

Identifying Business Models Adopted by FDI in Agriculture in Indonesia¹

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Abstract

The main argument of this study is that the presence of foreign direct investment (FDI) in agriculture will not automatically improve the welfare of small farmers. It depends on business models they adopt that link their production with local small farmers. The most interesting findings are: (i) contract farming, especially plasma and nucleus system, is the most popular one in Indonesia; (ii) some partnerships failed to make local farmers better off, suggesting that there are some preconditions for a successful partnership, and (iii) no evidence so far showing that successful partnerships will have positive impacts on agricultural productivity, rural income and economic growth. Despite lack of data, this study concludes that the type of business model used has an important influence on whether investment improve market access and hence incomes of local small farmers. Even, if broader environment is conducive, any types of business partnership will make plasma farmers better off and will have positive multiplier effects on rural.

Keywords: business models, agriculture, Indonesia, foreign direct investment

1. Introduction

Agriculture is a focal theme on the development agenda. As the World Bank (2008) maintains, agriculture is a high priority area in triggering overall growth, reducing poverty, ensuring food security and meeting the environmental goals.

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Agriculture is central to the economy of Indonesia, not only critical to secure its basic food security needs (i.e. to feed more than 200 million of its population), but also for employment creation. Notwithstanding efforts to develop manufacturing industry, agriculture remains the largest employer compared to other sectors in the economy. Although the relative share of agricultural workers has declined sharply since the start of the industrialization in the beginning of the country's *New Order* era (i.e. 1969, which was marked by the commencement of the first Five Year Economic Development Plan (REPELITA – *Rencana Pembangunan Lima Tahun*), the absolute number of people working in agriculture has increased steadily. The sector is also key to Indonesia's economic resilience. When the country was hit by the Asian financial crisis of 1997/98, agro-business industry was the only sector that managed to grow and generated sufficient revenues to fuel the stagnant economy in some parts of the country.

The *World Investment Report* of the United Nations Conference on Trade and Development (UNCTAD) (2009) posits that foreign investment is an essential element to consider in the development of agriculture. The same report also suggests that, to date, transnational corporations (TNCs) are increasingly dominating the foreign direct investment (FDI) in the sector, including those in the developing countries. They use various business models to structure their investments, often involving some forms of contract farming and joint ventures arrangements. In a similar line of argument, the Food and Agriculture Organization (FAO) (2009) estimates that developing countries require approximately US\$ 83 billion annually to meet the food needs in 2050. However, the lack of both public and private funds in the developing countries to fulfil this requirement can be addressed through foreign investment in agriculture.

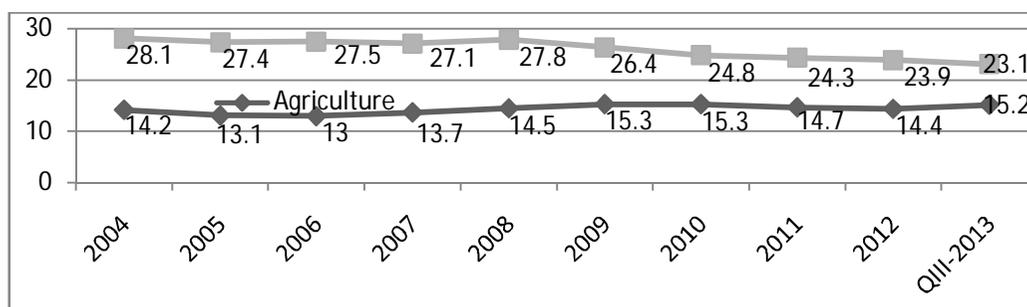
With the above background, with limited data, the main objective of this policy oriented paper is to examine the existing trends of investment in agriculture in Indonesia. While existing literature on business models in the sector, as well as their impacts on the local economy, is vast, the issue has not been explored sufficiently in the context of Indonesia. Accordingly, therefore, the present paper intends to draw concrete examples of existing business models that are available in Indonesia, explain the policy and economic drivers behind the utilization of such models, and assess their impacts on agricultural productivity, economic growth, and rural livelihoods.

2. Recent Developments of the Indonesian Agriculture and FDI in Agriculture

2.1 Recent Development in Indonesian Agriculture

Indonesia is currently the fifth largest country in the world with a total population of 225 million people, and the third largest agricultural economy in Asia after India and China (at least in terms of total arable land that are both used and not yet being used). Agriculture is one among most important economic sectors in Indonesia as it contributes significantly to output and employment generations in the country. However, as in the case with many other developing countries, the Indonesian economic structure has been significantly shifted from an agricultural based to a manufacturing dominated economy. While the share of agriculture to the national GDP dropped from 18 percent in 1993 to 15 percent in 1997, in 1999, however, the share of the sector went up again to 17 percent. Two key factors contributed to this upward trend at the time, which included the increase of production and exports on some crops which took advantage of the depreciation of the national currency, or the rupiah (Rp.) as a result of the Asian financial crisis in 1997/98, and the decline of output in manufacturing industry. Despite economic recovery in early 2000s, the contribution of agriculture to the country's GDP began to decline again to 16 percent in 2002. Since 2008, however, the GDP share of agriculture tends to be stabilized at the level of 14 to 15 per cent (Figure 1).

Figure 1: Percentage distribution of GDP in agriculture and industry in Indonesia, 2004-2013* (current prices)



Note: * Third quarter 2013

Source: BPS (Berita Resmi Statistik:

<http://www.bps.go.id/aboutus.php?news=1&nl=1>

As Table 1 illustrates, within ASEAN (Association of Southeast Asian Nations), although the level of economic development in Indonesia is relatively higher as compared to those in other agriculture-based member states, such as Cambodia, Lao PDR, Myanmar, and the Philippines, the process of structural change in Indonesia has been going much slower than in these four countries. For the period reviewed, the share of agricultural value added (VA) in their generated total VA declined by almost 58.7 percent, 33.6 percent, 26.8 percent, and 10.1 percent, respectively, in comparison with Indonesia at only 5 percent.

Table 1. Agricultural VA in ASEAN by Member State, 1990-2010 (percentage of country's total VA)

Countries	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei	1.0	1.2	1.0	1.1	1.1	1.2	1.1	0.9	0.7	0.7	0.6	0.9	0.8	0.6	0.7
Cambodia	56.5	49.6	37.9	36.7	32.9	33.6	31.2	32.4	31.7	31.9	34.9	35.7	36.0	36.7	35.6
Indonesia	19.4	17.1	15.6	15.3	15.5	15.2	14.3	13.1	13.0	13.7	14.5	15.3	15.3	14.7	14.4
Lao PDR	61.2	55.0	48.5	45.5	42.7	41.0	39.0	36.7	32.4	33.2	32.5	32.5	30.8	28.9	27.6
Malaysia	15.0	12.7	8.3	7.7	8.7	9.1	9.1	8.2	8.6	9.9	10.0	9.3	10.4	12.0	10.2
Myanmar	57.3	60.0	57.2	57.1	54.5	50.6	48.2	46.7	43.9	4.3	40.3	38.1	36.4	32.5	30.5
Philippines	21.9	21.6	14.0	13.2	13.1	12.7	13.3	12.7	12.4	12.5	13.2	13.1	12.3	12.7	11.8
Singapore	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thailand	12.5	9.5	9.0	9.1	9.4	10.4	10.3	10.3	10.8	10.7	11.6	11.5	12.4	11.4	...
Vietnam	38.7	27.2	24.5	23.2	23.0	21.8	21.8	21.0	20.4	20.3	22.2	20.9	20.6	20.1	19.7

Source: ADB (2010, 2013).

