

Palm Oil Sustainability Certification and Firm Performance: Is There a Conflict Between RSPO and MSPO?

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Abstract

Malaysia is very proactive in governing its palm oil industry since it contributes highly to the country's export earnings. The current requirement imposed on developing economies to export only RSPO-certified palm oil to the Western countries has raised concerns among the industry players. RSPO stands for Roundtable on Sustainable Palm Oil. It was initiated in January 2003 by a non-profit, private-sector organization. In Malaysia, RSPO certification is still voluntary and a debatable issue. Malaysia has implemented its own system known as Malaysian Sustainable Palm Oil (MSPO). Companies are also encouraged to practice environmental disclosure in the annual reports. This paper discusses the principles of sustainability certification for RSPO and MSPO. The effects of sustainability certifications, environmental disclosure, export earnings and palm oil technology are examined. A total of 103 companies participated in the research. 72.8% of the companies is export-oriented, 54.4% is currently RSPO-certified while 29.1% is MSPO-certified. The study suggests that both certification systems use similar principles. Furthermore, both RSPO and MSPO have no significant effect on firm performance and thus, not in conflict. 70% of the companies view that both certifications should be mandatory. On the other hand, export earnings show a negative impact on performance. As predicted, environmental disclosures and palm oil technology contribute positively to performance ($p\text{-value} < 0.01$). Thus, the disclosure practice and investment in technology should be enhanced to promote sustainability. The paper suggests that halal certification could be a value added to the MSPO certification and further enhance palm oil sustainability.

Keywords: Sustainability, RSPO, MSPO, Environmental Disclosures, Technology, Firm Performance

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Introduction

Sustainability studies attempts to promote responsible consumption and conservation of natural resources and generally focus on the economy, environment and human well-being. At present, 71% or 4.7 million hectares of agricultural land in Malaysia is planted with palm oil and 93.6% of the total industry output is exported. In total 560,000 workers are directly involved in this sector. 60% of the plantation areas can be categorized as large, 28% is termed as smallholders and 12% is independent smallholders (Palm Oil Research, 2016).

Export revenues of palm oil are very significant to the Malaysian economy since the country currently contributes 39% of the world's production, and 44% of the world's exports (MPOC, 2015). Between 2013 and 2014 the growth of crude palm oil production was very favourable rising from 19.2 million tons to 19.6 million tons or 2.3% (MPOC, 2015). The growth was supported by technological advancement which significantly improved oil extraction rate and consequently, supply of palm oil at the time of rising global demand. Two major importers of palm oil who provide support for Malaysia's growth in export earnings are India and China.

The palm oil industry has recently been distracted by a requirement to export only RSPO certified palm oil to Western countries. According to RSPO's current estimates the total global certified production areas is 2.53 million hectares and 41% of that is in Malaysia. The newly imposed system RSPO certification was established on the ground of protecting the environment and promoting social equity and economic development in developing countries. RSPO stands for Roundtable on Sustainable Palm Oil and was initiated in January 2003. It is still not a mandatory exercise in Malaysia. According to Nasir (2004) compliance with RSPO certification is costly and lengthy since it takes about three years to complete the process.

In April 2014 Malaysia launched its own sustainability certification standards known as Malaysian Sustainable Palm Oil (MSPO). It was designed to complement the existing law and unique environment in Malaysia (MPOB, 2015). According to the Ministry of Plantation Industries and Communities (MPIC, 2013) the objectives of MSPO are similar as those of RSPO but it eliminated the irrelevant processes particularly on the legal aspects which have been separately covered within the Malaysian law (MPOB, 2015). Earlier in the year 2011 Indonesia, the world's largest palm oil exporter implemented its own and mandatory Indonesia Sustainable Palm Oil (ISPO). Since the Malaysian government is yet to decide whether the MSPO should be mandatory, this study compares the principles governing the RSPO and MSPO certifications, and also assesses their impacts together with export earnings, environmental disclosure and palm oil technology on firm performance.

