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STATE-OWNED ENTERPRISES AND ENVIRONMENTAL DECISION-MAKING: COMPARING FELDA AND FGV

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ABSTRACT

When considering firms' environmental performance and decision-making processes, the literature has overwhelmingly focused on private firms. However, many firms involved in sectors linked to environmental exploitation are not private firms. In many natural resource-rich countries, state-owned enterprises (SOEs) control these resources. Many types of SOEs have different ownership and control structures, translating to varying emphases on profit. Therefore, this paper asks the question: do ownership and control structures of different types of SOEs influence their decision-making processes on the environment? To illustrate this, this paper uses a case study approach comparing two types of SOEs within the Malaysian palm oil sector: the people-oriented FELDA and the profit-oriented FGV. Despite similar market and governance conditions, the decisions taken by these SOEs resulted in opposite outcomes for the environment. FGV, with an ownership and control structure dominated by state and private investors, tended to take advantage of this structure to overlook environmental objectives in the pursuit of profits. On the other hand, FELDA, owned and controlled by the state and settler cooperatives, achieved both capital accumulation and environmental protection through environmentally- and socially conscious decision making. Hence, this paper argues that in the case of SOEs particularly, a firm's ownership and control structures can influence decision-making to either be positive or negative for the environment.

Keywords: *State-owned enterprises; FELDA; FGV, palm oil; environmental decision-making*

INTRODUCTION

State-owned enterprises (SOEs) "are firms that are wholly or partially owned and controlled by the state (government)" (Peng et al., 2016). SOEs are found in almost every economic sector and control the country's natural resources (Cuervo-Cazurra, Inkpen, Musacchio, & Ramaswamy, 2014). For instance, in Myanmar, there are twelve areas, including agriculture development and preservation of forest plantation, that are reserved by law for State Economic Enterprises (SEE) (widely known as SOEs) to venture into the (Rieffel, 2015). Profit-seeking SOEs are essentially the leading players in the emerging economies of Brazil, China, Indonesia, Mexico or South Africa, poorer economies, or even advanced economies like France.

Some types of SOEs often cause significant environmental issues in many carbon-intensive sectors. Based on Benoit (2020), profit-seeking SOEs have been analysed to "emit over 6.2 gigatons of carbon dioxide-equivalent in every greenhouse gas sector". Benoit Mayer & Rajavuori (2016) argue that more than twenty per cent of GHG emissions are from the fossil fuel-based sectors, and most companies involved in those sectors are profit-seeking SOEs. Many profit-seeking SOEs in China cause major environmental problems, particularly dam projects. As evidence, based on Urban & Nordensvard (2014), China's profit-seeking SOEs lead the hydropower sector in terms of the number of dams built despite their vulnerability to climate change. Besides that, two-thirds of China's power capacity is generated through coal burning in the power sector. It essentially involves five SOEs under the provincial administrations.

However, in the empirical study of Bergsager & Korppoo (2013), China's profit-seeking SOEs are significant players in mitigating climate change. Based on their study, in the steel sector, the State Council had increased the production share of the top ten profit-seeking SOEs from 40 per cent in 2010 to 60 per cent in 2015. It was achieved by introducing advanced and efficient technologies in the steel sector to mitigate climate change while making a profit. Therefore, sometimes, there can be environmentally positive outcomes.

As for Malaysian SOEs, there is hardly a sector where SOEs are not involved (Menon, 2017). Seventeen of the top fifty publicly-listed companies in 2017 were SOEs (Gomez et al., 2018). For instance, Petronas is a state-owned oil and gas company ranked 184th on the Fortune Global 500 List, having revenue of nearly a quarter of GDP in 2017 (Menon, 2017). Thus, this shows the crucial role of SOEs in building Malaysia's economy. Even though Malaysian SOEs are great economic contributors to the country, many profit-seeking SOEs violate the environment badly to achieve their profit-making goals. Some scholars argue that "the government strives for economic growth, progress and development; this is why it tolerates the destruction of tropical forests by foreign and national corporations" like profit-seeking SOEs (Nordensvärd & Urban, 2011, p. 17).

There are many different types of SOEs with varying types of government involvement in their ownership and control structure that give importance to profit differently, such as Government-Linked Companies (GLCs), Government-Linked Investment Companies (GLICs), Statutory Bodies, Foundation or *Yayasan*, Special Purpose Vehicles (SPVs) and Development Financial Institutions (DFIs). Thus, this paper chooses two types of SOEs within the Malaysian palm oil sector: the people or social-oriented FELDA and the profit-oriented FGV to answer the question on; do ownership and control structures of different types of SOEs influence the decision-making processes on the environment?

FELDA is a statutory body SOE, defined as an "institution established by various laws at the federal and state level" (Gomez et al., 2018). FGV was established as a GLC, defined as "a company, listed or unlisted, in which one government institution is the largest shareholder" (Gomez et al., 2018). They are both involved in climate-intensive sectors, particularly palm oil plantations, making them a good choice for this study to determine whether their decision is positive or negative for the environment.

METHODOLOGY

This research chooses to adopt the case study method. The case study method helps “to investigate cases in depth and to employ multiple sources of evidence makes them a useful tool for descriptive research studies where the focus is on a specific situation” (Spinks & Canhoto, 2015). This method is also used to examine contemporary events while focusing on historical events with various types of evidence such as documents, artefacts, interviews, etc. (Yin, 1994).

Between single or multiple case study research design, this research chooses the multiple-case method, which is used when “theory to be better grounded in more varied evidence, with the particular advantage that they allow for cross-case comparison” (Spinks & Canhoto, 2015). Thus, in answering the question of doing ownership and control structures of different types of SOEs influence the decision-making processes on the environment, this research has chosen to compare a profit-seeking SOE, FGV Holdings Sdn Bhd (FGV), with a social-oriented SOE, Federal Land Development Authority (FELDA).

FELDA and FGV are SOEs that share a common history. However, they began to function differently when FGV was divested from FELDA and incorporated with a different ownership and control structure. FGV works as a profit-seeking SOE with the government acting as one of the shareholders, with minimal government regulation. This is because FGV is an SOE or GLC established under the Companies Act 1965 (Felda Global Ventures Holdings Berhad, 2012).
On the other hand, FELDA works as a social-oriented SOE with high government regulation. The government is the regulator, and the settlers participate in the ownership and control structure. This is because FELDA is a statutory body established under the Land Development Ordinance 1956 (Dissanayake, n.d.).

Thus, it can be analysed that FGV is an entity that has minimal government regulation, contrary to FELDA, which is an entity that has high government regulations and settlers' participation which can be used to determine whether these entities can achieve both profit-making and environmental protection in the palm oil sector. This is because both are involved in the same climate-intensive sector, the palm oil plantation sector, which means that both SOEs will face the same environmental problems in developing the industry. In comparing these two SOEs, this study can analyse how they differ in the decision-making process in the palm oil plantation sector and their impact on environmental outcomes.

