

SUPPLY CHAIN MANAGEMENT PRACTICES IN MALAYSIA PALM OIL
FIRM

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DEDICATION

To my beloved husband..

and my children

Nurul Izzah Khairul Anwar

Muhammad Luqman Nurhakim Khairul Anwar

Nurul Aisyah Khairul Anwar

Nurul Syafiqah Khairul Anwar

And my mother

Muslimah Hj Mohd Kutty

And my late father

Omain Hj Mohd Noor

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ABSTRACT

Globalisation leads to competitive business environment which resulted companies continuously striving for excellence in their operations. Among others, supply chain management (SCM) is used as strategic tool for companies to remain competitive than their competitors. However, there are lack of evidences in the existing literature on the supply chain practices in Malaysia particularly in the palm oil industry. The purpose of this research was to explore issues relating to supply chain management and its practices in palm oil firm in Malaysia. This study used qualitative investigation in a single case study setting of a palm oil firm in Malaysia. In-depth semi-structured interviews were employed with twenty-one participants from six subsidiaries companies of Felda Global Venture Berhad. Thematic analysis was employed to analyse the transcribed interviews. Findings from the study reveal the SCM practices for FGV are inter-subsidiaries obligation, trust, loyalty, strategic location, suppliers and customer relationships, information systems and internal integration. In addition, this study discloses the issues concerning the SCM practices in FGV are problems concerning communication, poor quality of materials from outside suppliers, conflicts between subsidiaries, logistics and pilferage of stock. Theoretically, the study contributes towards the development of a model for supply chain practices of palm oil firm in Malaysia. The model shows that the integration of SCM practices blend the resources and capabilities of FGV and the success of SCM practices relies on the strong backbone of element on the subsidiaries relationship. Methodologically, the study illustrates the effective use of qualitative study in the predominant quantitative approach in SCM field of study contribute to the SCM literature. Practically, this study adds a valuable contribution to the supply chain profession, palm oil bodies, and government bodies in term of the constructs of the supply chain that should be implemented in palm oil industry. Future research in this area are recommended to focus on the quantitative approach in order to generalize the findings to a wider context.

ABSTRAK

Globalisasi menyebabkan persekitaran perniagaan semakin kompetitif yang mendorong syarikat-syarikat berusaha untuk terus cemerlang dalam operasi mereka. Di antaranya ialah pengurusan rantai bekalan (SCM) yang digunakan sebagai alat strategik bagi syarikat-syarikat untuk kekal kompetitif berbanding pesaing mereka. Walau bagaimanapun, terdapat kekurangan bukti dalam kajian literatur tentang praktis rantai bekalan di Malaysia terutamanya dalam industri minyak sawit. Tujuan kajian ini adalah untuk meneroka isu-isu yang berkaitan dengan pengurusan rantai bekalan dan amalannya dalam firma minyak sawit di Malaysia. Kajian ini menggunakan penyelidikan kualitatif dalam kajian kes tunggal syarikat minyak sawit di Malaysia. Temubual mendalam berbentuk semi-struktur dijalankan ke atas 21 peserta daripada enam anak syarikat Felda Global Venture Berhad (FGV). Analisis tematik digunakan untuk menganalisis temu bual yang telah ditranskripsikan. Dapatan kajian menjelaskan bahawa praktis SCM di FGV meliputi tanggungjawab antara anak syarikat, amanah, kesetiaan, lokasi strategik, hubungan pembekal dan pelanggan, sistem maklumat dan integrasi dalam syarikat. Tambahan pula, kajian ini mendedahkan beberapa isu berkaitan praktis SCM iaitu masalah berkaitan komunikasi, kualiti bahan yang rendah dari pembekal luar, konflik antara anak-anak syarikat, logistik dan kecurian stok. Secara teori, kajian ini menyumbang ke arah pembangunan model praktis rantai bekalan dalam firma minyak kelapa sawit di Malaysia. Model ini menunjukkan bahawa pengintegrasian amalan SCM menggabungkan sumber dan keupayaan FGV. Kejayaan amalan SCM bergantung pada kekuatan tulang belakang elemen tersebut iaitu hubungan antara anak-anak syarikat. Secara metodologi, kajian ini menggambarkan penggunaan yang berkesan kajian kualitatif yang dikuasai oleh pendekatan kuantitatif dalam bidang SCM yang menyumbang kepada literatur dalam SCM. Secara praktiknya, kajian ini memberi sumbangan yang berharga kepada profesion rantai bekalan, badan minyak kelapa sawit, dan agensi-agensi kerajaan dari segi pembinaan rantai bekalan yang perlu dilaksanakan dalam industri minyak sawit. Kajian masa depan dalam bidang ini disyorkan untuk memberi tumpuan kepada pendekatan kuantitatif supaya dapat merumuskan penemuan dalam konteks yang lebih luas.