The findings of this study are important to provide recommendations for strengthening the industry's sustainability. Firstly, the local certification could serve the same purposes but at lower costs and thus, more effective than the RSPO. Secondly, the impact of exports on firm performance when subject to RSPO certification is crucial for the industry in its strategic positioning. Thirdly, stakeholders are concerned with environmental disclosures and the use of technology to improve sustainability and therefore, their impact of firm performance are examined.

Literature Review

The accusation that forest burning for palm oil plantation is endangering orangutans (Bruce et al., 2010) forms the basis for the Western countries to demand RSPO certification. The accelerated expansion of the plantation areas in Malaysia and the developing countries also led to the environmentalists' concerns on sustainability (e.g., Bruce et al. 2010; Turner et al., 2011; and Fitzherbert et al., 2008). The plantation companies was criticised for destroying the natural rainforests the unfavourable climate changes.

The MSPO Standards (MS2530)

The MSPO certification is designed for palm oil producers and growers, including smallholders to ensure responsible business practice. Its main aim is to achieve sustainable production and improves market access. The standard provides an alternative verification system of sustainable practice such as the RSPO certification. Figure 1 presents the stages involved in the MSPO certification.

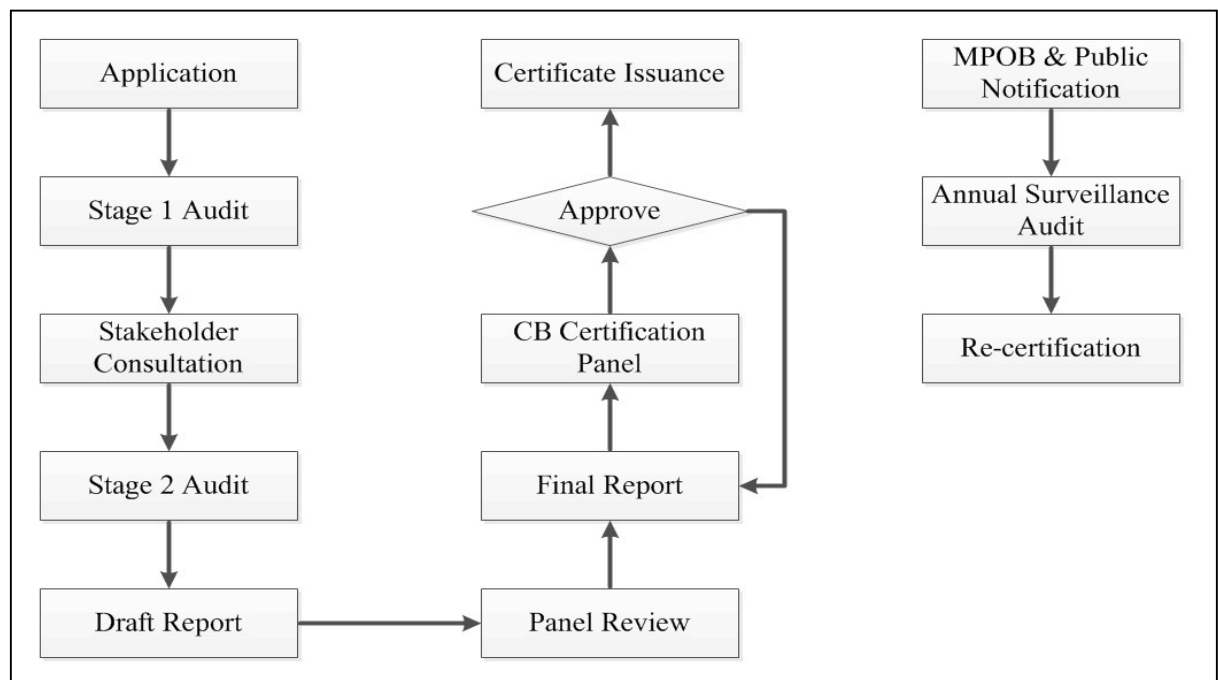


Figure 1: Procedure of MSPO Certification Scheme.