This study uses a business history approach to compare FELDA and FGV's decision-making process in developing the sector and its environmental protection management. Business history is a crucial method to trace a company's evolution. The emphasis of this approach is to discover the development of a business system that can vary significantly among businesses and countries (Cole, 1962). This approach is crucial because it is essential to track the decision-making processes that the entities have made from the formation until today based on the ownership and control structure consisting of different government roles and settlers' participation. This must be done by reviewing the entities' historical nuances.

In the literature on business history, Chandler's methodology was the most influential among business historians (Jones, 2017). His method was seen as an inductive style of reasoning to determine the transformation of a business. Five central pillars were identified in Chandler's methodology from most of his famous works [e.g. *Strategy and Structure (1962), The Visible Hand (1977), and The Dynamics of Industrial Capitalism (1990)*]. Firstly, focus on identifying the changes over time from a historical perspective in the business organisations Secondly, construct convincing research questions from the specified changes. Thirdly, undertaking a comparative analysis to answer why a certain change happened. Fourthly, the empirical study's historical narratives would be drawn out in chronological sequences on how a company evolved. Lastly, Chandler uses inter-disciplinary perspectives to conceptualise historical records in the history of a business.

Using the first and fourth pillars of Chandler's methodology, this study will identify the changes in the ownership and control structures of FELDA and FGV while looking into the decision-making processes in chronological sequence. In adopting the second pillar, this research has structured research questions from the changes that have been identified. Further in using the third and fifth pillars, this study has compared the different environmental outcomes of FELDA and FGV and why that is the case. Thus, this approach supports this study to analyse which type of SOEs ownership and control structure are more likely to produce outcomes that simultaneously support profit-making and environmental mitigations or protection. This study can thus determine whether the climate capitalism model that incorporates the neoliberal approach works for SOE with a profit-seeking company in making a profit while protecting the environment.

Two data collection methods are used in this research: primary and secondary. The primary data collection is done by compiling official documents and reports online or from institutions. The official documents used in this research were mainly FGV and FELDA company yearly reports. In collecting data, this research also conducted casual interviews with FGV personnel to build this study's grounds. Besides that, this research also used the secondary data collection method due to limited access to some of the official documents of FELDA and FGV. Thus, this study used various types of books, journal articles, and newspaper reports as its secondary data to overcome the limitations.

OIL PALM SECTOR IN MALAYSIA

Palm oil is one of the most demanding vegetable oils in the world. Therefore, the growth of palm oil monoculture plantations expanded drastically (Guillaume et al., 2018). While the palm oil crop is the best crop for producing a high yield per hectare compared to other crops, it also works best in tropical land areas rich in biodiversity. Therefore, oil palm developments also often cause the decimation of tropical forests. Field Guillaume et al. (2018) state that one hectare of converted rainforest land to oil palm plantation can release about 174 Mg of carbon per unit of yield. This amount of carbon release "is roughly equivalent to the amount of carbon produced by 530 people flying from Geneva to New York in economy class" (Guillaume et al., 2018).

In addition, oil palm is developed mainly in peatlands. Since peatland contains 18 to 28 times more carbon than regular forested areas, converting peatlands into oil palm plantations damages the environment (Page et al., 2011). Clearance of peat swamp forests causes a higher rate of carbon released into the atmosphere than clearing tropical forests. Furthermore, the drainage process of cleared peat swamp forests makes the areas vulnerable to fire. Thus, these cause major fire breakouts, which concurrently raise the total amount of GHGs. Therefore, it can be determined that the palm oil plantation sector is one significant sector that causes major releases of carbon into the atmosphere.

With that, looking specifically at Malaysia's palm oil plantation sector, the Malaysian government intervenes in three forms: statutory bodies, GLCs/SOEs, and substantial shareholdings (Gomez et al., 2018). There are three significant statutory bodies in the Malaysian plantation sector: FELDA, Rubber Industry Smallholders' Development Authority (RISDA), and the Federal Land Consolidation and Rehabilitation Authority (FELCRA). These statutory bodies are "institutions established by various laws at the federal and state levels" (Gomez et al., 2018). Meanwhile, FGV Holdings and Sime Darby are formed like GLCs/SOEs and function like any other corporate company (Menon, 2017). Apart from that, the government intervenes through substantial shareholdings with investments, such as in the case of IOI Corporation, a family firm controlled by Lee Shin Cheng (Menon, 2017).

As a result of the establishment of these types of companies, extensive tropical forests were cleared to establish oil palm plantations (IUCN, 2018). This led to significant carbon release from primary and secondary forest areas, leading to important global warming issues (Asian Scientist Newsroom, 2018; Union of Concerned Scientists, 2013). As evidence, based on the study conducted by Nordensvärd & Urban (2011), Malaysian profit-seeking SOEs involved in the palm oil sector often cause significant deforestation, causing the release of a high amount of GHG into the atmosphere. Besides that, based on the study conducted by Varkkey (2013), the Malaysian palm oil SOEs were criticised for causing transboundary haze in Indonesia. These palm oil SOEs were primarily involved in clearing peatland areas which caused major forest fires to break out. The study also argues that profit-seeking SOEs are often motivated by profit-making with little concern for the environment.

HISTORY OF FELDA AND FGV

On 1st July, FELDA was established under the Land Development Ordinance 1956. Therefore, FELDA was formed as a statutory body, bound by government legislation. This also means that the government has tight regulations over FELDA. At that time, the government was very interested in land development policies to uplift rural people's economic status (Dissanayake, n.d.). In 1958, several amendments were made to the Land Development Ordinance; as a result, the government expanded the role of FELDA.

However, after the Malayan Emergency[1] in 1961, the Malaysian government prioritised rural development and developed new policies to reorganise land development policies. Thus, Tun Abdul Razak, the Deputy Prime Minister and Minister of National and Rural Development appointed a Special Committee to see the need for transformation within FELDA (Bahrin & Thong, 1988; Dissanayake, n.d.). The Committee found the structure of FELDA was insufficient and ineffective in meeting the demands of the National Rural Development Programme (Thong & Bahrin, 2006). As a result, a significant restructuring occurred both within and outside the statutory body (the Ministry and other government agencies) after the Malayan Emergency.

Accordingly, two main reforms were implemented. Firstly, the government regulate FELDA to have a significant role in land development projects. Secondly, the government Field took away the autonomous power of FELDA to make policies (Thong & Bahrin, 2006). This shows that as a regulator, the government has the ultimate decision-making power to lead FELDA to function in certain ways. This was considered the first government action towards tightening its grip on FELDA as a regulator of statutory body SOE. As a result, Tun Abdul Razak, the Minister of National and Rural Development, urged FELDA to emphasise the regional development (Dissanayake, n.d.). It resulted in FELDA conducting the first comprehensive regional program in the Jengka Triangle, Pahang, followed by many more in other places (Mehmet, 1982). Thus, by the end of the First Malaysia Plan (1970), FELDA was a successful land developer in Malaysia (Mehmet, 1982; Thong & Bahrin, 2006).