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LIST OF ABBREVIATIONS

SCM	-	Supply Chain Management
CSR	-	Supplier Customer Relationships
II	-	Internal Integration
IS	-	Information Systems
FGV		Felda Global Venture Berhad
FPI		Felda Palm Industries Sdn Bhd
FKP		Felda Kernel Products Sdn Bhd
FVOP		Felda Vegetables Oils Products Sdn Bhd
DOP		Delima Oil Products Sdn Bhd
FTSSB		Felda Transport Services Sdn Bhd
FMSSB		Felda Marketing Services Sdn Bhd
CPO		Crude Palm Oil
CPKO		Crude Palm Kernel Oil
PKE		Palm Kernel Expeller

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The Malaysian economy recorded a moderate growth of 4.5 per cent in the fourth quarter of 2016 (Department of Statistics, 2016). Malaysia has a diversified economic structure. The main sectors of the economy are services, manufacturing, agriculture, mining and construction. Services sector growth at the rate of 5.5%, manufacturing (4.8%), and construction grew at 5.1%. In addition, the agriculture sector decreased at the pace of -2.4% (Department of Statistics, 2016). The decline of the agriculture sector in the fourth quarter of 2016 is due to the impact of El Nino on the oil palm and other agriculture subsectors (Malaysia Economy, 2016). Though agriculture decline -2.4% in the 4th quarter of the GDP, Malaysia currently accounts for 39% of world palm oil production and 44% of world exports, and therefore it has contributed to 12% and 27% of the world's total production and exports of oils and fats (MPOC, 2017). Thus, Malaysia is classified among the world's leading producer and exporter of palm oil products.

Globalization has created a business environment that has become increasingly competitive. As a result, companies have to continuously look for ways to distinguish themselves from their competitors and one of the approaches taken is to recognize supply chain management as a competitive weapon. The strategy is initiated by reducing inventory levels, which result in reduced costs. From mid 1990

to late 2000, numerous researchers have advocated that competition is no longer between organisations, but between supply chains (Bechtel and Jayaram, 1997; Cooper *et al.*, 1997; Spekman *et al.*, 1998, p. 709; Tan, 2001; Koh *et al.*, 2007; Chow *et al.*, 2008; Antai, 2011; Perry, 2012). Besides, Katunzi (2011) asserted that organisations must integrate their operations with trading partners, rather than work against them in order to maintain competitive advantage for the entire supply chain.

Supply Chain Management (SCM) is a strategic management tool in traditional business function that involves the flow of materials and information, upstream or downstream, across any aspect of the supply chain system (Mentzer, 2004). It consists of all involving parties, either directly or indirectly, to fulfill customer request (Chopra and Meindl, 2007). A supply chain is an interrelationship, through which information, physical goods, and services flow back and forth (Kim, 2005; Mentzer, 2004), consisting of business entities that undertake value-creating activities (Harrison, 2003; Kim, 2006) involved in supplying necessary materials, transforming various supplies into valuable goods and services, and distributing the final outputs to customer markets (Harrison, 2003; Altekar, 2005). Thus, it can be concluded that SCM is the study of how to manage the supply chain in an optimum way in order to create the maximum value for the customers (Kim, 2005; Altekar, 2005). Therefore, for the purpose of effective supply chains management, companies need to make both strategic and operational decisions on their sourcing, factories, and distribution centers, pertaining to its criteria such as, convenience, customer and supplier locations, and future needs (Guan, 2005).

As companies begin to realise the importance of creating an integrated relationship with their suppliers and customers, supply chain integration become an important issue to the firms. Power (2005), claimed that supply chain become feasible depending on the ability of companies to access accurate, timely and affordable information. This situation is the consequence of the growing usage of internet among firms. However, the author also believed that the formula for integration is not simple because organisations that aim to become part of an extended and integrated supply network are required to equip themselves with an infrastructure that enable effective information flows and streamlined logistics.

Handfield and Nichols (1999) have emphasized that the main drivers of integration are information revolution, increased levels of global competition in creating a more demanding customer and market driven markets, and the emergence of new types of inter-organisational relationships.

Many academics and practitioners have acknowledged the benefits of implementing SCM in organisations. A study by Chin *et al.* (2004) on Hong Kong manufacturing firms revealed that the 5 most important reasons for companies to implement SCM were reduced operations costs, improved inventory levels, decreased lead- time, increased customer satisfaction and to remain competitive. Moreover, there is clear evidence that the implementation of SCM has a correlation with company's performance. Chow *et al.* (2008) concluded that SCM practices have a direct impact on organisation performance in Taiwan. A further argument supporting this study was by Li *et al.* (2006). The results of the study showed that organisations with high levels of SCM practice possess high levels of organisational performance, likewise SCM practices have a direct impact on competitive advantage. Thus, to remain competitive, companies must adopt supply chain management practices in their organisations.

Although the importance of supply chain within the upstream suppliers and downstream customers have been recognised by many researchers, the implementation of SCM has become issues for many firms. A study by Fawcett and Magnan (2002) indicated that supply chain practice seldom resembled the theoretical ideal. Another point in favour of this study was done by Olhager and Selldin (2004) in the Swedish manufacturing firms. Their study revealed that the supply chain collaborations ability between focal companies, upstream suppliers, and downstream customers are somewhat mediocre. This is due to the fact that supply chain coordination is new to those companies. Thus, these studies proved that the implementation of extensive supply chain in companies is more rhetoric than reality.

