

## THE SUSTAINABILITY OF THREE INDONESIAN PALM OIL BUSINESS ENTITIES

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**Abstract:** The demand of palm oil products from export destination countries is still recorded to have a high growth. The prospect of world vegetable oil consumption need especially for palm oil that keeps rising gives an opportunity for Indonesia to increase its palm oil production. This research was conducted to observe how far oil palm plantation companies have conducted ISPO through Business Sustainability Typology perspective. This research made use of descriptive quantitative method. The data processing and analysis technique used in this research was descriptive quantitative analysis through Analytical Network Process (ANP) approach by using Super Decisions 2.2 software. Based on the processing result, the three companies were close to Sustainability version 3.0 but have not been perfect. Based on the average calculation of the three companies, the first priority composition from these companies is profit aspect consisting of permit and management system, implementations of oil palm processing guidelines and cultivation guidelines. In addition, it is the people aspect comprising responsibility to workers, community development, and social and community responsibility, and lastly the planet aspect of environmental management and monitoring. Managerial implications include developing and generating renewable energy by processing palm liquid waste (POME) to produce biogas as energy. They also include encouraging and supporting communities in various areas of development and utilization with a sustainable economy and holding a pollution tax that is included as a licensing fee, establishing standards for processing waste and subsidies related to business development

**Keywords:** business sustainability typology, palm oil, ANP, sustainability, oil palm plantation companies

**Abstrak:** Permintaan produk minyak sawit dari negara-negara tujuan ekspor masih mencatat pertumbuhan yang cukup tinggi. Prospek konsumsi minyak nabati dunia khususnya kebutuhan minyak sawit yang terus meningkat memberi peluang bagi Indonesia untuk meningkatkan produksi minyak sawit. Penelitian ini dilakukan untuk mengamati sejauhmana perusahaan perkebunan kelapa sawit telah melakukan ISPO melalui perspektif Business Sustainability Typology. Penelitian ini menggunakan metode deskriptif kuantitatif. Teknik pengolahan dan analisis data yang digunakan dalam penelitian ini adalah analisis deskriptif kuantitatif melalui pendekatan Analytical Network Process (ANP) dengan menggunakan perangkat lunak Super Decisions 2.2. Berdasarkan hasil pengolahan, ketiga perusahaan itu mendekati Sustainability versi 3.0 tetapi belum sepenuhnya sempurna. Berdasarkan perhitungan rata-rata ketiga perusahaan tersebut, komposisi prioritas pertama dari ketiga perusahaan tersebut adalah aspek keuntungan yang terdiri dari izin dan sistem manajemen, pelaksanaan pedoman pengolahan kelapa sawit, dan pelaksanaan pedoman budidaya, diikuti oleh aspek masyarakat yang terdiri dari tanggung jawab terhadap pekerja, pengembangan masyarakat, dan tanggung jawab sosial dan masyarakat, dan terakhir aspek planet dari pengelolaan dan pemantauan lingkungan. Implikasi manajerial dengan mengembangkan dan menghasilkan energi terbarukan dengan mengolah limbah cair sawit (POME) untuk menghasilkan biogas sebagai energi pengganti. Mendorong dan mendukung masyarakat diberbagai bidang pembangunan dan pemanfaatan dengan ekonomi yang berkelanjutan. Adakan pajak polusi yang dimasukkan sebagai biaya lisensi, menetapkan standar untuk memproses limbah dan subsidi yang terkait dengan pengembangan bisnis

**Kata kunci:** tipologi bisnis keberlanjutan, kelapa sawit, ANP, keberlanjutan, perusahaan perkebunan kelapa sawit

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## INTRODUCTION

In recent years, the demand of palm oil from Asian countries has quite soared. The demand of palm oil products from export destination countries still record a high growth. It shows that palm oil market continues to stretch due to the lack of supply from other vegetable oils in the global market (GAPKI, 2017). The largest consumer countries are India and Tiongkok, while the major producers of palm oil are Indonesia and Malaysia with the market share of approximately 85% (Pahan, 2016). Palm oil belongs to vegetable oil, and vegetable oil is oil that is extracted from plants, and most of the oil can be used as cooking oil and fuel (Kusminingrum, 2013).

