

Rubber, Oil Palm and Accumulation in Rural West Kalimantan, 1910s - 2010s

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Abstract: The article argues that social tensions in Indonesian oil palm cultivation have social origins internal to the communities that have adopted oil palm, and it traces some of these origins back across several processes of land conversion. In the early 20th century, the adoption of rubber among West Kalimantan farmers led to the privatization of land tenure and wealth accumulation in the hand of village traders, *tokeh*, that eventually caused social tension within the community. More money has come to the farmers following the conversion of land from rubber to oil palm since the 1990s, and the money is accompanied by a quicker pace of land accumulation in the hands of the village rich and plantation companies. This process opens a path for the grow of local, village-based capitalism.

Abstrak: Artikel ini menyampaikan bahwa ketegangan sosial berkaitan dengan budidaya sawit di Indonesia bersumber dari dinamika sosial di dalam masyarakat petani saat mereka mengadopsi tanaman pasar ini. Pada awal abad ke-20, adopsi karet di kalangan petani Kalimantan Barat menyebabkan privatisasi penguasaan tanah dan penumpukan kekayaan di tangan pedagang desa, *tokeh*, yang akhirnya menimbulkan ketegangan sosial di dalam masyarakat. Uang dalam jumlah yang lebih besar diterima para petani setelah mereka mengganti karet dengan sawit sejak tahun 1990-an. Kedatangan uang tersebut dibarengi dengan laju akumulasi tanah yang lebih cepat di tangan orang-orang kaya desa dan perusahaan perkebunan. Proses ini membuka jalan bagi tumbuhnya kapitalisme lokal berbasis pedesaan.

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INTRODUCTION

This article discusses the ongoing conversion of the main market crop in West Kalimantan, from rubber (*Hevea brasiliensis*) to oil palm (*Elais guineensis*). Adoption of oil palm, roughly began in the 1980s and expanded in the 1990s, has provided farmers with lavish revenue that allows farmers to enjoy a nice economic life. However, the prosperity was achieved at a severe cost of gearing their social life into a situation marred with distrust, enmity and a moral panics (Semedi, 2014, p. 68), a social life plagued by, according to Tania Li, mafia system:

A ... densely networked, predatory system in which everyone in a plantation zone must participate in order get somewhere, or simply to survive. ... In this vein, plantation managers and supervisors plunder the wages due to their subordinates; workers, government officials, and many others also attempt to plunder plantation wealth (T. M. Li, 2018, p. 329).

Just like farmers elsewhere, farmers in Kalimantan are economically pragmatic (Sellato, 2005, p. 68). By the end of 19th century, West Kalimantan farmers supplemented their swidden cultivation with collecting resins from forest trees and the gum of gutta percha (*Palaquium spp.*) to earn cash. In the early 20th century, they abandoned gutta percha for rubber which produce more money, that in effect had led to the privatization of lands among farmers (Dove, 1993, 1994, 1996, 1998;



Leslie Potter, 2011). This change of land tenure from village based to private ownership was moved and carried out by the wishes of the farmers themselves rather than by a power external to their community and once land ownership is privatized, a path for land accumulation is opened. Some seven decades into rubber cultivation, the farmers got into contact with oil palm that potentially could produce much better cash than rubber and came to their village under nucleus estate scheme with plantation companies (De Koninck, Bernard, & Bissonnette, 2011; Semedi, 2014; Semedi & Bakker, 2014; Sirait, 2009). Plantation companies carried greed over land (R. A. Cramb, 2011, p. 73; Dürr, 2017, p. 568), and their arrival just sped up and intensifies processes of land accumulation among oil palm farmers and left the farmers to compete over unevenly distributed wealth and a dwindling stock of farmland.

This article is written on the debate of competition between smallholders and plantations in market crop cultivation (Jean-François Bissonnette & De Koninck, 2017; Brookfield, 2008; Byerlee, 2014). Taking into account historical facts and the efficiency of the production process, some scholars stated that sooner or later market crops cultivated by plantations, such as rubber, coffee, tea, tobacco, cocoa, will become smallholder crops (Bauer, 1948; Lim, 1977). Meanwhile, by considering the expansion of capitalism other scholars perceived that household-based agriculture would be replaced by agricultural firms and plantations (R.A. Cramb & McCarthy, 2016; Hayami, 1996; Kautsky, 1988; T. Li & Semedi, 2021; Semedi, 2014; Zoomers, 2018). This article attempts to explore the future possibilities of oil palm smallholders by ethnographically reviewing the current situation among farmers. There is a consistent record of resistance among farmers against adverse incorporation to plantations and other dominating economic forces (McCarthy, 2010; James C. Scott, 1976; James C. Scott, 1985; James C. Scott, 2013; Semedi & Bakker, 2014). Yet these works often failed to mention internal accumulation, inflicted by kin and neighbours, who were lucky to occupy an advantageous position in the oil palm economy and getting luckier as they managed to accumulate more farmlands (J.-F. Bissonnette, 2013; Sirait, 2009). This work discusses the adoption of rubber and its conversion to oil palm at the village level and focuses on how land tenure changed and accumulation—of land and wealth—occurs under rubber and oil palm regimes in West Kalimantan, and what is the consequence it possibly bring to the existence of the smallholders

in the future.