Therefore, the current study was conducted to develop a conceptual framework to address this research gap. The goal is to explore the actual practices of

supply chain management in Malaysian palm oil firms and develop a conceptual framework for this practice.

1.1.1. The Palm Oil Industry

Palm Oil was introduced in Malaysian economy from Africa during late 1950s and early 1960s. The introduction of National Economic Policy (NEP) in 1970-1990 with the objectives to achieve national integration and unity through reducing and eradicating poverty and restructuring the Malaysian economy to reduce the economic imbalance (Simeh and Tengku Ahmad, 2001). The authors advocate that the Malaysia government agencies such as a Federal Land Development Authority (FELDA) opened up extensive new lands for re-settlement of the rural landless and the development mainly consisted of organized oil palm estate. Thus, it is the beginning of palm oil became the key role in the Malaysian economy.

The palm oil industry is an important component of the national economy and the agriculture sector. According to Basiron (2002), oil palm is an important crop for Malaysia and this industry provide about half of the overall agricultural employment. Malaysian palm oil industry demonstrated a mix performance in 2015 (MPOB, 2016). This report also advocates that there are an increase in the oil palm planted area (4.6%), and crude palm oil (CPO) production (1.5%). However, the average price of CPO was decrease by 9.6%.

Palm oil industry in Malaysia has developed and does not depend on palm oil plantation only. According to Basiron (2002), aside of plantation estates and small holders sectors, the industry has diversified into well established processing sector which encompasses of milling, refining, crushing, end user products and oleo-chemical products. The palm oil industry consists of many businesses along the supply-chain, which can be divided into four sub-sectors: (1) growers; (2) millers; (3)

refiners, and (4) oleochemicals. These industries are linked together from upstream to downstream. Figure 1.1 shows the value chain of palm oil industry.

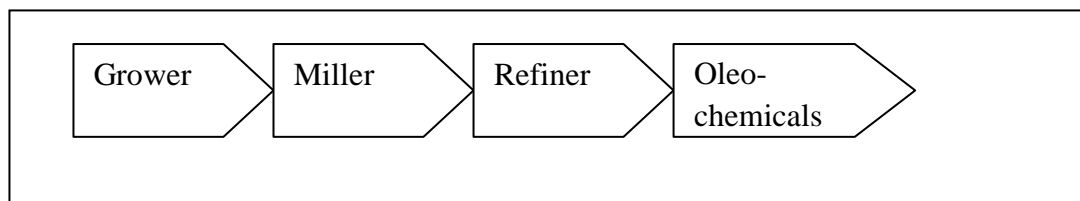


Figure 1.1 : The Value Chain of Palm Oil Industry

Source: Omain, *et. al* (2010), “*Supply Chain Management Practices in Palm Oil Industry*”, 11th Asia Pacific Industrial Engineering & Management System Conference.

Upstream industry comprises of growers and millers sectors. Growing sector involved in the cultivation of oil palm that include nursery establishment, plantation of palm oil plant and production of fresh fruit bunches (FFB). Whereas, downstream industry comprises of refiners and oleo-chemicals sectors. The downstream sectors comprise of palm oil refiners, palm kernel crushers, manufacturer of palm-based edible products, specialty fats producers and oleo-chemical producers.

According to Collins Dictionary, manufacturing firm can be defined as the organisation that manufactures goods (www.collinsdictionary.com). While Business Dictionary defined manufacturing firm as the process of converting raw materials, components, or parts into finished goods that meet a customer's expectations or specifications. Manufacturing commonly employs a man-machine setup with division of labor in a large scale production (www.businessdictionary.com). Due to the absence of a precise definition of palm oil firms, the researcher defined palm oil firms that involved in any of the palm oil activities which covers the value chains elements which include the supply of palm oil planting materials, nursery, fertilisers, palm oil plantation, palm oil mills, palm oil refiners, palm kernel crushers, manufacturer of palm-based edible products and oleo-chemical producers.

Figure 1.2 shows the palm oil processing flow from Fresh Fruits Bunches (FFB) to the refinery and shipment of palm oil. Fresh fruits bunch (FFB) from plantation companies will be send to mills and refineries companies. The products

from palm oil mills are crude palm oil (CPO), palm kernel and palm ash. Palm ash will be selling as fertiliser. While CPO will be send to refineries Company or will be export to overseas. Palm kernel will be sent to palm kernel processing plant.