The global vegetable oil consumption from 2012/13 to 2015/16 and its projection in 2016/17 are presented in Figure 1. The average increase of consumption (CAGR) of palm oil for 4 years was 2.90 % while the growth contributes 3.43% of world vegetable oil. The production of global vegetable oil consumption of 2012/13 -2016/17 is known to be the biggest contributor in the vegetable oil industry i.e. palm oil, soybean oil and canola oil. The position of palm oil itself in the global market is the biggest contributor between 51.99 to 61.64 million tons per year with an annual increase of 2.90% from the total annual increase in global oil which reached 3.43%.

The global vegetable oil production from 2012/13 to 2015/16 and the projection in 2016/17 are presented in Figure 2. The average palm oil production growth (CAGR) during that period was 1.8%, which was

the major driver of the average global vegetable oil production growth (CAGR) of 2.94%.

The variety of its functions drives the global palm oil demand to keep increasing. The prospect of world vegetable oil consumption need especially palm oil that keeps rising gives an opportunity for Indonesia to increase its palm oil production. However, social and environmental issues emerged affected Indonesian oil palm plantation industry bussines development. Environmental issue emerged because of an excess of land clearing conducted according to the procedure, but the foreign Non-governmental Organizations (NGO) accused Indonesia as the trigger of deforestation and land fires. This needs to be addressed wisely so as not to be counter-productive and not to harm the nation's economy on a macro basis. The stakeholders in oil palm plantation businesses have made an effort to understand the arising problems and overcome them with the right framework that is through Indonesia Sustainable Palm Oil (ISPO) initiative. ISPO is the policy of Ministry of Agriculture with the goals of improving the competitiveness of Indonesian palm oil in the world market, participating in fulfilling the country's commitment to reduce greenhouse gas emission, and paying attention to environmental issues (FWI, 2017). ISPO was established in 2009 to ensure that all oil palm entrepreneurs meet the permitted agricultural standard, which means that companies producing palm oil must own the ISPO. ISPO is the first oil palm national standard for a country, and other countries are currently considering implementing the similar standard for palm oil producers.

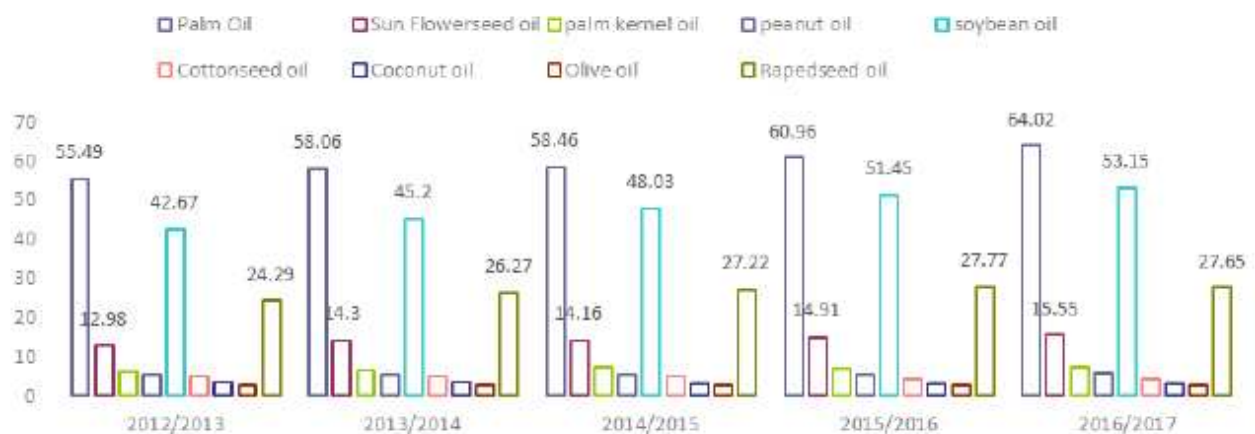


Figure 1. Global vegetable oil consumption 2012/13 - 2016/17 (Source: BPS, 2017)