Meanwhile, the growth rate of output in agriculture has fluctuated prior to and after the 1997/98 Asian financial crisis. As Table 2 illustrates, in 1990, or when the Indonesian economy was in the 'booming' period with the average GDP growth of 7 and 8 percent per annum, real VA in agriculture grew at around 3.1 percent. As during the 1997/98 crisis, during the global economic crisis in 2008/09 Indonesian agriculture managed to grow positively though declined slightly from 4.8 percent in 2008 to 4.0 percent in 2009.

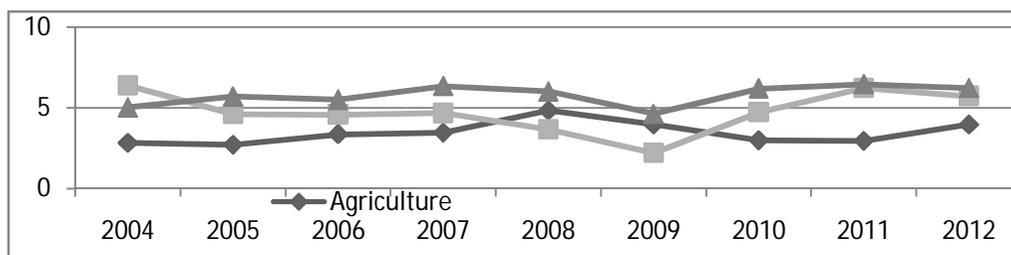
Table 2. Growth rates of agricultural real value added in ASEAN, 1990-2012 (in percentage)

Countries	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei	2.6	2.9	6.6	5.8	5.2	11.3	12.0	1.3	-9.9	-4.5	3.7	5.8	-5.9	4.6	11.8
Cambodia	1.2	3.5	-1.2	4.5	-3.5	10.5	-0.9	15.7	5.5	5.0	5.7	5.4	4.0	3.1	4.3
Indonesia	3.1	4.4	1.9	3.3	3.4	3.8	2.8	2.7	3.4	3.5	4.8	4.0	2.9	3.4	4.0
Lao PDR	8.7	3.1	4.2	-0.6	1.9	2.5	3.4	0.7	2.5	6.5	4.9	3.0	3.0	2.7	3.3
Malaysia	-0.6	-2.5	6.1	-0.2	2.9	6.0	4.7	2.6	5.2	1.3	4.3	0.6	2.1	5.9	0.8
Myanmar	1.8	4.8	11.0	8.7	6.0	11.7	11.0	12.1	9.7	7.9	5.6	5.6	4.7	-0.7	2.0
Philippines	0.5	0.9	3.4	3.4	3.3	4.7	4.3	2.2	3.6	4.7	3.2	-0.7	-0.2	2.6	2.8
Thailand	-4.7	4.0	7.2	3.2	0.7	12.7	-2.4	-1.8	5.0	1.2	4.2	1.3	-2.2	5.8	...
Vietnam	1.0	4.8	4.6	3.0	4.2	3.6	4.4	4.0	3.7	3.8	4.7	1.8	2.8	4.0	2.7

Source: ADB (2010, 2013)

However, in most years the growth rate of VA in agriculture is always lower than that in manufacturing industry (Figure 2). Only during the 2008/09 global economic crisis, VA in agriculture grew higher than that in manufacturing. Probably because during that crisis, as world income dropped which led world demand to decline, Indonesian export of many manufactured goods also dropped. More recently, in 2012, growth rate of agricultural real VA reached slightly less than 4.0 percent, compared to manufacturing industry at 5.7 per cent and GDP at 6.2 percent.

Figure 2. Percentage growth of GDP and VA in agriculture and manufacturing industry, 2004-2012 (at constant price of 2000)



Source: BPS (Berita Resmi Statistik:

<http://www.bps.go.id/aboutus.php?news=1&nl=1..>)

Although both the contribution of agriculture to GDP and the growth rate of VA of the sector are lower than that of manufacturing industry, agriculture remains a very important source of employment in Indonesia. Nevertheless, the proportion of the labor force employed in the sector tends to steadily decline, from almost 56 percent in 1990 to slightly above 45 percent in 2000, and 35.1 per cent in 2012 (Table 3). This steady decline is not because employment in other sectors, especially manufacturing industry and services, has increased at higher rates, but mainly due to continued moving out of people from rural areas to urban areas or cities. Within ASEAN, as of 2012, Indonesia was ranked fourth behind Cambodia, Vietnam and Thailand with respect to the importance of agriculture for employment creation.

Table 3. Employment in agriculture in ASEAN, 1990-2010 (percentage of total employment)

Countries	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei	...	2.5	...	1.4	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	81.4	73.7	70.2	70.0	64.8	60.3	60.3	72.3	72.3	72.3	72.3	72.3	71.3	71.1
Indonesia	55.9	44.0	45.3	43.8	44.3	46.4	43.3	44.0	42.0	41.2	40.3	39.7	38.3	35.9	35.1
Lao PDR	...	...	...	82.7	82.4	82.2	...	76.3	...	...	...	...	...	...	...
Malaysia	26.0	20.0	16.7	15.1	14.9	14.3	14.6	14.6	14.6	14.8	14.0	13.5	13.3	11.5	12.6
Myanmar	65.6	64.1	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	44.9	43.4	37.1	37.2	37.0	36.6	36.0	36.0	35.8	35.1	35.3	34.4	33.2	33.0	32.1
Singapore	0.5	0.2	0.1	0.3	0.3	0.3	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Thailand	63.3	46.7	44.2	42.4	41.0	41.0	39.3	38.6	39.7	39.5	39.7	39.0	38.2	38.0	38.9
Vietnam	72.1	71.3	64.4	63.6	56.9	56.9	58.7	57.1	54.3	52.9	52.3	51.5	38.7	48.4	47.4

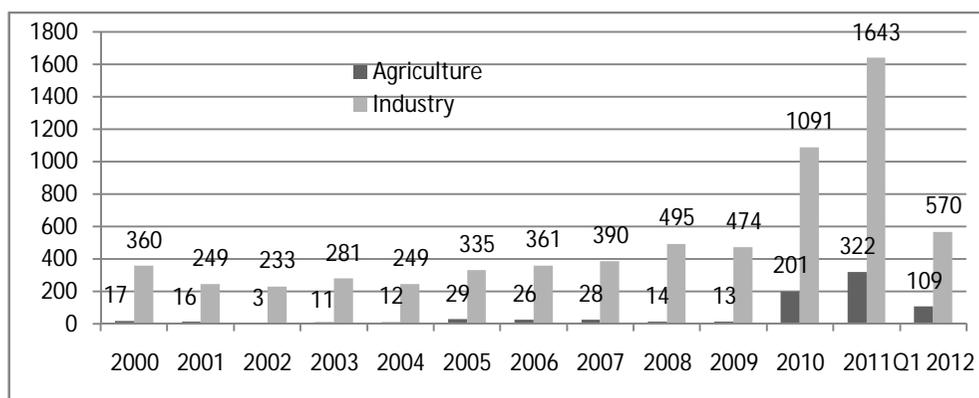
Source: ADB (2010, 2013).