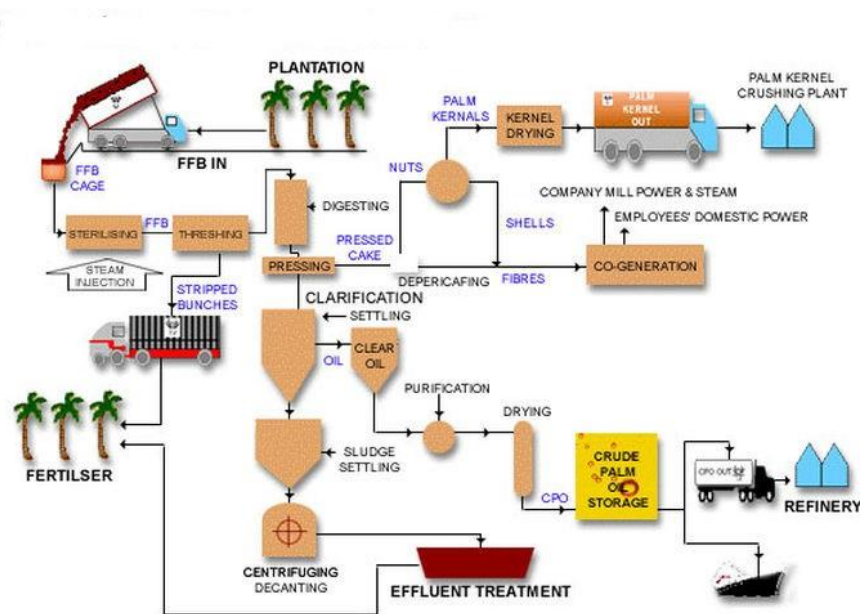


Figure 1.2 : Palm Oil Processing Flow

Source : <http://www.schusterinstituteinvestigations.org/#!/palm-oil-supply-chain/c1q1d>

1.1.2. Case Study Company: Felda Global Venture Holdings Berhad.

According to Yin (2003), case studies are the preferred strategy when “how” or “why” questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context and the “distinctive need” of conducting case research is derived from the “desired to understand complex phenomena”. FGV is suitable for this study in fulfilling the objectives of this study, such as; the actual practices of supply chain management in FGV (investigate a specific phenomena and detailed explanations of best practices), the level of adoption of supply chain integration in FELDA groups of

companies the issues surrounding the implementation of supply chain management (desired to understand complex phenomena in a real-life context).

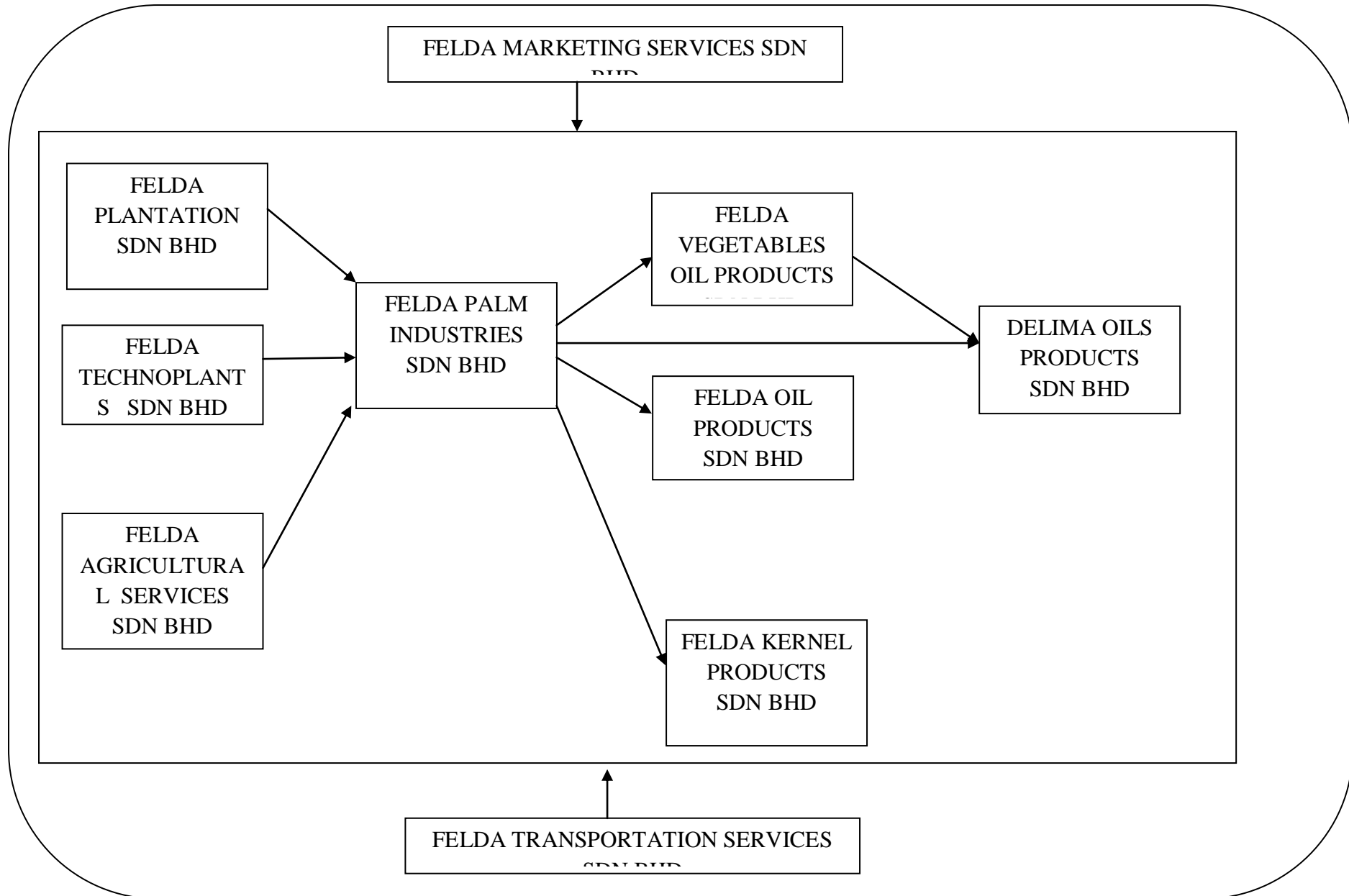
Felda Global Ventures Holdings Berhad (FGV) is a Malaysia's leading global agribusiness. FGV as part of FELDA Group, the world's largest palm oil manufacturer and oil palm plantation operator, based on planting hectares. Incorporated in Malaysia as a private limited company 2007, FGV initially operated as the commercial arm of Federal Land Development Authority (FELDA). On 28 June 2012, the company was listed on the main market of Bursa Malaysia Securities Berhad as Felda Global Ventures Holdings Berhad. FGV is the world's largest Crude Palm Oil (CPO) producer and the second largest Malaysian palm oil refiner. As an integrated palm oil producer, its activities include palm oil plantation, crude palm oil (CPO) production, palm oil refining and fractionation, kernel oil production, research and development, marketing and palm oil trading, production and distribution of cooking oils and packed products as well as liquid and dry bulk storage (www.feldaglobal.com).

