

Research article

Green Marketing Analysis on Oil Palm Plantation Industry

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Abstract.

Palm oil is one of Indonesia's important export commodities as a foreign exchange earner besides oil and gas. Indonesia is the largest producer and exporter of palm oil in the world. As the largest foreign exchange earner, the palm oil industry should also be able to maintain its superiority in various sectors, hopefully in the future it can continue to contribute to the development of the industry, especially oil palm. This study aimed to analyze the role of Green Marketing in oil palm plantations. The essence of competition lies in how a company can implement processes to create products or services that are cheaper, with better quality, and produced faster (cheaper, better and faster) than the other business competitors which can increase the influence of the green marketing concept as well as the profits. This research was conducted on oil palm companies that have been certified by ISPO or other certifications (related to the Quality/Environmental Management System), while the sample in this study were managers at oil palm companies located in North Sumatra as many as 45 people. The results of the research showed the effect of *green marketing* on marketing performance in the oil palm plantation industry and this research provided a scenario that could give the most significant impact on increasing marketing performance in the oil palm plantation industry.

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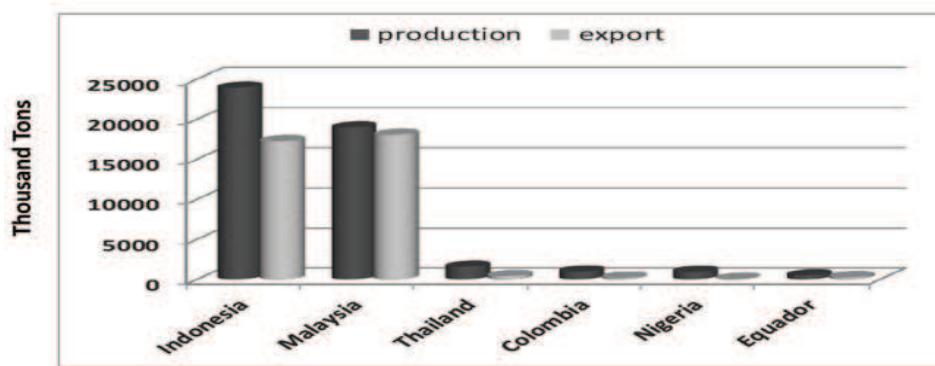
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1. Introduction

Indonesia is the world's largest oil palm producer with 28 million tons of production in 2014 (*Oil World Annual*, 2014), which dominated almost half of the world's oil palm market share. For the last thirty years, Indonesian oil palm industry has been rapidly expanded to 9,074 ha in 2012. Of that land area, more than 80% of national palm oil production is an export commodity to various destination countries (Bappenas, 2010) and the export volume in 2012 reached 18.85 million tons (Ditjenbun 2013).

The potentials and opportunities for oil palm development in Indonesia indicate that oil palm has positive prospects in the future, especially in terms of eminence and competitiveness. However, the development of the palm oil industry also faces various

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**Figure 1**

issues related to technological, economic, social, environmental and governance problems which are getting more complex. These problems need to be overlooked to make a sustainable and equitable palm oil development realized so that it won't distort the competitiveness of Indonesian palm oil products in the world market (Bappenas 2010). Along with the development of the palm oil industry in Indonesia, the world also often criticizes the practice of the oil palm plantation industry in Indonesia, such as banning Indonesian palm oil products.

As the largest foreign exchange earner, the palm oil industry should also be able to maintain its advantages in various sectors in the hope that it can continue to contribute to the development of the industry, especially oil palm in the future. Meanwhile, maintaining a position is conceptualized as the highest position in the market that captures provisions from above on customer value and achieving relatively lower costs (Day & Wensley, 1988). The development of the palm oil industry has also drawn criticism from several environmental organizations. European consumers who have a high concern for an impactful industries on environmental sustainability and global warming need to believe that the ISPO certificate is credible enough to prevent deforestation and biodiversity degradation (Analysis, 6 December 2018). And also there are oil palm plantation activities that are not carried out in accordance with regulations so that consumers oftentimes reject Indonesian CPO products.

There are five reasons causing the European Union to issue a policy to ban imports of CPO and its derivatives, namely: the palm oil industry creates deforestation, degradation of animal habitats, corruption, child labor, and human rights violations. The European Union Parliament considers the Indonesian palm oil industry to be one of the triggers for these problems. (https://igj.or.id/wp-content/uploads/2018/04/CPO-Indonesia-ditolak-Uni-Eropa_Palm-Oil-Issues.pdf). The land clearing for oil palm in some places is considered having resulted in massive deforestation and peat conversion which

threatens the richness of biodiversity in ecosystems, it's also believed having released carbon into the atmosphere and contributes to global warming. Not only in Indonesia, the anti-palm oil campaign is a major factor influencing import demand in a number of export destination countries for Malaysia (Awad et al. 2007). The Ministry of Agriculture in 2011 conducted a campaign (socialization) of green products (environmentally friendly products) on Indonesian palm oil to Europe in Spain and France to anticipate negative issues about palm oil commodities related to environmental problems. Minister of Agriculture Suswono (at that time) explained that this was related to the mission of the "palm oil campaign" activity in order to inform the Ministry of Agriculture's policy in developing the national palm oil industry by concerning the principle of sustainability (Warta Exports, June 2011).

