK, France, and Australia. Moreover, the study of Chalomklang (2012) revealed that Small and Medium Enterprises (SMEs) in Thailand encountered financial reporting problems because no training was given about the application of IAS 41.

In the Philippines, particularly in the poultry and livestock corporations, IAS 41 was not yet widely adopted as evidenced by the results of the study of Chavez, Mendoza, and Piguing (2011). Thus, there is a low compliance level to the provisions of IAS 41. Also, the study of Kakalta (2014) has proven that there was low compliance of the agricultural companies from the piggery, poultry, and other livestock sectors, but the level of compliance of the banana and coconut sectors was high. Furthermore, the results of the study of Miranda, Mojica, Madamba, and Zapata (2017) have shown that cattle farmers in the Philippines were not aware of the provisions of IAS 41, including preparation and presentation of financial statements. Because of that, there was a low level of compliance with IAS 41. However, due to the size and influence of auditors, commercial farms’ compliance with IAS 41 was very high. Other cattle farms that are SEC-registered business complied the provisions of IAS 41 except the recognition and measurement requirements of the standard; thus, their compliance level is moderate.

The following are the provisions of IAS 41 as adopted from IAS Plus:

Scope of IAS 41

IAS 41 applies to transactions related to agricultural activity – biological assets, agricultural produce, and government grants related to these biological assets. The standard excludes the land and intangible assets used in the agricultural activity, bearer plants, and government grants related to bearer plants.

Initial recognition of biological assets or agricultural produce

An entity shall recognize a biological asset or agriculture produce only when the entity controls the asset as a result of past events; it is probable that future economic benefits will flow to the entity, and the fair value or cost of the asset can be measured reliably [IAS 41.10].

Measurement of biological assets or agricultural produce

Biological assets within the scope of IAS 41 are measured on initial recognition and at subsequent reporting dates at fair value less estimated costs to sell, unless fair value cannot be reliably measured [IAS 41.12]. Moreover, agricultural produce is measured at fair value less estimated costs to sell at the point of harvest [IAS 41.13].
Gains or losses related to biological assets

The gain on initial recognition of biological assets at fair value less costs to sell, and changes in fair value less costs to sell of biological assets during a period, are included in profit or loss [IAS 41.26]. A gain on initial recognition (e.g., as a result of harvesting) of agricultural produce at fair value less costs to sell are included in profit or loss for the period in which it arises [IAS 41.28]. All costs related to biological assets that are measured at fair value are recognized as expenses when incurred, other than costs to purchase biological assets.

Government grants

Unconditional government grants received in respect to biological assets measured at fair value less costs to sell are recognized in profit or loss when the grant becomes receivable [IAS 41.34]. If such a grant is conditional (including where the grant requires an entity not to engage in certain agricultural activity), the entity recognizes the grant in profit or loss only when the conditions have been met [IAS 41.35]. Disclosures relating to government grants include the nature and extent of grants, unfulfilled conditions, and significant decreases expected in the level of grants [IAS 41.57].

Disclosure

Disclosure requirements in IAS 41 include but not limited to:

- aggregate gain or loss from the initial recognition of biological assets and agricultural produce and the change in fair value less costs to sell during the period [IAS 41.40];
- description of an entity's biological assets, by broad group [IAS 41.41];
- description of the nature of an entity's activities with each group of biological assets and non-financial measures or estimates of physical quantities of output during the period and assets on hand at the end of the period [IAS 41.46];
- information about biological assets whose title is restricted or that are pledged as security [IAS 41.49];
- commitments for the development or acquisition of biological assets [IAS 41.49]
- financial risk management strategies [IAS 41.49];
- reconciliation of changes in the carrying amount of biological assets, showing separately changes in value, purchases, sales, harvesting, business combinations, and foreign exchange differences [IAS 41.50]; and
- Disclosure of a quantified description of each group of biological assets, distinguishing between consumable and bearer assets or between mature and immature assets, is encouraged but not required [IAS 41.43].

Research Method

The selection of the respondent was made using the following criteria: (1) the sites must be more than five (5) years in operation; and (2) most of their activities are on the management of biological assets as they transformed into agricultural produce. As a result, there were three (3) agri-tourism sites who qualified to participate in the study.