FGV has a complete palm oil supply chain through their subsidiaries. They have taken up every aspect of the supply chain; from the production of seedlings to selling of palm oil based products. FGV is a unique company in term of the integration of its' business activities. Functions and services of FGV companies are in plantation, downstream activities (palm oil), manufacturing and services. FGV has fully integrated companies, which linked all of its upstream activities and downstream activities with the focal company. The upstream activities are managed by FELDA Agricultural Services Sdn Bhd (FASSB), Felda Technoplants Sdn Bhd (FTSB) and FELDA Plantation Sdn Bhd (FPSB). Those activities are supply of oil palm planting materials, fertilizers and rat bait, carries out agricultural research and development in oil palm breeding, agronomy, crop protection, fruits, herb and other potential crops.

FELDA Palm Industries Sdn Bhd (FPI) processing fresh palm oil bunches (FFB). Theses bunch were from the 160 oil palm estates. FELDA Palm Industries Sdn Bhd has 70 mills and refineries. The products from these refineries are crude palm oil

and palm kernel. These products will be sent for another processing to any of these companies, namely; Felda Vegetable Oil Products Sdn Bhd (FVOP), FELDA Kernel Products Sdn Bhd (FKPSB) and, FELDA Oil Products Sdn Bhd (FOPSB). DELIMA Oil Products Sdn Bhd (DOPSB) received their materials from FVOP. Further, FELDA Marketing Services Sdn Bhd (FMSSB) act as a marketing arm of the FGV in the sale of palm oil products. In addition, FELDA Transportation Services Sdn Bhd. (FTSSB) is managing transportation of all FGV products (from the upstream activities to the downstream activities). Therefore, FELDA Global Venture has a uniqueness of supply chain within their group of companies. Appendix A shows the subsidiaries companies in FGV that are related to palm oil and their activities. The companies are FPSB, FTSB, FAASB, FPISB, FVOP, FOPSB, FKPSB, DOPSB, FMSSB and FT. In addition, Figure 1.3 (refer to page 7) shows linkages between various companies in Felda Global Venture. On top of that, Figure 1.4 (refer to page 8) exhibits the FGV supply chain of palm oil. FPSB, FTSB and FASSB supply fresh fruit bunches (FFB) to FPISB to be processed in their 70 mills throughout Malaysia. FPI's main products are crude palm oil (CPO) and palm kernel. Crude palm oil will be selling to their own subsidiaries (DOP and FVOP), local sales and export sales. Another product from FPI is palm kernel and its sell to FPKSB. The shipments of CPO and palm kernel to their customers are using FTSSB. FVOP owns 4 refineries throughout Malaysia. Their main products are Refined Bleach Deodorized Palm Oil (RBDPO), Refined Bleach Deodorized Palm Oilen (RBDPS), Refined Bleach Deodorised Palm Stearin, Palm Fatty Acid Distillate FPAD, and Crude Palm Olien. RBD will be export and also sell to local market including DOP. Some of the products are using FTSSSB to ship to their customers. In addition, FMSSB does all the sales of CPO, RBD, PKE and CPKO from FPI, FVOP and FKPSB.