2.2 Recent Development of FDI in Indonesian Agriculture

In Indonesia, agriculture is not traditionally the most important destination for FDI. In 2000, for example, there were only 17 FDI approved projects in the sector with a total investment value of US\$ 95.7 million, while, in the same year, manufacturing industry received a total of 360 investments with a total value of US\$ 4,789.3 million. In 2010, however, the total FDI projects in agriculture reached 200. Notwithstanding this development, the level of FDI in agriculture remained lower than that accumulated in manufacturing industry, which managed to secure 1,000 investment projects at the time (Figure 3).

Based on the most recent data from the Indonesian Investment Coordinating Board (BKPM – *Badan Koordinasi Penanaman Modal*), there were up to 109 FDI projects in the agricultural sector in the first quarter of 2012, which included the combination of the following: 95 units in food crops and plantation, 4 units in livestock, 2 units in forestry, and 8 units in fishery.

Figure 3. FDI in agriculture and industry, 2000-Q1 2012 (number of projects)



Source: BKPM (Statistics: www.bkpm.go.id/contents/p16/statistics/17)

The percentage distribution of FDI by sector and subsector, however, varies, not only by year, but also by quarter. As Table 4 illustrates, in the first quarter of 2011, for example, mining was the most favorable destination for FDI in Indonesia with a total FDI value of US\$ 1.0 billion (23.2 percent of the total value of FDI in the country). With regard to agriculture, meanwhile, the highest concentration of FDI is coming from agricultural firms in the food crops and plantations sub-sector. In fact, this sub-sector has traditionally dominated the agricultural FDI in the country.

Table 4. Allocation of realized FDI in Indonesia by location (province), Q1 and Q4 2011

Sectors	Quarter 1		Quarter 2	
	Number of projects	Investment value (in US\$)	Number of projects	Investment value (in US\$)
Primary sector	166	1,445.2	199	417.9
Food crops and plantation	74	419.8	81	205.1
Livestock	2	0.3	3	1.2
Forestry	7	5.2	4	2.7
Fishery	4	1.2	7	1.7
Mining	79	1,018.7	104	207.3
Secondary sector	329	1,308.5	519	1,597.7
Food	61	300.0	107	315
Textile	36	52.5	53	125
Leather goods and footwear	12	55.5	24	73.8
Wood	3	1.5	8	6.5
Paper and printing	10	7.7	12	59
Chemical and pharmaceutical	54	280.0	60	222.4
Rubber and plastic	30	113.1	46	20.3
Non-metallic mineral	5	14.1	14	75.2
Basic metal, metal products, machinery and electronic	81	259.0	118	346.2
Medical prec. & optical instruments, watches & clock	2	0.9	2	41
Motor vehicle and other transport equipment	24	215.7	49	302.7
Other industries	11	8.6	26	10.7
Tertiary sector	407	1,642.0	582	3,114.3
Electricity, gas, and water supply	15	606.7	19	703.1
Construction	11	53.6	16	180.4
Trade and repair	179	144.2	262	166.5
Hotel and restaurant	48	60.3	60	103.8
Transport, storage, and communication	35	593.1	25	1,715.2
Real estate, industrial estate, and business activities	23	20.0	35	46.5
Other services	96	164.1	165	199.0
Total	902	4,395.7	1,300	5,129.9

Source: BKPM (Statistics: www.bkpm.go.id/contents/p16/statistics/17)

In food sub-sector, furthermore, the involvement of TNCs from upward activities (i.e. plantation) to downward activities (i.e. marketing) has expanded quite significantly in the last two decades or so. In some Indonesian food and beverages industries, TNCs own up to 100 percent of ownership, while in others they establish partnership with local companies (Table 5). This variation in percentage share owned by TNC in this industry is linked to many factors, including the implementation of the Investment Law No. 25/2007, which allows some sectors/sub-sectors/industries to be opened for foreign investment, but with some precondition that encourage TNCs to form partnership with local firms.

Table 5. TNCs in Indonesian food & beverage industry, 2011

Name of product	Type of product	Investors	Country	Share (%)	Ownership
ABC	Soy sauce	HJ Heinz	United States	65	PT ABC Central Food
Sari Wangi	Tea	Unilever	United Kingdom	100	PT Sari Wangi
Bango	Soy sauce	Unilever	United Kingdom	100	PT Sakura Aneka Food
Taro	Snack	Unilever	United Kingdom	100	PT Rasa Murni Utama
Aqua	Beverage	Danone	France	74	PT Tirta Investama
Helios, Nyam-nyam	Cracker	Campbel	United States	100	PT Helios Arya Putra
Ades	Beverage	Coca Cola	United States	100	PT Adel Alfindo Putra Setia
SGM	Baby milk/food	Numico	Belgium	82	PT Sari Husada

Source: Sawit (2011).

In the plantation sub-sector, palm plantations that produce crude palm oil (CPO) have been among a small group of highly attractive plantations in Indonesia for FDI. The number of foreign companies from various countries operating in the country's palm oil plantation has increased significantly in the past ten years. Unsurprisingly, Malaysia has been the lead investor in Indonesia's palm oil plantations (Table 6), particularly as the former has been among few key palm oil exporters in the world. Due to increasingly limited available space for CPO production in their country, many Malaysian CPO producers have expanded their operation beyond Malaysia in search for more areas to expand their production. Other plantations in Indonesia which have absorbed many FDI inflows are sugarcane and tobacco.

In this latter plantation, the most important foreign company is Philip Morris, the American tobacco firm, which has a 100 percent-share in PT HM Sampoerna, which produces *kretek* cigarette Dji Sam Soe (A Mild).

Table 6. FDI in Indonesian palm plantation by region and country of origin, 2011

Country of origin	Companies	Area (hectare)	Regions
Malaysia	Kumpulan Guthrie Berhad	220.204	Riau, Jambi, South Kalimantan, Central Kalimantan, Aceh, and Central Sulawesi
	Kulim Berhad	97,263	West Sumatra, Central Kalimantan, West Kalimantan, and South Sumatera
	Golden Hope Plantation Berhad	96,000	West Kalimantan
	Kuala Lumpur Kepong Berhad	91,170	Riau, Kalimantan, and Belitung
United Kingdom	REA Holdings	66,136	East Kalimantan
	MP Evans Group Plc.	47,290	Bangka, East Kalimantan, North Sumatera, Bengkulu, and Aceh
	Anglo Eastern Plantations	37,502	Bengkulu, North Sumatera, and Riau
Belgium	SA Sipef NV	65,993	North Sumatera
Luxembourg	Socfinasia SA-Plantations	44,992	South Sumatera, West Sumatera, West Kalimantan, North Sumatera, and Riau
	Nord Sumatera Ltd.	n.a.	n.a.
Singapore	Wilmar Holdings	198,285	South Sumatera, West Sumatera, West Kalimantan, North Sumatera, and Riau
United States	Hindoli-Cargill Inc.	10,000	South Sumatera
Sri Lanka	Carson Cumberbatch & Co. Ltd.	27,500	Central Kalimantan

Source: Kompas (2011).

As can be seen again in Table 4, other agricultural sub-sectors are generally less attractive to foreign investors as compared to food crops and plantation. In Fisheries, for example, in the first quarter of 2011 there were only four approved FDI projects in fisheries, compared to 74 projects in food crops and plantation. In the fourth quarter of 2011, meanwhile, there were only seven approved FDI projects in the fisheries sub-sector against 81 approved FDI projects in the food crops and plantation sub-sector.