With the continued land development objective in the Second Malaysia Plan (1971-1975), FELDA also ambitioned to eradicate poverty in the country (Dissanayake, n.d.). To achieve the eradication of poverty in rural areas, the government regulated FELDA "to accelerate the expansion and modernisation of the agriculture sector to increase employment opportunities" (pg. 25) (Thong & Bahrin, 2006). With the excellent result of the Second Malaysia Plan, the Third Malaysia Plan (1976-1980) focused more on expanding land development.

In 1980, the government regulated FELDA to establish Koperasi Permodalan FELDA (KPF), also known as FELDA Settlers Cooperative, consisting of a few FELDA settlers with the ambition of uplifting the social well-being of the settlers. It is a cooperation that functions as an intermediate channel for the settlers to communicate with FELDA. Besides, KPF was also created as a channel for the settlers to invest and benefit from the commercial activities of FELDA. Therefore, this shows that the government that acts as a regulator for FELDA focuses on investments for the settlers to generate income for their well-being.

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[1] Malayan Emergency was a guerrilla war carried out by the Malayan Races' Liberation Army (MRLA) under the leadership of Chin Peng for the independence of Malaya (known as Malaysia now) to form a socialist economy (Mcdonough, 2018).

However, in the Fifth Malaysia Plan (1986-1990), the government decided to reduce the land development targets of FELDA due to financial issues (Dissanayake, n.d.). During this period, as a regulator, the government influenced FELDA to play an important role in diversifying exports by cultivating oil palm to raise its exports. From then onwards, FELDA was a successful rural developer and recognised as a leading investor in the development of the plantation sector (Thong & Bahrin, 2006).

By the 1980s, FELDA faced many problems, one of which was financial issues due to high resettlement costs (Abdul Hamid, 2000). Simultaneously, the government under Prime Minister Mahathir Mohamad was interested in endorsing neoliberal policies through privatisation. Therefore, in the Sixth Malaysia Plan (1991-1995), the government shifted towards privatisation. Thus, the privatisation policy mainly focused on reducing "the government's financial and administrative burden, improving efficiency and productivity, and facilitating economic growth" (Dholakia & Dholakia, 1994).

During this time, the government regulated FELDA to focus on diversifying activities to support the government's privatisation policy (Sutton & Buang, 1995). As a result, FELDA formed FELDA Holding Sdn Bhd, which is FGV today, but it was formed under the Companies Act 1965. This was to function like any private company managing its diversification activities through corporations and companies. This is while FELDA remains the statutory body regulated by the government as a social-oriented SOE to focus on the well-being of the settlers.

On the other hand, the formation of FELDA Holdings Sdn Bhd under the Companies Act 1965 was criticised by many worldwide. For instance, the World Bank study (1985, p.30 and p.42) criticised that even though FELDA is thriving as a land development organisation, FELDA Holdings Sdn Bhd, without the settlers' participation in the decision-making processes, seems to be a weakness (Sutton & Buang, 1995).

Despite all these criticisms, the government regulated FELDA to create FELDA Holdings Sdn Bhd to increase value-added products from the oil palm plantations of FELDA settlers. Since FELDA Holding Sdn Bhd was formed under the Companies Act 1965, it has functioned as the commercial arm of FELDA. It was soon integrated with the plantation company to manage FELDA's plantations and downstream activities (Thong & Bahrin, 2006).

In 2007, FELDA Holdings Sdn Bhd further expanded its commercial activities by forming FELDA Global Venture Holdings (FGVH) "as the holding company for the government's 49% stake in FELDA Holdings" (Van Gelder et al., 2012). From then onwards, the firm functioned "to operate as a commercial arm for FELDA's overseas investments in the upstream and downstream palm oil business and other agribusinesses" (FGV Holdings, n.d.). This was due to the shareholder's interest, which is the government in this case. As a result, FGVH focused on venturing into soybean and canola in North America. FGVH further expanded its upstream plantation activities to other countries like Indonesia, apart from developing it locally. Besides that, FGVH also ventured into sugar and palm oil refining making FGVH the leading refined sugar producer in Malaysia (Van Gelder et al., 2012). Therefore, it can be analysed that the government's relationship with FGVH seems more profit-oriented than social-oriented without much regulation in any development.

Eventually, as a profit-seeking SOE that works in the interest of the government shareholder, FGVH was interested in getting listed on the Malaysian stock exchange. However, FGVH needed to own all FELDA Holdings shares, which were then partially held by KPF. Under these circumstances, at the beginning of 2012, FELDA signed the "99-year Land Lease Agreement" to shift the plantation lands under FELDA Holdings' control to FGVH (Van Gelder et al., 2012).

However, these drew major criticisms among the settlers, who believed that future generations would inherit the settlers' shares under FELDA Holdings Sdn Bhd will be inherited to the future generations. Firstly, it was criticised that this business deal has "undermined the hopes of the underemployed second and third generations of the settlers to obtain their pieces of land" (Van Gelder et al., 2012). Secondly, it was criticised for transferring about 24.5 per cent of Native Customary Rights and Malay Reserved Lands to a private company, FGVH (Van Gelder et al., 2012).

This resulted in mushrooming dissatisfaction among the settlers. Adding to the dissatisfaction, the listing of FGVH was announced to be carried out without the participation of KPF (Van Gelder et al., 2012). This also means that the settlers will not have any say in decision-making or financial commitment to FGVH. At this point, the relationship between FELDA settlers and the profit-seeking SOE, FGVH, seemed less than cordial. This can be analysed that as one of the shareholders, the government under FGVH appears only to make decisions that focus on profit rather than social aspects. Thus, FGVH decided not to include KPF in its listing journey.

However, the Land Leasing Agreement between FELDA and FGVH in 2012 before the listing has eventually created a business-like relationship with FELDA as the largest shareholder in the company. Thus, it can be analysed that from forming FGVH under the Companies Act 1965 as a profit-seeking SOE[2], the government decided to act as a significant shareholder through FELDA.

From 2012 onwards, the commercial estates of FGVH were used as the critical cash-generating asset for FGVH's overseas investments (Khor et al., 2015). Therefore, FGVH decided to raise its overseas investments to gain more profits. However, the overseas investments of FGVH, such as purchasing Grand Plaza Serviced Apartments and Kensington Hotel in London, and Merdeka Palace in Kuching, have failed to generate profit. This was due to corruption in the investment (The Centre to Combat Corruption and Cronyism, n.d.).