The MSPO are set in a series known as MSPO (MS2530:2013) Parts 1 to 4, and specify the sustainability principles, criteria and indicators. The actual compliance with the standards is verified through auditing. The MSPO also states the requirements on environmental, safety and health of business practices not covered under the existing national legislation and the industry control mechanisms. Its implementation is governed by the Malaysian Palm Oil Board (MPOB).

After submission, a stage 1 audit is performed to verify document and practices. The audit is performed by independent Certification Bodies (CBs), accredited by Standards Malaysia (SM). The CBs are registered with MPOB and provides assurance

of compliance with the sustainability standards (Mokmin, Ainie, Kushairi, et. al., 2014). Then a consultation session with stakeholders is held to allow for clarifications. A second stage audit is scheduled to close any gap obtained during the first audit. A draft report of the findings is issued following the second audit and reviewed by a panel of appointed experts. The final report is tabled to the Certification Board for the final approval. The approved application is awarded a certificate of MSPO compliance. The certificates are issued by the CBs after approval of MPOB after a successful audit. A renewal is required every 3 years through annual surveillance audit.

Export Earnings

Unlike Indonesia, Malaysian companies rely on the exports to sell their output due to low domestic demand. The export earnings from oil palm are critical for the country to support its economic growth and social development and only 10% of its total production is consumed domestically (Nam, 2011). As an export-oriented industry, large companies in the industry are forced to obtain the RSPO certification and thus, actively pursuing the certification standards. Redding and Venables (2004) describe export performance as having two components: (i) external which relates to market access; and (ii) internal which refers to supply-side conditions. According to Bernard and Jensen (1999) both exports and production efficiency have positive effects on firm performance. In terms of value of exports, demand conditions have been shown to have an impact on firm performance (Fugazza and McLaren, 2013).

Environmental Disclosure

Accounting studies involving sustainability generally examine issues related to the practice of environmental disclosures. Deegan (2000) asserts that the information disclosed within the Corporate Social Responsibility (CSR) framework should also address the impact on three main pillars of sustainability which are the environment, social and economics. With respect to environmental disclosures, the stakeholder theory specifically suggests the right of all stakeholders to information which should be made available through the disclosures. The disclosed information should assist them to make decisions regarding the economic activities of the business.

In developing countries two main sustainability issues are deforestation and endangerment to *orangutan* species. The accelerated growth of the plantation areas due to global demand was blamed for the damages to the environment and ecosystems (Bruce, Carmody, Shaw and Morales 2010). As demand for managers to be accountable to all stakeholders the practice of accounting disclosure becomes increasingly common even if it is only voluntary. These other stakeholders include employees, suppliers, customers, communities, trade associations and government agencies (e.g., Freeman, 1984; Freeman, 1994; Donaldson and Preston, 1995; Dima, 2008). Environmental disclosures and reporting are associated with responsible corporate behaviour. Early environmental studies (e.g., Wiseman 1982; Gray, et al. 1987; and Harte and Owen, 1991) indicate that only descriptive information on environmental reporting was reported in the disclosures. To overcome these concerns and improve transparency Malaysian companies are now encouraged to disclose environmental-related information in the annual reports.

Palm Oil Technology

In protecting the environment and promoting sustainability the Malaysian government is committed to use green technology. The green technology refers to products, equipment or systems which minimizes environmental degradation, reduces gas emissions from greenhouses, promotes healthy and improved environment for all forms of life, conserves energy usage and natural resources consumptions and promotes the use of renewable resources. The palm oil industry is currently working towards sustainable farming practices. Extensive research on oil-palm technology is on-going to determine improved methods and strategy for palm-oil cultivation. One of the options is to use genetic engineering or gene technology to modify oil-palm to boost palm-oil production and achieve sustainable oil-palm farming (Prakash, 2013).

