



Employment and Income of Workers on Indonesian Oil Palm Plantations: Food Crisis at the Micro Level

HARIATI SINAGA *¹

¹ International Center for Development and Decent Work, University of Kassel, Germany

* Corresponding author: sinaga@icdd.uni-kassel.de

Data of the article

First received : 30 August 2013 | Last revision received : 25 October 2013

Accepted : 3 December 2013 | Published online : 20 December 2013

urn:nbn:de:hebis:34-2014021145105

Keywords

Palm oil; Indonesia,
Trade liberalisation;
Labour rights;
Employment; Income,
Food security; Food
crisis

Abstract

The importance of oil palm sector for Indonesia is inevitable as the country currently serves as the world's largest producer of crude palm oil. This paper focuses on the situation of workers on Indonesian oil palm plantations. It attempts to investigate whether the remarkable development of the sector is followed by employment opportunities and income generation for workers. This question is posed within the theoretical framework on the link between trade liberalisation and labour rights, particularly in a labour-intensive and low-skilled sector. Based on extensive field research in Riau, this paper confirms that despite the rapid development of the oil palm plantation sector in Indonesia, the situations of workers in the sector remain deplorable, particularly their employment status and income. This also attests that trade liberalisation in the sector adversely affects labour rights. The poor working conditions also have ramifications for food security at the micro level.

Introduction

Since 2007, Indonesia has been the world's largest producer of crude palm oil (CPO), overtaking Malaysia (Richter 2009: 3). This is seen as a significant achievement particularly after the country decided to pursue trade liberalisation and target the export markets. For Indonesia, the oil palm sector is not only an important source for foreign reserves, but is also a main instrument for poverty alleviation and rural economic development (Rist et al. 2010; Susila 2004a). This impressive picture of the Indonesian palm oil sector is, however, blemished by environmental degradation, so-called land grabbing (Casson 1999; Surambo 2010; Colchester et al. 2006), and a decent work deficit. Many studies have been done on different aspects of the sector, including the working conditions. This paper seeks to contribute to the discussions on this issue, by focusing on the situation of workers on the oil palm plantations, particularly their employment status and income. The paper attempts to

investigate whether the remarkable development of the sector is followed by employment opportunities and income generation for workers.

In this regard, the paper also goes further to explore the structure of employment and income of the workers. This research question is posed within the theoretical framework on the link between trade liberalisation and labour rights, particularly in a labour-intensive and low-skilled sector. It is based on extensive field research in Riau, Indonesia, a province with the largest oil palm plantations in the country. Unlike most of the studies on the working conditions that rely on quantitative method, this study employs qualitative method. I interviewed workers, independent smallholders, estate representatives, representatives from trade unions and representatives of NGOs in the year 2012.

Citation (APA):

Sinaga, Hariati. (2013). Employment and Income of Workers on Indonesian Oil Palm Plantations: Food Crisis at the Micro Level, *Future of Food: Journal on Food, Agriculture and Society*. 1(2): 51-60



This paper confirms that despite the rapid development of the oil palm plantation sector in Indonesia, the situations of workers in the sector remain deplorable, particularly their employment status and income. This also attests that trade liberalisation in the sector adversely affects labour rights. The poor working conditions also have ramifications for food security. The monoculture of the plantations makes it difficult for local people to grow food crops. As such, the local people, including workers on the plantations, cannot rely on subsistence farming anymore, forcing them to buy their food from the market. For the local people, this change clearly causes increasing household costs for foods, which can also be considered as a food crisis at the micro level. As for workers on plantations, their low income hinders access to food from the market even more.

This paper is organised into several parts. The first part sketches the theoretical discussions on the link between trade liberalisation and labour rights. The second part lays out the historical background of the oil palm plantations sector in Indonesia. This description also explains main actors and the performance of the oil palm plantation sector in Indonesia. The third part describes the situation of workers in the Indonesian oil palm plantation sector, particularly the issues of employment status and income, followed by some conclusions.