As a result of that, by the end of 2014, the major shareholder of FGVH who is the government, approved to utilise its commercial plantation estates and downstream activities as its core strategy in achieving its ambition of becoming one of the top ten agri-business entities in the world by 2020 (FELDA Global Ventures Holdings Berhad, 2014). With that, the firm is responsible for showing progression in their financial status to the government due to the role as the largest shareholder who merely focuses on making a profit. The statement of YB Tan Sri Haji Mohd Isa, the Chairman of FGVH, to his fellow shareholders in its 2013 annual report was clear about their policy:

> "…Despite a challenging operating environment, FGV posted a profit after tax (PAT) of RM1.1 billion, a 30.2 per cent increase from the previous financial year. Consistent with the FGV's dividend policy, we delivered a total dividend pay-out of 16sen per share or RM583 million…." (FELDA Global Ventures Holdings Berhad, 2013) (pg11).

Therefore, it was evident that FGVH was very responsive toward its shareholders in achieving its financial progress than FELDA, which was responsible for the settlers' well-being in achieving the socio-economic goals. Thus, this shows the government's different roles under FGVH and FELDA to emphasise attaining different goals. This was possible for the government due to the various formations of FELDA and FGVH as other types of SOEs.

[2] Government-Linked Companies (GLC) or State-Owned Enterprise (SOE) is "a company, listed or unlisted, in which one government institution is the largest shareholder" (Gomez et al., 2018).

By analysing the business history[3] of FELDA and FGV, the relationship between the government and FELDA seems to be tight regarding regulations, and it is also very much social-oriented with its developments. On the other hand, FGVH is a firm that was formed under the Companies Act 1965 to function as a profit-seeking SOE with little regard to government regulations or the settlers' social well-being. Therefore, the government's relationship with FGVH seems much like a shareholder type of relationship that is profit-oriented with minimal laws in its developments.

DIFFERENCES IN THE OWNERSHIP OF FELDA AND FGV

In this section, this study will show how the government functions in the ownership and control structure of FELDA and FGV by using an explanatory diagram. After the policy change that took place in the 1960s, the Minister-in-charge of FELDA was given extensive powers to regulate FELDA in accomplishing its duties and functions in line with the interests of the government (Bahrin, Perera, & Kow, 1979; Commissioner of Law Revision Malaysia, 2006: Section 4, Number 1).

Thus, FELDA as a statutory body had restrictions in carrying out activities from then onwards, and all activities required the Minister's approval. This was clearly stated in the Land Development Ordinance 1956:

> "The Authority shall not promote, carry out, assist or participate in any such project or activity as is referred to in this section in any State or Settlement or with any Department of the Federal Government as appear to the Minister to be appropriate have been taken" (Land Development Act 1956, 2006)

Regarding the role of the Chairman, based on the Land Development Act 1956, the Chairman of FELDA is required to supervise and control the officers and servants in terms of FELDA's executive administration, accounts, and records. The Chairman can consult with the General Manager regarding their duties for FELDA [Section 21(2) & Section 22] (Land Development Act 1956, 2006). This can be seen in figure 1.

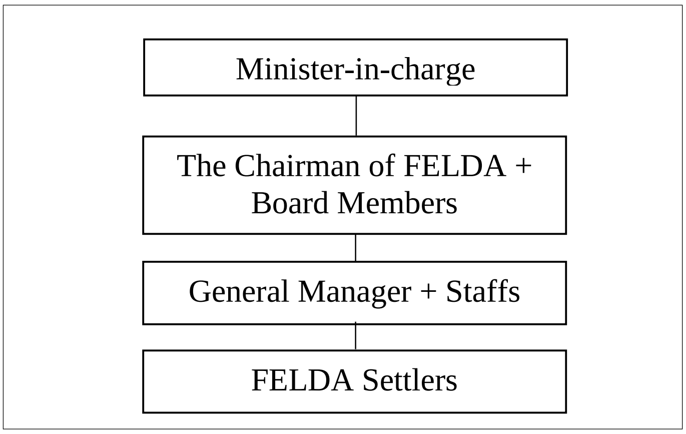

Figure 1 Ownership Structure of FELDA at the end of the 1960s

After the government's focus on eradicating poverty in the Second and Third Malaysia Plans, the government influenced FELDA to create KPF as a platform for the settlers to invest in FELDA

[3] Business history approach is an approach to discovering the evolution of a business system, one that can vary significantly among businesses and countries (Cole, 1962). It also encourages the need to develop questions such as "what made for change, why did it come when it did, and in the way it did?" (Jones, 2017).

Corporations to improve their well-being and overcome poverty through job opportunities. KPF is an organisation that consists of twelve board members, including six representatives of FELDA settlers, three representatives appointed by FELDA, and other three members from FELDA officials (Rokiah, 2009, pg 118,119). By the end of the 1980s, the ownership structure of FELDA was structured as shown in figure 2, which is structured based on the FELDA's annual reports.

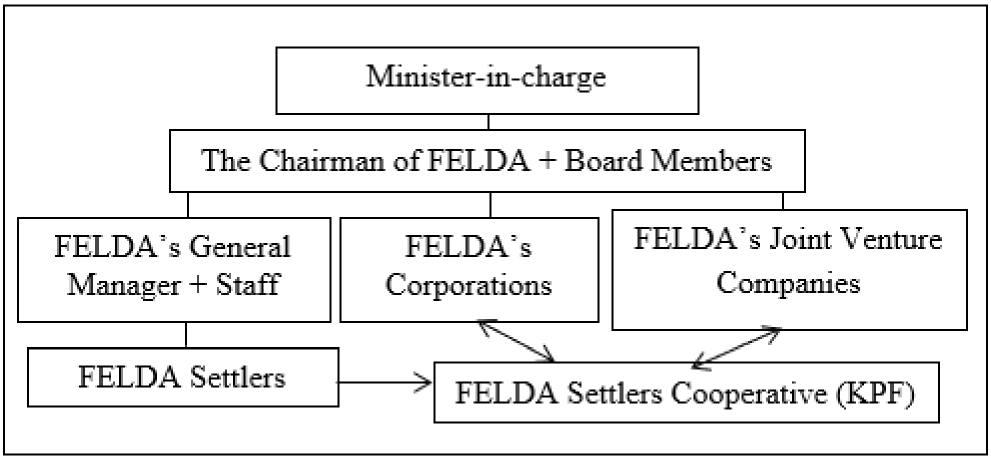

Figure 2 Ownership Structure of FELDA at the end of the 1980s.

