The Expansion of Oil Palm Smallholders and Migrants’ Upward Social Mobility in a Frontier Area of Riau Province, Indonesia (English Translation)

KOIZUMI Yusuke

Graduate School of International Relations, University of Shizuoka; 52–1 Yada, Suruga-ku, Shizuoka 422–8526, Japan.
E-mail: koizumi@u-shizuoka-ken.ac.jp

Received December 7, 2021; Accepted March 7, 2022

Abstract This study discusses the dynamics of migrants’ frontier society with the case of L Village in Riau Province, Indonesia, where oil palm cultivation is dramatically expanding. In the late 1980s, a private company developed a large oil palm plantation in the village, after which a large number of migrants from North Sumatra Province started moving to the village. The migrants’ purposes could be roughly divided into two aspects: the first was to start oil palm cultivation, and the second was to work at a company’s plantation or smallholders’ farmland. Interestingly, in L Village, landless plantation laborers could also buy land with their savings and start cultivating oil palm. Some of those initially poor migrants gradually expanded their farmland and finally became large-scale smallholders with more than 10 ha of farmland. Two conditions enabled migrants to grow to become large-scale smallholders: they had to start cultivating oil palm before and up to the 1990s when the land price was low, and they had to accumulate additional funds from other income sources such as running general stores or timber sales businesses. After the 2010s, when no more land was available in L Village, many migrants re-migrated to other frontiers in search of new land for oil palm cultivation. This indicates that these cyclical migrations are very characteristic in Riau Province as an unintended side effect of oil palm expansion.

Key words oil palm, migrants, frontier society, Riau Province, Indonesia

Introduction

In Indonesia since the latter half of the 1980s, the division of labor has been strengthened between Java, where urbanization and industrialization have rapidly progressed, and the outer islands (Sumatra, Kalimantan, and other islands), where the region’s core industries are still dependent on natural resource development. In the 2000s, when the industrial development of Java slowed down, the resource-based industries on the outer islands became the key engines of economic growth in Indonesia (Sato 2011). The oil palm industry, in particular, has attracted significant attention on the outer islands due to the increase in the global demand for edible oils and fats.

As criticized by NGOs and the media, the expansion of oil palm cultivation caused a dramatic decrease in tropical rainforests and their biodiversity, and also forced drastic changes in the livelihoods and traditional cultures of local indigenous people. McCarthy et al. (2012) noted that certain social and economic regimes, such as local authorities or governments, controlled the oil palm industry, which resulted in uneven economic distribution and triggered social conflicts. Meanwhile, oil palm, as a key export product, plays an important role in Indonesia’s economy, and oil palm plantations also provide a large amount of labor. As of 2015, employment by private and governmental companies’ plantations reached approximately 3.3 million (Kementerian Pertanian 2016). In addition, oil palm cultivation is relatively easy to start, even for people who have no experience in agriculture. The area of oil palm plantations by companies occupied 60% of the total (6,724,876 ha), while smallholders shared 40% (4,535,400 ha).1 Herein lies the question of how the outer islands would economically develop with the oil palm industry, and what kinds of actors could enjoy the benefits of mass employment on plantations or oil palm cultivation as smallholders. To tackle with these questions, this study focuses on migrants who cultivate oil palm in the frontier society of Riau Province.

Historically, the expansion of smallholders’ oil palm cultivation in Indonesia was triggered by a governmental project called Perusahaan Inti Rakyat (Nucleus Estate and Smallholders). In this scheme, governmental or private companies with financial support from the government created oil palm plantations and provided some part of the land to smallholders. Most smallholders who participated in this scheme were settlers from densely populated areas in Indonesia, such as Java or Bali, while a...
small number of indigenous people around the scheme area were also invited as participants. Each participant was given approximately 2 ha of land to cultivate oil palm. The scheme was implemented mainly in Sumatra and Kalimantan from the 1980s to the early 1990s, which became the basis for the expansion of smallholders’ oil palm cultivation in Indonesia. However, since the latter half of the 1990s, governmental support for the scheme has gradually declined due to limited government financing and the reduction of expenditure on agriculture. Under these circumstances, the number of independent smallholders who cultivate oil palm with little support from the government has significantly increased since the 2000s.2

There are roughly two entry routes to becoming independent smallholders. One is the conversion of crops to oil palm by existing smallholders, who are attracted to the profitability of oil palm compared to other crops (Rist et al. 2010). Therville et al. (2011) noted that starting oil palm cultivation is heavily reliant on access to infrastructure, information, and trading networks. In areas where traditional livelihoods such as shifting cultivation still remain, people prefer the combination of oil palm with rattan or rubber to lower the risk of single crop production, while recognizing the profitability of oil palm (Belcher et al. 2004; Terauchi et al. 2010). These studies focused on how rural societies have adapted to oil palm cultivation.

Another entry route is that migrants from other regions clear unused land and start cultivating oil palm by themselves. Koizumi and Nagata’s (2018) study focused on a large influx of migrants from North Sumatra Province to Riau Province, where oil palm cultivation is rapidly expanding, and analyzed the raw data of the 2000 and 2010 census. They found that most of those migrants became plantation laborers or smallholders in Riau Province. Previous studies on such migration exemplified the impact of migrants, such as the demonstration effect that encouraged existing farmers to switch to oil palm cultivation (Potter and Badcock 2004) or the spillover effect that spread new techniques and knowledge (Zen et al. 2005). However, it is still unclear how those migrants had access to land, started cultivating oil palm, and expanded their farmland.

This study focuses in particular on the dynamics of the expansion of oil palm cultivation by migrants, who are currently the driving actors of the oil palm industry on the outer islands, and discusses the kinds of structural changes that have occurred in frontier societies under the rise of the oil palm industry.

**Previous Studies about Frontier Society in Southeast Asia**

To consider the process of migrants’ oil palm cultivation, this study refers to the discussions of “frontier society”, one of the key concepts in Southeast Asian rural studies. This chapter summarizes the previous literature regarding the pattern of migration in Southeast Asian frontiers and the historical background of frontier society itself.