3. Business Models Adopted by FDI in Agriculture

3.1 Evidence from Literature

Variation in business models currently exists to describe the existing trends of agricultural investments throughout the world. In their study on agricultural investment, Vermeulen and Cotula (2010) identify at least six such models, which include contract farming, management and lease contract, tenant farming and share-cropping, joint-ventures, farmer-owned business, and upstream/downstream or vertical business links. The first common type of agriculture investment model is the **contract farming**, which mainly refers to the pre-agreed supply arrangements between local producers (i.e. farmers or growers) and buyers (usually large agribusiness firms). Under such an arrangement, local farmers generally grow and deliver their products for specified quantity and quality at an agreed date in exchange of upfront inputs, such as credits, seeds, fertilizers, pesticides, and technical advice, etc., all of which may be charged against the final purchase price, from the agribusiness firms.

UNCTAD (2009) maintains that contract farming forms a significant component of TNCs' participation in agricultural production. While, on the one hand, the scheme allows the TNCs better control over supply and product specifications, for farmers, on the other hand, contract farming provides them with predictable incomes, guarantee access to markets, as well as TNCs' support in the areas such as credits and know-how. However, Indonesia has not been traditionally among the largest recipients of agricultural based TNCs, despite the vast agricultural sector in Indonesia. One possible reason is that, during the 'new order' era up to the Asian financial crisis period (1966-1998), in its industrialization policy the Indonesian government has been focused too much on the development of manufacturing industry, and even within the manufacturing industry, the attention was heavily on non-agricultural-based consumer goods industries such as automotive and electronic industries. To finance industrialization, the government was heavily dependent on export revenues from mining, especially oil and gas, besides on foreign loans and supported by FDI, especially in export-oriented industries. While, agriculture was considered as domestic market oriented sector, i.e. supplying basic food especially rice for the country's population.

Only after the end of the Asian financial crisis era, or more obviously, during the current government led by President Soesilo Bambang Yudoyono, attention has been paid increasingly on development of agricultural-based, known as 'agro-industries, as part of the new adopted development paradigm, "inclusive development'.

The second model is the **management and lease contracts**, which generally entails an individual farmer or a farm management company works on agricultural land that belongs to someone else. Management contracts may take the form of a lease or tenancy, but it also carries with it the connotation of stewardship (i.e. managing the land on behalf of the owner). In order to ensure incentives for the farm management company, the contract often includes some forms of profit-sharing, rather than a fixed fee, arrangements.

The third model is the **tenant farming and sharecropping** where individual farmer or producer works the land owned by a large scale agribusiness firm or other individual farmer. Under this type of investment arrangement, land rental fee is normally set at a fixed rate, while the produces generated from such an arrangement are to be split along the pre-agreed percentage between the landowner and the land renter.

The fourth type of agriculture investment model is **joint ventures**. Under this type of investment arrangement, two independent market actors, such as an agribusiness firm and a farmers' organization, establish a co-ownership on a business venture. A joint venture arrangement usually involves the sharing of financial risks and benefits between the two parties, and, in most but not all cases, decision-making authority lies in accordance with the proportion of equity share between the joint-venture partners. In most circumstances, agribusiness firms usually provide contribution on the capital, whereas the smallholder farmers dedicate their lands or other assets into the joint-venture. In order to ensure their ability to participate in such an arrangement, smallholder farmers normally organize themselves through a cooperative or a company.

The fifth model is **farmer-owned business**. Under this model, individual farmers pool together their assets to enter into particular types of businesses.

This model normally allows these farmers to collectively determine the processing and marketing processes of their products, gain easier access to finance, and limit the liability that may be faced by each individual farmer. Such businesses are normally owned by cooperatives, and are commonly developed to facilitate business transactions more efficiently instead of such a business is to be ran by an individual farmer.

The final model is ***upstream/downstream or vertical business links***, which is mainly an umbrella expression for a set of business opportunities beyond direct agricultural production that exist for both large agribusiness firms and smallholder farmers and small local enterprises. While upstream examples of such a model include the supply of inputs and business services (e.g. seeds, fertilizers, pesticides, micro-credit, insurance, and advisory), the downstream examples include specialized wholesale and retail.

While, Campbell, *et al.* (2012) discuss their research findings from Lao PDR under two main broad models of investment, namely land concessions and contract farming. According to them, land concessions involve the rights to use land being transferred to the investor for a period of many years. Land concessions are less capital-intensive, less risky, and more flexible than land lease or ownership. Concessions are common in Lao agriculture as all land is technically owned by the state under the constitution, so sale of land is not possible.

3.1 Evidence from Indonesia

Data with regard to the existing business models for agriculture investment in Indonesia is not straightforward and readily available. While the country has an official institution that is dedicated on investment-related issues, or the Indonesian Investment Coordination Board (BKPM – *Badan Koordinasi Penanaman Modal*), the existing data produced by this institution does not offer information on the existing business model for agricultural investment. Existing literatures on the subject are also very limited, with many that attempt to do so fail to make explicit distinction between the investment pursued by foreign or local firms.

Notwithstanding such a lack of information on the business model on agricultural investment in Indonesia, there are a handful of literatures that offer hint on the matter. One of such studies produced by Patrick (2004) who maintains that, although there are various options or methods to obtain raw materials, contract farming is by far the most popular approach to investing in agriculture in Indonesia, both for large domestic large firms and TNCs. The key reason why most agribusiness firms choose to adopt this model, as Patrick further argues, is that this model allows them easy access to relatively cheap labors and lands for the purpose of growing high value commodities that are commonly grown by local farmeres. In addition, this model also allows agribusiness firms to minimise costs by not purchasing the lands or not using wage-paid workers. By offering credits, other inputs, and, in some cases, technical advices, agribusiness firms could encourage local farmers to produce new commodities.

As for the local smallholder farmers, on the other hand, the contract farming model allows them to avoid market imperfections. Local smallholder farmers in developing countries, including those in Indonesia, are often faced with difficulties to obtain credits from banks or other formal financial institutions to finance their production processes. This is not to mention other obstacles that they confront, such as their inability to access relevant information on market opportunities, new technologies, new production methods, current government regulations, and so on. Even if they are able to have access to the markets, price fluctuations often deter their ability to gain significant profits. For these smallholder farmers, contract farming is, therefore, an investment model that allows to them to overcome market imperfections, minimize transaction costs, and gain wider acces to the market.

Althought there are many different types of contract farming currently being used in Indonesia, the characteristics of partnerships between the smallholder farmers and agribusiness firms will depend largely on various aspects, such as the availability of institutions to support production, the commodity being produced, the resource base of the producers, and the capacity of the agribusiness firms (Patrick, 2004). A review of the existing contract farming types conducted by Simmons *et al.* (2005), however, suggests that the technical requirement and associated costs for production are the key determining factors for the selection of contract farming types among smallholder farmers and agribusiness firms.

Overall, as Patrick (2004) posits, there are at least four types of contract farming that are commonly used in Indonesia, and these include plasma-nucleus partnership, sub-contracting, harvest and pay, and the operational cooperation (KPO – *Kerjasama Operasional*). Plasma-nucleus partnership (PIR – *Pola Inti Rakyat*), or 'core-periphery' partnership, is by far the most popular form of contract farming arrangement in Indonesia. This form of contract farming has been in practice since the late 1970s for the purpose of improving the welfare of smallholder farmers, or the plasma, through a partnership they establish with an agricultural firm, or the nucleus or *inti*. This form of contract farming normally involves an agribusiness firm providing the necessary inputs, such as capitals, seeds, fertilizers, pesticides, and technical expertise, to the farmers or a collective group of farmers' cooperatives, as well as purchasing agricultural goods produced by the latter. Under this scheme, smallholder farmers's main responsibility is to produce the required commodities in agreed quantity, quality, and price.