The government has introduced Green Technology Financial Scheme (GTFS) which provides a guarantee of 60% on the loan via Credit Guarantee Corporation Malaysia Bhd (Mahfuzah, 2011). The types of green technology financing include term loan, overdraft/revolving credit, bank guarantee, working capital (Liew, 2011). Malaysian palm oil companies have started to consider investing in green technology to convert palm oil wastes into renewable energy such as electricity. The advanced technology helps to reduce greenhouse gas emissions by 80% which in turn increases profits (The Borneo Post, 2013). One potential is to use the palm oil empty fruit bunches (EFB) as biomass fuel and palm oil mill affluent for biogas production. Instead of using fossil fuel the technology captures methane emissions from palm oil affluent which is then used to generate power. Thus, the use of technology may result in improved palm oil yield and waste management to support the industry sustainability.

Firm Performance

Profit maximizing behavior of firms has always been a concern in studies related to business sustainability. According to the stakeholder theory managers have the duty to protect the stakeholders and the shareholders. Most studies of firm performance seeks to determine factors which produce positive impact on performance (e.g., Wally, 2003; Ramasamy, Ong and Yeung, 2005; Mishra and Suar, 2010). Firm performance was traditionally measured using only financial criteria or objective financial data. Among them include size, return on assets, return on equity, asset age and return on sales (Griffin and Mahon, 1997). However, Kelly (2003) argues that financial accounting measures are lagging and historical. Also, Gholami (2011) suggests that the measures may be inaccurate due to aggregation. Furthermore, the validity and reliability of these measures have been questioned. Thus, firms are increasingly incorporating non-financial performance measures (Mansor and Wong, 2013). These measures include research and development, innovation, employee and customer satisfaction (Kaplan and Norton, 2001).

Methodology

In the first part, document analyses using publicly available information (printed and on-line) was performed to gather information on the current state of sustainability certification in Malaysia. Annual reports of the selected companies were accessed and examined to determine the current disclosure practices in the industry. A survey questionnaire was designed based on the literature review and experts' opinion of representatives from the relevant government agencies including Malaysian Palm Oil Board (MPOB) and Malaysian Palm Oil Association (MPOA). The study population was palm oil plantation companies which fulfil the following criteria: (i) registered with and listed in the directory of Malaysian Palm Oil Associations (MPOA); and (ii) classified as palm oil plantations and organized smallholders. A non-systematic sampling was performed and a total of 300 respondents were selected. The non-probability sampling was appropriate in this study due to a limited sampling for the population (Blaxter, Hughes, and Tight; 2010). The questionnaire was divided into 2 parts. Part 1 addresses the profile and descriptive statistics while Part 2 covers statements corresponding to the independent and the dependent variables. A ten point Likert-scale was adopted and the questionnaires were sent to CEOs, accounting/finance managers or their equivalent rank. Follow-up telephone calls were made after 4 weeks for non-response cases and appropriate action was taken. A total of 108 were returned but 5 of them were incomplete. Thus, 103 (34%) responses were included in the final analysis using Structural Equation Modelling (SEM).

Findings and Discussion

Palm Oil Sustainability Certification Principles

Accredited third parties are appointed to audit and assess the compliance level under both RSPO and MSPO. The former consists of 8 Principles, 39 Criteria and 120 indicators while the latter is governed by 7 principles, grouped into 4 parts. These are outlined in the Malaysian Standard (MS 2530:2013). Table 1 presents the principles used under the two schemes.