METHOD

Data for this article has been collected from farmer communities along Tangkos River, a tributary of the Kapuas River, West Kalimantan, who belongs to several tribes: Malay (Moslem Dayak), Desa, Pom-pang, Kancing, Ketior, Kualan and Kopuk. Since 1992, two sister companies, PT Harapan Dharma (HD) and PT Sawit Permata (SP), obtained 35 years' land use rights in the area to cultivate 38,810 hectares of oil palm under a nucleus estate scheme (NES) in Tangkos area (Government of Indonesia, 1994). Nucleus estate scheme is a government project to integrate small holders with plantation companies in certain cash crop cultivation. In this scheme small holders acts as supplier of raw material, harvest of their fields to the nucleus company, and the company provides a secure market for the farmers' harvest (J.-F. Bissonnette, 2013). Long-term observation on several occasions from 2010 till 2016 allowed me to see the stages of the farmer integration into the oil palm regime. Semi-official data on land mapping and oil palm field annual productivity was obtained from company records accessible through farmer cooperatives. Interviews with farmers, traders, village officials and cooperative managers provide information on land accumulation, trading activities, socio-economic networks and everyday work related to rubber and oil palm cultivation. Field works from 2010 to 2016 involved a great number of students from Universitas Gadjah Mada, University of Toronto, University of Amsterdam, Heidelberg Universität and Universitas Negeri Semarang. Each researcher--professor and student--produced fieldnote and we pooled it in a repository for common use. This article is organized in three sections. First section discusses adoption of rubber in the early 20th century and its consequence to social life and land tenure among farmers in West Kalimantan. Discussion on rubber cultivation and privatization of land ownership in Tangkos River is presented in section two. Section three discusses further accumulation of lands and wealth in the hands of local elite that occur as farmers replace rubber with oil palm.

RUBBER CULTIVATION AND LAND TENURE

The introduction of rubber established a new "crop regime", i.e. an orderly procedure that dictates how a crop has to be cultivated so it can fulfill its expected function (Bellwood, 2005, p. 13; Guillet, 1981, p. 141). The regime organizes farmers' schedule of when to plant, to harvest and to rest. It estab-

lishes a set of values of what is considered bad and good behavior, lazy and diligent. It regulates the harvest exchange system and determines the form of land tenure fit for the crops' cultivation.

The crop regime that emerged when rubber was adopted led to significant changes in land tenure in Kalimantan. In pre-colonial West Kalimantan, land was officially the property of the Sultan, the sole owner of the realm. However, the sultanate's economic interest was generally directed to tax collecting, and later to gold mining. Agriculture was primarily conducted "by tribal communities of the interior over whom states rarely had direct control" (Healey, 1985, p. 8). In agricultural areas prior to the 20th century, land tenure was mostly collective, with exclusive use right for village members and residual right in the village community or extended family (Appell, 1971, p. 17; Boomgaard, 2011, p. 488). The expansion of colonial administration to West Kalimantan in the 19th century hardly changed the *de facto* status of land ownership, as it was more concerned with gaining control over gold mining and trading (Wadley, 2001, pp. 625-627).

It was the introduction of rubber that raised the state's interest in taking a new role as an effective, *de facto* landowner, to turn what they perceived to be idle land—capitalistically—productive (T. M. Li, 2007, p. 21). By the 1910s, dozens of large land concessions were issued to rubber plantation companies in West Kalimantan. Meanwhile, among the farmers themselves the adoption of rubber had in practice changed their concept of land use rights. Farmers applied the custom of granting individual farmers land use right for *swidden* for one planting season of rice that last for one year to rubber. However, the use rights here were extended for the duration of its life span of 25-30 years. Furthermore, the owner had the rights to trees from seeds that had fallen and grown naturally, and which reached maturity long before the first generation of trees died out. As the result, once a spot of common land was cultivated for rubber, it would be effectively under private control of the cultivator for good.

Farmers' interest in rubber cultivation is motivated by the fact that *swidden* was often not sufficient to cover their livelihood. In the early 20th century, when *swidden* was the dominant mode of agriculture, West Kalimantan imported 16,000 tons of rice annually (Touwen, 2001, p. 381). Rubber cultivation has greatly reduced farmers' problems of subsistence. Up to the 1970s in the calendar of Kantu *swidden* farmers of Upper Kapuas there was the season of hunger (*musim rapar*), i.e. "the time of the year closest to the next rice harvest and fur-

thest from the last one" (Dove, 1993, p. 140). At the same time, rubber cultivation has also exposed them to the flood of market goods. For ages, the farmers had been connected to market to gain access to everyday life goods produced in other places (Niuewenhuis, 1904, p. 21). It was adoption of rubber that allowed farmers to earn larger amount of cash that in turn provided them with bigger access to market.