Uhlig (1988) noted that there were two patterns of migration to frontier areas in Southeast Asia: government-supported migration and spontaneous migration with people’s free will. The latter pattern of migration was regarded as people opening up the land in a way that was more rational than the former, although the migrants who succeeded in frontier development tended not to care much about the environment. One of the factors that drove such spontaneous migration was that population pressure strongly affected migration to new spaces in areas where land suitable for agricultural production was limited. For example, according to Cunningham (1958), who took the case of Batak people in northern Sumatra, they tended to move to other lands when the population pressure in the original village increased. In 1949, when Indonesia became independent, many Batak people migrated to the coastal plantation areas, where the area was strongly controlled by the colonial government. Another case by Kato (1982), who focused on a matrilineal ethnic group of Minangkabau in western Sumatra, showed that one of the reasons why their matrilineal system had been maintained was that they had repeatedly migrated (called merantau) to the western or eastern part of Sumatra, which led to less serious land shortages in their home places.

Tanaka (1999) took the case of Bugis people from Sulawesi, who preferred migration to various regions, and pointed out that they frequently left their home villages, not because they were squeezed or forced out of their birthplaces, but rather because they recognized that being successful outside of the home villages was a virtue for Bugis. In other words, spontaneous migration was also caused by social and cultural factors and was not limited to factors such as increased population pressure in the homeland or the expansion of economic opportunities in other regions.

Other studies have focused on the livelihoods or resource use patterns of migrants in frontier societies. Tanaka (1993) found that when Bugis people migrated to southern Sulawesi and began cultivating cacao, other
ethnic groups were affected to switch from self-sufficient crops to cacao, triggering the convergence of agriculture in the whole society into cacao-dependent monoculture production, while people also tended to engage in off-farm work when all the land was cleared. In a recent notable study, Seki (2005) conducted intensive field research in a deforested region in northern Luzon in the Philippines. His study revealed that the migrants changed their livelihood strategy from logging to breeding trees and eventually succeeded in organizing the self-management of forest resources after primary trees were depleted and government crackdowns were strengthened. To analyze such dynamics in a frontier society, Seki (2005: 62–63) paid great attention to the life history of the migrants and the structural change of their livelihoods and presented his unique approach to describing the detailed dynamics of the livelihood strategy of a logging frontier society through interviews with individuals. In summary, these previous studies exemplify the interesting characteristics of the fluidity of migrants' livelihoods, which have largely affected the structural changes of frontier society.

Based on these studies’ findings, this study focuses on the dynamics of the livelihoods of spontaneous migrants and their upward social mobility in a frontier society. The social stratification of frontier societies in Riau Province was strongly determined by whether they owned their oil palm farmland. This affects not only economic differentiations, such as income disparity, but also determines social ones, such as the power relationship between landowners and their laborers. As mentioned earlier, what is interesting in frontier society is that the livelihoods of migrants are not always fixed but rather fluid. People who migrated as plantation labor could start cultivating oil palm several years after their migration and even expand their farmland. The process of migration and the expansion of oil palm cultivation are extremely important in understanding the changes in frontier society in Riau Province, or more broadly, on the outer islands of Indonesia, where the oil palm industry currently dominates the regional economy. However, previous studies have not paid much attention to the dynamics of frontier societies in terms of social stratification or social mobility. Therefore, this study attempts to clarify how migrants started and expanded oil palm cultivation, and considers the process of social mobility with the transformation of migrants’ livelihoods in frontier society.

This paper consists of six chapter. Chapter III explains the factors of the large migration in Riau Province and outlines L Village, this study’s research site. Chapter IV examines how migrants started oil palm cultivation and expanded their farmland based on interviews. Chapter V considers the detailed changes in farmland size at the household level. Based on the results of the case study in L Village, Chapter VI clarifies the conditions that enabled migrants to cultivate large-scale oil palm, and also considers the future developments of the village.

An Overview of Riau Province and the Research Site

Geographical features of Riau Province and the factors responsible for an increase in migrants

According to Figure 1, which is based on Furukawa (1992: 2–7), the coastal area of Riau Province is a wetland facing the Straits of Malacca and is covered with acidic soil of peatland, where the land is unsuitable for agriculture. Whereas, the inland area is hilly and well-drained, although there are backswamp areas that flood during the rainy season. Until the first half of the 20th century, Riau Province was underdeveloped, sparsely populated, and densely covered with tropical forests, except for trading hubs along rivers and coastal port towns (Masuda et al. 2012: 135–142). From the latter half of the 20th century, however, infrastructure development for the oilfield in Riau Province proceeded at a fast pace, and access to the inland forest areas became easier. Logging and oil palm plantations prevailed rapidly.

Figure 1. Map of Riau Province.

Source: ALOS World 3D-30m, JAXA© and map data from the Geospatial Information Agency, Indonesia.
in Riau Province through the road network of the oilfield.

As oil palm cultivation began to expand in Riau Province in the 1980s, the number of spontaneous migrants from North Sumatra Province increased. Figure 2 shows the transition of the oil palm cultivation area from 1982 to 2015; it was less than 10,000 ha in the first half of the 1980s, but the companies’ plantations expanded in the latter half of the 1980s and reached 500,000 ha by the end of the 1990s. Since around 2000, oil palm cultivation by smallholders grew remarkably, exceeding the cultivation area of companies in the first half of the 2000s. As of 2015, the area of smallholders reached 1.3 million ha. If we look at Figure 3, which shows the increase of the number of migrants from North Sumatra Province, there were only 16,796 migrants between 1975 and 1980, but the number increased to 60,398 between 1985 and 1990; it reached 136,594 between 1995 and 2000. From 2005 to 2010, the ratio of migrants to the total population decreased slightly, but the total number of migrants was still 148,561, indicating that a large number of migrants continued to flow in from North Sumatra Province. Based on these figures, it can be said that the number of migrants showed a remarkable increase during the period when the main driver of the expansion of oil palm cultivation shifted from companies to smallholders.

Migrants from North Sumatra Province mainly sought job opportunities in Riau Province, especially in the oil palm industry. According to the 2010 Population Census, the population by employment in Riau Province showed that 792,175 people were engaged in estate crop agriculture, which accounted for 38% of the total labor (2,092,721). When focusing on migrants from North Sumatra Province, laborers of estate crop agriculture numbered 235,774, which accounted for 51% of the total (458,646). Migrants from North Sumatra Province were more likely to move to Riau in search of employment in the estate crop sector, especially in oil palm plantations.