RSPO		MSPO Equivalent	
P1	Commitment to transparency.	P2	Responsible to transparency of information, documents, method of communication, traceability.
P2	Compliance with applicable laws and regulations.	P3	Compliance to legal requirements.
P3	Commitment to long-term economic and financial viability.	P1	Management commitment and responsibilities.
P4	Use of appropriate best practices by growers and millers.	P6	Implement standard best practices.
P5	Environmental responsibility and conservation of natural resources and biodiversity	P5	Environment, natural resources, biodiversity and ecosystem.
P6	Responsible consideration of employees and of individuals and communities affected by growers and mills.	P4	Social responsibility, health, safety and employment conditions.
P7	Responsible development of new plantings	P7	Commitment to development of new planting
P8	Commitment to continuous improvement in key areas of activity		Not stated as a specific principle, partly embedded in MSPO-P1.

Table1. Principles of RSPO AND MSPO and ISPO

Each of the RSPO principle is matched with the equivalent MSPO principle in the column labelled 'MSPO Equivalent'. The shaded areas show where both schemes use the same principles and in the same sequence. The first RSPO principle is commitment to transparency where provision of sufficient information on environmental, social and legal issues to stakeholders are the key concern. Growers and millers which apply for certification must have a documented Standard Operating Procedures (SOPs) and evidence of timely communication with stakeholders on RSPO related issues. Management documents such as land titles, pollution prevention, complaints and grievances and human rights policy are required to be made publicly available. Under this principle, a written policy of ethical conduct set within the United Nation framework against corruption shall be communicated to the workforce. This same principle is equivalent to principle number 2 of the MSPO.

The second RSPO principle addresses compliance with applicable laws and regulations, and equivalent to MSPO principle number 3 (P3). Companies must comply with all legal requirements including local and customary land-use rights,

labour and agricultural practices. They must prove that representatives of the affected communities including legal counsel were chosen by the communities. Where the customary rights areas are not clearly stated, participatory mapping exercise must be conducted and involve the affected parties.

The third RSPO's principle deals with commitment to long-term economic and financial viability. Companies must provide evidence of having at least a 3-year business plan that includes information on production costs, forecasts of prices and financial indicators. Under MSPO this is listed as principle number 1 (P1).

The use of appropriate best practices forms the fourth principle under RSPO and the criteria include having a Standard Operating Procedures (SOPs) for maintaining soil fertility, minimizing soil erosion and degradation, protecting surface and ground water, pesticides controls and appropriate plan for occupational health and safety. The same principle is applicable under MSPO, stated as principle number 6 (P6).

The fifth principle is dedicated to environmental preservation and biodiversity protection. Both RSPO and MSPO classify this as principle number 5. Growers and millers are also required to implement a plan to reduce pollution and greenhouse emissions before 2017. Companies must have a monitoring system to measure polluting activities and report them to or seek advice from RSPO working group on the best environmental practices.

Guidelines on communication with affected employees, individuals and communities including handling complaints and grievances fall under principle 6 for RSPO, and number 4 for MSPO. The guidelines also cover issues related to workers' pay and conditions of employment, equal opportunities, fair pricing and human rights policies. Companies should provide evidence that local people understand their right to refuse plantation of palm oil on their land, and have access to information on legal, economic, environmental and social implications of the new planting.

Both certifications provide guidelines on new planting under principle number 7. In contrast to MSPO, the RSPO has an additional principle (P8) on commitment to continuous improvement in key activities. The guidelines include reduce use of pesticides, pollution and greenhouse gases and waste reduction. MSPO does not specify this commitment under a separate principle but partly embedded them in P1.

Profile of Respondents

Table 2 presents the company profiles. 68.9% of the companies were relatively small with plantation areas of less than 3000 hectares while 22.3% had more than 5000 hectares. Only 8.7% were mid-size with total areas between 3000 to 5000 hectares. In terms of total investment 33% reported having invested less than RM5million while 16.5% had investment between RM5 million to RM20 million. The balance 34% of the companies had invested more than RM100 million.

