Valuation Techniques and Financial Statement Disclosures for Non-Bearer Plant Sustainability Performance in Indonesia

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ABSTRACT

This study presents early evidence of the current valuation techniques and financial statement disclosure of non-bearer plants by companies on the Indonesia Stock Exchange. The emphasis is on measurement and valuation techniques amended in 2018-2019—the compliance in financial statement disclosure items provided by the companies. The valuation technique of a biological asset is quite challenging because this process includes measurements due to changes in market price and biological transformation. The study was conducted through a review of financial statements, primarily focusing on their disclosure. The study compared the change recorded in the initial years after amendments in accounting policy (2018 and 2019). The result showed that companies applied no uniform techniques to the valuation of biological assets. Therefore, it significantly affected their disclosure mainly due to the scarcity of technical guidance concerning biological assets. This study was limited to observing disclosure information and its accounting treatment by companies listed in Indonesian Stock Exchange under Agriculture and related industries. This study is useful to academics, accounting standard setters, and regulatory bodies. The paper is useful as feedback to accounting standard setters regarding implementing Financial Accounting Standard No.69: Agriculture in Indonesia. The findings aim to provide insights to regulatory bodies regarding financial information provided by companies in the logging sector.

Keywords: measurement, valuation technique, financial statement disclosure, non-bearer plant, compliance, Indonesia

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INTRODUCTION

Deforestation in Indonesia has observed a significant rise in the last two decades. The deforested area was 444000 ha/year from 2000-2003, 918000 ha/year in 2007-2009, 780000 ha/year in 2011-12 and 640000 during 2013-2017 (Republic of Indonesia, 2016: MoEF, 2018). The illegal-logging and Illegal land clearing are the core reasons for massive deforestation (Palmer, 2001; Brown, 2002; Obidzinski et al., 2006: Nurrochmat et al., 2016). The scale of illegal logging far outstripped sustainable timber supplies (Brown, 2002; Tacconi et al., 2004.; Obidzinski et al., 2006: Casson et al., 2006). Further, illegal logging occurs in all categories of forests (Luttrell et al., 2011; Reboredo, 2013). Illegal logging in 2013 reached 15 million m3 of round wood equivalent, considered 60% of total Indonesian wood production and 50% of the international supply of illegal timber (Hoare, 2015). Illegal logging accounts for 61% of all logging activities in Indonesia (Lawson and MacFau, 2010). The leading causes of this situation are corrupt practices and weak monitoring (Baker, 2020: Riski, 2020). Therefore, this study focussed on the accounting treatment, valuation and monitoring of biological assets.

Biological assets owned by entities differ from non-biological assets owned by entities engaged in different sectors (Popescu, 2014). The biological transformation of plants creates a product that can be utilised for further processing (Saputra et al., 2022). Therefore, an accounting model is required to map the biological transformation of concerned assets, which covers the measurement, disclosure, and fair valuation concerning its contribution to the generation of economic benefits (Xu et al., 2020). Further, the management of biological assets should be referred to an applicable financial accounting standard that could produce high-quality financial information which can be used for decision-making (Murti et al., 2018). International accounting standard (IAS) 41 regulates all agricultural activities like animal husbandry, plantations etc (Rodríguez Bolívar et al., 2015).

Indonesia has adopted the IAS 41 as Financial Accounting Standard No. 69: Agriculture (FAS1 69), enacted in 2018. The new standard's core characteristic is fair value measurement and related financial statement

1 In Indonesia, FAS 69 is known as PSAK 69: Agriculture

disclosures. However, implementing the fair value measurement is challenging because it may involve the estimation method based on judgment. A biological asset has undergone a biological transformation, a unique characteristic compared to different types of assets. Further, biological transformation in an asset experiences growth in quantity or improvement in quality, degeneration in quantity or quality, production of agricultural produce, and reproduction of another living animal or plant (*IAS 41: Agriculture*, n.d.). Therefore, the measurement and valuation of a biological assets are critical factors in applying the accounting standard as the process includes observation of market mechanisms and biological transformation. Therefore, a reasonable technical understanding is required to implement the standard appropriately (Argiles et al., 2009: Sayekti et al., 2018: Nelson, 2018). The biological growth data input requires specialised valuation techniques, for example, measuring a non-bearing plant. The evaluators need to calculate the plant age first, which an accountant cannot do alone.