The outflow of the population from North Sumatra Province was heavily dependent on the fact that the front line of the oil palm expansion came down to Riau Province. Historically, the development of oil palm plantations in North Sumatra Province had already begun in the latter half of the 19th century. According to the oldest statistics found by the author, the oil palm cultivation area in North Sumatra Province in 1982 was 284,219 ha, accounting for 86% of the total area (329,901 ha), meaning that North Sumatra Province was the first well-established region of oil palm plantations in Indonesia. The oil palm cultivation area in Riau Province in the same year was only 2,423 ha, which is less than 1% of the total area. The development of oil palm plantations in North Sumatra Province since the 1990s has slowed down, and as of 2015, the oil palm cultivation area of the province was 1,427,022 ha, decreasing to 13% of the national total (11,260,276 ha). However, the area of oil palm plantations in Riau Province was 2,400,876 ha in 2015, which accounted for 21% of the national total. In addition, the population density of North Sumatra Province in 2015 reached 191 per km², which is twice as high as that of Riau Province’s 73 per km², which could be one of the push factors that affected the population outflow from North Sumatra Province to Riau Province.

In summary, the increase in plantation labor demand

---

Figure 2. The expansion of oil palm area by companies and smallholders in Riau (1982–2015).
Data from 1984 to 1990 are estimates. Source: Indonesian Oil Palm Statistics by Statistics Indonesia

Figure 3. The number of migrants from North Sumatra to Riau and its ratio to the total population of Riau Province.
For the years 1975–1980 and 1985–1990, the data of the place of five years’ residence are based on extracted samples. Source: 1980, 1990, 2000, and 2010 Population Census.
was a pull factor, and a high population density in North Sumatra Province was a push factor, both of which drove a large number of migrants from North Sumatra Province to Riau Province.

The development process of L Village

This study is based on a case study of L Village, Kandis sub-district, Siak district, Riau Province, where the majority of the residents are migrants from North Sumatra Province (Figure 4). In the last 30 years until the time of this survey in 2016, Kandis district experienced a vast area of land clearing, the rapid development of companies’ plantations, and a large influx of migrants. Thus, the district is considered a suitable case for understanding the dynamics of oil palm frontier society. After the short pre-survey at all the villages in the Kandis sub-district in April 2016, the author selected L Village as a research site, where the villagers were not only dependent on plantation labor but also the cultivation of oil palm as smallholders.

L Village is located in the hilly area of Riau Province, and almost all parts of the village are flat land with good drainage. Land in the village is suitable for oil palm cultivation, although there also exists a small river that frequently floods during the rainy season. Until the first half of the 20th century, L Village was sparsely populated and densely covered with forests. The indigenous Sakai people engaged mainly in river fishing, swidden agriculture, and a small portion of rubber cultivation, but they had little contact with the outside world. In the 1960s, Caltex from the United States, one of the world’s leading oil companies, began oilfield development inside L Village, leading to the rapid clearing of land and construction of roads. In the early 1970s, a Chinese logging company from Dumai, a port town in the northern part of Riau Province, entered L Village and began logging by hiring Sakai people. Such timber logging was often illegal, but the landscape of L Village did not change significantly at that time because the logging method was not clear-cutting but rather selective logging of only giant trees. In contrast, in the 1980s, the development of oil palm plantations in the village progressed drastically, and the village’s landscape changed dramatically.

Figure 5 shows how the landscape of L Village was transformed into a full picture of oil palm cultivation between 1989 and 2010. The first plantation company (hereinafter referred to as X Company) opened a large oil palm plantation of over 10,000 ha along the main road in 1984. Unlike timber logging companies, X Company built a residential area inside the plantation and hired labor mainly from North Sumatra Province and partly from the island of Java. As of 1989, only X Company’s oil palm plantation existed in the village. Since the 1990s, however, the number of spontaneous migrants aiming to
start oil palm cultivation has gradually increased. In 1995, as shown in Figure 5, land reclamation by migrants progressed in the empty space on the west and north side of X Company's plantation, or the roadside in the western part of L Village. At the very beginning, Sakai people did not look favorably on these migrants, but as their communications increased through the exchange or purchase of luxury items and daily necessities, they gradually started to sell land to the migrants. From 1995 to 2000 was the most advanced period for the development of L Village. A new company (hereinafter referred to as Y Company) also opened an oil palm plantation on the west side of L Village. During the same period, new oil mills were built one after another around L Village to purchase oil palm fruit bunches from migrants, namely, smallholders. In the latter half of the 2000s, most of the land, including the riverside in the northern part, had been shifted to oil palm cultivation, and the landscape of L Village was entirely filled with oil palm cultivation by both companies and smallholders.

Survey method

According to the monthly reports by the L Village office, the total population as of April 2016 was 6,290, and the total number of households was 1,630. The working population was 2,397, of which 1,352 (56%) were casual laborers, 716 (30%) were farmers, and the rest numbered 329 (14%). There are no data showing the working population by industry, but according to the village head, most farmers were oil palm smallholders, and the majority of casual laborers worked at the companies' plantations and smallholders’ farmland. Regarding population by ethnic group, the number of households of Sakai people was only 87 as of April 2016, which is an extremely low number compared to the migrant population in the village.

The author stayed in L Village from June to July 2016, selected a total of 160 households as research samples, and then conducted interviews with the heads of those households by mainly asking about changes in their livelihoods. These samples constitute 10% of the total households in each Rukun Warga, an administrative unit under village. Regarding the sampling method, the author initially selected sample households by considering the ratio of those who did or did not have oil palm farmland based on advice from the village head, leaders of each Rukun Warga, and an agricultural extension officer. Since this study focused on the process of migrants' social mobility, the ratio of large-scale smallholders was intentionally set to be higher than the reality. Therefore, the 160 sample households extracted in this survey did not quantitatively

Figure 5. The process of development around L Village (1989–2010).

The map of the development process around L Village was created by visually judging the cleared area based on the Landsat satellite images and the information gained from the field survey. The boundaries of the northern part of L Village are still undecided and remain uncertain. This is a situation peculiar to the outer islands of Indonesia, where villages formed in a relatively new era often have uncertain boundaries with adjacent villages.
represent the tendency of smallholders in L Village, but the author judged that these samples were useful to discuss the social mobility of migrants.