Permission from the owner/manager was obtained first before the conduct of the study. From each agri-tourism site, the accountant or equivalent was asked to answer the questionnaire and was interviewed after that.

Primary data about the profile, compliance level, and reasons for not complying were gathered through the use of a survey questionnaire and personal interview. The questionnaire contained items from the compliance checklist adopted from IAS Plus. The questionnaire items were validated through a pilot survey and re-checking of the items by Certified Public Accountants (CPAs) before the survey was conducted. Document analyses of secondary data, monthly reports, were also done to further know the compliance level with regards to the provisions of IAS 41. In determining the level of compliance, the following method is used: Very high (if all of the sites complied), high (if two of the sites complied), low (if only one is compliant), and non-compliant (if none of the sites complied).

Data Analysis and Discussion

Table 1 displays the profile of the selected agri-tourism sites. Two agri-tourism sites are owned and managed by the government. These government-owned sites have accountants and accounting staffs who record their agricultural activity. On the one hand, site 1 started its operation in 1920 and had the most agricultural produce and biological assets. Some of these are imported from other countries like New Zealand. On the other hand, site 2 has existed for about 24 years already. This site produced milk from the carabao (buffalo) and processed it into different kinds of products (e.g., chocobao, candy) which will be made available for sale to visitors and consumers.
The biological assets of both sites 1 and 2 are bearer and consumable. According to IAS 41, consumable biological assets are those that are harvested as agricultural produce or sold as biological assets while bearer biological assets are those that are not agricultural produce but are self-generating assets. The consumable biological assets of sites 1 and 2 are their agricultural produce such as milk from the carabao (buffalo), calves, chicken among others. The bearer biological assets of sites 1 and 2 are the cows that generate milk, and other biological assets that are capable of bearing offspring such as cattle, carabao (buffalo), horse, ducks, sheep, goat, and pig.

Site 3 is a people’s association that existed for about 7 years. The only agricultural activity of this a gri-tourism site is oysterfarming. The farming is done individually by the members; thus, the association will only get a share of the total proceeds from the sale of each member’s oyster. The oysters are cultured for about 6 to 7 months before it can be harvested and available for sale. With this span of time, they created a strategy that they should schedule their oyster planting in such a way that every day they can sell oysters to visitors and consumers. Since their farming is an individual as is, they do no hire an accountant to record the agricultural activity. Accordingly, they only record their sales on a notebook. Therefore, no proper recording was kept concerning their biological assets. By following IAS 41, site 3’s biological assets sets are classified as consumable biological assets for it will be sold directly upon harvest.

| Profile                          | Site 1                      | Site 2                      | Site 3                      |
|----------------------------------|----------------------------|----------------------------|----------------------------|
| Age of the firm                  | 96 years                   | 24 years                   | 7 years                    |
| Type of ownership                | Government-owned           | Government-owned           | People’s Association       |
| Presence of Accountant           | Yes                        | Yes                        | No                         |
| List of biological assets and    | Cattle, Horse, Carabao     | Carabao (Buffalo), Cow,    | Oyster                     |
| agricultural produce             | (buffalo), Chicken, Ducks, | Horse, and Milk            |                            |
|                                  | Sheep, Goat, and Pig       |                            |                            |

Table 1. Profile of the Agri-tourism Sites

| General Provisions of IAS 41 | Site 1 | Site 2 | Site 3 |
|------------------------------|--------|--------|--------|
| Recognition                  | X      | ✓      | X      |
| Measurement                  | X      | X      | X      |
| Gains and Losses             | ✓      | ✓      | X      |
| Government grants            | N/A    | N/A    | X      |
| Disclosures                  | X      | ✓      | X      |

Table 2. Summary of Compliance with IAS 41

Table 2 shows the compliance of selected agri-tourism sites with the provisions of IAS 41 namely, recognition of biological assets in the financial statements; measurement of biological assets in the financial statements; recognition of gains and losses in the financial statements; recognition of government grants related to biological assets; and required disclosures in the recognition, measurement, and presentation of biological assets in the financial statements.