The management of forests in Indonesia is closely monitored (Kehutanan, 1999; Perubahan Atas Peraturan Pemerintah Nomor 6 Tahun 2007 Tentang Tata Hutan Dan Penyusunan Rencana Pengelolaan Hutan, Serta Pemanfaatan Hutan, 2008). Therefore, companies engaging in the forestry business must provide the necessary information that reflects how they perform their duties related to their Forest Business Rights (Tata Cara Pemberian Dan Perluasan Areal Kerja Izin Usaha Pemanfaatan Hasil Hutan Kayu Dalam Hutan Alam, Izin Usaha Pemanfaatan Hasil Hutan Kayu Restorasi Ekosistem Atau Iizin Usaha Pemanfaatan Hasil Hutan Kayu Hutan Tanaman Industri Pada Hutan Produksi, 2014). FAS 69 required extensive financial statement disclosure on biological assets, whether compulsory or additional. The mandatory disclosure is classified into the following group of information:

1. General Disclosure.
2. Disclosure for biological assets whose fair value cannot be measured reliably.
3. Disclosure for biological assets, previously measured at their cost (less accumulated depreciation and accumulated impairment losses), which fair value becomes reliably measurable.
4. Disclosure related to government grants.

(*PSAK 69: Agrikultur*, n.d.)

Companies communicate information pertaining to its assets by means of presentation and disclosures in the financial statements. The issue of non-bearer plants' disclosure relates to the complexity of information provided in the financial statements. Extensive financial statement disclosure is required to provide insightful information regarding biological asset existence, precisely the measurement aspect. As it is mentioned in the Conceptual Framework for Financial Reporting, when selecting a measurement basis, it is essential to evaluate the nature of the information the measurement basis will produce in the financial statements. Users of financial statements must find the information provided by a measurement basis to be helpful. To accomplish this, the information must be relevant and faithfully represent what it seeks to represent. In addition, the provided information should be comparable, verifiable, timely, and understandable. Thus, issues in the measurement are closely related to the matters in disclosures. When companies face a wide variety of choices in measuring biological assets, the companies tend to disclose different sets of information with varying levels of extensiveness. (International Accounting Standards Board, 2018)

Previous studies on measuring biological assets were mostly conducted before FAS 69 was enacted in Indonesia (C. Elad & Herbohn, 2011; Nelson, 2018; Pricewaterhouse Coopers, 2009; Argiles, Bladon, & Monllau, 2009). Furthermore, the samples of previous studies are primarily agricultural or plantation companies listed on the stock exchange (Duwu et al. 2018; Rosiana & Solovida, 2018). However, limited studies have highlighted the companies engaging in the logging sector. A logging company is unique because it involves growing non-bearer plants and intends to harvest and sell timber production in the future. The logging companies are somewhat different from agricultural or plantation companies, which usually produce bearer plants intended to yield agricultural products repeatedly. These unique characteristics of non-bearer plants and bearer plants act as a basis to decide how to measure and value those types of biological assets (*PSAK 69: Agrikultur*, n.d.). Therefore, in addition to the existing literature, this study focussedon Indonesia's forestry industry. The companies in the logging sector listed on the Indonesia Stock Exchange were considered in the study. The framework used in the review is FAS 69, applied by these companies within two years of its implementation.