Trade Liberalisation and Labour Rights

The discussions concerning a country's competitiveness in the face of liberalised foreign investment as well as liberalised trade involve two contending camps. The first camp holds the idea of "conventional wisdom". The engagement of governments with race to the bottom practices is due to the desire to create jobs and, in a more general way, to support economic development, while on the other hand governments are aware of the mobility of multinational companies. A comparative study (Berik and Rodgers 2008), which examined Bangladesh and Cambodia, showed that these two countries experience strong pressures to cut labour costs and improve the price competitiveness of their textile and garment exports. Mosley and Uno (2007) showed that there is a negative relationship between trade openness with labour rights, but a positive relationship between foreign direct investment (FDI) and labour rights.

Meanwhile, the second camp claims that there is an inconclusive negative link between labour standards and investment as well as trade liberalisation. This camp even proposes that securing labour standards will increase a country's competitiveness. Studies conducted by the ILO

(2007), which particularly looked at certain international labour standards, show that compliance to labour standards positively contributes to a country's competitiveness and good economic performance. Kucera (2002) found no solid evidence upholding the conventional wisdom. Other studies (Jansen and Lee 2007; Maskus 1997; Brown et al. 2003) are at one with Kucera. In a micro level, a study of the most unionised airline (O' Reilly and Pfeffer 2000, as cited in Rogovsky and Sims 2002: 68) argued that the success of the airline is due to its healthy industrial relations climate.

These studies primarily focus on national level or cross-countries comparisons. Studies that put emphasis on cross-sector comparisons remain lacking. One among the few, which will also be relevant in the comparison between capital- and labour-intensive sectors, is the study by Blanton and Blanton (2009). They examined whether human rights serve as a decisive factor for locating FDI across different types of sectors. In this context, Blanton and Blanton (2009: 473-474) argued that the link between human rights and FDI location can be found through skill levels and social license. The results generally showed that, "...countries where physical integrity rights are respected are more respectful in attracting FDI in sectors that seek higher skill levels and greater levels of integration within the host society" (Blanton and Blanton 2009: 483).

Other relevant studies compare the different impact of trade liberalisation on low- and high-skill sectors. While Heckscher-Ohlin-Stolper-Samuelson theorems predict that trade between the North and the South will reduce wage inequality in the South, some scholars do not confirm this prediction through their empirical studies. Arbache et al. (2004) found that the impact of trade openness on wages in developing countries was insignificant for workers in the top two education groups, while the openness negatively affected those in the lower level education groups. The authors asserted that technological transfer might serve as an alternative explanation for this situation. Trade liberalisation may be accompanied by increasing imported technology, which in turn, leads to the increasing demand for highly skilled labour. Other scholars (Beyer et al. 1999; Robbins 1994, 1996; Cragg and Eperlbaum 1996; Desjonqueres et al. 1999; Hanson and Harrison 1999; Munshi 2008; Ing 2009) argued similarly. Meanwhile, Feenstra and Hanson (1997) claimed that increasing wage inequality in Mexico is associated with foreign capital flow. Wood (1997, as cited in Morone 2003: 4) argued that the experience of the Four Tigers (Hong Kong, South Korea, Singapore and Taiwan) confirms the prediction of Heckscher-Ohlin-Stolper-Samuelson theorems. Morone (2003: 5) contrasts this with the



experience of Latin American countries that saw rising wage inequality after trade openness since the mid-1980s.

From the above descriptions, it can be inferred that labour-intensive and low-skill sectors seem to bear the brunt of trade liberalisation. As such, it is interesting to analyse whether such a negative link occurs in the Indonesian oil palm plantation sector, which is also considered as a labour intensive-sector and employs low-skilled labour.