As mentioned earlier, after the government's central policy to focus on privatisation in 1990, the government regulated FELDA to establish FELDA Holdings Berhad as its commercial arm. All FELDA's corporations were changed under the Companies Act 1965 and placed under FELDA Holdings Berhad. With the creation of FELDA Holdings Berhad under FELDA, the settlers were still allowed to be the major shareholder in the FELDA Holdings Berhad through KPF with fifty-one per cent of shares to raise their well-being. The rest of the claims were held by the government. Thus, by the end of the 1990s, FELDA's ownership and control structure was restructured, as shown in figure 3, which was created based on the FELDA's annual reports.

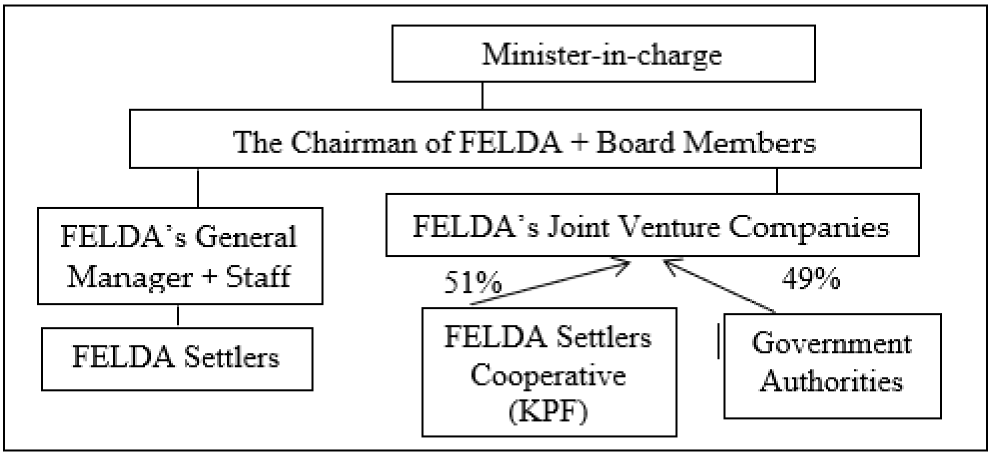

Figure 3 Ownership Structure of FELDA at the end of the 1990s

However, in the 2000s, with the profound interest of the government to privatise, the government insisted on forming FGVH as a profit-seeking SOE. By creating that, FGVH owned 49 per cent of shares under FELDA Holdings Berhad. In the interest of being listed on the Malaysian stock exchange, FGVH was interested in acquiring the rest of the shares held by the settlers under the

FELDA Holdings Berhad. As a result, FELDA remains a social-oriented firm regulated tightly by the government due to its formation as a statutory body SOE. With that, the current ownership structure of FELDA is shaped by the Minister being in the highest position and then followed by government servants like the Chairman, Board Members, general manager, staff and then lastly, settlers, as shown in figure 4, which is structured based on the annual reports of FELDA.

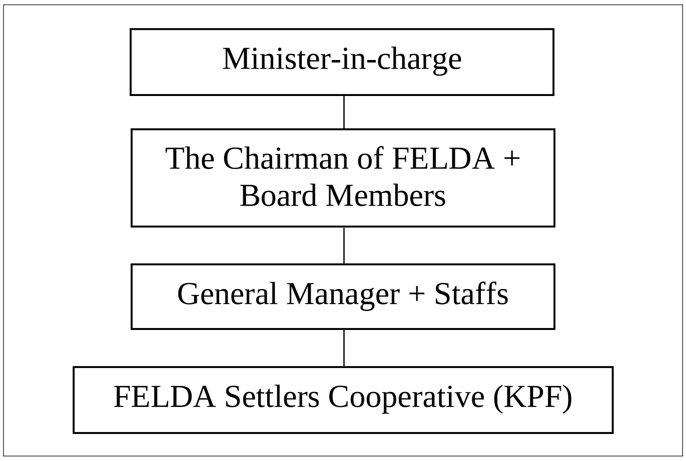

Figure 4 Current Ownership Structure of FELDA

From the transforming ownership and control structures of FELDA over the years, it can be analysed that the government has highly regulated FELDA from the beginning until today. On the other hand, the ownership and power structure of FGV after FGV was listed on the Malaysian stock exchange remains until this date. It can be analysed that the transformations it undergoes due to government regulation show how unique the role of government is.

Looking at the ownership structure of FGV in figure 5, it can be determined that the position of shareholders and stakeholders is placed at the organisation's top. The ownership structure affirms the significant role of shareholders and stakeholders in decision-making. Thus, this shows that the government, as one of the shareholders, has the power to approve decisions made by the Board of Directors within the profit-seeking SOE, FGV.

The Board of Directors consists of the Chairman and the Board Committee (Independent Non-Executive Directors and Executive Directors). The Board of Directors manages and guides FGV based on "the creation of long-term shareholder value, whilst taking into account the interests of other stakeholders" (FGV Holdings Berhad, 2018).

In the Boardroom, the Chairman must create a plan for the Board to deal with crucial issues. Despite the powers vested in the Chairman, all decisions had to be taken collectively with all the directors on Board (FGV Holdings Berhad, 2018). However, it is essential to note that the Board made decisions based on the interests of shareholders.

Next in line after the Board of Directors is FGV Group Chief Executive Officer. Thus, the role of the Group CEO is to be "responsible for implementing the program to achieve the Company's and Group's goals and vision for the future, by the strategies, risk appetite, policies, programs, and performance requirements approved by the Board" (FELDA Global Ventures Holdings Berhad, 2018).

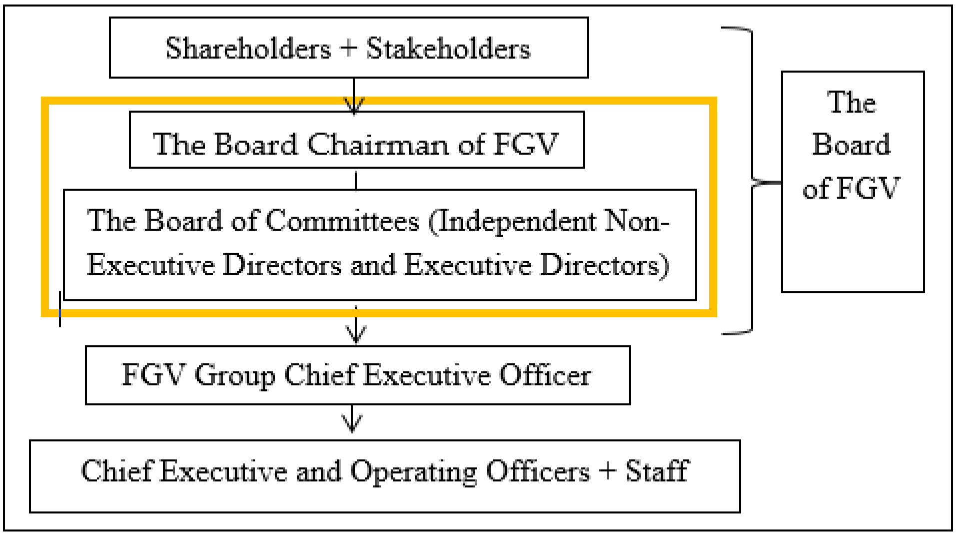

Figure 5 Ownership Structure of FGV

With all that, however, the shareholder has the final say in every matter of FGV. For instance, on 29th June 2018, the shareholders of FGVH approved the proposal of the Board of Directors to change the company's name to FGV Holdings Berhad (FGV) (FGV Holdings, n.d.). Thus, this shows how significant the government's role in FGV is as a shareholder in making decisions for FGV. Therefore, as a profit-seeking SOE, FGV, the government acts as a minimal regulator and a typical shareholder in a private company. Under the ownership and control structure, the government's priority is more on being a shareholder than a regulator.