No.	Profile	Description	No. of Respondents	%
1	Size of Plantation Area	Less than 3000 hectares	71	68.9
		3001-5000 hectares	9	8.7
		More than 5001 hectares	23	22.3
2	Total Invested Capital	Less than RM5 million	34	33.0
		RM5 –RM20million	17	16.5
		RM20 – RM50million	8	7.8
		RM50 – RM100million	9	8.7
		More than RM100million	35	34.0
3	Total Number of Employees	Less than 100 employees	28	27.1
		101-500 employees	48	46.6
		More than 500 employees	27	26.2
4	Total Annual Sales Turnover	Less than RM10 million	46	44.7
		RM10 – 50 million	30	29.1
		More than RM50million	27	26.2

Table 2. Profile of Palm Oil Plantation Companies

The industry is relatively labour-intensive and 46.6% of the companies employed between 101-500 people while 26.2% had more than 500 labourers. In terms of annual sales 44.7% of them had less than RM10 million, 29.1% had between RM10 million to RM50 million, and 26.2% had more than RM50 million annual sales.

Hypotheses Testing

Five hypotheses were tested in this study to examine the relationships between the exogenous variables and firm performance as follows:

- H1: RSPO certification has a negative impact on firm performance.
- H2: MSPO certification has a negative impact on firm performance.
- H3: Environmental disclosure has a positive impact on firm performance.
- H4: Export earning has a negative impact on firm performance.
- H5: Palm oil technology has a positive impact on firm performance.

Structural Equation Modelling

Figure 3 presents the standardised regression estimates. The coefficient of each correlation between the latent exogenous constructs is less than 0.85, which indicates that the assumption of discriminant validity was achieved.