Apart of intensifying farmers' relation to the market, the adoption of rubber changed their social relations to farmland. In contrast to *swidden* fields that produce rice, a means to fulfill the limited needs of human subsistence, rubber fields produce cash, a flexible means to fulfill growing needs created by the market system. Possessing large *swidden* fields were not only difficult to achieve due to labor constraints, but they are also useless. Having more rice would not make one's stomach fuller than those of people who had just enough rice to meet their subsistence needs. Hoarding rice for household consumption was not wise, as rice could easily deteriorate because of humid air, and attack of bugs and vermin. Meanwhile, possessing larger rubber fields was possible since rubber is a crop that requires a low input of labor, and earning more money from larger fields would allow a farmer to fulfill expanding needs beyond his subsistence. Falling to the quick gain rationality supported by the market system, farmers cunningly applied the old Dayak principle of *tanam tumbuh*, that trees planted or taken care of by a farmer were his exclusive belonging in order to claim private ownership over the fields where they cultivated rubber.

Custom dictates that land is acknowledged as a public good, with all villagers holding residual rights (Appell, 1971, p. 17; King, 1975, p. 14). In the case of *swidden*, farmers got temporary exclusive rights to the land for a planting season. When the season was over, the land was returned to the village although those who opened its first from primary forest had priority for reusing the land (Weinstock & Vergara, 1987, p. 313). Cultivating rubber allowed farmers to make fields economically productive for years to come, in the factor of not less than 1: 20 per hectare.¹ More than that, rubber allowed a flexible use of labour as tapping was done once eve-

¹ A hectare of *swidden* produces around 400 kg of rice in a 10 to 15 years rotation. Monthly latex production occurs, in relation to dry and rainy season. Statistical data shows on average a hectare of rubber fields produces 440 kg of rubber slabs per year (BPS, 2003, p. 169). According to farmers' calculation, the ideal price of rubber is twice the price of rice, but on average it is just 1.5.

ry three days all year round at a varying intensity in accordance with market demand. Rubber latex is also a durable product, which can be kept in the form of rubber slabs for months. All these benefits from rubber, however, could only be reaped if farmers 'ty[ed] up *swidden* land for longer periods of time' (N. L. Peluso, 2009, p. 62), and the rotational village-based land use rights were fixed into private ownership. Technically, after 30 years, when the trees lost their productivity, the farmers could clear the fields for *swidden* and regeneration with new seedlings (R.A. Cramb et al., 2009, p. 328).

Even without deliberate replanting, once a field was planted with rubber trees the trees would stay there forever. It would be hard therefore for village head to refute farmers' *de jure* claim of exclusive access to the fields since as a matter of fact the cultivated rubber trees were there. Farmers also did not feel morally wrong to claim land ownership in this way, because it was anchored to an established principle. One thing that the farmers did not probably foresee was that the privatization would lead to a zero-sum game of land ownership, predatory relations and the emergence of an Orwellian world where 'some animals are more equal than others.

Cultivation of rubber had in effect increased the supply of commodity from rural West Kalimantan to the world market. Rubber slabs came out of villages in thousands ton and the amount tended to increase from year to year. In the 1920/30s, the average of rubber slabs export from Pontianak was 25,139 tons annually (Touwen, 2001, p. 381). Trade to bring rubber slabs and crumbs to the world market was facilitated by forest products trading network that had been in place for centuries. This, however, was not merely a matter of change of commodity, abundant and kept growing supply of rubber slabs had in effect strengthened trading network that connect rural West Kalimantan and the market system and made traders, *tokeh*² position socially more powerful. *Tokeh* in villages facilitates trade of rubber slabs to the town-based rubber collector, who in turn transported the slabs to the warehouse of big *tokeh* in the province capital Pontianak, for further process into rubber sheets for export. On their way back to villages, *tokeh* brings market goods, from rice to salt, from lead rods for

flintlock bullets to medicines, for sale on credit among farmers. Village *tokeh* held strategic economic position that control outflow and inflow of goods crucial for farmers' survival and wellbeing. With the profit they made from trading in rubber and market goods, the *tokeh* engaged in the accumulation of farmland and wealth that in turn created pressure within community. As time passed by the pressure increased in parallel to the increasing power of *tokeh* to accumulate more.

A combination of state policy and farmers' practice of rubber cultivation in the early 20th century had effectively changed the land tenure regime in West Kalimantan, from a single regime of village/extended family based usufruct into tripartite land tenure regimes combining (1) state ownership, where plots were rented out to plantation companies, (2) private ownership of smallholding farmers (Kropveld, 1911, p. 50), and (3) village based usufruct. Indeed, at that time not all village land was converted into rubber fields and thus into private land. Some land remained under village or extended family usufruct, but the area has been decreasing over time. This change indicates a pattern: in the long term, the gravitation toward market crops tended to pull land tenure from a collective toward a private register. This pattern also implies a change of the status of farmland, from being a means of production into a commodity.