Therefore, an "intense" Indonesian government policy on sustainable Indonesian palm oil industry is required such as through a moratorium on oil palm expansion and encouraging oil palm productivity among smallholders (Analysis, 8 April 2019). And one of the activities that can be implemented in the palm oil industry is to conduct environmental-based marketing (Green Marketing). It can be said that Green marketing is an idea in marketing management which is applied based on environmental issues. In the process, Green marketing is an act of integrating broad activities, including product modification, changes in the production process, changes in packaging, and changes in advertising (Prabandari, 2016). According to Ajizah and Suharyono, 2017 Companies that implement green marketing as their marketing strategy are considered easier to build a positive company image. This is because it is easier for companies to claim that their company is the one that is friendly to environmental sustainability. Although green marketing was originally an idea of environmentally oriented marketing management, currently green marketing is widely applied as a marketing strategy. Especially when companies that implement green marketing are the ones with products marketed in international markets. Then automatically green marketing will be applied as an international marketing strategy in reaching international markets.

In this case, oriented companies to the concept of sustainability always do things that refer to drastic changes in marketing strategies, this is because the orientation towards green/environmentally friendly marketing will achieve business ethos (culture, profit) and performance excellence, such as in developing environmentally friendly products can provide a significant increase in R & D activities better than their competitors and maintain a competitive advantage (Karolos-Konstantinos Papadas, George J. Avlonitis, Marylyn Carrigan, Lamprini Piha (2018). Beside that, the market-oriented oil palm plantation industry should also have the awareness to implement Green Marketing, a

comprehensive campaign to engage environmental conservation efforts which practically is one of the alternative long-term campaigns in the Indonesian oil palm plantation industry.

2. Literature Review

2.1. Green Marketing

Green marketing is one of the most important strategies that business organizations conduct on one hand to gain the trust of consumers, the trust of governments and on the other hand to gain the trust of other parties working to protect the environment. The organization's survival in the market depends on its commitment to the standard of environmental and consumer protection from the damage that may arise from its work (Hersh, et.al, 2015). The basic concept of marketing is to promote a particular product or place with a purpose to increase its value and consumption among consumers. Marketing also has the potential to act as a vital tool to promote a more environmentally friendly consumption behavior among consumers (Aggrawal, 2010; Davari & Strutton, 2014; El Dief & Font, 2010). This is what has led to the emergence of green marketing. Green marketing can be defined as the process of developing a product or service and promoting it in a way that does not have a negative impact on the environment (Aggrawal, 2010). In fact, green marketing tools have been revealed to be an influential marketing tactic to increase green buying behavior. Green marketing (such as: eco label, eco brand, and the environment) is a significant thing on consumer green buying behavior (Delafrooz, Taleghani, & Nouri, 2014; Delmas, Nairn-Birch, & Balzarova, 2012; Fruqan et al. al., 2010).

2.2. Positional Advantage

Competitive advantage is the increase in the level of attractiveness offered by the company compared to competitors from the customer's point of view (Keegan, 2007). Profit is considered as anything that increases the cost of excess revenue in the value creation framework. (Rumelt, 20180 Saaty and Vargas, 2014). Competitive advantage lies in the nature or dimensions of each company that allows it to offer better services than competitors to customers. Competitive advantage is defined as the value of a company that deserves to provide greater value to customers than the price paid by customers (De, Toni A, 2003). Positional advantage has taken different forms depending

on the context. Doyle and Wong (1998) identified it as company's product, service and reputation, and Matear et al. (2004) examined relationships, brands, and customer service excellence in service organizations. Positional advantage is conceptualized in terms of three key elements of a retail offering: merchandise, store design, and front-line customer service (Bridson and Evans 2004; Vida, Reardon, and Fairhurst).

2.3. Marketing Performance

Marketing performance is an important element of the company's performance in general because the performance of a company can be seen from its whole marketing performance. Marketing performance is a concept to measure the marketing achievement of a company.. Every company has a requirement to know its achievements as a reflection of the success of its business in market competition (Keats et.al, 2000). Marketing performance is also said to be the ability of an organization to transform itself in facing challenges from environment with a long-term perspective (Keats et.al, 1998, p.576). However, the problem of performance measurement has become a classic and debatable issue because as a construct, marketing performance is multidimensional which includes various goals and types of organizations. Therefore, performance better be measured using various measurement criteria at once (multiple measurement). If it only uses a single criterion measurement, it will not be able to provide a comprehensive understanding of how a company actually performs (Prasetya, 2002, p. 227).