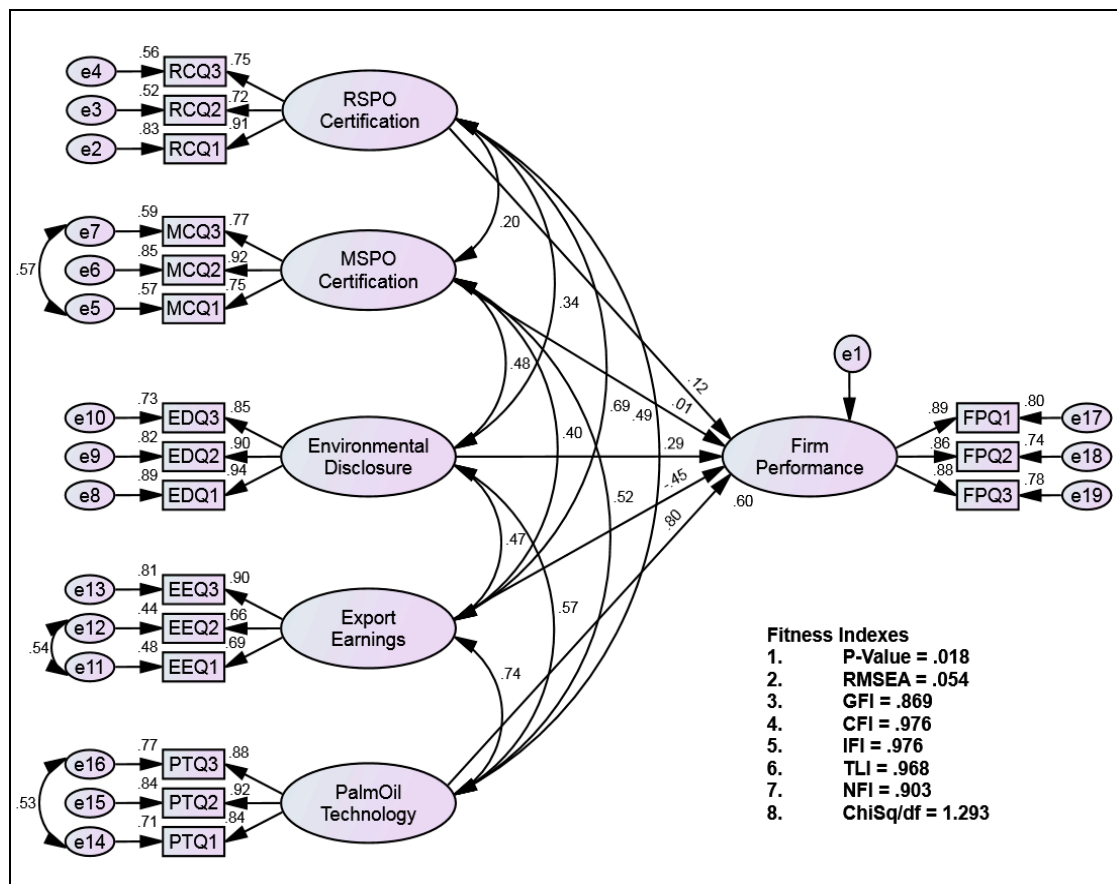


Figure 3: Standardized Regression Weight Output

Table 3 presents the results of path analysis using SEM. The path coefficient between RSPO certification and firm performance and, between MSPO certification and firm performance are not statistically significant (p-values 0.038 and 0.917, respectively). The coefficient for environmental disclosures, export earnings and palm oil technology are however, statistically significant.

Construct	Path	Construct	Estimate	S.E	C.R	P	Result
Firm Performance	←	RSPO Certification	0.093	0.108	0.863	.388	Not Significant
Firm Performance	←	MSPO Certification	0.014	0.133	0.104	.917	Not Significant
Firm Performance	←	Environmental Disclosures	0.352	0.130	2.713	.007	Significant
Firm Performance	←	Export Earnings	-0.480	0.222	-2.163	.031	Significant
Firm Performance	←	Palm Oil Technology	0.948	0.210	4.509	***	Significant

Table 3. Path Analysis Results between Exogenous and Endogenous Constructs

The results indicate that the practice of environmental disclosures has a significant positive impact on performance. This is consistent with the continuing demand by stakeholders for increased transparency in this environmentally sensitive industry. Thus, environmental disclosures in the annual reports should be improved and further promoted.

The performance of plantation companies is negatively affected by the export earnings. The RSPO certification costs are fixed in nature and unavoidable for companies which export their oil palm. The additional costs, however, are not compensated by sales to the Western countries since the price for certified oil palm is the same as the non-certified oil palm. Thus, the rise in exports led to reduced firm performances.

Unlike sustainability certification systems, technology shows a significant positive impact on the performance of firms in this industry. The investment in technology is in the long run beneficial for companies to reduce waste and improve yields and thus, promote sustainability.

Conclusion and Recommendations

Even though RSPO carries a global element it is a product of a voluntary organization. MSPO, in contrast, is developed by a government agency and has a clear framework to serve the interest of the Malaysian palm oil industry. The MSPO was not intended to compete or be in conflict with the RSPO. Rather, it is consistent with the principles of RSPO and further strengthens the existing standards and laws for sustainable palm oil market. Thus, the RSPO and MSPO certifications are not in conflict with one another, and Malaysia should self-govern its MSPO certification system in producing sustainable palm oil. However, implementing both systems may be redundant and not performance-driven if the increased in compliance costs does not result in positive impact on firm performance. Improved coordinations among the

existing government agencies such as MPOB, Malaysian Palm Oil Association (MPOA) and Malaysian Palm Oil Council (MPOC) could provide more assurance for the effectiveness of the MSPO certification in the global market. As a highly organised sector and heavily followed by investors, the industry needs to promote a culture of responsible business community. It is important for the industry to fulfil stakeholders continuing demand for increased transparency of financial and non-financial (i.e., balanced) business performance. The complexity of today's business environment demands balanced information for stakeholders' decisions. Companies which practice environmental disclosures and sustainability reporting are moving closer to Integrated Reporting (IR). By adopting the IR reporting framework, palm oil companies are being proactive in enhancing sustainability.

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