Figure 1.3 : The linkages of subsidiaries companies in Felda Global Venture Holdings Berhad.



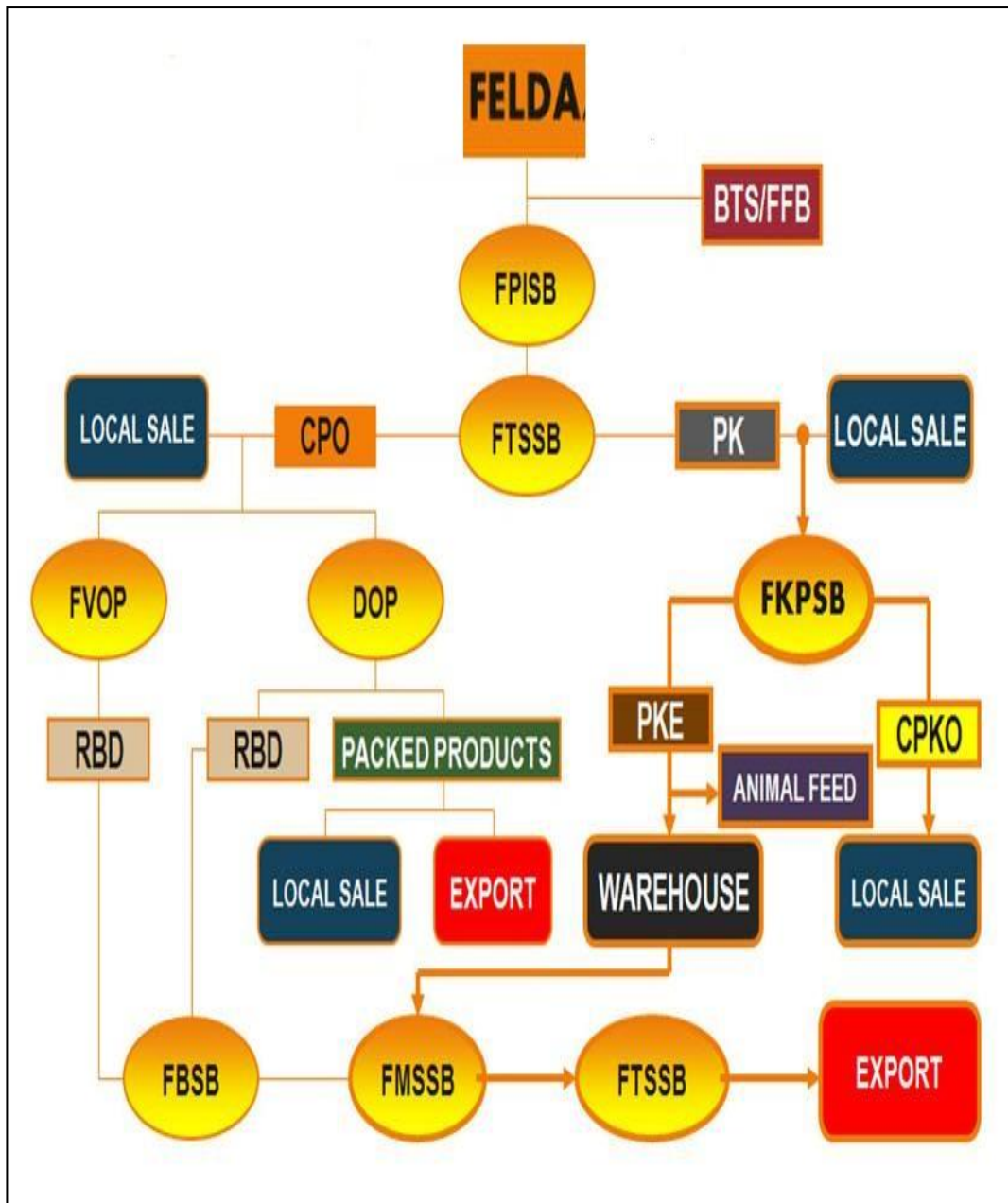


Figure 1.4 : Felda Global Venture Holdings Berhad supply chain of palm oil.

Source: FGV.

In conclusion, this section shows the comprehensiveness of the supply chain at FGV as compared to other organization in Malaysia. Thus, this unique point makes FGV a compelling case study for this research.

