The Employment of Indonesians on Oil Palm Smallholdings in Sarawak, Malaysia

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祖田 亮次・加藤 裕美 マレーシア・サラワク州の小規模アブラヤシ栽培におけるインドネシア人雇用

ABSTRACT:

Malaysia is a major producer of oil palm, and since the 21st century, Sarawak has attracted attention as the last oil palm frontier in Malaysia. In recent years, Sarawak has seen an increase in smallholder cultivation in addition to corporate plantations. Over the past decade or so, there has been a significant increase in the number of Indonesian laborers in Sarawak's interior rural communities. This phenomenon is a response to the increased demand for labor resulting from the expansion of smallholder oil palm cultivation by indigenous people in the interior. In some respects, smallholders' employment practices for Indonesian workers differ from those of large-scale plantations. For example, fellow smallholders sometimes lend Indonesian workers to each other, which can be described as "employee sharing," and there have also been cases of smallholders using their workers' personal networks to recruit Indonesian workers. Different wage systems include various combinations of fixed wages, commissions, per diems, and other forms of payment. Initially, most Indonesians employed on smallholdings were Sambas Malays from West Kalimantan. However, many employers have tried to employ Indonesians from other islands. Smallholders use these measures as part of their strategy to stabilize oil palm production on their smallholdings, and they continue to look for new ways to secure a more stable workforce. Indonesian labor has become essential to the expansion and stable management of oil palm smallholdings, but there is a risk that the supply of labor will not meet the growing demand

Keywords: oil palm, Indonesian worker, smallholder, employee-sharing, Sarawak, Malaysia

INTRODUCTION

Malaysia has been the world leader in oil palm cultivation and palm oil production since the 1970s, and although it ceded the number one position to Indonesia in the early 2000s, Malaysia still holds the world's second largest share. However, the Malay Peninsula and the state of Sabah on the island of Borneo were already saturated with suitable land, and Sarawak is now attracting attention as the country's last oil palm frontier.

Over the past decade, Sarawak has seen a marked increase in the employment of Indonesians in its inland farming communities. It is well known that many Indonesians have been employed in logging camps and oil palm or acacia plantations over the years, but these Indonesians have been almost invisible to the local people as they lived in logging camps or plantation quarters. Recently, however, Indonesians have made rapid inroads into interior communities. The main reason for this phenomenon is the increase in oil palm smallholdings run by indigenous people, and the resulting increase in demand for labor.

The purpose of this paper is to clarify how these Indonesian workers are being employed on inland oil palm smallholdings, and to discuss the significance of the dispersion of Indonesians into the local population. Over the past few decades, there has been a marked increase in oil palm cultivation in the insular Southeast Asia. What has received particular attention in recent years is the growth of smallholder oil palm (Koizumi 2022, Hayashida 2021, Ishikawa and Soda 2020, Soda et al. 2016, Asia Pacific Viewpoint 2012, Cramb and Ferraro 2012, Kato and Soda 2012, Cramb and Sujang 2011, 2013, McCarthy and Cramb 2009).

In the late 20th century, oil palm was viewed as a crop that is predominantly produced on plantations (Tanaka 1990). Until the 2000s oil palm was produced in smallholdings in some rare cases, which took place primarily on smallholdings dependent on plantations or on smallholdings aided by government land allocations. Examples of such production include the PIR system in Indonesia, the FELDA project in the Malay Peninsula, and the joint venture program in Sarawak (Budidarsono et al. 2013, Cramb 2011, McCarthy and Cramb 2009).

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As for Sarawak in particular, attention has often been focused on land disputes between smallholders and government/enterprises (e.g., Barney 2004), and the potential for smallholder oil palm development in Sarawak was generally viewed in negative terms (Soda 2009).

Since 2010, there have been various discourses on the more independent smallholders. For example, there have been studies describing the cunning methods of smallholders on the periphery of the plantation landscape (Cram and Sujang 2011, 2013), case studies of smallholders who achieved business stabilization by establishing friendly relationships with plantation companies (Kato and Soda 2012; Kato and Kato 2020), a dissertation arguing that oil palm cultivation can revitalize village communities (Ichikawa 2011; Soda and Kato 2020), and another discussing the diversification of smallholdings from the perspective of land use (Soda et al. 2016).

Since 2011, we have been studying oil palm cultivation by upland dwellers in the Bintulu Division of Sarawak, Malaysia, which is the frontier of smallholder oil palm cultivation. The outline of our previous research was as follows.

Smallholder oil palm cultivation faces several constraints, barriers and destabilizing factors. For example, smallholders depend on good road infrastructure and face a time constraint that requires them to transport fresh fruit bunches (FFBs) to the oil mill within twentyfour hours of harvest. In terms of finance, smallholders have to make initial investments to purchase seeds, seedlings, and fertilizers, and there is a relatively long time lag (about three years) before they begin to gain returns from the sale of FFBs. In terms of labor, unlike rice or pepper, oil palm production requires year-round agricultural labor, which increases time constraints and makes it difficult to maintain a stable labor force. Given that oil palm requires a certain level of investment in land and labor, a particularly serious question is how interior Borneoans who have been dependent on forest resource extraction economies can avoid the risk of poor returns on their investments.