3. Result and Discussion

The Green Marketing concept has evolved significantly since it was first defined by Hennion and Kinnear (1976, p. 1) due to "concern with all marketing activities that have involved in causing environmental problems and which can serve to provide a cure for environmental problems". Peattie (2001b, p. 130) conducted research on early definition of the First Age: "Ecological" Green Marketing. Within this definition, several limitations have been identified. The biggest mistake is to limit Green Marketing as an obligated (forced) tool in Traditional Marketing (Peattie, 2001b) or to consider it called promotion (Moniri et al., 2012). There are 3 (three) phases of the development of the Green Marketing strategy concept:

Green Marketing ("Sustainable" Green Marketing) requires an approach that concerned more on: marketers must seek "to meet the cost of production and a full-of-consumption environment to create a sustainable economy" (Peattie, 2001b, p.129). It

also requires moving from product ownership to product use, from product to service, from linear supply chains to close loops, from global distribution chains to localization of supply systems. Green practices are purchasing environmentally friendly products and services, selecting suppliers and setting environmental requirements. Green practice is also pollution prevention, principles and activities. Green procurement compares the price, technology, quality and environmental impact of a product, service or contract. Green procurement policies apply to all organizations, regardless of size (Coddington, 2013). According to Large and Thomsen (2011) green practice is the integration of environmental considerations into policies related on purchasing, programs, and actions. Green, or environmental purchasing, is the involvement of the purchasing function in supply chain management activities such as life cycle analysis and environmental design that facilitates the recycling, reuse, and reduction of resources (Carter and Carter, 1998; Carter et al. , 1998).

High levels of competition and rapidly changing markets and technology make it difficult for companies to maintain momentum without focusing on delivering value to customers who need it. The value proposition varies across industries and across different market segments within an industry (Kaplan & Norton 1996). Capon and Hulbert (2007) said the company's success in the market is achieved by providing value to customers. They introduced the principle of value to customers, with customer insights that drive the company's marketing activities. Yuhui, Gao (2010) considered that the measurement of a performance model that can provide a relationship between financial and non-financial performance requires performance. There are five dimensions in measuring marketing performance (market share, customer satisfaction, customer loyalty/retention, brand equity, and innovation). The following are previous studies that became references for this research.

Consumers make inferences about various product's attributes, including functional attributes such as product quality, through the visual appearance of the product (Bloch 1995; Creusen and Schoormans 2005). A positive relationship between stimulus appeal and product quality has been found in several contexts such as through websites (Wang et al. 2011) and retail stores (Richardson et al. 1996) considering all environmental concerns regarding supply chain management decisions (Yook et al., 2017). ; Zailani et al., 2012).

The picture above showed the results of the outer model analysis for indicators of each variable that has met the validity requirements based on the loading size. This means that research can more accurately predict the relationship between variables that occurred. In the reflective construct, the indicator validity test is conducted using



Figure 2

a loading factor. Each indicator was measured by its loading factor on each construct. The loading factor value was expected to reach more than 0.7. However, in a more exploratory research, a value of more than 0.4 was considered adequate. The loading factor value of each indicator on each construct was measured using the algorithm in the smartPLS program. The results of the SmartPLS algorithm indicated that the Green Marketing (GM) variable has a direct effect on Marketing Performance (MP) and Green Marketing (GM) has an effect on Positional Advantage (PA). Then, Positional Advantage (PA) has a direct effect on Marketing Performance (MP).

TABLE 1

	R Square	Adjusted R Square
M	0.823	0.817
MP	0.692	0.669

It can be seen that the value of the determination coefficient for marketing performance latent variable (Y) was 0.823, green marketing (X) can affect marketing performance (Y) by 0.888%. It can be stated that green marketing on marketing performance in this study has an influence on the development of the palm oil industry.

TABLE 2

	Original Sample (O)	Mean Sample (M)	Deviation Standard (STDEV)	T Statistics (O/STDEV)	P Values
GM -> M -> MP	1.095	1.181	0.345	3.172	0.002

Based on the test results in the table above, it is known that the P-Values GM (X1) -> PA (M) -> MP (Y) was $0.002 < 0.05$, so PA (M) was significant in mediating the influence of Green Marketing on Marketing Performance (Y). In the table above, the T Statistics

value for the Positional Advantage (M) variable in mediating the influence of Green Marketing (X1) on Marketing Performance (Y) is 3.172, which was greater than 1.96, which means that the Positional Advantage (M) variable can mediate the influence between the Green Marketing variables. on Marketing Performance. In this case, the policy that can be taken for oil palm plantation companies is that they have to maintain and even improve the quality of their products. The quality of the product is largely determined by the consumer, it means that it was the consumer who will later rate whether the quality of a product is good or not. For companies, some efforts can be conducted in various ways to improve quality, including by continuously improving applied processes by being more environmentally friendly, maintaining quality by conducting R&D or improving the quality of supervision. The positional advantage of a business was the result of an undertaken competitive strategy to become a low-cost producer in the industry and/or by differentiation in product/service lines.

4. Conclusions

In this research, a test on hypothesis that's developed out of relationship model between Green Marketing variable and Positional Advantage for Marketing Performance Enhancement has been conducted. Based on analysis and research data processing using SmartPLS, it's concluded that Green Marketing positively and significantly affected marketing performance of oil palm plantation industry.

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