LITERATURE REVIEW

When a company uses a different model to determine a fair value, it leads to different earning qualities in the agricultural sector (C. Elad & Herbohn, 2011). FAS 69 and the government of Indonesia do not provide specific rules on which model to use to determine a biological asset's fair value. Consequently, it is possible that earning quality is different across companies because they may choose any acceptable policy according to the accounting standard. Therefore, valuation models may affect the comparability of financial statements and the financial ratios calculated based on accounting numbers (Nelson (2018). Thus, it may lead to misleading information. However, challenges exist even if there is only one valuation model to determine a fair value because professional judgments are needed to decide which data to use in the valuation (Nelson, 2018).

Moreover, the data used in the valuation of standing timber may include the plan of harvesting, the assumed growth rate of the standing timber, timber prices, discount factor, and forestry costs (Pricewaterhouse Coopers, 2009). Further, markets for biological assets and agricultural products are not always available, and if they are available, they tend to be very volatile (Nelson, 2018). Therefore, the main problem with using fair value is the non-availability of an active market for some biological assets (Argiles, Bladon, & Monllau, 2009). To counter this, most companies use the Discounted Cash Flow approach to evaluate standing timber because the standing timber markets are minimal. Most of these markets are exclusively for harvested timber (Pricewaterhouse Coopers, 2009). Furthermore, few accountants have expressed concern regarding the fair value model's applicability to biological assets in developing countries with inactive markets (C. Elad & Herbohn, 2011). These findings indicate that professional judgements may lead to comparability issues between the financial statements, mainly the information on non-bearer plants.

Duwu et al. (2018) and Rosiana and Solovida (2018) investigated determinant factors of biological assets and their disclosure in compliance with FAS 69 in Indonesia. These studies focused on agricultural firms listed in IDX in Indonesia between 2012 and 2016. The studies find that the intensity of biological assets and firm size affect the disclosure of biological assets. In contrast, ownership concentration, type of accounting firm, and

profitability do not affect biological asset disclosure. However, both studies were conducted before FAS 69 was enacted in Indonesia. Therefore, the findings have not shown the uniqueness of non-bearer plants compared to bearer plants.

Almost all of these previous studies were conducted on plantation companies. However, there is a significant difference between plantation and logging companies. The focus of plantation companies is on bearer plants, such as palm oil, whereas logging companies focus on non-bearer plants, such as mahogany. Therefore, those studies' findings have not shown the full implementation of FAS 69 on the non-bearer plant, specifically in logging companies.

Applying the FAS 69 without full compliance may result in less financial disclosure. This may adversely affect the financial forecasting process. On the other hand, full compliance with the disclosure requirements of the FAS 69 provides more information to financial analysts and may enhance their ability to provide more accurate forecasts. Compliance with the disclosure requirements of FAS 69 may also affect forecast dispersion, or the standard deviation of financial analysts' forecasts, since higher forecast dispersion may serve as a proxy for uncertainty and common consensus among analysts about future earnings (Anderson, 2021)

METHODOLOGY

This paper presents early evidence related to the current valuation techniques and financial statement disclosure of non-bearer plants by companies in the Indonesia Stock Exchange. The focus was on the choice of measurement and valuation technique, change in policy choice during 2018-2019 (if any), and compliance regarding financial statement disclosure items provided by the companies. We believed that this early examination is essential. This study provides insight into academics, the accounting standard-setter, and the regulatory bodies in Indonesia.

A review of financial statements was conducted to understand how a company measures, value, and report its non-bearer plants in compliance with FAS 69. The standard-setting body enacted FAS 69: Agriculture on

January 1, 2018. Therefore, the review focus on the financial statement for 2018 and 2019. The financial statement 2018 was reviewed to implement the standard in measurement and valuation and fulfil financial statement disclosure requirements. The financial statement 2019 was studied as a comparison of whether there is a change in accounting policy choice after the first-year implementation.