The 160 heads of the households were all male migrants who migrated spontaneously from outside L Village; 115 (72%) were from North Sumatra Province, 27 (17%) were from the island of Java, and 18 (11%) were from other regions. Regarding the composition of each sample by religion and ethnicity, 89 Islamic Javanese (56%) accounted for the majority, while the others were 37 Christian Batak (23%), 17 Islamic Batak (11%), and 17 others (11%), which indicated that the social backgrounds of the migrants in L Village were highly diverse.

The main livelihoods of these samples were oil palm cultivation as smallholders or labor at companies' plantations or labor at smallholders' farmland. Most laborers at X and Y Companies' plantations were full-time employees, and their primary jobs were harvesting oil palm, working as security guards, doing clerical work, and so on. Meanwhile, labor at smallholders' farmland was mostly conducted on a daily basis at the request of the landowner; some of those laborers had a good relationship with landowners and constantly worked on a specific farmland. There were also other migrants who worked at oil palm mills, taught at schools, or ran small businesses such as general stores or motorcycle repair shops. The small businesses inside the village were perceived as a supplementary source of income, but some of the migrants made ends meet only with their small businesses and aimed at upward social mobility by investing in their business ventures.

Migrants’ Oil Palm Cultivation in L Village

The purpose of migration to L Village can be broadly divided into two aspects: first, to cultivate oil palm as smallholders, and second, to work at companies' plantations or on smallholders' farmland. While the former started cultivating oil palm immediately after moving to L Village, the latter group was also able to buy land and cultivate oil palm with the surplus money they accumulated after migration. This chapter analyzes how each sample started cultivating oil palm and expanded their farmland, which is an important driving factor that determines the dynamics of the livelihood structure in L Village.

Land reclamation and its transactions by migrants

The legal basis for land reclamation and its transactions by migrants, and partly by indigenous people, is somewhat complicated. Regarding land reclamation, the Regulation of the Minister of Home Affairs Number 6 of 1972 enabled “the transfer of authority of land rights (pelimpahan wewenang pemberian hak atas tanah)” if the area of the land reclaimed was less than 2ha. This regulation provided a legal basis for land reclamation by migrants, with permission from the sub-district head and a land certificate (Surat Keterangan Tanah; SKT) issued by the village head (Wahyu 2015: 42). In L Village, the migrants claimed land by paying a certain amount of compensation to the Sakai people. In 1984, the Instruction of the Ministry of Home Affairs Number 593/5707/SJ of 1984 restricted the issuing of land reclamation permits by sub-district and village head, but the Instruction did not work effectively in the field because there were no strict penalties. Therefore, land certificates continued to be issued for migrants in L Village even after the mid-1980s. Migrants’ land was often sold to other migrants, and a compensation certificate (Surat Ketarangan Ganti Rugi; SKGR) was issued to the buyer during land transactions. This compensation certificate was also used for the legal basis that migrants claimed ownership of their land. According to the village head, the transactions of land in L Village had been frequent, and almost all the lands surveyed in this research were already purchased from other migrants or transferred from their relatives free of charge.

Based on the 176 cases of land transaction data collected during this research, Figure 6 shows the average price per hectare and the number of land transactions every five years. In the early 1990s, the real price per hectare was around 2 million rupiah (approximately 200 USD). In the latter half of the 1990s, land prices in L Village increased dramatically, and in the first half of the 2000s, the real price per hectare exceeded 15 million rupiah (approximately 1,500 USD). This was mainly because the vacant land decreased in L Village; simultaneously, the land planted with oil palm became more valuable. Although the increase in land prices stabilized in the latter half of the 2000s, land prices increased again in the first half of the 2010s, and the average real price per hectare reached 30 million rupiah (approximately 3,000 USD).

Of the 160 sample households, 99 cultivated oil palm at the time of this survey. Based on these 99 samples, 48 had started cultivating oil palm before and in the 1990s, 29 had started in the first half of the 2000s, 10 had started in the latter half of the 2000s, and 12 had started after 2010, indicating that almost half of them had started cultivating oil palm in the 1990s when land prices were still low. From the 61 samples who did not own any farmland
at the time of the survey, six laborers of X Company and three laborers of smallholders also had experience in running their own farmland. In this sense, it was also possible for casual laborers to start cultivating oil palm in L Village, especially in the 1990s.

**How migrants started oil palm cultivation in L Village**

To analyze how the 160 samples started oil palm cultivation after they migrated to L Village, those samples were categorized into four groups based on their main source of income at the time of migration. Group A included those who started oil palm cultivation when they migrated to the village, group B were laborers at companies’ plantation, group C were laborers on smallholders’ farmland, and group D were in other occupations.

Table 1 shows whether the samples owned oil palm farmland when the author implemented the survey, and how they gained their first land in L Village. All 30 samples of group A owned their own farmland at the time of the survey; 11 had started cultivating oil palm with their own funds, while 19 had taken over land from their relatives for free. This indicates that the samples of group A who did not have enough capital could also start cultivation with support from their family or relatives. All samples of group B started working at companies’ plantations after they migrated to the village; the samples who owned oil palm farmland at the time of the survey were only 20 out of 60, less than half of the total. In contrast, 34 samples out of 48 in group C who were engaged in labor on smallholders’ farmland, and 15 samples out of 22 in group D who were engaged in other labor or small businesses after migration, owned their own farmland at the time of the survey, meaning that the number of samples that cultivated oil palm was higher than those who did not. For group B, samples who worked at companies’ plantations on a full-time basis, stable living was guaranteed; there were many samples who could not purchase land but remained in the village. Meanwhile, the samples of groups C and D, who were mostly dependent on daily labor, tended to move to another area if they could not obtain land in the village. All the samples of groups B, C, and D were mostly dependent on labor at companies, but some of them could start cultivating oil palm by accumulating surplus money from their wages.