Nevertheless, many residents have adapted well to oil palm cultivation. They have done so in part by adopting the plantation model of land development, while continuing to use a land tenure system based on traditional swidden agriculture, and by using the customary labor exchange system. Another factor that has contributed to the successful entry of local people into the oil palm industry is that many local people have gradually expanded their oil palm farms to manageable sizes as opportunities have allowed (Soda and Kato 2020, Soda et al. 2016). Currently, many oil palm smallholdings of ten hectares (approximately 1,300 to 1,800 trees) or more have begun to employ Indonesian workers on a permanent basis. Thus, plantations no longer have a monopoly on the employment of Indonesians in oil palm cultivation.

As noted above, Sarawak's oil palm smallholders have invested in land and earned income, a type of land use that did not exist in traditional livelihoods. In other words, they have introduced a plantation model of income generation to Sarawak's interior communities. At the same time, smallholders have made adjustments to land use and labor supply and demand in ways that are consistent with local traditions and customs, and have developed strategies to ensure stable smallholder production. Thus, rather than simply adopting the plantation model as it is, smallholders have built a unique agroeconomy (Soda et al. 2016).

With this in mind, we assumed that this trend would be reflected in the employment of Indonesian workers. In other words, we assumed that smallholders would not employ these workers in the same way as plantation workers, but would have their own individual employment strategies. Therefore, we conducted a detailed study of the ways in which smallholders employ Indonesian workers in order to stabilize smallholder oil palm farming. We focused on factors such as the diversity of Indonesian workers (e.g., place of birth, ethnicity) and the different employment practices used to determine the costs and benefits of these different forms of employment for smallholders. Based on our findings, we then discuss the prospects for oil palm smallholders.

OVERVIEW OF THE RESEARCH AREA

Oil Palm Cultivation in the Study Area

This section outlines the status of oil palm cultivation in the study area, namely the Bintulu Division in Sarawak, Malaysia.

Oil palm cultivation in Southeast Asia began to expand

in the 1970s in the Malay Peninsula and the island of Sumatra. From the 1990s, oil palm area expanded rapidly on the island of Borneo. The development of oil palm plantations in Sarawak, a Malaysian state located in the northwest of Borneo, was government-led until the 1990s, after which private companies began to play a major role in plantation development. Smallholder oil palm will account for only about 20 percent of oil palm area in 2020, but has grown dramatically over the past decade (Figure 1).

Bintulu Division, where the study was conducted, has seen a rapid increase in smallholder oil palm cultivation since the late 2000s, and the Tubau region of the division can be considered a frontline area for smallholder oil palm cultivation.

The main oil palm smallholders in Tubau are from ethnic groups such as the Iban and Kayan, who have traditionally lived in longhouses (20-50 households living together) along rivers and engaged in swidden agriculture, as well as other activities such as hunting, fishing, and the cultivation of cash crops such as rubber and pepper. The proportion of people engaged in such forms of agriculture has declined in recent years, and many work as wage laborers in cities or logging camps.

According to a 2011 survey of 11 communities around Tubau, 69 percent of the 210 households surveyed were engaged in oil palm cultivation. Considering that only 18 percent of households were engaged in rice farming, oil palm farming has clearly become more economically important than rice farming. Oil palm cultivation was seen as a new way of earning cash income, so much so that some people left their salaried jobs in the city and returned to their villages to take up cultivation.

The indigenous people of Tubau began planting oil palms on swidden fallow land in the early 2000s. The smallholdings vary in size, with some families planting only 100 palms and others planting several thousand. Many smallholders plant additional seedlings every few years, depending on their financial resources and labor capacity.

The position that oil palm farming occupies in smallholders' livelihood portfolios varies considerably. Some households combine oil palm cultivation with rice and vegetable production, while others specialize in oil palm. There are also those who work in the cities during the week and return on weekends to work on an oil palm farm, and those who run large oil palm farms that employ

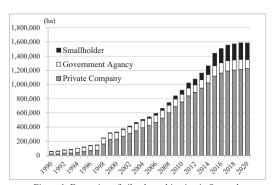


Figure 1. Expansion of oil palm cultivation in Sarawak Source: "Yearbook of Statistics Sarawak" (1991-2021)

a number of workers.

Research Methods

We conducted our research in and around Tubau, which is located in the Bintulu Division in the state of Sarawak, Malaysia (Figure 2). The data we used in this paper are mainly from the completed surveys we conducted in the aforementioned region in August 2011, March 2012, August 2013, and March and August 2014. In particular, we focused on Indonesian workers in the 2014 surveys, and additional information was subsequently collected in the field in March 2017 and September 2018.