The study was conducted on companies listed in IDX, particularly those with assets in the form of a non-bearer plant. The sectoral classification system used to categorise companies listed at the Indonesia Stock Exchange is the Jakarta Stock Industrial Classification (JASICA) (Indonesia Stock Exchange, 2019). According to JASICA, companies in the forestry industry fall under the Agriculture, Basic Industry and Chemicals sectors. There were 99 companies that fell within these sectors. Out of those 99 companies, there were 26 companies that were involved in the forestry industry. However, out of 26 companies, only 5 companies specifically owned non-bearer plants. Although there are hundreds of logging companies, in Indonesia, unfortunately these companies were not listed companies. Thus, the financial statements and disclosures were not publicly available. The selected sectors and their coding is provided in Table 1.

Table 1: The Selected Companies

No.	Company Code	Sector
1.	BR	Basic Industry and Chemicals
2.	DS	Agriculture
3.	IN	Basic Industry and Chemicals
4.	SI	Agriculture
5.	TK	Basic Industry and Chemicals

RESULTS AND DISCUSSION

Valuation Technique of Non-Bearer Plant

The study found that during 2018-2019, four out of five selected companies complied with FAS 69 because they measured their non-bearer plant at fair value and less cost to sell. However, there were variations in how they applied the valuation technique.

DS, IN, SI, and TK measured their non-bearer plant during the development/growing period of the non-bearer plant. The valuation technique of all four companies was identical: the income approach uses the discounted cash flow technique. Yet, the inputs utilised in the valuation technique were not similar. DS used an estimated log price, estimated log production, estimated maintenance, harvesting, and transportation cost, as well as an estimated discounted rate. Unlike DS, IN used the estimated inflation rate and exchange rate in addition to the estimated log price and production. IN did not provide information on whether it considers any estimated costs. However, it was clearly stated that SI and IN used unobservable input, classified as Input Level 3, to measure fair value according to International Financial Reporting Standard No. 17: Fair Value Measurement (IFRS 17) and FAS 682: Fair Value Measurement.

This information was not explicitly stated in the financial statements of DS and TK. SI was different from both DS and IN because it only used two inputs in the valuation technique: estimated log price and estimated discounted rate. Similar to IN, SI did not explicitly state whether it considered any estimated costs. Additional information provided by SI was the source of the estimated log price it uses in the valuation technique. SI estimated log price based on agricultural produce price, which was then extrapolated by changes in plywood log forecast price published by the World Bank (2018). However, this data source was not mentioned in 2019.

Another company that measured its non-bearer plant using a fair value less cost to sell was BR. However, the company's management argued that all the parameters used in any unbiased value measurement technique were unreliable. Therefore, this company only applied the concept when the non-bearer plant was ready to be harvested. During the development/growth of the non-bearer plant, the company chose to capitalise any cost and expenses incurred associated with developing/growing a non-bearer plant.

As explained in the previous sections, under FAS 69, companies must measure non-bearer plants using fair value less cost to sell. Although the accounting standard provides general guidelines for appropriate value measurement, technical guidance on how the measurement is supposed to be conducted is not available. Besides, the regulatory body of the forestry

2 In Indonesia, FAS 68 is known as PSAK 68: Fair Value Measurement

industry in Indonesia does not provide any additional guidelines regarding the matter. The above findings indicated that this situation resulted in varying interpretations of how companies should apply the concept of fair value less cost to sell for the non-bearer plant. The findings also suggested that the accounting policy of the non-bearer plant is used consistently by all five companies during the first two years of FAS 69 implementation in Indonesia. The summary of findings related to the valuation technique of non-bearer plants is provided in Table 2.