PRIVATIZATION OF FARMLANDS AND INEQUALITY ALONG THE TANGKOS RIVER

Until the mid-19th century, Tangkos lands, an area of approximately 400 km² (40.000 hectares) along Tangkos River was very much vacant and later on became an area of expansion for neighboring tribes (van Hinderstein, 1837). The earliest inhabitations in the area were Melawi village in the headwater of the Melawi sub-river, inhabited by Desa people and Kuala Tangkos village in the estuary inhabited by Malay people (Anonym, 1885). In the coming decades, Melawi inhabitants moved a bit downstream from Gunung Poring hill slope and established Sawak village, while some Malay population from Kuala Tangkos established Mayam hamlet. Some other Malay population moved upstream and established Kayu Ara village (Anonym, 1896, 1898). From Kayu Ara the Malay moved further up to Kuala Rosan, where the Rosan and Kembayau rivers meet. They stopped right there as the area further upriver was inhabited by Kancing people. From then on new villages were founded at a faster pace. In the 1900s, Desa and Kualan people established Balai Imbung village and members of the

² *Tokeh*, *tauke* (Chinese orig.) is a businessmen or trader, shop owner, agent, labor recruiter and leader who runs his economic enterprise based on monopoly and perpetual credit to keep consumers and petty producers attached to his enterprise (Graafland, 1888, p. 507).

Ketior tribe who migrated from Sekadau established Pampang Dua village (Anonym, 1919). Unlike their forefathers who could migrate from place to place in search of vacant, fertile lands, those farmers would be stuck in Tangkos lands, fenced in by rubber trees and glued down to the land by rubber latex.

The wave of rubber came in 1906 and was brought by the Borneo Rubber Company, which gained a land lease for 8,900 hectares at Sungai Dekan and Kuala Tangkos at a leasing fee of £ 260 per year. In 1910, the plantation was sold to Kapoewas Rubber Maatschappij, for £40,000. During its four years of operation, the company managed to plant 586 hectares of fields with 15,620 rubber trees of different ages, but further expansion of the cultivated area was hindered by labor shortage (Swart, 1911, pp. 54, 114). Contract labor was invited from Java, but only a few came. When the Japanese occupation forces arrived in the early 1940s, only 640 hectares of the plantation fields were planted in rubber (Brinkgreve, 1947, p. 49).

People of Mayam were the first victims of the rubber regime in Tangkos River. Their hamlet was located inside the concession area and was evicted to a spot across the Kapuas River. Unfortunately, the location for the new hamlet was just a thin strip of land tightly squeezed between the territory of the Hibun tribe and the big river, enough to establish a hamlet but not enough for swidden cultivation (Julia & White, 2012). What Mayam farmers did to maintain their subsistence was quietly reclaiming the concession land that happen to be not planted with rubber trees yet. This weapon of the weak was exercised for more than half a century, until eventually the government leased the lands to PT HD and PT SP in 1992.

From the Sungai Dekan plantation, rubber spread into up-river areas along the Tangkos, while farmers took seedlings and planted them in swidden lands. In ten to fifteen years, tapping was commenced and the farmers got a reliable flow of cash from work much less demanding compared to collecting wild tree gum (Dove, 1994, p. 387). Once the farmers cultivated rubber they had to commit to a sedentary life and were attached to the lands where the rubber was planted (Dove, 1994, p. 390). From the 1920s on, the Tangkos River population no longer engaged in migration to establish new villages. When a hamlet was overpopulated, they fanned out to open a new hamlet within a radius of 2 kilometers—not close enough for everyday social contact but also not too far from their rubber fields (Defani, 2016, p. 31).

The adoption of rubber has divided farmers into the groups of owners of large rubber fields, ordinary farmers, and poor farmers. These three groups could generally be distinguished by their way of tapping the rubber trees. As a part of the household economy, rubber tapping was ideally to be carried out by household members to maximize revenue. For owners of big rubber fields however, their own household labor was not enough to cover all their fields. To keep their fields productive, they invited neighbors or migrant workers for share tapping, with a lavish 70% of the latex for the tapper and 30% for the tree owner. Although it may seem strange that most of the tapping proceeds went to the tapper, it must be kept in mind that most of big rubber fields owners were also store owner, *tokeh* and a condition for the share tapping was that all the tappers' proceeds had to be sold at the field owner's store. For rich landowners, share tapping was a mechanism for keeping large rubber fields productive.

The second group, ordinary farmers, usually taps their rubber fields with their own household labor. Thus, they earn all proceeds from the fields. Usually, rubber fields among ordinary farmers were exceeding the tapping capacity of their own household labor but they preferred to tap the trees at lower intensity rather than sharing with other farmers. The risk of share tapping, which is that most of the time tappers would tap the trees dry to maximize their short-term revenue, far outweighed its benefits. When ordinary farmers share-tapped their rubber trees, often it was only with close relatives either because of trust or social pressure. Poor farmers, the third group, generally possessed fewer rubber fields compared to ordinary farmers and often they had a labor surplus in relation to their rubber fields. Newlyweds could be poor too in this sense, as they had just planted rubber seedlings and had to wait for several years before tapping their own fields. To earn additional income, poor farmers worked as share tappers for big rubber fields owners. It seems that until the 1970s/80s, the number of poor families in Tangkos River was not high, so that rich farmers needed to invite Madurese migrants and jobless people from towns along Kapuas River to work as share tappers.