The Indonesian Oil Palm Plantation Sector

It takes three to four years for an oil palm tree to mature. When the tree is mature, large bunches of palm fruits grow in the armpits of palm leaves each year, which are called fresh fruit bunches (FFBs). FFBs may contain 1,000 to 3,000 individual fruits, together weighing 10 to 20 kg. Every oil palm tree produces several FFBs every year, with fruit yield per hectare amounting to 10 to 35 tons. Palm trees have a productive age of 8 to 25 years, and afterwards the tree reaches a height that hinders harvesting activities (van Gelder 2004: 4).

The first commercial oil palm plantation was established in Sumatra in 1911¹. The plantations expanded through the support of Dutch capital and the country became the world's largest exporter by 1938 (Rasiah and Shahrin 2006: 21). After Indonesia gained its independence in 1945, the oil palm plantation went through declining production periods (van Gelder 2004: 189).

Until late 1979, large-scale plantations dominated the oil palm sector. In 1979, the government initiated a contract-farming-based scheme (Casson 1999: 13; Badrun 2010: 63). Under this scheme, the state offered access to forest and village lands, infrastructure development and credit at concessionary rates for plantation development. The state provided financing for smallholders plantings, initial living expenses and housing, while the nucleus estate was responsible for extended services, for collecting and processing fresh fruit bunches (McCarthy 2010: 828). The nucleus estate (called 'inti') would obtain 20-40% of plantation plot development, while participating smallholders (called 'plasma') would obtain 40-60% of the plot called 'satellite', typically around 2 ha, as well as 0.75 ha for home garden intended for food crops, and 0.25 ha for housing (Rist et al. 2010: 1011; McCarthy 2010: 828-9). This program was then followed by similar state programs, such as PIR Khusus and PIR Lokal (Badrun 2010: 64). Between 1986 and 1995, the government released a similar program that involved migrants from other islands, mostly from Java, through a scheme called

PIR-Trans. All these schemes have become important milestones for the participation of smallholders in the Indonesian oil palm plantation sector (Surambo 2010).

In the mid-1980s, driven by the desire to outperform Malaysia as the world's largest palm oil producer, the government offered vast tracks of forest areas to large Indonesian business groups and foreign investors (van Gelder 2004: 19). In 1995, before the Asian Crisis, the government attempted to expand the development of oil palm plantations in the eastern part of Indonesia through the KKPA scheme (*Kredit Kooperasi Primer untuk Anggota/ Primary Cooperative Credits for Members*), which was a government-supported private sector and cooperative investment (Casson 1999). In the same year, the country acceded to the WTO, marking an important milestone in the country trade liberalisation policy. For crude palm oil (CPO), this will boost its competitive advantage as it is considered cheaper compared to other vegetable oils. Responding to the Asian Crisis and the International Monetary Fund (IMF) policy recommendation, the government passed a directive to remove barriers for foreign investment in oil palm plantations (Casson 1999) and pursued trade liberalisation even more. In 1999, the central government discontinued financial assistance for smallholders, and thus left them in the hands of the plantation companies (McCarthy and Cramb 2009: 117). The contract-farming-based schemes remained. However, these were then fully initiated by the private sector.

The various schemes and liberalisation policies implemented in the oil palm sector fostered production and exports. Production of crude palm oil (CPO) reached 22 million tons in 2010 of which 16.3 million tons were exported. This marks a significant increase of around 3000% in CPO production as well as of around 200% in CPO exports compared to the numbers in 1980 (Directorate General of Estates 2011: 3, 5). A major reason for palm oil's growth is its competitive advantage over other oils in terms of production costs and yields (Mather 2008: 61; Susila 2004: 108). Moreover, palm oil is a non-genetically modified organism (non-GMO) and thus is not vulnerable to consumer concern about GMOs, which is a potential case for soybeans. Additionally, compared to other oils, palm oil lacks trans fats (Mather 2008: 61) and hence is considered as a healthier choice, although palm oil also contains 50% saturated fat, which can increase overall cholesterol levels.