In the palm oil industry, however, the plasma-nucleus partnership is also often associated with the Nucleus Estate Smallholders (NES) scheme. Launched in 1977, the initiative managed to increase significantly the supply of domestic palm oil, which, subsequently, expanded the country's domestic consumption of palm oil by 14 percent annually, and improved Indonesia's palm oil export capacity by 18 percent on average per year. Since the mid-1980s, however, the trend around plasma-nucleus partnership was further enhanced with the injection of capitals from the private sectors, including those from abroad.³ This trend allowed the expansion of various plantations in Riau, Jambi, South Sumatera, and Kalimantan, as well as a steady supply for Indonesian palm oil exports to other global markets.

³ The adoption of the NES scheme was practically an effort of the government to maintain control of the palm oil plantation and industry in Indonesia. Based on the Presidential Decree No. 1/1986, plantation firms are obliged to develop palm oil plots for individual farmers in the so-called 'plasma' area, which usually included two hectares of palm oil plantation and another one hectare for other food crops in the area around the firm's own plantation, also known as the 'nucleus'. While the nucleus plantation provided technical support and transfer the ownership of the land to farmers after a minimum of three years or a maximum of five years following the first harvest, the farmers were obliged to pay the land fee for the duration of approximately ten years. The land fee was normally taken out of the profits the farmers obtained by selling their palm oil to the nucleus firm. This form of partnership was used as an integral approach to the then Indonesian government's resettlement, or *transmigrasi*, programme, whereby low income or poor families from most populated islands in the country (e.g. Java and Sumatera) were relocated to other less populated islands. Thus, many, though not all, of the plasma smallholder farmers were relatively new settlers (Vermeulen and Goad, 2006).

By 1995, some 33.6 percent of palm oil plantation area, or about 656,100 hectares, were owned by smallholder farmers, while 46.4 percent, or 905,200 hectares) were owned by the private sector. The state, on the other hand, maintained control over 20 percent, or 390,400 hectares, of land used for palm oil plantation.

Although the plasma-nucleus system remains in use until today, the government's sponsorship of expansion, which was supported by the World Bank, had ended since 2001 following the implementation of the regional autonomy and fiscal decentralization, which transferred some functions of the central government to regional and local governments (Vermeulen and Goad, 2006).

Sub-contracting usually involves an agreement between an agribusiness firm and a third party in the food chain, such as supermarket, for the former to supply commodities to the latter. Under this arrangement, the said agribusiness firm normally sub-contracts the production of the agricultural produce to the above-mentioned third party to smallholder farmer, or groups of smallholder farmers, based on the pre-agreed quantity, quality, and prices. One example of this type of contract farming arrangement can be among agricultural traders in Baturiti, in the Tabanan district of Bali. In this small town, agricultural traders have been contracted to supply a variety of horticultural products, such as paprika, tomato, lettuce, cabbage, and so on, to various hotels and restaurants in the Nusa Dua district of Bali. These agricultural traders normally sub-contract the production of these agricultural produces to various groups of farmers in several villages in Bedugul, another small town in the same district. Unlike the nucleus-plasma contract farming arrangement, the sub-contract arrangement does not oblige the agricultural traders to provide any technical or management assistance to the farmers, but, instead, the former would promise the latter to purchase certain volume of their agricultural produces every day or week, with specified quality at the spot market price (Patrick, 2004).

Harvest and pay generally occurs in small-scale agricultural production. It mainly involves a local trader who provides credits to small farmers to purchase the necessary inputs, such as seeds and fertilizer, with a promise that the latter will sell the agricultural commodities the produce to the former. At harvest time, the farmers will be required to pay back their loans, at an amount that is determined by the cost of the credit and the spot market price. Payments may be made either in-kind or cash.

The form of partnership normally emerges as a result of the difficulty for smallholder farmers to access credit from formal or informal (e.g. neighbors and family) sources (Patrick, 2004).

Operational cooperation (KSO – *Kerjasama Operasi*) mainly involves a firm acting as a contractor that provides not only all the inputs, but also pays the farmers in exchange for the land use (also known as the *imbalan penggunaan lahan* (IPL)), usually at a market rental value of the land for a season or more. The IPL is paid at the beginning of the contract (usually with advanced cash payment), the amount of which to serve as a base payment to be topped up depending on the outcome of the harvest. This advanced payment mainly serves as a minimum wage for the length of the KSO, which is often added with a bonus should the production outcomes exceeds the expectation. This form of business partnership is particularly useful for crop productions that require long waiting period prior to the harvest, such as sugar cane which often requires 14 months to reach its maturity. Smallholder farmers usually find this form of business partnership useful as it allows them to access the much-needed capital to ensure their business survival. Accordingly, this partnership system has been in place since 1988 when the government announced the formation of the PTP Nusantara XI, a state-owned plantation agribusiness, that has the function to mediate between smallholder farmers and sugar mills. While this scheme benefits the cane farmers with income security and other added incentives (e.g. bonuses) to ensure the survival, many sugar producing firms also benefit from guaranteed production for their mill (Patrick, 2004).

As in many other countries around the world, all lands in Indonesia are technically owned by the state. With respect to land rights in agriculture, meanwhile, the Investment Law No. 25/2007 guarantees any investors to obtain the rights to cultivate the land (HGU – *Hak Guna Usaha*) for the period of 25 years, which can subsequently be renewed for another 25 years and another 35 years should the second extension of HGU ends. The government sells land permits each year for any investors to use publicly owned land for specific purposes, such as agriculture, logging, and mining. Prices for such concession vary depending on the land's location and intended use.

With the increase growth of agribusiness industry in Southeast Asia, rapid change in land ownership is already taking place in the region, especially in Cambodia and Laos. In line with similar developments in Africa, the so-called 'land-grabbing' phenomenon is also emerging in Southeast Asia. Similar pattern of the changing landscape of forced change of land ownership is also occurring in Indonesia. However, officials from both the BKPM and the Ministry of Agriculture have no data to support such an argument. Worse still, land tenure rights among smallholder farmers may overlap with those of the government, private sectors, communities, and individuals. Consequently, as postulated by a representative from the Ministry of Agriculture of the Republic of Indonesia, at present, land ownership cannot provide a clear legal basis underpinning a contract.⁴ The same officials also maintained that, thus far, there are some key commodities that serve as key drivers for land acquisition phenomenon in the country, and these include biofuels, biomass energy, rubber, sugar, and food crops (refer to box 1).

Box 1. Land acquisition on key commodities in Indonesia

To date, there are several key agricultural commodities that attracts land acquisition in Indonesia, and these include the following:

- **Biofuels:** Indonesia and Malaysia are currently dominating the production of biofuels, accounting for about 87 percent of total global production. The growing supply of palm oil production in both countries has been driven primarily by the demands from the global food industry. In Indonesia alone, the Indonesian Palm Oil Board estimated that the total palm oil cultivation area in the country reached 6.3 million hectares in 2006, which was distributed across three main actors, including government holdings, private firms, and smallholder farmers. While 48.4 percent of total palm oil area was owned by private firms, 40.8 percent and 10.8 percent of the land areas were owned by smallholder farmers and the government respectively (IPOB, 2007). With regard to land acquisition in Indonesia, Malaysian conglomerates have a majority of approximately two-thirds of firms acquiring land for palm oil plantation in the country.
- **Biomass energy:** growing interest in tree plantation to supply biomass energy plants is beginning to fuel demand for high quality lands. Land acquisitions by South Korean investors, in particular, in the sector are particularly high in Indonesia.
- **Rubber:** Indonesia is currently one of the major producers of rubber, along with Malaysia and Thailand. Investors from China have been particularly active the acquisition lands for rubber plantations, though the exact scale of their investment in the sector remains unknown.
- **Sugar:** Most sugar firms in Indonesia were established during the Dutch colonialization era. To date, there are few large powerful sugar firms that monopolize the sugar market in the country. Mostly located in East Java province, these firms control large amount of lands for sugar plantations. These firms normally obtain supply of raw materials (e.g. cane) from farmers surrounding their plantations through the PIR system of partnership.
- **Food crops:** the development of food crop industry is particularly aimed at strengthening food and energy security domestically. Capital-rich Gulf countries and many others from Asia, particularly South Korea, have been aggressive in seeking available lands in Indonesia, especially in the West Papua province. Reliable information concerning the investments from these countries in the food crops sector, however, has not been reliable.