1.2 Problem Statement

Malaysia is classified among the world's leading producer and exporter of palm oil products (MPOC, 2015). Among the palm oil companies in Malaysia such as Sime Darby, IOI Plantation, Golden Hope Plantation, Guthrie Groups, Kulim, and Federal Land Development Authority (FELDA). Felda Global Venture (FGV) is the biggest player which has a complete palm oil supply chain operations through their subsidiaries. FGV has taken up every aspect of the value chain ranging from the production of seedlings, nursery, fertiliser, plantation of palm oil trees, palm oil mills, palm oil refiners, palm kernel crushers, manufacturer of palm-based selling of palm oil based products. Hence, FGV has the comprehensive supply chain network in palm oil industry. Besides, FGV has a unique supply chain network within their group of companies through their supply chain management (SCM) members of the supply chain which include the upstream and the downstream activities, establishes relationships that covers the coordination of production and logistics activities. Thus, coordination required decisions to be made jointly with regarding companies' production, inventory, and delivery activities. Today, upstream and downstream integration with suppliers and customers have emerged as an important element of manufacturing strategy. In addition, the emergence of Indonesia as one of the palm oil producer has effects on the competitiveness of FGV in palm oil market. In 2012, Indonesia produced 35% of the world's certified sustainable palm oil (Sarif, 2013). Thus, FGV needs to develop a complete and efficient SCM in order to remain competitive in this industry.

A review of literature shows that a number of studies have been conducted to measure the level of SCM practices in specific countries or specific industries (Tan, 2002; Tan *et al.*, 2002; Quayle, 2003; Li *et al.*, 2006; Larson *et al.*, 2007; Zhou and Benton-Jr, 2007; Talib *et al.*, 2011) . However, most of the previous studies of

supply chain management practices were conducted in the U.S. or other developed countries rather than in developing countries like Malaysia. Moreover, these studies were mostly focused on automotive, electronics and retail industries which left the palm oil industry unattended. In order to implement SCM in Asia, companies need to consider their strengths, uniqueness and limitations in term of political, infrastructural, manufacturing systems and practices which are eccentric to each industries and countries. Thus, different countries may have different set of practices in implementing SCM. This lead to a major question on how companies such as FGV implement SCM in their daily operations?

Evidences in the literature in 2001 suggest that the focus on SCM research is heavily on European and US food and agriculture industry. However, later studies on SCM in food and agriculture industry focused on the internet-based application (Manthou *et.al*, 2005); retail food supply chain (taylor and Fearne, 2006); proposing of supply chain collaboration framework (Matopulos *et. al*, 2007); measuring the structure on the level of chain (Mikkola, 2008); level of strategies on the vertical channels of fresh produce (Hingey *et. al*, 2008). Study by Mollenkopf and Dapiran (2005) in Australia and New Zealand on supply chain capabilities and competencies concluded that food and agricultural industries need better improvement in their implementation of supply chain management. On the contrary, these works were done outside Malaysia as well as out of the contenix of palm oil industry. Thus, the absent of Malaysia setting that warrant this study to be done on a single case study of palm oil company.

Attempts have been made by researchers such as Hamid, (2002); Ndubisi *et al.*, (2005); Zailani and Rajagopal, (2005); Salleh, (2007); Kamaruddin and Udin, (2009); Shatat and Udin , (2012); Rusli *et al.*, (2012); Inda Sukati *et al.*, (2012); Thoo *et al.*, (2012) to investigate SCM practices in Malaysia. However, their main focuses are on industry such as semi-conductor, electrical and electronics, automotive, small medium enterprises and Multi-national Corporation, rather than on the oil palm industry. In addition, it is acknowledged that different countries and

industries influence the SCM practices in organizations. Thus, it is arguable that a palm oil company such as FGV would experience similar benefits and conflicts like those written in the literature. However, little evidence can be found in the literature describing the actual practices of supply chain management in palm oil industry. A call for further investigation on the issues surrounding SCM practices in particularly the palm oil organization is justified due to the lack of evidences in the existing literature. Hence, findings from this study contributed to fill in the gaps of knowledge in supply chain practices in Malaysia particularly in the palm oil industry.

Most previous studies applied survey method (Tan, 2002; Tan *et al.*, 2002; Sahay and Mohan, 2003; Ulusoy, 2003; Chin *et al.*, 2004; Olhager and Selldin, 2004; Mollenkopf and Dapiran, 2005; Jharkharia and Shankar, 2006; Li *et al.*, 2006; Sahay *et al.*, 2006; Koh *et al.*, 2007; Larson *et al.*, 2007; Robb *et al.*, 2007; Zhou and Benton-Jr, 2007; Chow *et al.*, 2008; Halldorsson *et al.*, 2008) which tend to be too deductive and narrow. In contrast, only a few studies on supply chain practices used case study approach (Sohal *et al.*, 2002; Wong *et al.*, 2005; Demeter *et al.*, 2006) and qualitative method (Kempainen and Vepsalainen, 2003; Storey *et al.*, 2006; Childerhouse *et al.*, 2008). Qualitative studies are more in-depth as they seek to understand the organisation's SCM practices. Due to the quantitative approach of many researchers in SCM practices, many issues surrounding the implementation of SCM practices are left unaddressed. Therefore, even though quantitative research findings can be generalised to the other industries but such studies failed to provide in-depth understanding of real SCM studies. Hence, this qualitative investigation is important as an attempt of providing in-depth exploration of SCM practices which is still lacking in the literature.