**How migrants expanded the area of oil palm farmland**

In L Village, the samples of not only group A, but also groups B, C, and D could expand their farmland for oil palm. In practice, oil palm is a crop that can be harvested all year round, although the amount of production varies slightly depending on the amount of fertilizer or the quality of the land itself. If the area of smallholders’ farmland exceeds 5 ha in the village, their income tends to be higher than the wages of companies’ plantation labor; thus, it is possible to make a living through oil palm cultivation alone. Based on this fact, the size of oil palm farmland was roughly categorized into three groups in the discussion below: small-scale farmland with less than 5 ha, medium-scale farmland with 5–10 ha, and large-
scale farmland with more than 10 ha.\textsuperscript{13}

Regarding the 99 samples who owned oil palm farmland at the time of the survey, Table 2 shows the scale of their farmland in each group when they started cultivating oil palm in L Village and at the time of the survey. In group A, 9 out of 30 samples were medium in size, and 10 were large-scale farmland when they started cultivation. At the time of the survey, the number of small- and medium-scale farmland owned by group A decreased by six and five, respectively, while the large-scale increased to eight, indicating that they had grown as a powerful cluster of large-scale oil palm smallholders in L Village. In group B, 3 out of 19 samples were classified as medium- or large-scale farmland, and the remaining 16 were classified as small-scale when they started cultivation. At the time of the survey, the amount of small-scale farmland decreased by eight, and the amount of medium- and large-scale farmland increased to four. Similarly, in groups C and D, 31 and 12 samples respectively were small scale when they started cultivating oil palm, but 11 samples of group C and 5 samples of group D grew to medium- or large-scale farmland at the time of the survey.

In summary, the samples of groups B, C, and D who started from small-scale farmland could also grow to medium- and large-scale farmland as well as the samples of group A who were engaged in oil palm cultivation immediately after they migrated to L Village.

**Upward Social Mobility of Migrants in L Village**

From the 99 samples discussed in the previous chapter who cultivated oil palm at the time of the survey, 22 were
medium in scale, and 32 were large. This chapter focuses on these 54 samples and exemplifies how they started their oil palm cultivation and succeeded in expanding their farmland. This chapter is mainly based on Figures 7 to 10, which show the detailed changes in the samples’ livelihoods before and after their migration to L Village.

The change of livelihoods in group A

The year of migration of the 22 samples in group A ranged widely from the early 1990s to the 2010s, while the start of cultivation was mostly centered on the 1990s (Figure 7). This indicates that the samples who succeeded in growing to medium- and large-scale smallholders had bought land when the land price was relatively low in L Village, including the samples whose land was transferred from their relatives. An interesting characteristic of group A was that 10 samples had already owned large-scale farmland when they migrated to the village; six samples (Nos. 03, 05, 13, 16, 18, 19) took over land from their relatives, and the other four samples (Nos. 01, 08, 15, 22) used their own funds to start cultivating oil palm. Regarding the latter, their funding for oil palm cultivation was based on salaries of civil servants (No. 01) or land sales (No. 08) before migration. In addition, Nos. 15 and 22 worked at companies’ plantations in North Sumatra Province, and were informed by their colleagues that the land price in L Village was still low; thus, they bought land for their old age. Nos. 15 and 22 continued to work at the company’s plantations in North Sumatra Province, even after starting their own oil palm cultivation in L Village. During the time that they lived in North Sumatra, they entrusted the harvesting and management of their farmland to reliable persons in L Village, and they moved to L Village when they retired from the plantation company.

Regarding the 12 samples of group A who owned small- or medium-scale farmland at the start of cultivating oil palm, eight had grown to large-scale farmland at the time of the survey. All eight samples obtained loans of more than 100 million rupiah (approximately 10,000 USD) from banks or government-affiliated financial institutions with land mortgages when they were willing to expand their farmland. What was also interesting about group A was that five samples (Nos. 03, 06, 10, 13, 19), who succeeded in growing their land to large-scale smallholdings, owned land of more than 10 ha outside L Village. This trend indicated that after the land price of L Village soared, migrants tended to purchase land in other areas outside the village where the land price was still relatively low.

The group A samples relied heavily on oil palm cultivation from the time they migrated to the village until the time of the survey. Some were engaged in administrative work at the village office (Nos. 01 and 02), labor on other smallholders’ farmland (No. 11), or as on-site supervisors at oil palm mills (Nos. 18 and 19), although their main source of income was from oil palm cultivation. Those samples were engaged in various types of labor as side jobs to earn additional income. In addition, the main source of income for five samples (Nos. 03, 08, 13, 14, 15) at the time of the survey was in the middleman business, in which they bought oil palm fruit bunches from smallholders and sold them to mills. Since the latter half of the 1990s in L Village, the demand for middleman businesses grew due to the large increase in migrants who started cultivating oil palm. These five samples started middleman businesses because their oil palm farmland had already exceeded 10 ha, and they had to transport their own harvests (oil palm fruit bunches) to mills. Nos. 03 and 13, however, had expanded the scale of the middleman business with eight trucks at the time of the survey, and their customers totaled around 100 smallholders. There is also another sample (No. 10) who used to run a middleman business but withdrew due to poor cash flow. This case indicated that it was not an easy option even for large-scale smallholders to start middleman businesses, since it required a large amount of capital for investments such as heavy vehicles.

The change of livelihoods in group B

The group B samples tended to start oil palm cultivation several years after they migrated to the village (Figure 8). Six samples (Nos. 25, 26, 30, 31, 32, 33) had grown to large-scale smallholders at the time of the survey, mainly due to their positions in companies’ plantations. Nos. 25 and 30 were security guards and field supervisors at X Company, respectively, and their wages were relatively higher than those of the general positions such as cultivators or mechanics. Three samples who worked at Y Company (Nos. 31, 32, 33) were a general manager of the accounting department, a chief of the harvesting sector, and a security guard, respectively; samples 31 and 33 were already large-scale smallholders when they started oil palm cultivation. Nevertheless, all those samples were still engaged in labor at companies’ plantations at the time of the survey, although their income from oil palm cultivation exceeded the wages received from the companies. This is mainly because they were attracted to the benefits of medical treatment or pensions after retirement.
However, several samples also became large-scale smallholders from casual laborers. No. 26 started working at X Company when he migrated to the village in 1987, and he was in charge of weeding and fertilization for 10 years until he retired in 1997. Although his wages were lower than those of Nos. 25 or 30, he was highly motivated to cultivate oil palm by himself when he migrated to the village and bought 0.5 ha of land in 1988, a year after he started working at the plantation. In the same year, he opened a small general store for plantation laborers, and with that additional income, he gradually expanded his farmland. He retired from X Company in 1997, as the income from his oil palm cultivation exceeded the wages of the company; at the time of the survey, he was one of the largest smallholders in L Village. The case of No. 26 indicated that even a low-wage planta-
tion laborer could also start oil palm cultivation in the early 1990s, and eventually grew to become a large-scale smallholder by expanding his farmland. Five other samples (Nos. 23, 24, 27, 28, 29) who were also field laborers for X Company at the time of migration, did not have any additional income sources, except for No. 27; thus, they had only grown to medium-scale smallholders at the time of the survey.