Since 2011, we have surveyed more than twenty village communities in and around Tubau. All twenty communities were engaged in oil palm cultivation, and fifteen employed Indonesian workers on a long-term basis. In this paper, we report on interviews we conducted with twenty individuals from these fifteen communities that employed Indonesians. Based on these data, we present an overview of the situation regarding the employment of Indonesians by the interior indigenous population, and detail our findings from the in-depth interviews we conducted with four of the twenty individuals.

During the in-depth interviews, we asked about issues such as the history of cash crop cultivation, the status of oil palm cultivation, methods of labor procurement, the social characteristics of workers, the content of their work, the wage structure, and the relationship between employers and workers. In addition to employers, we also interviewed some workers. We used these data as appropriate.



Figure 2. Study area

FINDINGS

In this chapter, we outline our findings on the employment of Indonesian workers by indigenous inland residents and then describe in detail some typical cases based on our in-depth interviews with selected four employers.

Overview of the Indonesian Employment

Table 1 summarizes our findings on oil palm cultivation and Indonesian employment, based on the twenty interviews we conducted in and around Tubau. We found several patterns of Indonesian employment in the oil palm sector. There are few phenomena that can be generalized, but the following should be seen as general trends.

The first thing to note is the correlation between the area/number of oil palm plantations and the number of employees. Smallholders with fewer than 1,000 palms rarely employ Indonesians on a full-time basis. However, even these smallholders often hire Indonesians on a temporary basis for tasks that require many workers, such as planting seedlings, fertilizing, and harvesting. On the other hand, several households collectively employ a single Indonesian worker for the long term.

Three households that used to employ Indonesians now do the oil palm farm work themselves. These households told us that they would employ Indonesians again if they increased the number of oil palms on their farms. Many employers reported that they struggled to maintain a stable workforce after experiencing instances where Indonesian workers disappeared without notice.

When the number of Indonesian workers was considered in relation to the number of palms and hectares, one Indonesian was employed for about 1,500 palms (roughly equivalent to 10 hectares). This figure is low compared to employment on plantations, where the employment rate is about 0.33 to 0.35 workers per hectare (Urano 2013; Barlow et al. 2003), but an exact comparison cannot be made because many smallholders also rely on labor from their own family, traditional labor exchange with other households, and temporary hiring of local villagers.

The wage structure for Indonesians depends on the employer. There used to be some cases of fixed wages, but now there are hardly any. In a relatively large number of cases, workers receive a combination of fixed wages and percentage pay, or fixed wages and daily wages. The percentage wage is based on the amount of crops harvested; typically, about MYR 30 to 50 is paid for each ton harvested. There were also cases where a per diem of MYR 35 was paid during the harvest.

Often, instead of a fixed monthly wage, the smallholder used a combined percentage and daily wage system. For fertilizing and herbicide spraying, in some cases the wage was calculated according to the amount of

		Village	Ethnicity of employer	Number of oil palms		_ ,, ,			
	Employer			Total	Number of oil palms bearing FFB	Number of Indonesian workers (permanent basis)	Ethnicity/Origin of employee	Study period	Notes
1	PL	ЛU	Iban	3,000	2,200	2	Sambas Malay	Aug. 2014	
2	WA	IW	Kayan	1,000	400	1	Bugis	Mar. 2014	Employee-sharing
3	KJN	GD	Kayan	48,000	40,000	23	Lombok/Jawa	Mar. 2014	He usually lives in Bintulu.
4	NR	JM	Iban	2,000	2,000	1	Dayak	Aug. 2011	
5	NA	CA	Iban	2,000	2,000	2	Timor	Mar. 2012	
6	NS	LS	Iban	1,300	1,100	2	Jawa	Aug. 2014	
7	BS	LS	Iban	3,000	3,000	2	Bugis	Aug. 2013	
8	CL	IL	Iban	2,000	1,500	2	Sambas Malay	Aug. 2014	
9	TP	IW	Kayan	1,000	0	1	Bugis	Mar. 2014	
10	MJ	AJ	Iban	1,300	1,300	0	-	Aug. 2012	He used to employ two Indonesians.
11	YH	BT	Iban	1,000	1,000	2	Lombok	Aug. 2014	
12	TL	LJ	Kayan	6,000	?	7	Bugis/Sambas	Aug. 2013	
13	BM	GM	Iban	3,000	2,500	1	Jawa	Nov. 2013	
14	LA	AS	Iban	4,000	?	3	?	Aug. 2012	
15	LB	AB	Iban	1,200	1,200	0	-	Aug. 2013	He used to employ two Indonesians.
16	YB	AB	Iban	3,700	1,700	0	-	Mar. 2012	He used to employ an Indonesian.
17	SA	SS	Iban	2,000	?	2	?	Aug. 2013	
18	SJ	LG	Kayan	1,000	700	1	Jawa	Aug. 2014	
19	GU	IW	Kayan	1,300	?	1	Sambas Malay	Aug. 2014	
20	NK	IW	Kayan	300	300	1	Sambas Malay	Aug. 2014	

Table 1. Employment of Indonesian workers by indigenous smallholders

Source: Authors' field survey.

fertilizer or herbicide used, and in other cases according to the area covered. There were also instances where workers were paid a per diem based on the type of work they did that day. In this way, payment methods varied.