In 2010, the five major CPO export destinations were India, Malaysia, the Netherlands, Italy, and Singapore, altogether comprising 84% of Indonesia's CPO exports (Directorate General of Estates 2011: 56). Malaysia serves



as both a competitor and destination country for Indonesia's CPO exports due to the growing Malaysian oil processing (downstream) industry. Nonetheless, Indonesia has the advantage to focus on the upstream part, thanks to its vast land area and cheaper labour (Goenadi et al. 2005).

Workers' Situations on Indonesian Oil Palm Plantations

As explained in the previous part, the Indonesian oil palm plantation sector has seen a remarkable development. This begs the question of whether such achievement is followed by employment opportunities and income generation for workers. This part seeks to answer this question. The descriptions of the workers' situation are mainly based on findings from my field study on three company-operated plantations (henceforth, estates X, Y, Z) as well as on smallholder-owned (both plasma and independent) plantations in Riau² in April 2012. The purpose of the selection is to compare the working conditions between company-operated plantations as well as between company-operated and smallholder-owned plantations. In terms of company-owned plantations, I chose plantations operated by parastatal and private companies. A parastatal company (henceforth, company X) manages estate X. The parastatal company operates 77,064 hectares of oil palm plantation in Riau and employs around 19,000 workers. Estate X covers areas amounting to 2,813 hectares, with 484 workers. Private plantation companies operate estates Y and Z (henceforth, companies Y and Z). These companies are subsidiaries of two foreign-owned company groups considered as "big" players in the oil palm sector (both upstream and downstream) in Indonesia and Malaysia. Both of these groups operate a substantial number of oil palm plantations in Indonesia. Company Y operates 208,000 hectares, of which estate Y manages 2,928 hectares and employs 495 workers. Company Z operates 182,840 hectares, of which estate Z manages 1,288 hectares, and employs 248 workers.

This study employs qualitative methods, especially in-depth interviews and observations on the plantations. I interviewed 21 workers, 6 *plasma* and independent smallholders, 12 estate representatives, 2 representatives from trade unions, and 3 representatives of NGOs. Questions asked focused on working conditions of workers, particularly their employment status and income. The interviews were recorded, transcribed and analysed. In some cases, I could not record the interviews and wrote down the results of the interviews instead. Access to workers on company-owned estates in many cases was only allowed under the supervision of field supervisors.

They guided me to the plots where plantation activities were conducted. That was how the respondents were selected. It was only on estate X where I could manage to find other time to interview workers without the supervision of the field supervisors. However, I did not find much difference in terms of the results of the interviews. I suspect the different results would come out only if I stayed longer with the workers. Meanwhile, access to workers on smallholder-owned estates was much easier. I went through the plots of smallholder-owned estates and interviewed workers whom I found. It was only one case in which the smallholder owner was also present during the interview. This is because the smallholder was usually working together with the workers. Among the workers whom I interviewed, twelve are women, aged mid-20s to mid-50s. The majority of these women are working as maintenance workers. Casual employment composes the largest share of the employment status of these women, whereas four of them serve as unpaid workers and only one has a permanent employment status. Meanwhile, the male workers are aged mid-20s to mid-30s. Among these male workers, there is only one worker who does not work as a harvester. Additionally, only two of these male workers work under casual employment status.

There are mainly three main phases on an oil palm plantation. The first phase involves preparation activities such as land clearing, seedling preparation and planting. The second phase starts after seedlings are planted. Activities in this phase include maintenance and harvesting activities. The third phase occurs when palm trees reach their industry limit. This phase includes replanting activities. In this paper, I will focus on the activities in the second phase.