The adoption of rubber brought a new social value that promote the role of money among farmers. From the mouth of *tokeh*, the words spread that a good farmer was diligent in making money. A diligent farmer was always in his fields tapping when weather was right, *Tokeh Abuy* told me. On the opposite side, a poor farmer sat lazily at home

even if it was not raining. The poor farmer could be active going to the fields, but he trapped birds or squirrel. He went home with a side dish for his supper but not with money, and his debt to the *tokeh* in groceries was rarely paid on time. As a result, he could not get sufficient rice and side dishes for his family. From the *tokeh*'s point of view, if a farmer could not feed his family, it was his own fault because he failed to cooperate with the *tokeh* who surely would guarantee his sustenance on credit.

Over the decades, the role of rubber in the farmers' economy in general became dominant. Gaining access to more cash has allowed farmers to buy and consume more as the market keeps plying them with all kinds of goods that are not always necessary. Even if they produce their own rice, a growing list of consumer goods has pushed them to tap more cash from their rubber fields. Recent farmers' grocery lists kept by the *tokeh* may illustrate the high dependency on rubber. By the mid 2000s farmers in the upriver area who cultivated rice in *swidden* obtained 42% to 60% of their household revenue from rubber. Apparently, rubber, which in the beginning was an ancillary to the farmers' economy, some decades later had developed into their preferred source of living (Dove, 1993, p. 142; Nancy Lee Peluso, 1996, p. 517).

Table 1. Pattern of Farmer Groceries, 2006-2009

| No | Item | Amount (IDR) | % |
|----|--------------------------|--------------|--------|
| 1 | Rice, noodles, flour | 3,347,000 | 36.12 |
| 2 | Beverage, tobacco, snack | 2,040,500 | 22.02 |
| 3 | Ingredient | 1,476,500 | 15.94 |
| 4 | Cash loan | 880,500 | 9.51 |
| 5 | Hygiene, medicine | 785,000 | 8.48 |
| 6 | Kerosene | 556,600 | 6.01 |
| 7 | Tools | 179,000 | 1.93 |
| | Total | 9,265,100 | 100.00 |

Source: Tokeh Abuy's notes, Nek Sawak Village 2015

Accumulation of land, labor and wealth among the village *tokeh* has put them in control of the supply of clothing, medicine and food as well as cash for other usage of farmers who were attached to them by perpetual credit relations. Taken together, those components have made *tokeh* very influential and powerful. The everyday expression '*apa kata tokeh*', 'whatever *tokeh* say' clearly reflects their position in the village. It is not a surprise that most village chiefs in Tangkos Rivers since the 1920s have come from groups of wealthy family

Table 2. Lands handed over for oil palm fields in the upriver, Tapang village 1992/3.

| Size of lands (ha) | No of farmers | % | Average size of lands |
|--------------------|---------------|-------|-----------------------|
| 0.25 - 5.00 | 65 | 67.01 | 2.61 |
| 5.10 - 10.00 | 20 | 20.62 | 6.82 |
| 10.10 - 25.00 | 11 | 11.37 | 15.52 |
| Total | 97 | | 468.73 |

Source: Cadastral map 1992, Tapang Village (Anonym, 1992).

Attachment to the cash economy combined with private ownership over rubber fields has led to the accumulation of land in the hands of the of *tokeh*. It was not unusual for farmers to give up rubber fields cheaply to *tokeh* because of sickness in the family or gambling debt. On the farmers' side, they did not feel sorry to give up one or two rubber fields, as it was possible for them to create a new one out of the village forest lands. In this way, some *tokeh* managed to obtain 10 to 15 hectares of rubber fields that used to belong to other farmers. The father of *tokeh* Kamprat of Kerawang managed to have sixteen places of rubber fields through this procedure. Chief Gondir of Nek Sawak back in the 1940s employed a different way, he ordered his villagers to clear 10 hectares of forest for rubber fields without payment (Semedi & Bakker, 2014, p. 397). *Tokeh* Meyong of Pampang Dua, back in the 1970s, managed to hold control over the trading of rubber slabs in upper Tangkos that allowed him to buy two large cargo boats (*perahu bandung*) and to own more than twenty hectares of rubber fields.

Results of a cadastral survey in 1992 in upriver Tangkos to measure land belonging to farmers who were willing to join PT HS and PT HD oil palm cultivation scheme, may help us to see the pattern of inequality of land ownership caused by the adoption of rubber.

Table 2 above indicates the pattern of unequal land ownership among the upriver farmers. The majority of farmers, 67%, released a mere 2.61 hectares of their lands; and 11% out of 97 farmers released more than 15 hectares of their lands to venture into oil palm cultivation. The majority, those who took part with 2.6 hectares of their lands, most probably did so because their landholdings were already limited. The 11% of the farmers released a larger area of land very likely because they were in possession of bigger fields. Further observations indicate that indeed the 11% farmers were among the Tapang village rich; one person was the village head at that time, the other were *tokeh* with a

good number of share tappers.