Many Indonesian workers, regardless of how they are paid, work not only for their employers but also on other smallholdings on a temporary basis, either on their days off or when needed. The practice of temporarily hiring an Indonesian worker employed elsewhere is called "borrowing" (pinjam or nginjau), and the "borrower" typically pays the worker directly on a daily or percentage basis.

There is no correlation between acreage and payment patterns, and the payment structures used varied from employer to employer. Many employers stated that they had experimented with a number of different payment methods. In the following sections, we discuss our findings from the four in-depth interviews in more detail.

The case of Mr. PL

In this section, we discuss the employment of Indonesians as it emerged from our interview with Mr. PL of JU village. In the late 1990s, Mr. PL moved to a detached house along a logging road, away from a longhouse on

the Kemena River. After Mr. PL moved, he attempted to grow various cash crops while also doing paid logging and plantation work. In 1998, he worked on an oil palm plantation for about half a year. Around the year 2000, he started his own small-scale oil palm farming, using the knowledge he gained during his time on the plantation. He was one of the first people to start oil palm smallholdings around Tubau.

Over the years, Mr. PL gradually increased the number of oil palms on his farm, and by 2012 he had planted approximately 3,000 palms and employed two Indonesian workers consistently. Mr. PL rarely works on the farm himself; rather, he gives instructions to the workers, buys fertilizer, herbicide, and other supplies as needed, and drives the truck when it is time to transport the FFBs to an oil mill.

According to Mr. PL, he had employed dozens of Indonesians in total since 2008, and a number of them suddenly disappeared. Many of the Indonesians employed by Mr. PL were Sambas Malays from the province of West Kalimantan. Most of the workers were employed for a period of months to years. In the past, he had also employed Bugis from Sulawesi, but he was not satisfied with the quality of their work. He therefore began to em-

ploy Sambas Malays again, relying heavily on personal connections. When hiring new workers, Mr. PL generally relies on referrals from workers he has hired rather than using an employment agency.

Mr. PL showed us his wage register for the period from April 2010 to July 2012. The register included the amount of monthly fixed wages paid, along with additional incentive payments. It also listed loans to workers (*utang*). It is rare for a smallholder employer to have such detailed records, so we used the register as a valuable resource for documenting the wages of Indonesian workers. We discuss these records in detail below.

Using the records for September 2011 as an illustration, workers received a fixed monthly wage of MYR 550. In addition to the monthly wage, workers received a commission of MYR 30 for each ton of FFB harvested (8.22 tons × MYR 30 = MYR 246.60), resulting in an income of MYR 796.6 for the month. On the other hand, the register also recorded loans totaling MYR 293, which was broken down into MYR 200 in cash loans, MYR 29 for the purchase of a mobile phone number, MYR 60 for its prepaid usage fees, and MYR 4 for the purchase of soap. Subtracting this amount from the total wage payment leaves MYR 503.6.

Thus, Mr. PL's wage structure included a combination of a fixed monthly salary and an additional payment based on the amount harvested, and he also recorded wage advances and personal loans for the cost of daily necessities that he purchased for the workers in town, and he paid wages at the end of the month after deducting the amounts of these loans from the wages.

Mr. PL accommodates his workers in a hut in the oil palm field several hundred meters from his home, and he provides free meals for the workers in his home. After dinner, the workers usually spend some time relaxing at Mr. PL's house, watching television, and returning to their huts late at night.

Mr. PL insisted that he was paying his Indonesian workers the same wages as the local workers by extending the recent wage increase to his Indonesian workers. In fact, when Indonesian workers disappeared or returned home, and Mr. PL temporarily hired local Iban workers until new workers could be found, he paid the Iban workers the same wages as the Indonesian workers.

We asked Mr. PL why he was employing Indonesian workers instead of local Iban. He said that since many Iban in the longhouses have started planting oil palms, they are busy with their own farms, making it difficult to employ them temporarily, let alone permanently.

The case of Mr. NR

This section discusses the results of our interview with Mr. NR of JM village. Mr. NR started oil palm cultivation in 2003. Prior to this, he made his living mainly from swidden rice cultivation, as well as vegetable farming, rubber tapping and riverbank logging. He started oil palm cultivation in 2003 after receiving seedlings from an oil palm plantation company that distributed the seedlings as part of its corporate social responsibility policy. Mr. NR attended a free seminar on oil palm cultivation sponsored by the company, became a successful oil palm farmer and now has about 2,000 fruit-bearing palms. He has given up growing rice and other crops to focus exclusively on oil palm.