Overall, it can be analysed that FGV has a typical ownership and control structure like any private company, which prioritises the shareholders and stakeholders and is managed by professional managers. Under a profit-seeking SOE, the ownership and control structure consists of the government as one of the shareholders, which differs from any private company. It can be analysed that the government that acts as one of the shareholders typically functions like one. Therefore, as a profit-seeking SOE, FGV focuses on making a profit at every opportunity with minimal government regulation.

DIFFERENCES IN THE ENVIRONMENTAL OUTCOMES OF FELDA AND FGV

As analysed, the ownership and control structure differ according to different types of SOEs due to their establishment as statutory body SOEs and profit-seeking SOEs. From that, it was evident that the government acts differently within separate ownership and control structures of SOEs. Under a statutory body SOE, FELDA, the government acts as a regulator with tight regulations. Compared to profit-seeking SOE, FGV, the government acts as one of the shareholders while also wearing a hat as a minimal regulator. With these, this section will highlight how both SOEs take decisions when developing the palm oil sector while looking into mitigating environmental issues.

The first FELDA oil palm project was established at the Taib Andak Complex, with a land area of 88,100 ha. By the end of 1970, oil palm was the major crop in the schemes developed by FELDA (Bahrin & Thong, 1988). As a result of the cultivation, FELDA settlers could raise their income levels in a shorter time. Moreover, oil palm is a crop that has fewer problems and risks due to its broader range of weedicides. Concurrently, the palm oil plantation development increased the revenue of FELDA, and it was able to pay the expenditure on land development sooner than usual (Bahrin & Thong, 1988).

As a regulator, the government decided to allocate more land for oil palm plantations for FELDA to venture into and categorised it as FELDA's annual development program. As an outcome, a significant expansion of oil palm plantations took place "from 55,000ha in 1960 to 647,000ha in 1975 and 1.56 million hectares in 1987" (Bahrin & Thong, 1988). This has concurrently increased the employment rate that the government targeted in the Third Malaysia Plan (1976-1980).

In the beginning stage of oil palm development, there were three main problems: oil quality, field discipline, and fruit supply reliability to the mills. In regulating FELDA, the Minister in charge, who represents the government and is situated in the highest ownership and control structure position, decided to resolve these issues by establishing a nucleus estate concept. This makes it convenient for the settlers to transport their fruits to the mills. For instance, FELDA Jerangau, with 485ha of land, was the first to implement the nuclear estate concept for the settlers.

Apart from that, by being the government representative, the Minister in charge was concerned about three major features in developing the palm oil sectors: "reliability of water supply, good soil and a central location with reference to field planting" (Thong & Bahrin, 2006). This is so that planting would occur without causing much environmental damage and avoid unnecessary loss, which would instantly impact the settlers' income rate. As a result, the Minister in charge considered the nursery site selection as one of the critical factors in developing the sector to avoid flood-prone areas, which can cause significant loss to FELDA.

In addition, the government also regulated FELDA through the Minister in charge of adopting the "interrow" oil palm cultivation method with leguminous cover crops. Leguminous cover crops are among the best that provide many environmentally sustainable benefits, such as restoring organic matter to the soil and instantly reducing fertiliser usage. Thus, using this method, many investments in purchasing fertiliser for the settlers were reduced dramatically (Thong & Bahrin, 2006). Therefore, it can be analysed that the government regulates the social-oriented SOE, FELDA, to be environmentally sustainable while profiting the settlers and the firm in developing the palm oil plantation sector.

Apart from that, in developing the palm oil plantations, the settlers also faced issues controlling pests and diseases. This Minister in charge identified this through FELDA Settlers Cooperative (KPF) in the ownership and control structure. With that, the Minister in charge regulates FELDA focused on implementing good agronomical practices to resolve this problem for the settlers. The agronomical rules are adopted to manage diseases and pests sustainably without causing much damage to the environment. For instance, FELDA settlers faced huge mammalian pest problems in 1987 that destroyed about 10 million oil palm trees.

As a result, FELDA built electric fences along the perimeters of oil palm plantations to overcome the mammalian pest problem. Since the electric fences were designed with a low current supply, they did not threaten animals' lives. Therefore, it can be analysed that the government regulation and settlers' involvement under FELDA in the decision-making process seems to be socially fair and economically beneficial while being environmentally friendly.

With the drastic development of the palm oil sector, in 1998, the settlers received income as high as RM 1800 per month from the plantations. However, the crop production rate varied each year. For instance:

> "The average yield per hectare in 1993 was 23.32 tons, but it slid down to 15.3 tons in 1998 and then up again in 2000 and 2001 to achieve the threshold yield of above 20.0 tons per hectare" (Thong & Bahrin, 2006, p.108)

To reduce the unstable production rate in the oil palm plantations, in 2004, the government regulated FELDA to work closely with agronomic practices in developing the palm oil plantation sector. As a result, FELDA decided to emphasise the reduction of fertiliser usage. Therefore, FELDA utilised waste products from the plantations as organic fertilisers for the settler's (Laporan Tahunan FELDA 2004, 2004).

By doing that, the government regulations the settlers' management within the ownership and control structure of FELDA can make more profit for the settlers while being environmentally concerned in developing the palm oil plantation sector. In regulating FELDA, the government envisions raising the production of palm oil plantations with an effective agriculture management system. This is also to avoid unnecessary loss of revenue due to environmental factors (Laporan Tahunan FELDA 2004, 2004).

During this period, the government also formed FGVH as the commercial arm of FELDA to generate some income for settlers from the shares the settlers held through KPF. As many countries were concerned about palm oil production in the aspects of "environmental protection, conservation and sustainable development", Malaysia has also committed to practising sustainable development in its development at the World Summit (Federal Land Development Authority, 2005). As a result, the Minister in charge, the government's representative, regulates FELDA to emphasise the sustainable agriculture management system where the development of palm oil plantations takes place without causing much damage to the environment.