The discussion above shows that the cultivation of rubber led to the emergence of village *tokeh*, who served as centers of economic transactions in the village and who were in a position to accumulate wealth and land. On reflection, rubber can be cultivated without the privatization of farmlands that in turn leads to accumulation of land ownership. Extension of land use rights from one season to a longer term is possible to arrange, but exposed to the never-ending offer of facilities, luxuries and amenities of market products, the farmers prefer to secure immediate, short term individual economic gain rather than long term, collective one (Brox, 2006). Very likely, the economic achievement of *tokeh* and their strong position in the everyday affairs of their village serves as model of success that the farmers were happy to follow. One thing that the farmers either did not care about or did not understand was that the *tokeh* was the victors in a new economic setting where lands was turned into commodity and access to land had become a zero-sum game. Taking the *tokeh* as a model of success meant accepting a moral standard according to which it is fine for farmers to build success at other people's cost—even if they were kin or neighbors.

OIL PALM, THE COMMODIFICATION OF LAND AND LANDLESSNESS

Just like rubber, oil palm requires long-term access to farmland that guarantees farmers exclusive ownership of the harvest for years to come. Land tenure of this type had been made available through rubber cultivation. A crucial difference between the two crops is that oil palm produces perishable fruits that have to be processed not more than 48 hours after harvest to prevent their oil content from getting spoilt. Consequently, oil palm farmers are de-

pendent on a processing plant that in the 1990s only a company with sufficient access to capital and technical know-how could build. It was in such a situation that PT HD and PT SP came with a plan to establish 38,000 hectares of oil palm plantation, almost the whole area of Tangkos River. Following a nucleus estate scheme, 20% of the fields would be cultivated as the company nucleus fields, the remaining 80% would be cultivated by farmers who were bound to sell their harvest solely to the company plants for further processing into crude oil palm.

Farmers' participation in the nucleus estate scheme cost them large parts of their land, because the scheme was combined with a transmigration program to settle farmers from other islands in Tangkos. Participation in the scheme required a farmer to hand over 7.5 hectares of lands, of which 2.5 hectares would be returned in the form of a *kapling* of 2 hectares of oil palm fields and half a hectare for housing. Another 2.5 hectares would be allocated to transmigrant farmers, and the remaining 2.5 hectares was given to the plantation company for its nucleus fields and other facilities. Reluctantly, the farmers agreed to join the scheme, but they fought back once the oil palm fields were redistributed. In the upriver area, even before the fields were redistributed some farmers immediately squatted back on their old fields and adamantly claimed that they should remain their fields. They also reclaimed abandoned fields that were assigned to transmigrants. Many transmigrants could not stand the hardship of the early years of oil palm cultivation and they moved somewhere else (J.-F. Bissonnette, 2013, p. 500). In the end, the companies managed to convert 20,433 hectares of lands, of which 3,833 hectares were cultivated directly by the companies as nucleus fields and 3,500 hectares were

Table 3. Harvest and gross revenue of plasma farmer, 16.800 ha, 2005-2014

| Year | Harvest (ton) | Price/ kg (US\$) | Total rev (US\$) | Monthly total rev (US\$) | Monthly rev/kapling (IDR) |
|------|---------------|------------------|------------------|--------------------------|---------------------------|
| 2005 | 101,189 | 0.07 | 6,588,567 | 549,047 | 595,352 |
| 2006 | 109,165 | 0.07 | 7,520,297 | 626,691 | 679,545 |
| 2007 | 100,074 | 0.12 | 12,008,442 | 1,000,704 | 1,090,164 |
| 2008 | 121,994 | 0.14 | 17,285,475 | 1,440,456 | 1,593,526 |
| 2009 | 143,415 | 0.11 | 15,711,374 | 1,309,281 | 1,595,430 |
| 2010 | 126,705 | 0.15 | 18,509,923 | 1,542,494 | 1,685,592 |
| 2011 | 179,817 | 0.18 | 32,047,072 | 2,670,589 | 2,747,811 |
| 2012 | 190,064 | 0.14 | 27,357,087 | 2,279,757 | 2,728,842 |
| 2013 | 155,076 | 0.13 | 20,653,954 | 1,721,163 | 2,058,345 |
| 2014 | 181,009 | 0.14 | 26,045,249 | 2,170,437 | 3,113,139 |

Source: SP VI. Tapang Village Cooperative (Koperasi, 2015)

given to transmigrant farmers. The remaining 13,100 hectares of oil palm fields were in the hand of local farmers. This left some 19,000 hectares of—reserve—lands, mostly located in upper Tangkos in the hands of farmers, still cultivated for *swidden* and rubber.

Oil palm cultivation gives farmers revenues at unprecedented levels, although in the beginning they were low. With good maintenance, the new crop began to bear fruit after 3 years, although in the following 3 years, the fruit's oil content was not high, and it fetched a low price. When finally, the trees bore good fruits in the early 2000s, the price of oil palm in the world market was just around 7 cent US\$ per kilogram. Few years later, in 2007, the price improved to 12 cents and kept rising to 14 cents in 2014.

In 2005, around 6.5 million US dollars of revenue poured into 14 villages; the amount kept increasing in subsequent years because of an increase in price and harvest quantity, and it reached 26 million dollars in 2014. It was a very large amount for Indonesian villages and for farmer households. On average, each household earned IDR 3.1 million per month in 2014. Moreover, the money came regularly monthly, so farmers could plan. With the money, farmers could afford to build cement houses, with toilets and bathrooms, to buy new motorcycles, house appliances, mobile phones, and send their children to high school in Meliau.