Mr. NR started employing Indonesian workers in 2012. At that time, a kindergarten was being built in the village, and two Indonesians were involved in the construction. When the kindergarten was completed, Mr. NR hired the two Indonesians because he felt sorry for them as they could not find other work nearby. Until then, he and his wife had been doing the farm work, occasionally hiring extra workers from the village.

The two workers were men in their twenties from the province of West Kalimantan. Their ethnicity was Dayak. Subsequently, Mr. NR employ only one Indonesian because the other worker married a woman in the village and moved into his wife's household. He pays the remaining worker MYR 800 per month and a commission of MYR 50 per ton of FFB during the harvest times. He also has more flexibility in paying the workers than the plantations, for example, allowing advance payment of wages (Kato and Soda 2023).

The worker is involved in the full range of oil palm operations on Mr. NR's farm, including planting, pruning, fertilizing, weeding, harvesting and transportation. Since one worker is not enough to manage a 2,000 palm farm, Mr. NR and his wife also work on the farm. Mr. NR's wife occasionally participates in the village labor exchange. Mr. NR's two sons, who are listed in the small-holder register, rarely provide additional labor because they are usually busy with office work on a plantation or running a grocery store. Mr. NR relies mainly on his sons to finance his oil palm farm.

Mr. NR houses his worker in a hut just behind the

longhouse. The worker spends evenings chatting with local youth in the longhouse corridor and sometimes sleeps there. The worker often spends his days off relaxing in Bintulu town with Mr. NR's family.

Mr. NR said that one worker is enough, as wages for Indonesian workers have recently increased dramatically. During the harvest, Mr. NR may hire day laborers from the village. He also hires Indonesians who work on nearby plantations or on Chinese-owned medium-scale oil palm estates. The wage for both local and Indonesian day laborers is the same - MYR 30. According to Mr. NR, other people in the village who are busy with their own oil palm farms often secure their labor by hiring Indonesians on a full-time or temporary basis.

Mr. NR regularly visits and interacts with Indonesian workers in nearby plantation quarters. The Indonesians call Mr. NR *akik*, or grandpa. Together with the plantation workers, Mr. NR picks fruit from an orchard behind the longhouse and gives them some of the fruit. He also gives the workers cash for transportation when they return home. On the other hand, the workers sometimes make Sulawesi-style sweets and buy him souvenirs when they return home. In this way, a personal relationship has developed between Mr. NR and the workers (Kato and Soda 2023).

Mr. NR is the only person in JM village who employs an Indonesian for the long term. Other villagers say they can manage the farm with their own household members, the labor exchange, and by hiring temporary workers during the harvest, but if these families increase the number of palms in the future, they may also begin to employ Indonesian workers.

The case of Mr. WA

There are some examples where a single Indonesian worker is employed by several villagers. Our findings in IW Village illustrate this situation. Many IW villagers have been planting oil palm since 2008. As of 2018, almost all villagers are involved in oil palm cultivation, and about 20 percent of them own fertile oil palms.

Mr. WA, a resident of IW village, used to engage in swidden agriculture, cutting and selling ironwood in the village, and salaried work for logging and natural gas companies. He is employed in the city and commutes frequently between the city and the village. Mr. WA has planted about 1,000 palms. He started planting in 2005, but those oil palm seedlings were eaten by porcupines

and did not bear fruit. Mr. WA's current oil palm field was replanted between 2008 and 2009.

Because Mr. WA works in the city, most of the work on his oil palm plantation is done by his wife and an Indonesian worker. Mr. DA, the Indonesian worker employed by Mr. WA, is a thirty-year-old Bugis from Sulawesi who was hired in 2010. Mr. DA came to Sarawak in 2009 and initially worked on a Chinese-owned oil palm estate. He left that job after eight months and then began working in the IW village.

In addition to working on Mr. WA's oil palm farm, Mr. DA also works on Mr. WA's rubber plantation and other villagers' oil palm farms. Mr. DA is now employed by six families, including Mr. WA. Since each of the family farms has only a few hundred oil palms, a worker working for only one family would have a lot of idle time. For this reason, the worker serves several employers. Wages are generally paid on a percentage basis. Workers receive about MYR 100 per hectare for spraying herbicides, MYR 0.5 per tree for applying fertilizer, and MYR 50 per ton for harvesting. On rubber farms, workers are paid MYR 1 for each seedling they plant. When all these services are added together, the worker can earn around MYR 1,000 per month.

In 2006, Mr. WA recruited an Indonesian to work in his orchard. At the time, he paid the worker a fixed wage of MYR 300 per month and provided him with meals. However, this worker often did occasional work for other villagers, and Mr. WA felt he was at a disadvantage because he was the only one paying a fixed wage. So he decided to stop employing him.