Maintenance activities include weeding, spraying and fertilizing. In the plantations visited, I encountered three more activities. The first one is called "nangkos", a word coming from "jangkos". This activity generally means the spreading of empty bunches onto the soil in the plantation. The second involves pouring pesticide into a spraying tank. In some plantations, they do not need manpower to do this activity as they use a truck with a large tank filled with pesticides. The third one is the loading and unloading of the FFBs.

a. Employment and Employment Status

The oil palm plantations in Indonesia are labour-intensive. Around 1.95 million workers are employed on plantations operated by parastatal and private companies, while about 1.7 million farmers toil on smallholder-owned plantations (Indonesian Palm Oil Board 2010:



36). However, this number might not include casual and unpaid labour working in the sector. Indeed, casual labour is quite common in the Indonesian oil palm plantation sector. Meanwhile, the permanent employment status of plantation workers is different from the permanent employment status of administrative workers or the so-called "staff". A study on the labour rights situation on large-scale oil palm plantations in North Sumatra (Siagian et al. 2011: 5) describes the structure of employment status on the oil palm plantations as a pyramid, with "staff" on top of the pyramid. "Staff" refers to what we commonly consider as permanent workers. They have working contracts and receive pay slips. Below the staff category is the category of workers with an "SKU" (Syarat Kerja Umum/ General Work Requirement) employment form. Although workers in this category are also considered as permanent workers, they sometimes do not have working contracts and/or receive pay slips. Permanent workers on the plantations fall into this category. At the bottom of the pyramid, there are casual and unpaid labourers. There are two types of casual labourer employed on the oil palm plantations. The first one is a casual labourer directly hired by the company, so-called "BHL" (Buruh Harian Lepas). The other one is a casual labourer brought in by plantation workers to help them with activities on the plantations. Siagian et al. (ibid) call it "kernet" or assistant. In the pyramid, the position of a BHL is higher than an assistant.

This structure is confirmed on the plantations operated by private and parastatal companies visited in Riau. On estate Y, while plantation workers are called SKU Harian Tetap (fixed daily SKU), workers at the supervisor level, such as foremen, fall into the SKU Bulanan (monthly SKU) category. However, the structure remains similar to the pyramid described above. On estate X, BHL workers are children or family members of SKU or staff workers. Estate Y has not hired BHL workers since 2007. The company does not hire any workers with BHL status because it is not allowed anymore after the plantation received an RSPO (Roundtable Sustainable Palm Oil) certification. Nonetheless, one of the foremen interviewed mentioned that there is a possibility that workers bring someone (i.e. assistant) to the plantations to help them, especially for harvesting activities. Assistants are usually responsible for collecting individual fruits or so-called brondolan. The employment of an assistant is the responsibility of the workers who employ them, and not that of the company. This is also the case on estate Z. The employment of assistants shows that casual labour is still prevalent on this plantation. Meanwhile, unpaid workers are commonly workers' family members (e.g. wife, children) who help workers on the plantations. In most cases, they are

helping workers carry out harvesting activities.

On the three plantations visited in Riau, the SKU employment status is predominantly the case for workers engaged in harvesting activities (harvesters). Only on estate Y did both harvesters and maintenance workers have SKU employment status. This is the plantation that is already RSPO certified. On estate X, there are some maintenance workers that have SKU status, but most of these workers are BHL workers. An explanation for this situation is that the plantation will be replanted in the near future and thus the company decides not to carry out maintenance activities every day. I interviewed two SKU harvesters on this estate and both of them worked under BHL employment status. It seems that BHL status is an initial form of employment before they are hired as SKU workers. On estate Z, all of the maintenance workers are BHL workers. This estate has the smallest area compared to the other two company-operated estates. The reason for hiring BHL workers for maintenance activities is the relatively small-scale plantation area; hence there are not so many maintenance activities. In a given month, these activities can be finished within 10-15 days. The choice is that either the company reduces the number of maintenance workers but hires all maintenance workers with SKU status, or keeps the workers but offers BHL status. Additionally, workers engaged in nangkos on estate X are also BHL workers. In the same vein, workers who pour pesticides into spraying tanks on estate Z are also employed with BHL status.