This unprecedented amount of money also came with an unprecedented rate of land transfers among farmers. Once the oil palm field was reassigned to the farmers, it was subjected to land selling and exchange to get a *kapling* close to one's village, and to reclaiming by old owners.

In Tapang Village by 2000, from 224 *kaplings* of oil palm only 16.5% remained in the hands of their first owner, 4.% were reclaimed from the hands of transmigrants, 3.6% were swapped among farmers in order to get a *kapling* located close to the farmer' house, and 75% or 168 *kaplings* were sold to other farmers in favor of quick money. Out of 168 *kaplings* sold to other farmers, around 27

kaplings were accumulated in the hands of 6 *tokeh* (Koperasi, 2000).

Many transmigrant farmers were unable to cope with the hardship of the early stages of oil palm cultivation, abandoned their *kaplings*, which were immediately reclaimed by the old owner. In downriver Tangkos, reclaiming was often marked with tensions on the verge of open conflict. In the upriver area, reclaiming was not as intense because less land had been handed over in the first place and only a handful of transmigrants came and left. Conversely, the rate of land sales in the downriver area also tended to be lower compared to the upriver. The farmers acknowledged that most of the downriver area where they had been cultivating for *swidden* and rubber for two generations was government land, thus they felt obliged to hand over most of the land to the company and not much *swidden* or rubber fields were left as a reserve. As the consequence, they tried their best to cling to their oil palm fields no matter how poor the revenue was.

There have been two stages of land selling during this oil palm economic regime so far. The first was in the 1990s, when many farmers almost lost their hope in oil palm and sold their fields cheaply, for as little as 1.5 million rupiah (around US\$ 190) per *kapling*, to anybody whom they could entice to buy it. Until the 2000s, it was still very much a buyer's market, with plenty of supply and low demand. *Tokeh* and some canny farmers exploited this opportunity to expand their fields. The intensity of first stage land selling in the upriver area was generally higher than in the downriver area. In the upriver area, most farmers still had access to *swidden* and rubber fields that they had inherited from parents. Upriver farmers did not consider selling a piece of—not so productive—oil palm fields for quick cash as a problem since it did not immediately cripple their household economy. Should oil palm become attractive enough to cultivate some time in a future, they still had some land available.

The second stage of land transfers occurred in the 2010s, it resembled what Jan Breman (1983, p. 56) called rent capitalism where rich farmers gained control over the harvest through loans, rather than direct ownership. By 2011, a properly maintained *kapling* was sold for Rp 50 million (US\$ 5.800) and farmers were not eager to sell oil palm *kaplings*. *Tokeh* and rich farmers on the other hand were very enthusiastic to increase their access to these fields. Realizing that farmers were not willing to part with their fields, *tokeh* and rich farmers applied the old-time wisdom that the land is not im-

Table 4. Status of *kapling* ownership in the upriver, Tapang Village, 2000

| Status | Number | % |
|-------------------------------|--------|------|
| First <i>kapling</i> owner | 37 | 16.5 |
| Reclaimed by old lands owners | 11 | 4.9 |
| Swapped | 8 | 3.6 |
| Sold | 168 | 75.0 |
| Total | 224 | 100 |

Source: SP VI Cooperative (Koperasi, 2015)

portant, but access to the fruit of the land is. They noticed that farmers often spent their money before the payday, when the company distributed payments for the fruits. They seized upon this cash discrepancy for enlarging their access to the oil palm harvest by offering short- and long-term loans, buying on-site contracts and co-management.

A short-term loan is a loan taken within a month prior to harvest at 20% of interest. At the payday, the farmers hand over their harvest receipt to the *tokeh* to settle the loan. Long term loans that last for a year or more are basically a mortgage. The amount of the loan is fixed and is calculated by subtracting revenue from the ongoing harvest with maintenance, fertilizer, and harvest cost, plus the monthly interest. With long-term loans, the *tokeh's* revenue comes not only from the interest, but mainly from the increase of the field's productivity achieved by applying better maintenance and sufficient fertilizer. Farmers resent long-term loans because the excellent harvest obtained with good maintenance and proper fertilizer on their fields goes to the *tokeh*.

On-site buying saves farmers from the worry of transportation problem, and that's why the practice is prevalent in upriver area where harvest transportation is unreliable due to the poor state of the plantation road. Equipped with four-wheel drive trucks, some *tokeh* visit the fields to buy and carry the harvest to the processing plant. The price in on-site buying is the current price minus the transportation cost of Rp 100/kg from field to collecting point, Rp 167/kg from collecting point to processing plant, plus around Rp 100/kg as the *tokeh's* profit. Since the relation is stable and continuous, farmers often sell their harvest in advance just like in the case of short-term loans, thus adding to the *tokeh's* revenue with the 20% interest.