After this experience, Mr. WA then employed Indonesians on a commission system. Mr. DA, the Indonesian currently employed by him, has a wife from Miri, Sarawak and a stepdaughter, and they all live together in an agricultural hut. Mr. DA's wife occasionally helps on the farm. Mr. DA has about one week off a month and sometimes spends his days at his wife's parents' house. Mr. WA remarked that since Mr. DA has a wife and child, he works hard and does not run away easily.

Mr. WA does not employ anyone from the village to work on his oil palm farms. He says he cannot rely on the villagers because they are busy with their own oil palm farms. On the other hand, Indonesians from nearby villages approach him looking for work, so it is easy to find temporary workers.

The case of Mr. KJ

There are also cases where members of the interior indigenous population run medium to large oil palm farms and employ large numbers of Indonesian workers. This section discusses one such case, Mr. KJ from GD village. Mr. KJ has one of the largest farms of all the smallholders around Tubau. He used to run a grocery store in Kapit Town and was also a subcontractor in the construction industry. He runs oil palm farms and subcontracts work on a dam construction project. He has employed Indonesians both on his oil palm farms and in his construction company.

Mr. KJ began planting oil palm in 2006. He started with an area of about 48 hectares and gradually increased the number of oil palms, so that by 2014 his farm had grown to a total of about 450 hectares. In 2014, just over 80 percent of the oil palms were bearing fruit, and the monthly yield was about 120 tons.

Mr. KJ has planted oil palms on several plots of land, including some in his wife's village of origin and in his native village. He inherited some of his land from his ancestors and also bought other plots from villagers. Mr. KJ lives with his wife and child in the city of Bintulu, but he also owns a house (*bilik*) in the village and commutes between the village and the city almost daily, spending about two hours each way.

Mr. KJ began employing Indonesians on his oil palm farm in 2006. When we conducted the 2012 survey, he had nine Indonesian workers, and when we conducted the 2014 survey, he had twenty-three. Of these, nineteen are from Lombok and four are from Jawa. The workers are divided into three work groups. Two of the groups are assigned fixed tasks, while members of the remaining group help the other groups as needed.

Payment is all commission-based, and Mr. KJ does not provide meals for his workers. Examples of his payment system include MYR 50 per ton for harvesting and MYR 38 per hectare for spraying herbicides. Each worker earns about MYR 1,400 to 1,700 per month, which is good pay compared to other smallholdings. In 2006, the workers received a fixed monthly wage of MYR 400 plus commissions at harvest time, which meant that Mr. KJ was paying around MYR 700 to 800 per month, but as of 2014, he only pays commissions. As to why the amount paid out has become higher, Mr. KJ said that an increase in wages is a factor, but the main reason is improvements in harvesting efficiency.

All work on the oil palm farms is carried out by Indonesian workers, as is the harvesting and transportation of FFB. Mr. KJ generally instructs and supervises the workers himself. Of his twenty-three workers, Mr. KJ trusts Mr. and Mrs. ND the most. Mr. KJ pays this couple a little more than the other workers and has given them responsibility for managing the other workers.

In the past, Mr. KJ had employed about fifty Indonesian workers on his oil palm farms, but he made some mistakes in sourcing labor, which he attributes to a lack of knowledge and a limited network. In 2006, he simply recruited any Indonesian who approached him for work. One day, he hired a male Bugis from Sulawesi and gave this new employee about MYR 1,000 worth of daily necessities, kitchen utensils and food. But the next day, the worker disappeared, taking all these items with him.

Mr. KJ had used agencies to hire workers in the past, but it did not work well. For example, he said that agencies tend to send those workers who perform poorly on plantations to smallholdings. However, such workers do not stay on smallholdings for long. He said that there are also cases where workers who have fled a plantation go to the indigenous villages in search of work, so he does not employ such people, believing that they will also disappear from the smallholdings.

After several bad experiences with recruiting workers, Mr. KJ started asking his trusted workers to introduce him to people from their hometowns. He said that workers from the same hometown stay longer. He likes to recruit Lombok Indonesians, who he says are excellent workers because they are hardworking and appreciate the goodness and kindness of others. Mr. KJ himself keeps in touch with his workers' families back home by phone and SMS/SNS, so he cares enough to conduct exchanges between his family and his workers' families.

Over the years, Mr. KJ has used various methods to recruit Indonesian workers. Although he experienced many failures, he was able to achieve a stable workforce based on his experience and knowledge. When hiring a new worker, he uses the personal network of his trustworthy workers. He takes pride in the fact that his employment method, which emphasizes the individual personalities of his workers, is very different from the plantations that employ several thousand workers.

DISCUSSION

Employee Sharing

As mentioned above, oil palm cultivation was viewed as something where plantations have an great advantage. The main reasons for this include the fact that oil palm cultivation requires extensive infrastructure, including transport routes and oil mills, and the fact that this type of cultivation involves time constraints, such as the twenty-four hour limit between harvesting and oil extraction. But these are not the only reasons. It has also been suggested that plantations have an advantage over small-holdings in terms of their greater ability to make efficient use of labor due to their intensive farming practices.