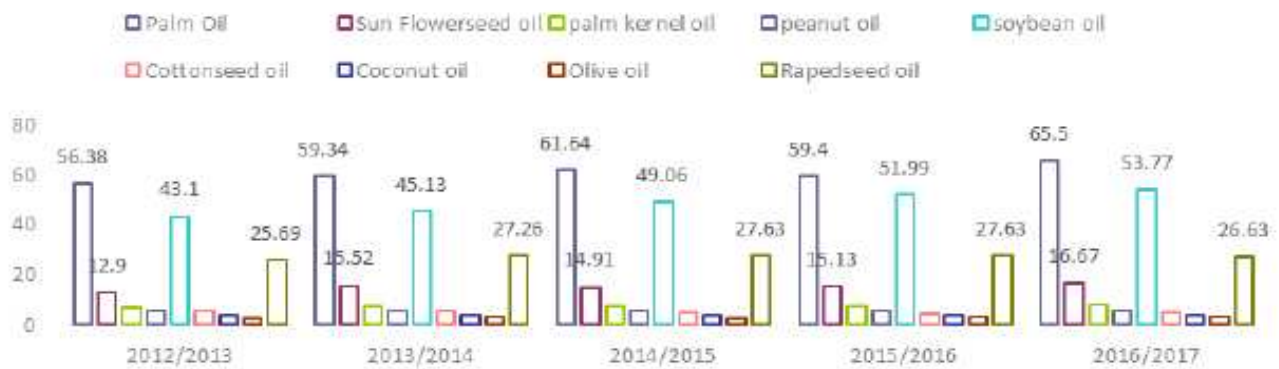


Figure 2. Global vegetable oil production 2012/13 - 2016/17 (Source: BPS, 2017)

The basis of ISPO principles and criteria is the Triple Bottom Line concept (Elkington, 1998) which acknowledges that if a company wants to be sustainable, it should pay attention to 3Ps, namely profit, people, and planet. It means that there are other aspects that need to be considered other than profit which is the main purpose of the company establishment. In practice, the company must give positive contributions to the community (people) and participate in maintaining and preserving the surrounding environment (planet). Profit is the principal orientation of the company, and it requires improving the welfare of the shareholders and relevant parties. People are the society directly or indirectly affect and be affected by the company. Planet means environment, which is in the form of natural resources, which are inhabited or managed by the company. The company is required to not only contribute to the economy but also help in solving the problems related to sustainability risks from social relationship, environment, and economy.

Several companies currently adopting sustainability system are required to make a sustainability report. This is conducted to reveal the company performance in economic, environmental, and social aspects and reveal its attempt to become an accountable company for all stakeholders for the purpose of company performance toward a sustainable development. Besides, the benefit of sustainability is providing security and assurance (directly or indirectly) to the investors and creditors on the environmental and social risks. Dyllick dan Muff (2016) clarified the definition of sustainability by developing a typology with a focus on effective contributions for sustainable development, called Business Sustainability Typology (BST). This will help in assessing the company's journey toward the integration of BST into its strategy and business model and providing professional framework for business

transformation, moving from business-as-usual to business with true sustainability (Dyllick and Muff, 2016).

This research aimed to observe how far oil palm plantation companies have conducted their sustainability based on BST framework and look at the company performance in carrying out their sustainability. Based on the above explanation, the research question that needs to be elaborated in this research is as follows: How is the achievement of business sustainability of the three Indonesian oil palm plantation entities?

## METHODS

The method used in this research was descriptive quantitative method using case study approach. Descriptive approach was used to obtain an overview of information, explanation, and conditions that are related to the research object and the research object itself factually and systematically. The objects of this research were the three oil palm plantation companies operating in Kalimantan and Sumatera and indeed registered at IDX and SGX and had sustainability reports at least for 3 years. The data were collected by means of observation in the research objects and in-depth interviews with the experts of plantation i.e. the head of sustainability department and manager of sustainability.

This research used two types of data: primary and secondary data. The primary data were obtained through in-depth interviews, while secondary data were obtained from Sustainability Reports of the respective company, Global Reporting Initiative (GRI), and Statistics Indonesia (BPS). The steps of data processing in this research were as follows.

The descriptive analysis step covered reviewing relevant literatures and interviewing the internal management to obtain the general overview of the researched companies, followed by interviewing relevant experts who have worked for at least 20 years and play an important role (decision makers) in the company to validate the data and information obtained.