As to recognition of biological assets in the financial statements, site 1 does not recognize biological assets account in their financial statements; instead, all their livestock were recorded in the inventory account on the initial recognition and at each balance sheet date. Site 2 recognizes biological assets initially and every reporting period in their financial statements starting 2016. Site 3 does not prepare financial statements; thus, their biological assets are not recognized. Therefore, based on the provisions of IAS 41 as to recognition of biological assets on the financial statements, sites 1 and 3 do not comply with IAS 41, and only site 2 does.

For the second provision, on the one hand, sites 1 and 2 have different ways of measuring their biological assets in their financial statements. On the other hand, Site 3 does not prepare financial statements, thus no measurement of biological assets in the financial statements.

Site 1 does not adopt biological assets in their financial statements because the livestock are recorded in the inventories account. Consequently, they are not compliant with IAS 41 regarding the measurement of biological assets in the financial statements. As to the measurement of their livestock, they used the book value of the biological assets. The management already determines the book value of each livestock. In determining the total value of the livestock, they will multiply the number of heads under each class of livestock to the book value of each livestock. If the livestock is purchased or imported, it is recorded based on the landed cost – purchase price plus other costs necessary in bringing the asset to its location, such as freight and insurance.
The result is consistent with the findings of the study of Miranda et al. (2017) that dairy farms recorded their purchased cattle using landed cost if it is imported. Site 2 records biological assets in their financial statements, as practiced, based on fair market value, cost, and book value. Fair market value is used in recording the newborn biological assets. The fair value changes as the age of the biological asset increases. Book value is used in recording the bearer biological assets. The management already determines the book value of each livestock; thus, this amount is directly multiplied by the number of biological assets to get the total value of the biological assets. The cost method is used in recording the milk upon harvest. Accordingly, they determined the total cost of maintaining the buffalo (carabao) that produces the milk, whatever is the accumulated cost that is the value charged to the milk. Based on the provisions of IAS 41 as to the measurement of biological assets in the financial statements, site 2 does not comply with IAS 41 because the measurement is not at fair value less estimated cost to sell at the point of harvest.

Site 3 does not comply with IAS 41 in terms of measurement of biological assets in the financial statements because they do not maintain in financial statements. Nevertheless, their biological assets are measured based on the quoted market price. The quoted price of their biological asset per unit of measure is PhP150.00 or approximately US$ 3.00.

With regard to the provision measurement of biological assets in the financial statements, only site 2 is compliant with IAS 41 while sites 1 and 3 are not compliant. Based on the data gathered, site 2 recognizes gain when there is a new born or when the book value increases due to changes in age. When there is death, the value of the said biological asset set is recognized as a loss in the financial statement. Site 1 is not compliant in this provision because they do not recognize biological assets in their financial statements. Site 3 does not comply with IAS 41 because no financial statement is prepared. Only the sale transactions related to biological assets are recorded in their notebook.

As to the recognition of government grants in the financial statements, the provision is only applicable to site 3 because sites 1 and 2 are government owned. The results show that site 3 is not compliant, though they have received grants from the government because they did not recognize it in their financial statements.

For the last provision, only site 2 is compliant to most of the required disclosures related to biological assets. Eventhough site 1 prepares monthly reports of their live stock pertaining to the description of each biological asset, such as name, gender, age, book value, quantities, date of purchase, and among others, still they do not comply because they do not recognize biological assets in their financial statements.

The low compliance of the selected agri-tourism sites with the provisions of IAS 41 is due to management’s level of knowledge and awareness about the standard. The management of sites 1 and 3 explained that they are not aware and knowledgeable of the standard that is why they are still using the old standard in accounting for biological assets. Site 3 further as one doubt that they do not know how to prepare the financial statements. On the case of site 2, they have adopted the standards since 2016; however, they still faced the difficulty of determining the proper measurement of the biological assets, especially the fair value less cost to sell.