As a result, FELDA joined the non-profit organisation called the Roundtable on Sustainable Palm Oil (RSPO)[4] on 18th October 2004. This shows that the government is committed to its pledge in the World Summit through statutory body SOE like FELDA to develop the palm oil sector sustainably. Thus, by joining RSPO, FELDA was assisted by RSPO in implementing the global standards to produce sustainable palm oil Fields(Roundtable Sustainable Palm Oil, 2019). As a result, FELDA was the first smallholders' agency to receive RSPO certification globally for producing sustainable palm oil due to their sustainable management of the plantation sector. By getting certified, FELDA could sell palm oil at a premium price to other countries. Thus, the settlers indirectly profit from being environmentally concerned (2010 Annual Report of FELDA: Boundless Expanse, 2010).

Participation in the certification scheme has increased the knowledge of FELDA and the settlers on developing good agricultural practices in cultivating oil palm. For instance, the settlers could effectively reduce chemical products' usage in their oil palm plantations using the Integrated Pest Management system. Adopting the approach saved costs due to the reduced spending on purchasing chemical products and reduced the damage to the environment (Federal Land Development Authority, 2005).

Therefore, the urge of the government to participate in the RSPO certification has benefited FELDA and the settlers economically while being environmentally concerned. Thus, it can be determined that the role of the government as a regulator seems to positively impact the environment and economy through its decision-making processes when it comes to developing the palm oil sector.

By the end of 2010, the settlers' active participation in RSPO resulted in FELDA receiving RSPO certification for about eleven oil palm plantation schemes that incorporated 22,268 ha of areas.

[4] RSPO is a certification body for palm oil production, which consists of eight principles: "plantation management quality, social impact from operational activities, plantation biodiversity as well as other environmental criteria" (2010 Annual Report of FELDA: Boundless Expanse, 2010).

This raised the total yield in the settler's estates to 2,261,206 tons in 2010 compared to 1,835,427 tons in 2009.

Various approaches were used due to the government's regulation through the Minister in charge, such as Good Agriculture Practices (GAP), Good Management Practices, and so on. (Laporan Tahunan FELDA 2013, 2013). For instance, FELDA's GAP approach "is based on safe and sustainable development principles and management, which complied with local safety standards, laws and regulations" (Federal Land Development Authority, 2005). By carrying out this approach, FELDA raised the production levels and, consequently, the settlers' income levels to between RM2500 and RM3500 per hectare in the 2013 (Laporan Tahunan FELDA 2013, 2013).

Apart from RSPO, the Minister in charge also regulated FELDA to participate in the Malaysian Sustainable Palm Oil (MSPO)[5] Certification Scheme. Since it is a national scheme, the Minister handled FELDA to support the government's initiative in producing sustainable palm oil Fields(Malaysian Palm Oil Certification Council, 2020). As a result, in 2017, 286 oil palm plantation schemes of FELDA received MSPO certifications. Besides, the Minister in charge also regulated FELDA to collaborate with the Malaysian Palm Oil Board (MPOB) to create awareness among settlers to produce sustainable palm oil under the MSPO certification scheme (Laporan Tahunan FELDA 2017, 2017).

Thus, it can be analysed that the ownership and control structure of FELDA consists of the government that acts as a regulator. The firm seems to have a positive impact both economically and environmentally. This is because due to the regulation of government through the Minister in charge in deciding to focus on good agricultural practices, the firm and the settlers were able to make more profit from the certification and from the rising production level, which is all resulted from being environmentally concern in developing the palm oil sector.

On the other hand, after the Land Leasing Agreement (LLA), FGV was on track to becoming the most significant oil palm plantation owner and the world's giant Crude Palm Oil (CPO) producer. This was resembled by FGV when it stated that the firm aimed "to grow strategically towards becoming a leading, globally diversified, integrated agri-business by increasing our land bank, participating in mergers and acquisitions and capitalising on downstream opportunities" (Felda Global Ventures Holdings Berhad, 2012). Therefore, it can be analysed that it differs from FELDA, which merely aims to improve the settlers' social well-being.

After the listing of FGV, based on the Board of FGV, who analyses the remuneration matters, annual budgets and risks faced by FGV, it was determined that significant revenue of FGV was coming from the plantation sector as compared to downstream activities in developing the palm oil sector. With that analysis from the Board of Directors, the Board of Directors decided to expand its plantation sector, and the shareholders, including the government, have approved this. As a result, by the end of 2012, FGV had developed about 135 estates covering approximately 343,521 hectares of oil palm plantations (Felda Global Ventures Holdings Berhad, 2012).

As a reflection, the government, as a significant shareholder, approved the Global Strategic Blueprint that focuses on "improving operating efficiency, optimising earnings from their existing land bank" (Felda Global Ventures Holdings Berhad, 2012, p.3). This is then executed by the Board of Directors and other professional CEOs and managers to serve the interest of the shareholders, which is to raise the profit and be the top ten agribusinesses in the world.

One of the strategies is to explore more possible brownfield estates in Southeast Asian countries. With that strategy, FGV developed about 150,000 oil palm plantations in the 2013 (FELDA Global

[5] MSPO is “the national scheme in Malaysia for oil palm plantations, independent and organised smallholdings, and palm oil processing facilities to be certified against the requirements of the MSPO Standards” (Malaysian Palm Oil Certification Council, 2020).

Ventures Holdings Berhad, 2013). This resulted in FGV developing about 40,000 hectares of land in East and Central Kalimantan and another 14,385 hectares of oil palm plantations in West Kalimantan. As a result of the government's strategy as one of the shareholders in FGV, FGV became the world's third-largest oil palm plantation operator, with 450,000 hectares in Malaysia and Kalimantan Indonesia in 2014 (FELDA Global Ventures Holdings Berhad, 2014, 2015).

During this era, the palm oil sector was challenged by environmental activists primarily concerned about environmental protection, conservation, and sustainable development in developing oil palm plantations (Federal Land Development Authority, 2005). As this risk was identified by the Board of Directors of FGV, the major shareholder, the government, approved to overcome this risk by committing to three main sustainability principles; profit, planet, and people in developing the palm oil sector, which was a suggestion by the Board of Directors.

By looking specifically into adopting planet as one of its sustainable principles, the shareholders decided to focus on "the preservation and protection of waterways, enhancement of riparian buffer zones, reducing water footprint" in developing the palm oil plantation sector (FELDA Global Ventures Holdings Berhad, 2013). This is then further instructed by the Board of Directors to other professionals to work according to the sustainability principles agreed by the shareholders.