Analytical Network Process (ANP) analysis was the next step after the data collection of the Triple Bottom Line's attributes, and the data were processed to find out the factors and conditions determining the sustainability policy in oil palm plantation companies. An evaluation was then conducted by using ANP approach. The process can be applied in a decision-making, which is complicated, complex and needs many variations of interaction and interdependency. As the development of AHP method, ANP still uses Pairwise Comparison Judgment Matrices (PCJM) way between elements so that the obtained results fairly represent the company condition. A research that employs ANP often uses more than one respondents as reference. This enables the obtained opinion to be diverse in the weight of the ratio. However, ANP method only needs one weight for one ratio in forming a pairwise comparison matrix. If this happens, the weights from the respondents must be averaged by using geometric mean equation (Saaty 2001).

Elkington (1994) stated that sustainability has become a business goal of non-profit organizations and governments and been frequently mentioned in the last decade, but measuring to what extent a currently operating organization is sustainable or reaches sustainable growth may become difficult. Elkington found a way to measure sustainability that is Triple Bottom Lines (People, Planet, and Profit). Triple Bottom Lines does not only become a scientific theory but also a concept that is performed by companies and become necessary in a corporate strategy. Eight-phases process model (sustainability transition) that maps how a company switches its orientation from a sustainability that is irrelevant with corporate operations and strategies to be sustainability-oriented has been applied in the company (Valente, 2015) to see the company performance position in the valente model process. The research of Hamann et al. (2017) and Manik (2013) reported that large companies, Small, and Medium Enterprises (SMEs) can get involved in social activities and environmental responsibility, and the stakeholders are involved as the main drivers. However, the major companies also proactively have an

expectation from those activities, namely, competitive advantage. This emphasizes the institutional context and potential interaction effect between the companies and explains the reason why the companies are engaged in a pro-environment behavior in developing countries. To observe the small and medium enterprises involved in social activities and environmental responsibilities and stakeholders involved as primary drivers can result in competitive advantage while ISPO itself is a tool to see whether the company has implemented regulations that are the cornerstone of sustainability in Indonesia.

Sustainability needs to be applied in agribusiness sector, especially in oil palm plantation according to Ekpo and Umoh (2014) who discussed that Nigeria was previously was the largest palm oil producer in the world and the largest maize exporter in Africa, but it started to import those products in the end of 1980s, and Nigerian economy currently has a negative economic growth. Sustainable development process cannot rely on the income from unreliable and unsustainable sources so that Alabi (2015) explained the need of sustainable development and showed the radical change in the way of crude oil processing and export used in Nigeria. Sustainability in the process also has been widely considered to cause less pollution and destruction on the environment. These views on sustainability sometimes can affect the definition of sustainable development and eventually affects the formula and institutions of policy in many countries.

BST ranges from Business Sustainability 1.0 (Refined Shareholder Value Management) to Business Sustainability 2.0 (managing for the Triple Bottom Line) and Business Sustainability 3.0 (True Sustainability). Based on Dylick and Muff (2016), Business Sustainability 1.0 is based on a purely economic view of the firm and business processes. The underlying assumption is that typical economic concerns are pursued to produce economic value in the form of profit or market value. The most fundamental corporate responsibility is operating for the sake of creating and enhancing the shareholder value (profit) (Benton, 2014; Yun, 2014) by embracing opportunities and managing risks originating from the economic, environmental, and social developments (SAM and Coopers, 2006).

Business Sustainability 2.0 is defined as a process of managing Triple Bottom Line in which companies manage their financial, social, and environmental risk as an obligation and opportunities (NBS, 2012).



Companies create values not only as a side effect but also as their business activities and organizational activity measurement, including profitability, shareholder and social value, as well as human and environmental capital conducted and considered in a balanced manner (Elkington, 1998; Linton et al. 2007).

Business Sustainability 3.0 (True Sustainability) is a truly sustainable business that shifts its perspective from seeking to minimize its negative impacts to understanding how it can create a significant positive impact in critical and relevant areas for the society and planet (Dyllick and Muff, 2016). True sustainability is the extension form of Triple Bottom Line, which is embedded into the corporate practices (Dyllick and Muff, 2016). It is just that there is a huge gap in this form so that there is a need of a narrative intelligence to explain it (Moratis and Melissen, 2017). The most suitable concept to explain this true sustainability is through Creating Shared Value approach proposed by Porter and Kramer (2011). The formulation of Corporate Social Responsibility (CSR) in Indonesian oil palm industry that is close to the true sustainability is the combination of profit, people, and planet with the priority of 53%, 23%, and 23%, rounded to 50%, 25%, and 25% respectively (Suroso and Pahan, 2018).