⁴ An interview was conducted by the author with an official at the Ministry of Agriculture of the Republic of Indonesia which was conducted on 22 May 2012.

As for farmers, on the other hand, contract farming of this kind allows them more predictable flows of incomes, access to the markets, and to secure the necessary support to improve their production (e.g. through credit and know-how obtained from the TNCs). Based on the latest available data produced by the UNCTAD (2009), however, Indonesia, as among the largest agricultural based economies in Asia together with China and India, at least until 2007, was not the largest recipient of inflows of FDI in agriculture (or investments from large agriculture-based TNCs (refer to Table 7). One likely reason for such a trend was that, during the New Order era (1966-1999), the Indonesian government was too preoccupied with the process of industrialization in the country. At the time, the government gave more attention to the development of the manufacturing industry and other non-agricultural-based consumer goods industries, such as automotive and electronic industries, instead of making substantial investment in the development of agricultural sector. It was only during the present post-reform era (1999-present) that the government gave priority to the development of the so-called “agro-industries”.

4. The Impacts of Various Business Models of Agricultural Investment in Indonesia

4.1 Existing Impact Assessment Analyses on Business Models of Agriculture Investment in Indonesia

A range of literatures exist to assess the impacts of the implementation of various business models of foreign investment in agriculture in Indonesia and beyond. At the global level, da Silva (2005) maintains that contract farming is particularly useful for farmers as the model helps reduce the production and marketing risks. Having said this, Baumann (2000), in his assessment of contract farming in Africa, Latin America, and Asia, contends that such arrangements are likely to be more attractive for large size farmers rather than smallholder farmers. For large agribusiness firms, dealing with a large number of small farmers can be costly and time consuming. Large size farmers, on the other hand, are likely to be less dependent on technologies from the large agribusiness firms, and tend to have better access to good quality inputs than smallholder farmers.

Elsewhere, however, Vermuelen and Cotula (2010) argue the benefits of any forms of business partnership models in agriculture depend much on value sharing, and this can be assessed through four criteria, including: (i) the equity shares of the business, including on key assets such as lands and processing facilities; (ii) the ability of the contracted farmers to influence key business decisions; (iii) political and reputational risks associated with the partnership; and (iv) the sharing of economic costs and benefits, including price setting and financial arrangements.

With regard to Indonesia, meanwhile, the impacts of the various business models that exist in agricultural investment remain difficult to assess, and this is primarily due to the lack of data provided by relevant authorities in the country.⁵ Despite this, there are vast literatures that examine the impacts of various business models associated with agricultural investment in Indonesia. One of the earliest of such a study was conducted by the World Bank (1983) that attempted to evaluate the implementation of contract farming in sugar plantation in South Kalimantan in 1972 was actually part of the Indonesian government's program to develop sugarcane plantation and sugar industry outside Java. Unfortunately, since the evaluation process of the study was carried out only a year after the implementation of the program, little was said about the actual impacts of the project on contracted farmers. Although the study mentioned that the average net income per year of contracted farmers after debt service would reach an average of US\$ 1,700 for new settler families and US\$ 2,000 for existing farmers, these figures were set based on the assumption that various determinants in sugarcane production would go in favor of the project.

Elsewhere, a study pursued by Chotim (1996) from the AKATIGA, a social policy think-tank, on the pineapple agro-industry in Subang district of West Java revealed that the outcome of the plasma-nucleus partnership (PIR) in the sector failed to generate the expected positive results. In this specific case, the agribusiness firm that was supposedly acted as the 'nucleus' in its partnership with the local farmers, or 'plasma', failed to delegate the primary production process to the latter.

⁵ The BKPM currently does not consider the adopted types of business partnership in its approved FDI project important. The Board primarily concerns with the ability of an investment applicant to meet all the requirements it sets. Should an investor is interested to invest in the country's agricultural sector, particularly in the sub-sector that is open to foreign investment, but with certain conditions, then the BKPM would require the said investor to form a business partnership with local farmers. The said investor, however, is not required to explain to the BKPM the business model it intends to form with its local business partners. The interview with a representative of the BKPM took place in Jakarta, on 11 May 2012.

More specifically, Chotim maintained that the firm failed to bind its local farmer partners in such a way that the latter would observe the agreement as stated in the contract that the two parties had set up in the beginning of the partnership.

Various economic approaches had also been employed to assess the effectiveness of business models in agricultural investment in the country. Suwartini *et al.* (1997), for example, attempted to estimate the welfare effect of the implementation of the Nucleus Estate Smallholders (NES) system in the poultry industry following the issuance of Presidential Decree No. 50/1981, which regulated the scale of production (e.g. 10,000 birds for layer farms and 15,000 birds for broiler farms), and was aimed at improve the level of small farmers' participation in the industry. Using a partial equilibrium model in their analysis, Suwartini *et al.* found that the issuance of the above-mentioned 1981 Presidential Decree caused major structural change and lowered outputs in the industry. This study also revealed that the said policy generated welfare loss of about 8 percent of average annual revenues of producers.

More recent assessments on various business models in agricultural investment in Indonesia, such as those produced by Zen *et al.* (2005), Oktaviani (2009), and Feintrenie *et al.* (2010), however, found that issues such as conflicts over land ownership can serve as obstacles in making business partnership between agribusiness firms and local smallholder farmers a success. Furthermore, in his study on the issue in several palm-oil plantations in the country, such as those in West Kalimantan and Sumatera, Alimi (2011) also postulated that, in reality, farmers were not always better-off in the nucleus-plasma system. Contracted farmers were often too dependent on the agribusiness firms for the supply of farming inputs, such as fertilizers, seeds, and pesticides, while the latter often took advantage of their guaranteed relationship with local farmers and drove the prices of the agricultural products they purchased from the farmers down.

Yet, there were also assessments of positive nature in the existing studies on business models in agricultural investment. For example, using case studies of contract farming arrangements in several key commodities, such as sweet potatoes, tobacco, maize, horticultural products, rice seed, milk, poultry, and shrimp, Daryanto and Oktaviani (2003) argued that both agribusiness firms and the contracted farmers found their business partnership being advantageous.

As mentioned elsewhere in this policy paper, contracted farmers, in particular, found such a business partnership useful as it allows them access to larger and stable markets, as well as much-needed credits to expand their business activities.