Apart from the initial and sporadic processes—such as raising and planting seedlings—oil palm cultivation also involves fertilizing, spraying herbicides, pruning and harvesting. These processes are not continuous. Instead, they must be carried out at specific intervals ranging from two weeks to three months (Corley and Tinker 2003). In addition, oil palms bear fruit in short two-week cycles, almost regardless of the season. If a large number of oil palms are planted, there will be gaps between different areas of the plantation in terms of fruiting. This means that on a large plantation there will always be harvesting work to be done somewhere. In other words, one of the advantages of plantations is that they can make efficient use of labor by smoothing out the temporal distortions in labor demand.

In oil palm smallholdings, on the other hand, harvesting work is concentrated in fortnightly intervals, making smallholdings less efficient than plantations. This factor was pointed out by Pye et al. (2012), who argued that because there is considerable variation and fluctuations in the workload required on smallholdings, smallholders are forced to hire workers on a temporary basis.

As mentioned in previous sections, households with 1,000 or more palms tend to use full-time Indonesian workers. However, on farms with less than 2,000 palms, harvesting is concentrated in fortnightly intervals, so owners of these farms tend to hire additional workers during harvest times, often mobilizing the labor of household members or recruiting day workers from the village. When harvesting is not taking place, a variety of other tasks are carried out, such as fertilizing, spraying herbicides, tidying up the farm (e.g. removing fallen

leaves), and tending to newly planted seedlings. However, Indonesian workers may still have time to spare. For this reason, smallholders tend to borrow and lend workers to each other, or share the same worker. This form of employment, which can be termed employee-sharing, is a strategy smallholders adopt to avoid the inefficiencies that inevitably arise from employing full-time workers.

In addition, when a large labor force is temporarily needed during harvesting and planting, employers hire dayworkers from the village, often borrowing Indonesian workers employed on nearby plantations or Chinese-run estates. An advantage for Indonesians is that when they have a day off from their main job, they can accept part-time work elsewhere and gain a secondary source of income. We confirmed that the practice of borrowing and lending workers extends beyond the village to a wide

The main reason Indonesian workers are favorably employed on inland smallholdings is that there is no large surplus of permanently available labor, since many locals grow oil palm themselves. Smallholders have come to see Indonesians as essential to the sustainability of their oil palm farms. Through a series of trials and errors, the smallholders have developed an employment system that effectively avoids the main disadvantage of smallholders, which is the need for irregular work.

Personal networking

An interesting trend over the past decade or so among Indonesian workers employed on inland oil palm small-holdings has been the diversification of their places of origin. Before the boom in smallholder oil palm, the Indonesians occasionally seen in inland Sarawak were usually Sambas Malays from West Kalimantan (Wendy 2014; Ishikawa 2010). However, of the smallholders we interviewed, only Mr. PL was proactive in hiring Sambas. Many employers say that Sambas are difficult to retain and difficult to manage, citing the fact that the Sambas area is connected by land to the Malaysian border, making it easy for these workers to return home overland whenever they wish.

Many employers have experienced workers running away in the past, and they have used various methods to try to retain workers for longer periods of time. These employers say that, based on their experience, the Indonesians who came from far away places such as Lombok, Sulawesi, and Timor with their friends and family to

look for work rarely return home and are less likely to run away. Thus, the employment strategy of avoiding Sambas in favor of more distant Indonesians facilitates the diversification of the workforce in terms of ethnicity and place of origin. This phenomenon can also be called "de-Sambasization" or the avoidance of Sambas concentrations in the employment of workers.

Examples of other strategies used by employers to improve retention rates include a trend in recent years to treat Indonesians as their own family, to recruit people from the same hometown, and to strengthen personal relationships with workers. Many employers say it is easy to find Indonesian workers, but they are critical of rapid turnover and want a stable, long-term workforce. When employers find trustworthy workers, they begin to look at expanding their personal connections through these workers (Kato and Soda 2023).

For example, Mr. KJ employs twenty-three Indonesians, many of whom are from the same village. Among these workers, Mr. KJ gives preference to Mr. and Mrs. DN, who have worked for Mr. KJ for a long time as *mandors* (senior workers who supervise other workers). When selecting new workers, Mr. KJ seeks the advice of Mr. and Mrs. DN. Even on smallholdings that are not as large as Mr. KJ's smallholding, there are many examples of smallholders keeping Indonesian couples together. Mr. NS, BS and CL listed in Table 1 are examples of this type of arrangement. Mr. NS had previously hired an Indonesian married couple and an unmarried Indonesian man. He reported that he let the single male go after a few months due to his poor performance, but he continues to employ the couple.