On the plantations operated by plasma smallholders, workers are by and large employed under BHL status. This confirms what a large body of studies in this sector have revealed (Siagian et al. 2011; Chamim et al. 2012). A similar situation is likely to apply in the case of workers on plantations operated by independent smallholders. Workers on plantations owned by smallholders can also be family or relatives of the smallholders. The two workers interviewed mentioned that they work on 2-3 kaplings in a day³. It implies that workers are often hired by more than one plasma smallholder. These workers also bring their wives in order to help them with their work. This practice seems to be quite common for harvesters on plantations, both owned by plasma and independent smallholders.

b. Income

With regard to wages, the system that applies to SKU workers consists of a basic salary and premium (or so-called premi). Each SKU worker has a daily target to meet. When these workers are able to achieve over the target, they will receive a *premi*, as an additional pay-



ment apart from their basic salary. For example, wages for SKU workers on estate X are based on the minimum wage for the oil palm plantation sector in Riau as mentioned below. The daily target for harvesters is 700 kilograms/day. If workers are able to harvest more than this target, they will receive a premi with several layers of possible achievement. *Brondolan* collected are calculated separately. The *premi* for *brondolan* ranges from Rp 150/kg to Rp 300/kg.

On estate Y, SKU workers receive Rp 1,133,500 in a month as their wage. The estate sets a target for harvesting amounting to 1300 kilogram/day. If workers can harvest over this target, they will get a premi. On this estate, harvesters do not only receive a premi but also an incentive amounting to Rp 13,500 when they are able to harvest more than the target. Like on estate X, on this estate, the premi for *brondolan* is also calculated separately. The estate offers Rp 125/kg as a *premi* for *brondolan* collected.

In harvesting activities, this system triggers the employment of assistants or unpaid workers. Harvesters clearly desire to get as many premi as possible. Harvesters employ assistants when the daily target is increased, especially during peak seasons. These assistants can be their relatives or friends. However, in normal cases, harvesters usually bring their wives and/or children to the plantations. In the case of one of the SKU harvesters it was found that when his wife does not help him, his yield in a day will drop as much as 50%. In another case, it was revealed that an SKU harvester has to work 2 hours longer if his wife does not come and help him on the plantation. As for a BHL harvester interviewed, around 24% of his income is contributed by the work of his wife.

Nonetheless, I found that estate Z does not apply this payment system. Instead of using the above system, the company distributes the same scale of working plot (or so-called *ancak*) amounting to 2.5-3 hectares for harvesters. SKU harvesters on this plantation are paid at a rate of Rp 46 x 1.5 ton (harvesting capacity expected by the company) x 25 days, meaning Rp 1,725,000⁴ in a month. This payment system implies that SKU harvesters do not receive fixed wages; they are paid by their output.

Meanwhile, the payment system for BHL workers on the plantations operated by plantation companies is based on the yield of the workers. On estate X, the rate for BHL harvesters is Rp 1000/FFB. A harvester can usually collect 1 ton of FFB in a day, assuming that the average weight of an FFB is 10 kg. This means that BHL harvesters could receive Rp 100,000 in a day or Rp 2,600,000 in a month (assuming that workers also work on Saturday). One of

the BHL harvesters on estate X is able to harvest 1300 FFBs in a month compared to 2000 FFBs in the past. This implies that he receives Rp 1,300,000 in a month. The rate for BHL harvesters in the past was Rp 26-30/kg. This rate is actually better than the current rate because the current rate does not take into consideration the weight of the FFB. In the meantime, workers engaged in *nangkos* activities on estate X receive Rp 30,000 per truck of *jankos*. These workers are able to finish applying a truck of *jankos* in a day if they work full time or if it is not raining. Under less than ideal circumstances, it will take them 2 to 3 days. Assuming that they can finish applying *jankos* daily and it is not raining, these workers could receive Rp 780,000 in a month. However, I found that they are able to apply only 12 to 13 trucks of *jankos* in a month, meaning that they receive only Rp 360,000 to Rp 390,000 in a month.