## RESULT

### Sustainability Development

Oil palm industry currently gains a bad view from abroad as its development is considered to have an effect on the environmental sustainability. The World Non-governmental Organization (NGO) considers that the expansion of oil palm plantation area is the cause of deforestation and illegal land clearing (Molenaar et al. 2010). CPO importing countries, especially European countries, have threatened not to buy Indonesian-produced CPO originated from unsustainable oil palm plantations (Infosawit, 2013). The current effort made by the government to ensure the sustainability of palm oil industry development is by creating a sustainability standard called Indonesia Sustainable Palm Oil (ISPO), which is mandatory. In addition, oil palm industry currently is required to conduct sustainable oil palm cultivation and processing, like implementing Good Agricultural Practices (GAP) and Best Management Practices (BMP). Each company is not only required to

own but also implement the indicators within ISPO so that the true business sustainability can be created.

This research used descriptive analysis on the research variables referring to the variables of ISPO, which were divided based on variables measured through the index score of each cluster, namely, Profit (p1), Planet (p2), and People (p3). Business Sustainability Typology decomposition in Table 1.

### Profit, People, and Planet Analysis

Based on the processing results presented in Table 2, it was found out that the dominant indicator of ABC Company was Profit with the details of plantation permit and management system accounted for 14%, the implementation of oil palm processing guidelines of 23%, and the implementation of cultivation guidelines of 18%. The second dominant indicator was People with responsibility to workers accounted for 12.8%, social and community responsibility (CSR) of 5.1%, and community development of 7.9%. The last one was Planet indicator of environmental management and monitoring which accounted for 17.3%. The score of this environmental indicator was relatively higher compared to that of the People indicators.

The results show that the scores of the indicators of ABC Company were 57% for Profit, 25.9% for People, and 17.3% for Planet, indicating that based on BST decomposition, the company is close to the category of Sustainability version 3.0, but this is not perfect, with the variant of Profit of +14%, People +4%, and Planet -32%. Based on these data, the company must reduce its Profit activity by +14% i.e. by reducing land expansion and utilizing the existing land more by arranging plant spacing and maximizing processing plant by optimizing operational work hour.

The company also must reduce People aspect by +4% i.e. by reducing CSR activity that has less positive impacts and by making responsibility to workers indicator efficient. It also has to work hard to reduce Planet variant by -32% to return to the Planet proportion by managing the factory and plantation environment maximally by using methane capture on palm oil mill effluent (POME). Moreover, establishing better environmental management rules, without having to sacrifice the competitiveness of an industry such as holding a pollution tax, which includes a licensing fee and making a waste treatment standard.

According to theory of Business Sustainability Typology framework and the results of calculations with the analysis tool of Analytical Network Process, the company has introduced and implemented sustainability concept. Besides, based on the interviews with the company experts, the company still conducts plantation area development. This is evident from the high permit indicator and oil palm processing indicator

to produce CPO so that the company is presumably still in its development but keeps attempting to implement sustainability concept. This normally happens, so if the company focuses on company development, the focus on other indicators will decrease. In this case, oil palm industry must carry out sustainable oil palm cultivation and processing like implementing GAP and BMP without expanding land to increase its production.