Table 2: The Findings – Valuation Technique

No.	Company Code	Measurement of Non-Bearer Plant	
		2018	2019
1.	BR	Fair value less cost to sell at the point of harvest. Management believes that the parameters used in any fair value measurements are unreliable. During the development/growth of a non-bearer plant, the cost and expenses incurred associated with developing/growing non-bearer plants are capitalised. Borrowing costs on the reforestation loan to finance the non-bearer plant project are capitalised until the plants become commercially productive.	Fair value less cost to sell at the point of harvest. Management believes that the parameters used in any fair value measurements are unreliable. During the development/ growth of a non-bearer plant, the cost and expenses incurred associated with developing/ growing non-bearer plants are capitalised.
2.	DS	Fair value, less cost to sell. The fair value less cost to sell is estimated using the income approach, in particular, discounted cash flows technique with the following inputs: ● The estimated log price per tonne/ meter cubic ● The estimated log yields per hectare ● The estimated maintenance, harvesting, and transportation costs ● The estimated discount rate	Fair value, less cost to sell. The fair value less cost to sell is estimated using the income approach, in particular, discounted cash flows technique with the following inputs: ● The estimated log price per tonne/meter cubic ● The estimated log yields per hectare ● The estimated maintenance, harvesting, and transportation costs ● The estimated discount rate

No.	Company Code	Measurement of Non-Bearer Plant	
		2018	**2019**
3.	IN	Fair value, less cost to sell. The fair value less cost to sell is estimated using the income approach, particularly the discounted cash flows technique. The expected future net cash flows of biological assets are determined using a four (4) years cash flow forecast utilising the following unobservable (level 3) inputs: ● The estimated log price ● The estimated log potential ● The estimated inflation rate ● The estimated exchange rate ● The estimated discount rate	Fair value, less cost to sell. The fair value less cost to sell is estimated using the income approach, particularly the discounted cash flows technique. The expected future net cash flows of biological assets are determined using a four (4) years cash flow forecast utilising the following unobservable (level 3) inputs: ● The estimated wood price ● The estimated wood potential ● The estimated inflation rate ● The estimated exchange rate ● The estimated discount rate
4.	SI	Fair value, less cost to sell. The fair value less cost to sell is estimated using the income approach, in particular, discounted cash flows technique with the following inputs: ● The non-bearer plant is expected to be harvested after eight years of planting ● The estimated log price is based on the actual selling price of the agricultural produce for the current year (extrapolated by changes in plywood log forecast price published by the World Bank) ● The estimated discount rate	Fair value, less cost to sell. The fair value less cost to sell is estimated using the income approach, in particular, discounted cash flows technique with the following inputs: ● The non-bearer plant is expected to be harvested after eight years of planting ● The estimated log price is based on the actual selling price of the agricultural produce for the current year (extrapolated by the market price growth of logs) ● The estimated discount rate
5.	TK	Fair value, less cost to sell. The fair value less cost to sell is estimated using the income approach, in particular, discounted cash flows technique with the following inputs: ● The projected harvest, net off, among others, plantation, maintenance, and harvesting cost ● The projected selling price ● The estimated discount rate ● The projected inflation rate	Fair value, less cost to sell. The fair value less cost to sell is estimated using the income approach, in particular, discounted cash flows technique with the following inputs: ● The projected harvest, net off, among others, plantation, maintenance, and harvesting cost ● The projected selling price ● The estimated discount rate ● The projected inflation rate

Source: Information summarised from Financial Statements 2018-2019 (www.idx.co.id accessed in February and June 2020)

Compulsory Financial Statement Disclosure on Non-Bearer Plant

The various findings on the valuation technique of non-bearer plants lead this study to examine further the completeness aspect of the selected companies' financial statement disclosure. The study found that in the financial statements of 2018-2019, each company provided a different set of financial statement disclosures on the non-bearer plant. The findings on compulsory disclosure and additional disclosure are discussed separately.