As a result of the environmental activism, the government, as a significant shareholder, further agreed to participate in palm oil certification schemes like RSPO, MPOB, and other certification agencies such as the International Sustainability and Carbon Certification Scheme (ISCC), which the Board of Directors suggested. This shows that FGV, as a profit-seeking SOE, is keen on producing palm oil sustainably. As a result, FGV's commitment "not to acquire land containing a significant amount of peat or areas of high conservation values" (FELDA Global Ventures Holdings Berhad, 2013, p. 55). Besides that, in 2013, FGV pledged to develop new lands based on the RSPO Principles and Criteria on New Planting Procedures (FELDA Global Ventures Holdings Berhad, 2013). As a result, by the end of 2014, FGV received RSPO certification for 89 oil palm estates.

FGV also was certified for 35 oil palm estates under the Code of Practice of the Malaysian Palm Oil Board (MPOB). Besides that, FGV got authorised under ISCC, an international certification for 53 of its oil palm estates (FELDA Global Ventures Holdings Berhad, 2014). Thus, this shows the shareholder's interest, the government, in getting certified to maintain a good reputation as one of the largest palm oil companies in the world.

However, the environmental protection efforts of FGV appeared inspiring until several cases were filed against FGV for violating the environment on the ground for oil palm development purposes. For instance, in 2013, as one of the shareholders, the government under FGV approved purchasing the Pontian land bank areas in Sabah from Asiatic Development. The areas regularly affected by floods were considered underproductive fields(Levicharova et al., 2016). Thus, this shows that when the government functions as a significant shareholder, it makes inefficient decisions with the Board of Directors, CEO, Chief Executive, and other staff. Compared to FELDA, the government functions as a regulator through the Minister in charge and settlers in the ownership and control structure.

Apart from that, another case involved FGV's subsidiary in Ladang Tawai, Perak, where a violation of the environment occurred when open burning was carried out for replantation purposes. Based on Simorangkir (2006), FGV practised open burning to clear the land quickly and cheaply. Besides that, FGV also earned about 5,600 ha of forests without HCS assessment through its subsidiary, Asian Plantation in Sarawak. It is important to note that this occurred after FGV's commitment to RSPO New Planting Procedures for its new planting areas (Levicharova et al., 2016).

Thus, the decision violated the Malaysian Environmental Quality Act 127,1974 and its commitment to RSPO and MSPO in sustainably developing the palm oil sector (Levicharova et al., 2016). Therefore, it can be analysed that FGV took the decision. At the same time, the government was a major shareholder, with the execution of the Board of Directors and other staff, which seems to negatively impact FGV when it comes to environmental aspects in developing the palm oil plantation sector.

Besides that, in 2016, FGV's majority-owned subsidiaries in West Kalimantan were accused of clearing about 16,498 ha of identified High Conservation Value (HCV) peatlands (refer to Table 3.1). The HCV areas were cleared after FGV subsidiary PT Temila Agro Abadi conducted an HCV study in 2013. The assessment identified the site as consisting of "conservation values 1-4 in a 650 ha deep (>3m) peat forest" (Levicharova et al., 2016). In clearing the HCV areas, PT TAA built a 30 kilometres network of drainage canals in the area (Greenpeace International, 2017; Levicharova et al., 2016). This resulted in the lowering of the water table of the peat soil. Thus, the ground became vulnerable to fires. As a result, on 23rd August 2017, there was an outbreak of fires in those areas (Chan, 2017).

Table 1: Peatland Conversion PT CNP and PT TAA

FGV subsidiary	Total Land Bank (ha)	Peatland (ha)	Total cleared land 2010-2015 (ha)
PT Citra Niaga Perkasa	14,385	11,006	8,797
PT Temila Agro Abadi	8,193	5,492	5,266
Total	22,578	16,498	14,063

(Adopted from (Levicharova et al., 2016)

Based on the table, it can be analysed that the decision taken by FGV. At the same time, the government is the major shareholder and seems to only focus on expanding its landbanks to make more profit without considering what it will cause to the environment. Therefore, executing the decision by the Board of Directors, CEO, Chief Executive Officer, and other staff also seem to bring adverse environmental outcomes for FGV in developing the palm oil sector.

Besides that, the professionals like the Board of Director members, FGV Group CEO, Chief Executive, Operating Officers and staff work to register a massive profit so that a considerable dividend could be declared to serve the interest of the shareholders. Apart from that, it can be analysed that the government under the ownership and control structure of FGV influences FGV to take profitable decisions without considering environmental issues, just like any shareholders would have. Such decisions resulted in significant peatland clearances.

In 2019, Mighty Earth reported that FGV had again carried out deforestation activities in PT Citra Niaga Perkasa's concession areas. It was accused of clearing about 4 hectares of forests from May 2019 until August 2019 (Mighty Earth, 2019). However, in response to that report, on 27th January 2020, the Chairman of FGV from the FGV's Board of Directors claimed the clearing was by the local community for paddy plantation.

Besides, FGV indicated that they had stopped work on PT Citra Niaga Perkasa's and PT Termila Agro Abadi's areas since May 2017 (FELDA Global Ventures Holdings Berhad, 2020). However, the firm did not provide proper evidence to support its accusation that the local community had committed that activity. This shows that as the major shareholder, the government and other staff below the shareholders are merely motivated to make a profit at any cost and do not take responsibility for its action toward the environment.

Even with the certification schemes, profit-seeking SOEs like FGV seem to make decisions that violate the environment due to the ownership and control structure of FGV that consists of the government as the major shareholder, including others like the Board of Directors, CEO, Chief Executive Officer and other staffs who execute the decision taken. In comparison to FELDA, as a regulator, the government under the ownership and control structure of FELDA is very concerned about the well-being of the settler and the environmental issues in developing the palm oil plantation sector.

CONCLUSION

Overall, both FELDA and FGV are SOEs. However, their different structure has created other relationships with the government. Even though the government plays a crucial role in the decision-making process under both SOEs, they arrive at different types of decisions. This is due to the other parts of the government under both SOEs.

As a social-oriented statutory body SOE, the ownership and control structure of FELDA consists of the government as a regulator with tight regulations to improve the settlers' well-being. Therefore, the decisions taken by FELDA while the government acts as a regulator seems to bring positive outcome in making a profit for the settlers while also being an environmental concern in developing the palm oil sector.

On the other hand, in the profit-seeking SOE, FGV, the government functions as a significant shareholder with minimal government regulations as a regulator. Therefore, the government's decisions as one of the shareholders seem to negatively impact the environment in making a profit through the development of the palm oil plantation sector. This is due to the lack of government regulations. The unique relationship with the government as one of the shareholders seems to give more privilege to FGV to violate the environment without being accused of it.

Therefore, the ownership and control structure determines the decision-making process of firms like SOEs. With SOEs' different ownership and control structures, both SOEs' environmental outcomes contradict each other. Environmental outcomes depend on how different types of SOEs are linked to the government through its ownership and control structure.

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