Table 1. Business sustainability typology decomposition\*

Typology	Construct	Definition	Interface assumption
Sustainability version 1.0	Business as usual	The most fundamental corporate responsibility is operating for the sake of creating and enhancing shareholder value (profit) (Benton, 2014; Yun, 2014). Profitability is the main driver of company's investment on sustainability for company's standard reporting (Mukumbi, 2013). The success of a business is still evaluated from the purely economic view, focuses on serving the business itself, and is still shareholder-value-oriented as its economic goal (Dylick and Muff, 2013).	Profit = 100% People = 0% Planet = 0%
Sustainability version 2.0	Triple Bottom Line	Organizational activity measurement, including profitability, shareholder and social value, as well as human and environmental capital which is conducted and considered in a balanced manner (Elkington, 1998; Linton et al. 2007).	Profit = 33,3% People = 33,3% Planet = 33,3%
Sustainability version 3.0	True Sustainability	True sustainability is the extension form of Triple Bottom Line that is embedded into corporate practices (Dylick and Muff, 2016). It is just that there is a huge gap in this form so that there needs to be a narrative intelligence to explain it (Moratis and Melissen, 2017). The most suitable concept to explain the true sustainability is through Creating Shared Value (CSV) approach proposed by Porter and Kramer (2011). The formulation of Corporate Social Responsibility (CSR) in Indonesian oil palm industry that is close to the true sustainability is the combination of profit, people, and planet with the priority of 53%, 23%, and 23%, rounded to 50%, 25%, and 25% (Suroso dan Pahan, 2018).	Profit = 50% People = 25% Planet = 25%

Note: \* developed by Elkington (1998); Linton et al. (2007); Benton (2014); Yun (2014); Porter and Kramer (2011); Dylick and Muff (2016); Moratis and Melissen (2017); Suroso and Pahan (2018).

Table 2. Analysis of business sustainability of three Indonesian oil palm plantation companies

Cluster	Indicators	ABC Company	DEF Company	GHI Company	Average
Profit	Plantation permit and management system	0.147741	0.17359	0.19696	0.16392
	Implementation of cultivation technique guidelines	0.188737	0.185289	0.12021	0.1637
	Implementation of oil palm processing guidelines	0.236196	0.178055	0.20583	0.22743
	Sub-total	0.5726728	0.536933	0.52300	0.55505
People	Responsibility to workers	0.128639	0.101331	0.18033	0.14513
	Social and community responsibility (CSR)	0.051235	0.063519	0.04855	0.05073
	Community development	0.079854	0.127665	0.06364	0.07463
	Sub-total	0.259727	0.29243	0.29252	0.27050
Planet	Environmental management and monitoring	0.173597	0.178147	0.19448	0.18445
	Sub-total	0.173597	0.178147	0.19448	0.18445
Total		1.0	1.0	1.0	1.0

For DEF Company, the results below show that Profit was the dominant indicator. The identified indicators were plantation permit and management system, which accounted for 17%, the implementation of oil palm processing guidelines of 17%, and the implementation of cultivation technique guidelines of 18%. For each company or even country, profit is the basis to drive the operation of an organization. It needs high economic resources to be able to keep investing and funding various activities and the idea of entrepreneurship is to maximize rational economic profit and improve social aspect (Jenkins, 2009).

The second indicator was People with the dominant indicators of responsibility to workers, which accounted for 10%, social and community responsibility (CSR) of 6.3%, and community development of 12%. The main reason for the company to act this way is its sense of responsibility and tasks, and it receives a larger development without hesitation as it focuses not only on profit but also on people). It has goals focusing more on the long-term sustainability of the organization rather than on its growth (Battisti and Perry, 2011). The company has integrated its social values into its philosophy and guided its actions (Spence and Rutherford, 2001).

The next one is the Planet indicator of environmental management and monitoring which accounted for 17.8%. This environmental indicator has a quite higher value than People indicators; therefore, it can be assumed that the company management and concern on environment is relatively good. Based on the results, the scores of business sustainability of DEP Company were 54% for Profit, 28% for People, and 17% for Planet. This means that based on BST decomposition, DEF Company is close to the category of Sustainability version 3.0, but it is still imperfect with the variants of Profit of +8%, People of +12%, and Planet of -32%. In order to be in Sustainability version 3.0, the company must reduce the variants of Profit by +8% and People by +12% and increase the variant of Planet by -32%. The first step is that it must focus on developing profit-sharing activities for the environment so that environmental values can be elevated by focusing more on the final results, and the next step is to improve the points that are felt still do not meet the requirements.

Lastly, for GHI Company, based on the results below, Profit was still the dominant indicator similar to the other two companies. The identified indicators were

plantation permit and management system, which accounted for 19%, the implementation of oil palm processing guidelines of 20%, and the implementation of cultivation technique guidelines of 12%. Interestingly, the most dominant indicator at GHI Company is the implementation of oil palm processing guidelines like ABC Company has done. Therefore, it can be assumed that the company prioritizes its final products and focuses on the processing to produce the best CPO and monitors the final products so that the production will not pollute the environment.