Similarly, in his study of contract farming arrangements in various parts of Indonesia, Patrick (2004) also found that there are a range of contract farming arrangements that can benefit both small farmers and agribusiness firms. Aside from improving the welfare of the contracted farmers, some contract farming arrangements, such as those evident in the case of rice seeds production in Bali and poultry industry in Lombok, also allow greater access to inputs, credits, and marketing opportunities for contracted farmers. Elsewhere, the assessment of the Asian Development Bank (ADB) (2006) on the NES scheme in the shrimp industry in Lampung also suggested that the arrangement appeared to have improved the general welfare of the 'plasma' farmers. Meanwhile, similar NES scheme observed by Jelsma *et al.* (2009) in the palm-oil plantation in West Sumatra also enabled contracted farmers to maintain high level of production and earned good incomes.

Amidst differences in results, all of the above-mentioned assessments on the impacts of various business models in agricultural investment have three things in common. Firstly, the implementation of various business models in agriculture investment in the country has primarily been initiated for the purpose of expanding the economic opportunities provided to farmers, particularly small ones. Secondly, the use of the contract farming as the primary business model for agriculture investment in Indonesia has been driven by agribusiness firms' interest to secure access to supply of agricultural products, and farmers' interest to obtain good access to inputs and markets. Thirdly, subcontracted partners would be better off in a business partnership that observes the preconditions, such as equitable contractual agreements, the full understanding of potential costs and benefits between business partners, and a shared understanding of co-management (Nawir and Santoso, 2005).

4.2 Land Conflicts: Emerging issues in Agriculture Investment in Indonesia

Land conflicts are one of the key issues emerge as a major issue associated with investment in agriculture in Indonesia.

Although the government had since 1975 established the so-called Land Acquisition Committee (*Panitia Pembebasan Tanah*) to estimate the value of compensation to be distributed to people affected by land acquisition initiatives by both government- and private sector-led projects, conflicts often flared up as a result of the inability of the supposed owners of the land to present authorized land certificates. A land dispute between the Dayak-Kentian community in East Kalimantan and P.T. Kahold Utama, which attempted to seize the lands supposedly owned by the former to establish an Industrial Forest Plantation (HTI – *Hutan Tanaman Industri*) is a case in point. Land disputes in agricultural estates also occur occasionally as a result of the transferring of the rights to use the lands under the nucleus-plasma estates (PIR) initiative. Conflicts between landowners, HTI, and the PIR initiative were also evident North Sumatera (Jaluran), East Java (Jenggawah), West Java (Badega), Lampung (Bengkunel), Toraja (Rindung Allo), and so on.

The emergence of the land conflicts issue was also confirmed by the representative of the Indonesian Farmers' Association (HKTI – *Himpunan Kerukunan Tani Indonesia*), a farmer association that pursues advocacies around agricultural-related policies.⁶ In his view, not all partnerships between the core, or *inti*, firms and the *plasma* farmers or growers in Indonesia were successful. The HKTI had been actively assisting local farmers who had lost their incomes as a result of such failed partnerships across the country. The representative highlighted a case example that involved a large crude palm-oil manufacturing firm and local farmers. By using the land certificates that the said firm obtained from its contracted local farmers, the firm obtained the loan from Bank Mandiri, the largest state-owned bank in the country. Since the loan was considered as debts by the bank, the local farmers were not able to use the land even after the expiration of their contract arrangement with the firm.

Indeed, as further explained by the representative of the HKTI above, there were many cases where the core firms violated the agreements that had been set between themselves and the local farmers. In most cases, farmers were often forced into an agreement where the rules of the game were not explicitly stated in the contract. Thus far, the intervention from the local authorities on the matters had proven to be unsuccessful in mediating such conflicts.

⁶ An interview was carried out by the author with Dr. Ir. Benny Pasaribu, M.Ec. (Secretary General), HKTI, in Jakarta, on 18 June 2012

Similar concern on the emergence of land disputes in agriculture business partnership was also shared by a representative from the Ministry of Agriculture.⁷ According to this official, there were many cases where the core firms were unable to provide the necessary access to the market for the commodities that they promised to the local farmers. The same firms also often failed to provide the necessary capital injection, technologies, and/or other services as stipulated in the contract agreement that they signed with the local farmers. Notwithstanding the spread of such a problem in the country, the said official maintained that assessment on similar problems that affect business partnership between large agribusiness firms and local farmers should be made on case-by-case basis.

The findings from these exchanges with officials and stakeholders involved in agriculture policy-making processes are consistent with some existing reports produced by Faryadi (2009), Colchester (2011), Colchester and Jiwan (2006), and Colchester *et al.* (2006). Unfortunately, however, many of such existing publications do not make explicit distinction between foreign and national palm-oil firms. Due to increasing economic openness of the country, it is becoming highly difficult to assess the actual owners (either local or foreign) of large palm-oil firms operating throughout the country.

5. The Role of Government Institutions in Promoting Investment Policy Reform in the Agricultural Sector

5.1 Government Institutions and Investment in Agriculture

There is little doubt that government plays crucial role in promoting investment policy reform in agricultural production, development, and reforms. As noted by Patrick (2004), the government had at least undertaken several important actions to accelerate rural and agricultural development in the country, and these include: (i) the imposition and evaluation of monetary and fiscal policies (e.g. the reduction of export taxes, rescheduling of subsidy packages, and making available the production and consumption credits); (ii) the facilitation and the promotion of agro-industry development; (iii) re-evaluation of the marketing system, legal institutions, and cooperation policies in the agricultural sector; (iv) the development of infrastructure and institutional policies;

⁷ An interview was carried out by the author with Prof.Dr. Pancar Simatupang (Specialist staff for the Minister), the Ministry of Agriculture of the Republic of Indonesia, in Jakarta on 22 May 2012.

(v) the improvement of agricultural research and development; (vi) the improvement of the capacity of smallholder farmers through education and training; (vii) the improvement of natural capital as well as natural resource management and environmental protection and renewal; and (viii) the launching of food safety policy.

While there are numerous government-related agencies that deal directly or indirectly with the agricultural sector, in Indonesia there are two key government ministries that mainly deal with the investment issues, i.e. the Ministry of Agriculture and the BKPM. While the former deals with policies and/or regulations pertaining to agricultural production and the implementation of various business models in the sector, the latter is primarily responsible with the development of policies to regulate the foreign investment in the agricultural sector.

Although the Indonesian government provides policy support for the development of the Nucleus Estate Smallholder (NES) scheme, the Ministry of Agriculture is not too directly involved in the implementation of various business models that emerge in the agricultural sector, though it does carry out monitoring activities on the nature and extent of contracting in the sector. As observed by Patrick (2004), the Center of Agricultural Technology Assessment (BPTP – *Balai Pengkajian Teknologi Pertanian*), an arm-length of the Ministry of Agriculture, monitors closely contract farming arrangements for asparagus plantation, which include the visits to meet the farmers working on the land and evaluate their performance. There is, however, virtually no evidence that the government provides assistance with regard to inputs or extension services. In addition, the Ministry also established the Agribusiness Development Program (PPA – *Program Pengembangan Agribisnis*) in 2007 to provide information and consultancy services to the farmeres in various regions (Saptana and Ashari, 2007).

Last but not least, the government, through the Ministry of Agriculture, also provides various credit schemes for farmers, such as the Cooperatives' Members Credits (KKA – *Kredit Koperasi Anggota*) for palm oil growers, though not specifically used to support those involved in contract farming arrangements. In some agricultural sub-sectors, such as fisheries, the Ministry of Agriculture also provides various services, including training on the the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization (FAO), developing guidelines and standards for services in fishing ports, the improvement of fishing equipment, and so on.