The findings are discussed systematically according to the classification. As it was previously explained, the compulsory disclosures are classified into four groups of information, as follows:

1. General Disclosure

2. Disclosure for biological assets whose fair value cannot be measured reliably

3. Disclosure for biological assets, previously measured at their cost (less accumulated depreciation and accumulated impairment losses), which fair value becomes reliably measurable

4. Disclosure related to government grants

Firstly, the five selected companies provided compulsory disclosure related to the first group of information, "general disclosure." DS, IN, SI, and TK measure non-bearer plants at fair value less cost to sell consistently during 2018-2019. They disclosed the aggregate gain or loss arising from the change in fair value, less the cost to sell non-bearer plants. They also disclosed both qualitative and quantitative information on the non-bearer plant. As for non-financial information explaining the size of their concession area, only DS, IN, and SI had provided the required disclosure. However, only DS, SI, and TK disclosed their activities involving the non-bearer plant. DS, IN, SI, and TK did not disclose information about the existence and carrying amounts of biological assets whose title is restricted. The carrying amounts of biological assets pledged as security for liabilities, the number of commitments for the development or acquisition of biological assets,

financial risk management strategies related to agricultural activity, and the nature and amount of income or expense which arise due to the occurrence of a specific event (such as climate change, disease, or other natural risks). Further examination is required to justify the absence of this information.

Furthermore, DS, IN, and SI disclosed the reconciliation of changes in the carrying amount of the non-bearer plant. This information included gains or losses from the change in fair value less cost to sell non-bearer plants. This information also contained increases due to purchase (only IN provides this information), decreases due to harvest (both DS and SI give the information), and increases due to business combination (only DS provides the information). In contrast, the rest of the reconciliation items were not provided. Similarly, further study is required to justify the absence of this information. BR measures non-bearer plants at cost less accumulated depreciation and accumulated impairment losses. Therefore, it is reasonable that the company does not disclose the gain or loss arising during the current period on the initial recognition of biological assets and agricultural produce. It is also reasonable that the company does not disclose the change in fair value less costs to sell biological assets. BR is also subject to a different set of reconciliation items necessary to explain the changes in the carrying amount of non-bearer plants due to measurement choice. This set of information is discussed further in the following section. Besides these two disclosure items, BR disclosed qualitative and quantitative information on non-bearer plants. This company also disclosed non-financial information explaining the size of its concession area, the nature of its activities involving non-bearer plants, and the existence of biological assets pledged as security for liabilities. Further examination is necessary to justify the absence of the rest of the required disclosures.

Secondly, BR is the only selected company that disclosed information about the second group of information, which is "disclosure for biological assets which fair value cannot be measured reliably". This finding is consistent with the previous result on the valuation technique of the non-bearer plant, where DS, IN, SI, and TK measured their non-bearer plant at fair value less cost to sell. This finding was consistent because BR calculates its non-bearer plant at a price less accumulated depreciation and accumulated impairment losses during 2018 and 2019. The disclosure provided by BR was limited to the description of non-bearer plants. The

company also disclosed the management argument of why the fair value of the non-bearer plant was not reliably measurable. The company also revealed information about the amortisation method and the amortisation rate applied, the gross carrying amount, and the accumulated amortisation at the beginning and end of the period. There was also disclosure on limited reconciliation on the carrying amount of non-bearer plant, which only includes exchange differences arising on the translation of financial statements and depreciation. Likewise, further examination is required to justify the absence of other information.

Thirdly, the published 2018-2019 financial statements of the five selected companies did not disclose the third information group. The third information group is "disclosure for biological assets, previously measured at their cost (less accumulated depreciation and accumulated impairment losses), which fair value becomes reliably measurable". DS, IN, SI, and TK measured their non-bearer plant using fair value less cost to sell. Therefore, the four companies did not need to disclose any non-bearer plant information, previously estimated at their cost (less accumulated depreciation and accumulated impairment losses), which fair value becomes reliably measurable. Conversely, BR measured its non-bearer plant at cost less accumulated depreciation and accumulated impairment losses for two consecutive years, 2018-2019. The valuation technique indicated that, until the end of 2019, the fair value was still not reliably measurable. Therefore, the third group disclosure's absence can be justified as the third group disclosure was not yet applicable for BR, either in 2018 or 2019.