The second indicator was People with the dominant cluster of responsibility to workers, accounted for 18%, social and community responsibility (CSR) of 4.8%, and community development of 6.3%. Responsibility to workers indicator is the most dominant indicator for all companies. In addition to becoming an official obligation for each company and be contained in the Law No. 13 Year 2013, this indicator is present in one of the requirements of ISPO. Based on the above assumption, the score of responsibility to workers, which has a quite high dominance in People indicator, is related to the implementation of oil palm processing guidelines point, which requires skillful workers. In order to make the plant efficient, workers that already received training, have experience, and understand the technology in operating the plant are required.

The next one is Planet indicator of environmental management and monitoring accounted for 19%, and this score is higher than that of People indicators. It can be assumed again that the company management and concern on environment is relatively good, and the above data are related to the oil palm plantation processing guidelines. In ISPO indicator of oil palm processing, there is an indicator of waste processing and utilization so that when the company focuses on oil palm processing, it has indirectly conducted the act of environmental management. Such environmental management is really important and related to other aspects in the plantation management system. Basiron and Weng (2004) explained that an environmental management system conducted to improve the overall environmental performance is a key strategy to move toward a larger sustainability, with the target of minimizing greenhouse gases, enhancing the efficiency of energy use, and enhancing the efficiency of other resources' utilization such as the efficiency of land use.

The results show that the overall scores of GHI Company were as follows: 52% for Profit, 29% for People, and 19% for Planet. Based on BST decomposition, GHI Company is close to the category of Sustainability version 3.0, almost similar to DEF Company, but is imperfect with the variants of Profit of +4%, People of +14%, and Planet of -24%. To reach the true sustainability, the company must reduce the variant of Profit by +4% i.e. by maximizing the plant existing processing capacity, maintaining the quality of fruits through a continuous grading and coordinating with the plantation workers to maintain the harvest quality and quicken the delivery of fresh fruit bunch to the plant. The variant of People must be decreased by +14% i.e. by optimizing and holding a training and reducing a recruitment of the minors. With regard to the Planet, the company must improve the managers of plantation who have plant to conduct the obligation of environmental management and monitoring according to the current arrangement. The company also has to perform its obligation regarding Environmental Impact Assessment (AMDAL), Environmental Management Efforts (UKL), and Environmental Monitoring Efforts (UPL) according to the laws and regulations. The plantation managers must maintain and preserve the biodiversity within the managed area according to the plantation business permit.

### Managerial Implications

A number of implications become factors as well and requirements which must be fulfilled so that business sustainability development at each company can be optimally operated. The first factor that affects the achievement of true sustainability is Planet of -24%. The companies are recommended to develop and produce renewable energy sources such as biodiesel and process oil palm liquid waste (POME) to produce biogas as the source of electrical energy. The next priority is Profit as the average variant of all three companies was + 10%, so that the strategy to refuel the variant is by reducing land expansion through intensification like replanting. The companies are recommended to create and develop quality seeds so that the trees can produce more fruits, arrange and pay attention to plant diversity to maximize the land use and maintain grading process to maintain all qualities.

The last priority is People with the variant of +8%. The recommended strategies are by having Work Health and Safety Management (K3) according to the prevailing

standard, paying attention to the welfare of workers, and improving their ability through trainings. The companies are also recommended to reduce social activities that have less positive impacts like opening free health service. The funding can be directed to community development to produce products that can support the community, and they are expected to give more help in preserving the nature.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Based on the weight of the sustainability parameters from the interviews of the three entities of oil palm plantation companies with ANP data processing, the results show that the third position of the company is approaching sustainability version 3.0 with profit of 55%, people of 27% and planet of 18% with the variant of non-idea on profit indicator of + 10% people of + 8% and planet of -28%.

### Recommendations

The followings are the recommendations for the three companies approaching sustainability version 3.0: focusing on intensification by developing and creating superior types of seeds for more plants to produce and by regulating and observing plant spacing, developing and producing renewable biodiesel energy and treating palm liquid waste, reducing less effective corporate social responsibility, and utilizing community development.

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