Due to the introduction of the regional autonomy in the late 1990s, however, the power of the Ministry of Agriculture has declined significantly in influencing and determining the decisions on issues, such as the direction, volume, approach, and priorities of key sub-sectors to be promoted and supported. Notwithstanding this development, the regional autonomy and fiscal decentralization have give more space for regional governments, private enterprises, non-governmental organizations (NGOs), rural societies, and farmers the opportunities to become leaders in deciding the future of the country's agricultural development.

5.2 Government and Agricultural Policy-Reforms

Following the Asian financial crisis in the late 1990s, the government had little choice other than to follow the path towards liberalization. Nearly a decade after the financial crisis, the government, in 2007, issued the new investment law, or Law No. 25/2007,⁸ to replace the older investment law issues in 1967.⁹ This new law provides national treatment to all foreign investments and protect investors against the likelihood of expropriation in the country. With this new policy, all policies or regulations that affect directly or indirectly investment activities in Indonesia (e.g. labor policies that affect the hiring of foreign workers in FDI-based firms, tariffs for imported raw materials and other inputs issued by the Ministry of Trade and the Ministry of Finance) are to be coordinated by the BKPM.

Although certain restrictions persist in the area of foreign equity ownership, the new investment law has been seen by many observers and practitioners alike as the most important investment reform initiatives undertaken by the Indonesian government so far. The new investment law adopts the so-called negative list approach to investment, which allows all sectors to be open for investment, except those listed as closed or open with certain conditions.¹⁰

⁸ For further details on the new Investment Law No. 25/2007, see BKPM (2007).

⁹ A complementary regulation to attract FDI in the form of Presidential Regulations (PR) No. 36/2010 was later introduced in 2010. This new regulation determines the way in which investments can be pursued in 17 sectors that are conditionally open to FDI, which include agriculture, banking, communications and information technology, culture and tourism, defense, education, energy and mineral resources, finance, forestry, health, industry, manpower and transmigration, marine and fisheries, public works, trading, transportation, and security. For further details on the Presidential Regulation No. 36/2010, see BKPM (2010).

¹⁰ See, in particular, Article 12 (1) of the new investment law. The list of sectors that are closed or open with certain conditions (or "negative list") is determined by the Presidential Regulation No. 77/2007. This list is to be reviewed every three years.

Aside from being more opened to investments of all types, the provisions in the new law also include transparency and the introduction of various new incentives to attract more investment into the country. Although, as a result of poor infrastructure and security, attracting FDI remains a problem for Indonesia, it is generally expected that the new investment law would serve as the key tool to drive the growth of FDI in the country.

With regard to the investment in agriculture, several key features of the new investment law worths mentioning, and these include the guarantee from the Indonesian government concerning the equal treatment to all investments, no minimum capital requirement, free repatriation of investment and profit, legal guarantee, dispute settlement, and investment services. More importantly, the new investment law offers incentives to any foreign investors that are able to expand the employment of local labor force, involve in the country's infrastructure development, capable of ensuring the process of transfer of technology, pioneering ideas to develop alternative energy, conducting business in remote areas, entering partnership with micro, small, and medium businesses, and using capital goods, machinery, or equipments produced locally. In addition to these, tax incentives, such as tax holidays for new firms, tax credits for new investments, and exemption from import duties, are also added to promote greater investment in the country.¹¹

As far as land rights and ownership are concerned, the new investment law also allows foreign investors to: (i) cultivate the land (HGU) for a period of 25 years, which can be extended for another 25 years, and further extended to another 35 years; (ii) the rights to build (HGB – *Hak Guna Bangunan*) for 30 years, which can be extended for another 35 years, and renewed for another 20 years; and (iii) the rights to use (HP – *Hak Pakai*) up to 25 years, which can be extended for another 20 years, and renewed for another 25 years.

Internationally, the Indonesian government, as of June 2012, has concluded bilateral and regional investment treaties with more than 65 countries.¹²

¹¹ To avoid incidental double taxation on certain types of incomes, such as profits, dividends, interests, fees, and royalties, Indonesia has also signed double taxation treaties with 59 countries. Details on these countries, see BKPM (2010.).

¹² For detailed list of these countries, see UNCTAD (2012).

As from these, Indonesia has also ratified the convention of the International Center for Settlement of Investment Disputes (ICSID), which means that disputes that may arise between government and foreign investors can be settled through international arbitration (OECD, 2010: 20).

6. Conclusion and Policy Recommendations

The discussions in this paper have shed a light on the emerging trends of business models of investment in agriculture. Despite the lack of priority given to the distinction between foreign and domestic types of investments, it has been a challenging endeavour to pursue this study. The existing literatures on business models of agriculture investment in Indonesia also fail to make such a distinction. Notwithstanding such setbacks, the present policy paper is able to discern the extent to which the existing business models that prevail in the agricultural investment in the country. From a handful of literatures that this paper is based on, contract farming reveals by far as the most popular approach to investing in agriculture in Indonesia, both for large domestic large firms and TNCs. The key reason is that this particular model allows them easy access to relatively cheap labors and lands for the purpose of growing high value commodities that are commonly grown by local farmeres.

Although, the overall impacts of this model as well as other business models that exist in agricultural investment in Indonesia remain difficult to assess due primarily to the lack of data provided by relevant authorities in the country, the available literature (case studies) discussed in this paper shows mixed evidence: while there have been reports of successful case studies, there are also numerous cases that illustrate the drawbacks of such business models adopted for various reasons including that companies which was supposedly acted as the 'nucleus' in its partnership with the local farmers, or 'plasma', failed to delegate the primary production process to the latter (as stated in the contract that the two parties had set up in the beginning of the partnership), conflicts over land ownership, contracted farmers were too often dependent on the companies for the supply of e.g. fertilizers, seeds, and pesticides, while the company often took advantage of their guaranteed relationship with local farmers and drove the prices of the agricultural products they purchased from the farmers down, unequitable contractual agreements, lack of full understanding of potential costs and benefits between business partners, and lack of understanding of co-management.

In addition to the above mentioned reasons, it can also be concluded that the unsuccessful partnerships between investors and contracted farmers in contract farming or other business models are also a result of inconducive business environment prevalent Indonesia. To start with, business environment in Indonesia is still far from being favorable to the development of the agricultural sector. An effective agricultural investment in the country should be supported by not only viable agricultural policy, but also trade, monetary, and fiscal policies. Moreover, the sector and the investment made in the agricultural sector could also benefit further from improvement in the development of infrastructure, as well as policies conducive to the environment (this is particularly so given the high level impact of the climate change in the country).

In view of these points, the author proposes several key policy recommendations on the subject. Firstly, the government should be able to create conducive business environment to enable partnership activities in the agricultural sector go smoothly. Among other things, appropriate policies that favor market growth, stable prices, and the development of infrastructure should be put in place.

Secondly, in light of common problems found in many existing business partnership in the agricultural sector, the government ought to consider enhancing its capacity building initiatives (e.g. training, technical assistance, access to credit, and so on) to empower further local farmers involved in such business partnerships.

Thirdly, the government should provide incentives (e.g. tax holidays and other investment-related facilities) to agribusiness firms willing to pursue business partnership with local farmers in less favorable regions and the most vulnerable communities of the farmer groups in the country.

Fourthly, the government should be more pro-active in facilitating the establishment of business partnership between agribusiness firms and local farmers, but without too much intervention that would create market distortion in the process. Government's intervention in this context should be limited to ensuring that the local farmers involved in such business arrangements are to obtain fair treatment.

Finally, for the sake of transparency and amid minimal information concerning the distinction between foreign and local investments in the agricultural sector, the government should consider requiring agribusiness investors in the country to reveal relevant information concerning its own ownership status.

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