**Conclusion, Implication, Suggestion, and Limitations**

This study investigates the compliance level with IAS 41 of the selected agri-tourism sites in Bohol. Results show that the compliance level is high in terms of the recognition of gains and losses in the financial statements; low in recognition of biological assets in the financial statements, and disclosure requirements; and non-compliant in the measurement of biological assets, and recognition of government grants in the financial statements. Having no knowledge and being unaware of the standard were the top reasons for non-compliance.

Given the results, it is recommended that the management of these agri-tourism sites should attend training or seminars in order to broaden the knowledge and awareness about IAS 41. Through this, they can prepare complaint reports and be able to generate timely and relevant financial data to eliminate social conflict.

The study is limited only to the answers given by the accountant or equivalent of the three agri-tourism sites in Bohol; thus, the results do not represent the whole agri-tourism industry in the Philippines. Hence, it is recommended that another study is to be conducted in other provinces of the Philippines to arrive at a conclusion that will represent the whole country and the whole agri-tourism industry.
References

Argiles, J.M., Slof, E.J. (2010). New Opportunities for Farm Accounting. *Journal of European Accounting Review*, 10 (2), 361-383.

Bassemir, M. (2017). Why do private firms adopt IFRS? Accounting and Business Research, 48(3), 237–263. doi:10.1080/00014788.2017.1357459

Chalomklang, C. (2012). Impact and a Guideline for Accounting Practice in Accordance with the Agricultural Accounting Standard of Agriculture Business of Thailand. *International Journal of Arts and Sciences*, 5 (1), 251-256.

Chavez, J.M., Mendoza, M. G. J., Piguining, J. (2011). A Study on the Level of Compliance with PAS 41 Agriculture of Poultry and Livestock Corporations in the Philippines: Impact on Profitability. Unpublished Thesis, De La Salle University, Manila.

Dékán, I. O. M. T., & Kiss, Á. (2015). Measurement of Agricultural Activities According to the International Financial Reporting Standards. *Procedia Economics and Finance*, 32, 777–783. doi:10.1016/s2212-5671(15)01461-6

Elad, C., Herbohn, K. (2011). Implementing Fair Value Accounting in the Agriculture Sector. Published by: The Institute of Chartered Accountants of Scotland. Printed by: T.J. International Ltd.

Herbohn, K., Herbohn, J. (2006). International Accounting Standards (IAS) 41: What are the Implications for Reporting Forest Assets?. *Small-scale Forest Economics, Management and Policy*, 5 (2), 175-189.

Hilchey, D. (1993). Agritourism in New York State. Farming Alternatives Program, Department of Rural Sociology. Ithaca, NY: Cornell University.

IAS Plus (2018). International Accounting Standard 41 – Agriculture. https://www.iasplus.com/en/standard/ias/ias41

Kakalta, M. (2014). Evaluation of Biological Assets and Agricultural Disclosures Required by Companies in the Philippines. *International Journal of Social Sciences and Humanities Research*, 1(1), 83-89.

Kaya, D., & Koch, M. (2014). Countries’ adoption of the International Financial Reporting Standard for Small and Medium-sized Entities (IFRS for SMEs) – early empirical evidence. Accounting and Business Research, 45(1), 93–120. doi:10.1080/00014788.2014.969188

Miranda, H., Mojica, L., Madamba, J.A., Zapata, N. (2017). Accounting Practices and International Accounting Standard (IAS)/Philippine Accounting Standard (PAS) 41 Compliance of Cattle Farms: Evidence from the Philippines. *Journal of Global Business and Trade*, 13(1), 55-77.

Sharma, R. S. (2012). Accounting for Agriculture. *International Journal of Recent Research and Review, vol. 11*, 62-66.

Uyar, A., Kılıç, M., & Ataman Gökçen, B. (2016). Compliance with IAS/IFRS and firm characteristics: evidence from the emerging capital market of Turkey. *Economic Research-EkonomskaIstraživanja*, 29(1), 148–161. doi:10.1080/1331677x.2016.1163949

Wen-hsin Hsu, A., Liu, S., Sami, H., & Wan, T. (2018). IAS 41 and stock price informativeness. *Asia-Pacific Journal of Accounting & Economics*, 1–26. doi:10.1080/16081625.2019.1545928