Apart from wages, SKU workers on plantations operated by plantation companies are also entitled to other benefits such as housing, electricity, water and subsistence support (i.e. rice). All three estates visited offer these benefits. On estate Z, however, water is not provided by the company as a benefit in addition to wages. Workers have to pay for this utility. Estate Y provides rice in the amount of 15 kilograms/month to a worker, with an additional 9 kilograms/month for his wife, as well as 7.5 kilograms/month for each child to a maximum of 3 children. Housing is provided generally in semi-permanent houses. However, once workers are retired, they have to leave the housing. This may become a problem for workers who are not able to spend some of their income to prepare their own housing. On estate X, I found that few workers were able to save money to build their own houses. Meanwhile, BHL workers on these estates are not entitled to these benefits. BHL workers who stay in worker housing are either the spouses or family/relatives of the workers. In the case of one former BHL worker, I found that although as a BHL worker he was able to stay in the worker housing, this is because the worker entitled to the house where he stayed already owned a house. Another facility formerly provided by companies is transportation such as pick up cars, as the distance between worker housing and the plantations is often quite far. However, nowadays most of the workers have their own motorcycles, mostly bought through credit. Companies support this mechanism and sometimes help workers to get credit.

BHL workers interviewed on the plantations of plasma smallholders receive Rp 100,000/ton. In a day, these workers are able to harvest 1 ton of FFBs. Assuming that they also work on Saturday, this means that these work-



Table 1: Comparison of worker income, minimum wage and decent living needs in Riau

Type of Worker	Estate X	Estate Y	Estate Z	Plasma Plantations	Minimum Wage	Decent living needs*
SKU workers	Rp 1,389,450 + premi	Rp 1,133,500 + premi	No fixed (basic) wage. Rp 1,725,000a	Rp 2,600,000 b	Rp 1,389,450	Rp 1,230,491 for estate X and plasma plantations. Rp 1,455,340 for estates Y and Z
BHL workers	Rp 2,600,000b	-	Rp 1,387,670c			

Notes *: As determined by the government. Figure for 2011.

a This amount of salary requires workers to harvest 1.5 tons of FFBs.

b Assuming that the average weight of an FFB is 10 kg (workers normally can harvest 1 ton FFBs in a day) and that workers also work on Saturday.

ers receive Rp 2,600,000 in a month. A BHL worker receives Rp 125,000/ton, which is higher than the normal rate for BHL workers in that area. As the worker revealed, this higher rate is because he and the smallholder employer are cousins. Another BHL harvester mentioned that he receives Rp 1,500,000 per month. Moreover, some of these BHL workers might have additional income. Smallholders might let their workers take *brondolan* with them. Workers then sell *brondolan* to traders nearby. Apparently, not all workers have this possibility and it really depends on the willingness of the smallholders. In the case of one of the BHL harvesters, I found that he is only able to take *brondolan* with him if the employer does not know or does not watch. I observed that BHL workers who have family relations or are relatives of their employers have more possibility to do this. Additionally, unlike SKU workers on company-operated plantations, BHL workers on smallholder-owned plantations are not entitled to other benefits such as housing, water, electricity and subsistence support (i.e. rice).

According to the perspective of estate X, the wage level offered by the company is sufficient for workers to live decently. If we compare the above numbers to the minimum wage for the oil palm plantation sector in Riau, amounting to Rp 1,389,450 as of 2012, it seems that these workers are better off, except for workers on estate Y. However, there are three issues worth noting in regard to the minimum wage level (either sectoral or provincial)

in Indonesia. The first problem is that the majority of the minimum wage level does not meet decent living needs. In Riau, the decent living needs for *Siak and Kampar* (the two regencies where the visited plantations are located) were Rp 1,455,340 and Rp 1,230,491, respectively in 2011 (the data for 2012 were not accessible). We can see that while the above sectoral minimum wage applies to the oil palm plantation sector in Riau is slightly above the decent living need for Kampar regency, such a minimum wage is actually lower than the decent living need for Siak regency. If we compare the payment received by workers mentioned above to decent living needs in these two regencies, it appears that these workers are better off, except for *nangkos*⁵ workers.