In brief, no comprehensive framework has been developed from the implementation of SCM practices in a particular firm. Despite the evidence of the importance of SCM, there is insufficient knowledge about these practices in Malaysia. Previous studies have not addressed the practices of SCM in palm oil

industry in Malaysia; FGV which has a complete supply chain business process is suitable for the single case setting for this study.

1.3 Research Aims

The overall research gaps have been identified and addressed in the previous section. Due to the significant research gap in palm oil industry, this study aimed at developing in-depth understanding of issues surrounding the SCM practices in FELDA Global Venture Holdings Berhad.

1.4 Research Objectives

Considering the concerns raised in the problem statement, hence, the research objectives recognised in this study were:

- (1) To investigate issues relating to supply chain management practices in the firm.
- (2) To investigate SCM practices in oil palm firm.
- (3) To developed a model that reflects the supply chain management practices of palm oil firm.

1.5 Research Questions

In particular, this study will examine three main research questions:

- (1) What are the issues relating to the SCM practices in palm oil firm?
- (2) How is SCM being practiced in a palm oil firm?

- (3) How can SCM practices of palm oil firm be modeled?

1.6 Scope of the Study

The focus of this study is only limited to FELDA Global Venture Holdings group of companies. In specific, only companies directly involved in the palm oil chains under the management of FELDA Global Venture Holding (FGV) will be the scope of this study. FGV is a unique company in term of the integration of its' business activities. Functions and services of FGV companies are in plantation, downstream activities (palm oil), manufacturing and services. FGV has a complete palm oil supply chain through their subsidiaries, which linked all of its upstream activities and downstream activities with the focal company.

In addition, this study follows a case-study design, with an in-depth analysis of interviews. Therefore, the findings of this study cannot be generalised as the practice of the entire palm oil industry. Besides, it is beyond the scope of this study to examine the entire palm oil industry in Malaysia.

1.7 Significant of the study

Previous researches show that different countries may have a different set of practices in implementing SCM. Thus, proposing the supply chain management model that tailored to the environment of the Malaysian palm oil company is essential. Moreover, the proposed model provides important insights into the key factors, which enable managers or supply chain practitioners to gain better understanding of these factors impacting SCM adoptions. This information will always be useful for industries, especially for those companies who are planning to implement this approach in the future. Furthermore, extensive research on the

current practices of SCM in palm oil industry will help the Malaysian government and policy makers in implementing or proposing the new policies regarding this issue in the future.

The issue of supply chain management is frequently highlighted in the literature, however, there is a lack of research been found with relation to SCM practices in palm oil industry, particularly within Malaysian context. Thus, this study is expected to add a valuable contribution to the supply chain profession, palm oil bodies and government bodies in the practices and constructs of SCM practices.

Nevertheless, this lack of evidence indicates that the research on SCM practices in palm oil industry in Malaysia has consequently forced the researcher to embark on this study. Hence, this study is expected to pose distinct new knowledge to the academicians, practitioners, and regulators. Consequently, the emulation of improvements and contributions to the knowledge can be expanded over time. This will add a major contribution to the existing collection of literature in SCM, and the palm oil industry. Finally, it also will offer a potential ground for future research within the SC field and other fields relating to palm oil industry.

1.8 Definition of Terms

This section provides some definitions of SCM, SCM Practices and palm oil firm.

1.8.1 Supply Chain Management (SCM)

For the purpose of this research, the definition proposed by Handfield and Nicholas (2002) is found suitable to be adopted for this research. Handfield and Nicholas (2002) defined SCM as;

“The integration of all activities associated with the flow and transformation of goods from the raw materials stage, through to the end user, and information flows through improved supply chain relationships, to achieve a sustainable competitive advantage”.

(Handfield and Nicholas, 2012; 2)

1.8.2 Supply Chain Management Practices

“SCM practices are defined as the set of activities undertaken by an organization to promote effective management of its supply chain. The practices of SCM include a multi-dimensional concept, including the downstream and upstream sides of the supply chain.

(Li *et al.*, 2005; 108).

The set of activities proposed by Li *et al.* (2005) are strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and postponement.

1.8.3 Palm Oil Firm

Palm oil firm is any firm that is involved in any of the palm oil activities which covers the value chains elements including the supply of oil palm planting material, nursery, fertilisers, palm oil plantation, palm oil mills, palm oil refiners, palm kernel crushers, manufacturer of palm-based edible products and oleo-chemical producers.

1.9 Organisation of the Thesis

This thesis is organised as follows. The first chapter provides the general introduction of this research, the palm oil industry, the case study company, problem

statement, research aims and objectives, scope of this research, significant of the study and the definition of terms.

Chapter 2 reviewed the overview of supply chain management, the benefits of supply chain management implementation, and the barriers in implementing SCM, discussed the supply chain practices, the underpinning theory of this study and proposed a conceptual model of SCM practices.

Next, chapter 3 provides the review of research methodology. This chapter discussed the justification of the paradigm, research design, overview of the case study company, case study procedures, and ethical consideration. Chapter 4 presents the findings of the study whereby Chapter 5 concludes and suggests recommendations to further enhance the study.

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