Mr. NA in Table 1 also had a number of workers who fled, but he says that the Indonesian from Timor he currently employs is trustworthy. He then invited the Timorese Indonesian's wife to migrate from Indonesia to work on his smallholding. He said the couple would apparently soon be working together on the smallholding. Mr. NA believes that a worker is less likely to run away if his spouse is working alongside him. In the case of Mr. WA, the Indonesian man who works for him is married to a woman from Sarawak, and Mr. WA houses the worker in a hut with the worker's wife and child. This pattern of employment, where workers are able to stay with their family members, can be seen as a strategy to ensure a stable workforce.

On the other hand, Mr. PL does not follow the trend

of employing married couples. He has employed many Indonesians over the years, but has avoided using agencies. When hiring a new worker, he asks those he has employed in the past to introduce him to suitable candidates. He then interviews these candidates separately before deciding to hire them. Mr. PL himself admits that Sambas Malays often tend to return to their hometowns, but he values the personal connections of the workers he has employed in the past and is willing to continue hiring Sambas Malays. Mr. PL has not followed the trend of de-Sambasization in the employment of workers, but the form of recruitment he uses depends heavily on the personal networks of his former employees.

Many smallholders avoid using agencies to hire workers. Relying on the services of an agency creates uncertainty because employers do not know what kind of workers they will get. In fact, there are many smallholders who have had bad experiences with such agencies. Some have even been duped into paying a service commission without getting anything in return. For this reason, employers are beginning to value their personal relationships with their employees and rely heavily on their trusted employees when recruiting new workers.

We have observed certain trends in the employment of Indonesian workers on oil palm smallholdings. Recently, Sambas Malay have been increasingly avoided, and the pool of workers is becoming more diverse in terms of place of origin and ethnicity. At the same time, more attention is being paid to securing a more stable workforce by strengthening personal relationships between employers and workers and using workers' personal networks/connections.

CONCLUSIONS

In this paper, we focused on the employment of Indonesians on oil palm smallholdings, a practice that has increased significantly in Sarawak in recent years, and discussed the patterns in which these Indonesians are employed.

Smallholder oil palm operations rely on neighboring plantations for their infrastructure - roads and oil extraction factories - and many smallholdings mimic the plantation model in some of their practices, such as farming methods. However, as Soda et al. (2016) argue,

smallholdings have also developed their own management models to ensure their sustainability. For example, they have developed sporadic land use practices and adopted traditional labor exchange systems.

As the acreage of smallholdings increases, the smallholders turn to Indonesians as a source of labor. This phenomenon in itself can be seen as an imitation of plantation-style management. However, we found that the forms in which these Indonesians are employed reflect the uniqueness of smallholdings. The forms of employment we observed, such as the borrowing and lending of workers and the sharing of workers, are adaptations that are characteristic of the small scale of the farms. There are also cases where smallholders temporarily borrow Indonesian workers from a corporate plantation or a Chinese-run estate. While this phenomenon could be seen as an indication of their dependence on the plantations, another interpretation is that smallholders use plantation workers according to their needs and convenience.

It should be noted, however, that the trend of small-holders employing Indonesians is still relatively new, and smallholders are still experimenting with different methods at this stage. For example, the payment structure used is inconsistent and varies from employer to employer, experimenting with fixed monthly wages, per diems, commissions, or various combinations of these practices. The ethnicity/origin of the workers further illustrates these undefined arrangements. Sambas Malays are increasingly difficult to recruit, and the workforce is becoming more diverse, but employers differ on which types of Indonesians are stable and characteristic of an easily manageable workforce.

With the expansion of oil palm smallholdings, the demand for Indonesian labor is growing rapidly in both the plantation and smallholder sectors. Under these circumstances, inland oil palm smallholders see securing a more stable workforce as an extremely important issue for their smallholdings. Many employers have had workers who have run away, and they continue to struggle to secure a stable workforce. To mitigate this factor of instability as much as possible, they tend to strengthen their personal relationships with their workers. However, many employers are unhappy with the wage increases they have been asked to pay over the past decade, and they run the risk of having a worker leave if they pay them low wages.

A number of employers stated that if Indonesian work-

ers find another place with better working conditions, they will move there without hesitation. They have often had Sambas Malays run away to return to their hometowns. Recently, when Indonesians run away, they tend to run to another job site within Sarawak, not necessarily back to their home places. In other words, Indonesians have been given a wider choice of jobs, and even Indonesians recruited from far-distant places can easily find alternative places to work and live in Sarawak. Thus, the latent threat of escape gives Indonesians leverage to negotiate better wages. Against this backdrop, employers are concerned that they may not always be in a position to easily find another Indonesian worker, and there is a possibility that the balance between labor supply and demand may become tighter in the future.

Indonesian workers have become indispensable to the expansion of oil palm smallholdings, but this may mean that labor-management negotiations will become much tougher in the future. In this sense, Indonesian workers have developed their bargaining power by moving between plantations and smallholders. It is no exaggeration to say that the Indonesians hold the key to the stability and future of Sarawak's oil palm smallholdings.

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