The final mode of accumulating access to the fruits of the land is co-management. Ideally a *kapling* of oil palm requires at least 4 tons of combined chemical fertilizer and twenty liters of herbicides per year, but many farmers fail to put aside part of their revenue for this purpose. The result is a poor harvest, and *tokeh* perceive this as an opportunity to increase the fields' productivity through the proper application of fertilizer and weeding under his management. If the poor farmer likes, he can do weed killing and harvesting work as wage labor. By the end of the month, the fields' proceeds after subtraction of all the cultivation costs will be given to the field owner. The *tokeh's* revenue comes from a management fee of Rp 100/kg, an on-site buying fee of Rp 100/kg, and the transportation fee.

This mode has proven to be effective in raising the fields' productivity while at the same time turning the farmers into a semi-proletariat.

The high productivity of oil palms attracts people with access to money to buy oil palm fields, and those who already have a field to buy more. Land certificates—that come with the conversion of farmers' fields into oil palm *kapling*—provide legal protection for these transfers and therefore smoothen the process as a farmer can technically sell his land without constraint from either his village community or kin.

Table 5. Land ownership in a downriver area, Daok Village 2011

| Land ownership | Number of farmers | % |
|-------------------|-------------------|------|
| Landless | 48 | 24.5 |
| Less than 1 ha | 9 | 4.6 |
| 2 ha | 46 | 23.5 |
| 3 - 4 ha | 58 | 29.6 |
| 5 - 7 ha | 22 | 11.2 |
| 8 - 9 ha | 8 | 4.1 |
| 10 - 12 ha | 3 | 1.5 |
| Bigger than 20 ha | 2 | 1.0 |
| Total | 196 | 100 |

Source: Household survey 2011

Table 5 indicates how severe inequality occurs in the downriver area, where the conversion of the land use into oil palm is almost total. Out of 196 farming household in Daok Village, close to a quarter were landless and had to eke out a living by selling labor to neighbor or to plantation company. Back in the late 1980s, all households owned at least a piece of rubber fields. High rates of landlessness in downriver Tangkos relate to the lack of land in reserve—in the form of *swidden* and rubber fields—as most of the areas have been privatized and converted into oil palm fields. Once the precariousness of the poor farmer households forces them to sell their oil palm fields, there is nothing for them and their children to fall back on and they will fall to landlessness. At the same time, a neighbor or relative is getting a larger share of the land. The accumulation of land comes “hands in gloves” with the accumulation of wealth and leads to the emergence of very rich farmers in the villages, with annual gross revenue from oil palm fields of not less than US\$ 30,000. Some of them still have additional revenue from groceries and loan services. Ordinary farmers, however, are not happy with it, and they are convinced that the *tokeh's* wealth is made at the poor farmers' cost. Aware that conspicuous wealth has caused envy, rich farmers use their money to buy

houses in the city and buy more farmland somewhere else.

A boost in oil palm cultivation occurred in the first half of the 2010s, with the increase of the price of oil palm and of the fields' productivity. At the same time the price of rubber has been steadily decreasing from around IDR 18,000/kg in 2010 down to IDR 5,000 in early 2015. Pulled by good revenue from oil palm and pushed by poor revenue from rubber, upriver farmers have been active in converting their rubber fields located close to the plantation road into oil palm fields. The plantation companies brand these new fields as a source of low-quality oil palm. In return, the farmers proudly say that *kebun swadaya*, independent fields, have saved them from losing land to the companies. The development of independent fields in Tangkos River has not reached the so called medium scale plantation of fifty to a few hundred hectares that already have sprouted up all over West Kalimantan (Lesley Potter, 2015, p. 20), but rich farmers perceive it as an ideal pattern of plantations that they would love to copy. They take it as a normal development and apparently do not mind that accumulating land has a detrimental consequence for the previous landowners. Finding labors for independent fields is not difficult. Oil palm requires a low labor input and labor supply has been growing—thanks to internal land accumulation and the incoming flow of migrants (T. M. Li, 2015).

CONCLUSION

When oil palm came to Tangkos River in the 1990s, the practice of land accumulation and benefiting at the cost of kin and neighbors were already with the farmers. They have been with them since adoption of rubber in the beginning of the century. Apparently agrarian history among the farmers itself is not farmer friendly. The adoption of oil palm under the nucleus estate scheme in Tangkos River in this sense can be seen as a joining force of two currents of accumulative drive, internal and external to the host community. The oil palm regime has practically bound the smallholding economy with the big plantation system to form a pressurized pyramidal cash crop economy with plantation companies sitting on the apex, *tokeh* and rich farmers occupying the middle layer, ordinary farmers on the precarious bottom layer, and the landless excluded. The higher one's position in the pyramid, the bigger one's access to capital and the stronger the gravitation to accumulate land and wealth. Oil palm regimes have transformed the Tangkos River farmers into market creatures, bound to quench their thirst

for cash in dwindling access to farmland, subjected to increasing pressure generated from the accumulation of land and wealth, treated as fair games by rich neighbor and kin and driven to treat each other in the same way. Back to the debate of smallholders versus plantations, the trend among Tangkos River farmers indicates an inclination of palm oil cultivation to the hands of big farmers. Considering that so far there is neither social nor political counter movement this trend of internal accumulation will keep going on. Sooner or later the palm oil will be cultivated as a capitalistic business to produce profit for the firm owners who emerge from the farmer communities themselves and not just companies that comes from somewhere else.

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