Lastly, all of the companies selected did not disclose the fourth information group, "disclosure related to government grants". No information can justify whether these companies receive government grants for their non-bearer plant. Therefore, it is still inconclusive whether the absence of the fourth group disclosure is justifiable. The summary of findings related to compliance disclosure of non-bearer plants is provided in Table 3.

The study found that several information on the disclosure checklist required further examination in order to justify the absence of the information or the sufficiency of the information provided. Although this finding leads to inconclusive discussion regarding the completeness of financial statements disclosures provided by each company, the study decided to include the

finding in the analysis because these information falls within the category of compulsory disclosure. Therefore, omitting some of the checklist would fail to provide a comprehensive presentation of compulsory disclosure regarding with non-bearer plants.

Additional Financial Statement Disclosure on Non-Bearer Plant

To sum up, the findings on additional disclosure suggested that two out of five selected companies, DS and IN, disclosed quantitative information on the non-bearer plant. The information also distinguished between mature and immature non-bearer plants. Also, all selected companies did not disclose the amount of change in fair value, less costs to sell included in profit or loss due to physical changes and price changes. This finding is consistent because although four out of five selected companies succeeded in disclosing non-financial information on non-bearer plants, these companies merely disclosed the size of their concession area. Therefore, it is reasonable that these companies do not differentiate the amount of change in fair value less costs to sell due to physical changes or price changes. An exception exists for BR, which measured non-bearer plants at cost less accumulated depreciation and accumulated impairment losses. Therefore, it is justifiable for BR not to disclose the amount of change in fair value less the cost to sell. The summary of findings related to the additional disclosure of non-bearer plants is provided in Table 4.

Table 3: The Findings – Compulsory Disclosure

Disclosure Item		Company Code				
No.	**Compulsory**	**BR**	**DS**	**IN**	**SI**	**TK**
1	The aggregate gain or loss arising during the current period on initial recognition of biological assets and agricultural produce and from the change in fair value less costs to sell biological assets	n/a	a	a	a	a
2	Narrative or quantified description of each group of biological assets	a	a	a	a	a
3	The nature of its activities involving each group of biological assets	a	a	x	a	a
4	Non-financial measures or estimates of the physical quantities of:					
	Each group of the entity's biological assets at the end of the period	a	a	a	a	x
	The output of agricultural produce during the period	?	x	?	a	?
5	The existence and carrying amounts of biological assets whose title is restricted and the carrying amounts of biological assets pledged as security for liabilities	a	?	?	?	?
6	The amount of commitments for the development or acquisition of biological assets	?	?	?	?	?
7	Financial risk management strategies related to agricultural activity	?	?	?	?	?
8	Reconciliation of changes in the carrying amount of biological assets between the beginning and the end of the current period:					
	• The gain or loss arising from changes in fair value less costs to sell	n/a	a	a	a	a
	• Increases due to purchases	n/a	?	a	?	?
	• Decreases attributable to sales and biological assets classified as held for sale (or included in a disposal group that is classified as held for sale) following IFRS 5	n/a	?	?	?	?
	• Decreases due to harvest	n/a	a	?	a	?
	• Increases resulting from business combinations	n/a	a	?	?	?
	• Net exchange differences arising on the translation of financial statements into a different presentation currency and the translation of a foreign operation into the presentation currency of the reporting entity	n/a	?	?	?	?
	• Other changes	n/a	?	?	?	?