The change of livelihoods in group C

The group C samples had different characteristics between those who migrated before 2000 (Nos. 34 to 39) and those who migrated after 2000 (Nos. 40 to 46) (Figure 9). The former was as young as 19 to 30 years old at the time of migration, and they had little work experience before they migrated to the village. Four samples (Nos. 34, 36, 37, 39) owned large-scale farmland at the time of the survey. Samples 34 and 36 specialized in oil palm cultivation when their income from oil palm exceeded the wages they received working on smallholders’ farmland. Samples 37 and 39 had also grown to become large-scale smallholders at the time of the survey, although they started cultivating oil palm in the first half of 2000, which is relatively late when compared to others. No. 37 started oil palm cultivation in a wetland area along the river, which was a poor condition for oil palm but relatively cheap even in the 2000s. He used the money he accumulated from oil palm cultivation in the swampy area to buy a small truck in 2010 and succeeded in a middleman business. No. 39 worked on another smallholder’s farmland after his migration while simultaneously starting a timber sales business. With the additional income from the timber business, he started oil palm cultivation in 2003. What was interesting about his strategy was that he repeatedly bought and sold his farmland from/to other migrants when his oil palms matured.

Seven samples (Nos. 40 to 46) who migrated to the village after 2000 were in their 30s to 40s at the time of migration, which is relatively old, except for No. 43. They had significant experience working on company plantations or in other jobs before they migrated to the village. For them to start cultivating oil palm, they sold land at home (Nos. 40 and 44) or saved money from their wages received from companies’ plantations in North Sumatra Province (Nos. 41 and 45). However, after the land price of L Village soared after 2000, it was difficult for them
to expand their farmland. Those samples were medium in scale at the time of the survey, and four samples (Nos. 41, 42, 43, 46) continued to work on other smallholders’ farmland to seek additional income. In addition, No. 44, who ran a large-scale oil palm cultivation enterprise, and Nos. 40, 42 and 46, who managed medium-scale farmland, gave up the expansion of their farmland in L Village at the time of the survey. Rather, they found new places outside L Village, about an hour by motorcycle, and bought land there.

The change of livelihoods in group D

The group D samples had migrated to L Village in the early 1990s, except for No. 54, and started their oil palm cultivation by 2000 (Figure 10). Those samples were engaged in labor other than oil palm related sectors such as timber logging or construction after they migrated to the village, and it was also possible for them to start cultivating oil palm. Nos. 47 and 48, in particular, who were engaged in timber logging in the early 1990s, had grown to a large-scale at the time of the survey.14 No. 47 earned a living from logging labor when he migrated to the village, and in 1999, he started a timber sales business. With the surplus funds from the timber business, he started cultivating oil palm and gradually expanded his farmland. He had finally shifted his livelihood solely to oil palm cultivation when crackdowns on illegal logging intensified in the early 2000s. No. 48 had experience working on a company’s plantation in the eastern part of Siak district, Riau Province, and with the money he saved during that period, he bought land in L Village in 1992, immediately after his migration. At the beginning of his life in L Village, he was initially engaged in logging labor, but when his oil palms matured to be harvested, he stopped logging and began to make a living from oil palm cultivation alone. In contrast, Nos. 49 and 50 also started oil palm cultivation but they were engaged only in labor at others’ oil palm cultivation at the time of the survey; thus, their oil palm farmland remained medium in size.

Samples 51 to 54 were engaged in construction labor or small businesses such as general stores, and by investing part of their income, they succeeded in expanding their

---

| No. | Occupation before migration (years) | Age | The change of migrants’ livelihoods | When they started cultivation | In 2016 |
|-----|-----------------------------------|-----|-----------------------------------|----------------------------|---------|
| 34  | several (jobs)                    | 25  | In 2016                           | 1990                      | 2.0     |
| 35  | fisher (3)                        | 23  |                                   | 2000                      | 3.0     |
| 36  |                                  | 20  |                                   | 2005                      | 4.0     |
| 37  | timber labor (19)                 | 25  |                                   | 2010                      | 4.0     |
| 38  |                                  | 19  |                                   |                            | 10.0    |
| 39  | rice farmer (7)                   | 30  |                                   |                            | 10.0    |
| 40  | rice farmer (24)                  | 39  |                                   |                            | 8.5     |
| 41  | labor at plantation (19)          | 35  |                                   |                            | 8.5     |
| 42  | N/A                               | 48  |                                   |                            | 5.0     |
| 43  |                                  | 22  |                                   |                            | 5.0     |
| 44  | oil palm smallholder (8)          | 31  |                                   |                            | 10.0    |
| 45  | auto mechanic (6)                 | 48  |                                   |                            | 6.0     |
| 46  | several (jobs)                    | 31  |                                   |                            | 6.0     |

Figure 9. Change of each sample’s livelihood in group C.

Annotation is the same as that in Figure 7. Source: Based on the interview results.
farmland. In the latter half of the 1990s in L Village, there
was a high demand for the construction of houses, public
facilities, roads, and so forth. No. 52 was engaged in con-
struction labor and his wage was relatively higher than is
typical for labor at the company's plantation because he
had experience in construction labor in Medan, the capi-
tal city of North Sumatra Province. In contrast, No. 53
had maintained a general store since he migrated to the
village, and he started cultivating oil palm with the funds
obtained from his own business. He also grew to a large-
scale smallholder at the time of the survey.

Discussion and Conclusion

The livelihoods of the migrants in L Village mainly
consisted of oil palm cultivation and labor on compa-
nies' plantations/smallholders’ farmland. This livelihood
structure in the village was not fixed, but rather fluid,
so that even landless plantation laborers could also start
cultivating oil palm, and even grow to become large-
scale smallholders (Figure 11). This chapter summarizes
the processes and conditions that made it possible for
migrants to start and expand their oil palm farmland and
then considers the future developments of L Village.