Disclosure Item		Company Code				
No.	Compulsory	BR	DS	IN	SI	TK
9	If an event (agricultural activity is often exposed to climatic, disease, and other natural risks) occurs that gives rise to a material item of income or expense, the nature and amount of that item are disclosed under IAS 1 Presentation of Financial Statements	n/a	?	?	?	?
	Additional disclosures for biological assets where fair value cannot be measured reliably					
1	Description of the biological assets	a	n/a	n/a	n/a	n/a
2	Explanation of why fair value cannot be measured reliably	a	n/a	n/a	n/a	n/a
3	If possible, the range of estimates within which fair value is highly likely to lie	x	n/a	n/a	n/a	n/a
4	The depreciation method used	a	n/a	n/a	n/a	n/a
5	The useful lives or the depreciation rates used	a	n/a	n/a	n/a	n/a
6	The gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period	a	n/a	n/a	n/a	n/a
7	Gain or loss recognised on disposal of such biological assets and the reconciliation	?	n/a	n/a	n/a	n/a
8	Reconciliation of changes in the carrying amount of biological assets between the beginning and the end of the current period:					
	● Increases due to purchases	?	n/a	n/a	n/a	n/a
	● Decreases attributable to sales and biological assets classified as held for sale (or included in a disposal group that is classified as held for sale) per IFRS 5	?	n/a	n/a	n/a	n/a
	● Decreases due to harvest	?	n/a	n/a	n/a	n/a
	● Increases resulting from business combinations	?	n/a	n/a	n/a	n/a
	● Net exchange differences arising on the translation of financial statements into a different presentation currency and the translation of a foreign operation into the presentation currency of the reporting entity	a	n/a	n/a	n/a	n/a
	● Impairment losses	?	n/a	n/a	n/a	n/a
	● Reversals of impairment losses	?	n/a	n/a	n/a	n/a
	● Depreciation	a	n/a	n/a	n/a	n/a
	● Other changes	?	n/a	n/a	n/a	n/a

Disclosure Item		Company Code				
No.	**Compulsory**	**BR**	**DS**	**IN**	**SI**	**TK**
	If the fair value of biological assets previously measured at their cost less any accumulated depreciation and any accumulated impairment losses becomes reliably measurable					
1	Description of the biological assets	?	n/a	n/a	n/a	n/a
2	Explanation of why fair value has become reliably measurable	?	n/a	n/a	n/a	n/a
3	The effect of the change	?	n/a	n/a	n/a	n/a
	Government grants					
1	The nature and extent of government grants recognised in the financial statements	?	?	?	?	?
2	Unfulfilled conditions and other contingencies attached to government grants	?	?	?	?	?
3	Significant decreases expected in the level of government grants	?	?	?	?	?

Source: Information summarised from Financial Statements 2018-2019 (www.idx.co.id accessed in February and June 2020)

Notes:
a Available
x Not available
n/a Not applicable
? There is not enough information to safely conclude the availability/unavailability of the disclosure item

Table 4: The Findings – Additional Disclosure

Disclosure Item		Company Code				
No.	**Additional**	**BR**	**DS**	**IN**	**SI**	**TK**
1	Quantified description of each group of biological assets, distinguishing between consumable and bearer biological assets	?	a	?	?	?
2	Quantified description of each group of biological assets, distinguishing between mature and immature biological assets	?	a	a	?	?
3	The amount of change in fair value less costs to sell included in profit or loss due to physical changes and due to price changes, presented by group or otherwise	n/a	x	x	x	x

Source: Information summarised from Financial Statements 2018-2019 (www.idx.co.id accessed in February and June 2020)

Notes:
a Available
x Not available
n/a There is not enough information to safely conclude the availability/unavailability of the disclosure item

CONCLUSIONS

Various accounting policies can create possibilities for earning quality differences (Elad & Herbohn, 2011). Therefore, to counter this issue, this study reviewed the application of FAS 69 during its first two years of implementation in companies engaged in the logging industry, emphasising non-bearer plants. This study concluded that there are varying interpretations of measuring non-bearer plants at fair value, less cost to sell. It resulted in diverse disclosure completeness as the selected companies shared various information. Furthermore, it is evident that the companies consistently used similar valuation technique. Surprisingly, the technique is applied with different sets of input and at different timing, referring to each company professional judgements. The study further found the lack of technical guidelines on measuring at fair value less cost to sell. Therefore, clear and uniform instructions should be implemented for measurement and valuation. Hence, to address this confusion, the forestry department should come forward and publish specific and concrete regulations for measuring biological assets.

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