Upward social mobility in a frontier society

In the author's research in L Village, the samples were
categorized based on their main source of income at the
time they migrated to the village; group A was oil palm
cultivation, and groups B, C, and D were others, such as
plantation laborers. They started oil palm cultivation by
different processes, and some grew to become medium-
or large-scale smallholders. The conditions that made it
possible for them to expand their oil palm farmland can
be summarized in the following two points.

First, low land prices were one of the primary factors
that enabled migrants to start cultivating oil palm in L
Village and subsequently grow to become large-scale
smallholders. All of the samples of group A who suc-
cceeded in expanding their farmland started their oil
palm cultivation in the 1990s. Although some of them
migrated after the 2000s, they had already started culti-
vating oil palm before they moved to the village or took
over land from their relatives. Regarding the samples
of groups B, C, and D, although some already had ini-
tial capital before they migrated to L Village, most were
engaged in low-wage labor at the time of their migra-
tion. Several samples with limited funds at first had also
become large-scale smallholders at the time of the survey
because those samples had migrated to the village by the
1990s and started cultivating oil palm within at least five
years of migration.

Second, it was necessary for migrants to save addi-
tional funds if they wanted to grow to become medium-
or large-scale smallholders. For the samples of group A, about half had already embarked on oil palm cultivation on land of 10 ha or more at the time of migration, but the others whose oil palm cultivation was small or medium in size at the beginning, borrowed money from banks with their own land as collateral. In contrast, the samples of groups B, C, and D, who succeeded in expanding their farmland, accumulated funds by working at plantations in the initial stage of their oil palm cultivation. Among the companies’ plantation laborers, those in charge of management or security could invest and expand their farmland with the surplus from their wages, and some could even grow to become medium- and large-scale smallholders as they were provided with higher wages than field laborers. In contrast, plantation field laborers or timber logging workers obtained additional funds by running general stores or small timber businesses, and gradually expanded their farmland.

Oil palm is a crop that does not require advanced techniques, so it is easy for migrants to start cultivating if they have funds to purchase land. Oil palm cultivation in L Village is the most promising investment destination for improving migrants’ incomes. More broadly, in a frontier where there is abundant undeveloped land, and the legal binding force for land reclamation is weak, migrants prefer to start oil palm cultivation and expand their farmland and not to increase productivity with fertilizer or labor input.

In previous studies, it was emphasized that the differentiation between wealthy farmers and poor plantation laborers had deepened in the process of inclusion and adverse incorporation with the expansion of oil palm cultivation (McCarthy 2010). In contrast, as suggested by the findings of this study, local elites or capitalists and poor migrants all have an opportunity to become large-scale smallholders and achieve upward social mobility in a frontier society such as L Village.

**Future development in L Village**

The dynamics of frontier society discussed in this study can be characterized by a high influx of migrants, speculative economic activities, and fluid social mobility. However, as Tanaka (1999: 76–77) pointed out, there remains the question of whether these characteristics of frontier society would continue or be lost after all the forests in the village had been cleared. At the time of this survey, there was little land left for new migrants who were willing to cultivate oil palm, and it could be said that L Village had already become a mature rural village. At this point, the livelihoods of migrants had become fixed in the village compared with the situation in the 1990s, making it more difficult for the existing villagers and new migrants to attain upward social mobility.

When the characteristics of a frontier society, such as the high mobility of the population, frequent land transactions, and speculative economic activities, were being lost in L Village, two new changes emerged. First, oil palms planted from the 1980s and 1990s began to exceed...
the limits of the high-yield production lifetime of 25 years at the time of the survey; thus, many smallholders were required to replant the existing oil palms. Since the cost of replanting is very high, smallholders would soon be faced with the problem of whether to continue their oil palm cultivation with additional loans. It is very important to examine such a structural change of livelihoods in L Village, including companies’ plantation laborers and indigenous Sakai people, who are out of the scope of detailed analysis in this study.

Second, another change occurred when land reclamation in L Village reached its limits. The migrants tended to move to the southern part of Riau or other provinces such as Jambi Province, South Sumatra Province, or even to Kalimantan Island, where undeveloped land still abundantly remained. It could be said that the rise of the oil palm industry in Riau Province led to the creation of a frontier society such as L Village, and when it was transformed into a mature society, the pioneering front of oil palm development moved on to the next frontier. In this situation, it is also necessary to pay close attention to how the process of frontier society discussed in this study would play an important role in the development in other regions outside of Riau Province.

Acknowledgements

This article is a translated article by Koizumi (2019) in the Geographical Review of Japan Series A. The title has been modified slightly and supplementary explanations have been added for international readers. I am deeply grateful to those who assisted in my survey, especially Mr. Hendri, an agricultural extension worker, who provided kind support and informative advice in L Village. This research was supported by a Grant-in-Aid for JSPS Fellows (DC2), No. 16J02180 of 2016–2017. The main content of this paper was presented at the 25th Colloquium of the IGU Commission on the Sustainability of Rural Systems (Ho Chi Minh City, April 2017).

Notes

1. According to Statistics Indonesia (Badan Pusat Statistik), there are two types of actors who cultivate oil palm: large plantations (perkebunan besar) with legal personality, and smallholdings (perkebunan rakyat) without legal personality. Large plantations consist of governmental and private companies’ plantations.
2. According to Badrun (2011: 180), the area of oil palm cultivation by supported smallholders as of 2009 was about 670,000 ha, while the area of independent smallholders was more than 2.7 million ha.
3. Riau Province consists of the mainland and islands, including the Natuna and Anambas Islands located between the Malay Peninsula and Kalimantan Island. In 2002, the island section was separated as a new province of the Riau Islands Province (Propinsi Kepulauan Riau).
4. According to the 2010 Population Census, the total population in the Kandis district was 57,762, of which 29,626 were from North Sumatra, accounting for 51% of the total population.
5. The Kandis district became a single district when separated from the Minas district in 2002. L Village was also separated from S Village in 2011. This paper refers to L Village as the village’s current range.
6. The land along the main road, which had already been cleared by 1989, was now mainly used for housing, public facilities, markets, and so forth, but oil palm was not cultivated.
7. According to Porath (2002: 777–778), Sakai people wanted to buy motorcycles, televisions, jeans and chainsaws to show ‘modernity,’ so they gradually began to sell their land to migrants.
8. In L Village, the government’s Nucleus Estate and Smallholders’ projects had not been implemented, and all the oil palm farmlands were owned by spontaneous migrants and a small portion of local people, including some Sakai.
9. At least until the time of the survey, land had not been leased or rented under contracts in L Village.
10. Here, relatives refer to parents, siblings, or spouses’ parents. These relatives not only purchased land from other migrants but also paid a certain amount of compensation to Sakai and started oil palm cultivation by themselves. In addition, those who became large-scale smallholders mostly transferred some parts of their farmland for free to their children, siblings, or spouses who were willing to continue living in L Village.
11. Land transaction data were obtained from interviews by asking the year and price of the purchase for each section of land, as far as could be remembered.
12. Of these nine samples, four were asked to sell their land by other migrants at a good price, three did not have enough money to cultivate oil palm and sold to others, and the other two had sold their land to pay for medical treatment or children’s education.
13. According to the 2013 Agricultural Census, medium-scale farmland constituted 465 ha (16%) and large-scale farmland constituted 1,522 ha (52%), which accounted for nearly 70% of the total area (2,937 ha) of oil palm cultivation in L Village, indicating that a small number of medium- and large-scale smallholders were driving the expansion of oil palm cultivation in the village.
14. Illegal logging has been severely curbed throughout Indonesia since the early 2000s. Most of the timber logging workers who lost their jobs moved to other areas or returned to their hometowns if they did not engage in oil palm cultivation in L Village (based on an interview with the village head).

References

Badrun, M. 2011. Milestone of change: Developing a nation through oil palm “PIR”. Jakarta: Direktorat Jenderal Perkebunan, Kementerian Pertanian.
Belcher, B., Rujehan, Imang, N. and Achdiawan, R. 2004. Rattan, rubber or oil palm: Cultural and financial considerations for farmers in Kalimantan. Economic Botany 58: 77–87.
Cunningham, C. E. 1958. The postwar migration of the Toba-Batak to east Sumatra. New Haven: Yale University Southeast Asia Studies.
Furukawa, H. 1992. Indonesia no teishicchi. Tokyo: Keiso Shobo. (J)
Kato, T. 1982. Matriline and migration: Evolving Minangkabau tra-
ditions in Indonesia. New York: Cornell University Press.

Kementerian Pertanian 2016. Statistik perkebunan Indonesia 2015–2017 kelapa sawit. Jakarta: Direktorat Jenderal Perkebunan, Kementerian Pertanian.

Koizumi, Y. 2019. Expansion of oil palm smallholders in a frontier area of Riau Province, Indonesia. Geographical Review of Japan Series A 92: 343–363. (JE)

Koizumi, Y. and Nagata, J. 2018. Population by birthplace and ethnicity and employment structure by industry in Riau Province, Indonesia: An analysis of the raw data of the 2000 and 2010 population censuses. Japanese Journal of Southeast Asian Studies 56: 3–32. (JE)

Masuda, K., Mizuno, K. and Sugihara, K. 2012. Deitan chiikino shakaikeizaishi: Koueki kara tochikaihatsu, soshite hozen he. In Nettai baiomasu shakai no saisei: Indonesia no deitanchi kara, ed. S. Kawai, K. Mizuno and M. Fujita, 287–324. Kyoto: Kyoto University Press. (J)

McCarthy, J. F. 2010. Processes of inclusion and adverse incorporation: Oil palm and agrarian change in Sumatra, Indonesia. The Journal of Peasant Studies 37: 821–850.

McCarthy, J. F., Gillespie, P. and Zen, Z. 2012. Swimming upstream: Local Indonesian production networks in "globalized" palm oil production. World Development 40: 555–569.

Porath, N. 2002. A river, a road, an indigenous people and an entangled landscape in Riau, Indonesia. Journal of the Humanities and Social Sciences of Southeast Asia 158: 769–797.

Potter, L. and Badcock, S. 2004. Tree crop smallholders, capitalism, and adat: Studies in Riau Province, Indonesia. Asia Pacific Viewpoint 45: 341–356.

Rist, L., Feintrenie, L. and Levang, P. 2010. The livelihood impacts of oil palm: Smallholders in Indonesia. Biodiversity and Conservation 19: 1009–1024.

Sato, Y. 2011. Keizai taikoku Indonesia: 21 seiki no seichou jouken. Tokyo: Chuokoron-Shinsha. (J)

Seki, Y. 2005. Fukuizatsu tekioukei ni okeru nettairin no saisei: Ihou bassai kara jizoku kanouna ringyou he. Tokyo: Ochanomizushobo. (J)

Tanaka, K. 1993. The southeast Asian maritime world and the expansion of the agricultural frontier: A case from South Sulawesi in Indonesia. Japanese Journal of Southeast Asian Studies 30: 427–443. (JE)

Tanaka, K. 1999. Tonan aija no fuontiaron nimukete: Kaitakuron karano apurochi. In Sougouteki chiikikenkyu wo motomete: Tounan aija zou wo tegakarini, ed. Y. Tsubouchi, 75–102. Kyoto: Kyoto University Press. (J)

Terauchi, D., Setsuda, T. and Inoue, M. 2010. Farmers’ perspectives about agroforests conversion to plantations in Sumatra: Lessons learnt from Bungo district (Jambi, Indonesia). Forests, Trees and Livelihoods 20: 15–33.

Uhlig, H. 1988. Spontaneous and planned settlement in South-East Asia. In Agricultural expansion and pioneer settlements in the humid tropics, ed. W. Manshard and W. B. Morgan, 7–43. Tokyo: United Nations University Press.

Wahyu, K. 2015. 97 risiko transaksi jual beli properti. Jakarta: Ragh Asa Sukses.

Zen, Z., Barlow, C. and Gondowarsito, R. 2005. Oil palm in Indonesian socio-economic improvement: A review of options. Working papers in trade and development. Canberra: Research School of Pacific and Asian Studies, ANU.

(J) written in Japanese

(JE) written in Japanese with English abstract