A highly contested issue is the indicators used to set decent living needs. The indicators of decent living needs are set up by the central government under Permenakertrans No. 17/2005. The regulation lists 46 items that serve as the basis for a decent living needs survey at the regional level. Workers had been demanding the government to revise the regulation by including 122 items into the indicators. The revision was eventually conducted in 2012. Under Permenakertrans No. 13/2012, the government lists 60 items for the decent living needs indicators. However, this was not yet applicable during the time of my field research. Furthermore, the current indicators only take into account the living needs of single workers and thus disproportionately affect workers with spouses



and children. Some cases described above demonstrate the income of workers with spouses and children. Although their income might be higher than decent living needs level in the regency, it is worth noting that such decent living needs are applicable only for single workers. As such, it is questionable whether the income of these workers actually meets their decent living needs. This might also explain why these workers pursue as many premi as possible. The third issue is that the minimum wage is supposedly used as a floor in determining the wage level between workers and companies. This is illustrated in the regulation, which states that minimum wage applies to workers whose working period is below 12 months. In practice, however, minimum wage is used as a maximum standard in determining the wage level.

For SKU workers on estate Y, their wages are even below the minimum wage for the oil palm plantation sector in Riau. This wage level is stated in the collective agreement negotiated between the trade union and BKS-PPS (Badan Kerja Sama Perusahaan Perkebunan Sumatra/Cooperation Board of Sumatra Plantation Companies), an association of plantation companies in Sumatra. Meanwhile, despite the fact that their income is higher than the minimum wage for the oil palm plantation sector in Riau, SKU workers on estate Z do not receive fixed wages. This estate does not set a daily target that serves as the basis for the basic salary of SKU workers. Instead, the calculation of the salary received by these workers relies completely on worker productivity.

For BHL workers on smallholder-owned plantations, they inevitably face the issues with minimum wage as mentioned above. Although it seems that these workers receive income higher than SKU workers on company-operated plantations, the main problem for them is certainly their employment status. This also means that they do not receive regular income.

As mentioned, harvesters on company-operated plantations receive a premi when they are able to harvest more than the daily target, except for the case of estate Z. The premi serves as a reward for their productivity. However, a reward is always accompanied by punishment. Indeed, harvesters are sanctioned when they do not carry out their harvesting tasks properly. The sanctions are usually fines deducted from the harvester salaries. On estate Y, there are 20 activities that can result in sanctions. Only 2 of these 20 items are related to occupational safety and health, while the rest refer to improper harvesting activities. Every day, after working hours, a foreman has to prepare a working sheet, which contains the productivity (which determines the premi) as well as the sanctions of his subordinate harvesters. This sheet will become the

basis for calculating the harvester salaries.

Conclusions

Oil palm plantations play an important role in Indonesia's agricultural sector, particularly after Indonesia decided to pursue trade liberalisation and target export markets. It is widely held that they contribute significantly to the development of rural livelihoods in Indonesia. Nonetheless, whether the expansion of the oil palm plantations has also benefited workers remains in question.

Drawing evidence from the oil palm plantations in Riau, a province with the largest oil palm plantations in Indonesia, this paper concludes that workers have found employment but under unsatisfactory conditions. Not only are casual workers still rampant in the sector, but there is also no fixed form of employment (and payment) practices in the sector. Despite the presence of a common employment (and payment) structure, each plantation company may have its own form of employment practices. Workers on plantations also receive income insufficient for their decent living. For casual workers, who make the largest share of plantation workers, this income is also not regular.

These conclusions provide an important aspect for the discussions on the link between trade liberalisation and labour rights. The remarkable development of the Indonesian oil palm plantation sector, particularly after the country decided to pursue trade liberalisation policy, relies on poor working conditions on the plantations. The findings also shed light on food crisis discussions. Oil palm cultivation paves the way for changes in land use from polyculture to monoculture farming. This in turn makes it difficult for workers or local people to grow food crops. As a result, subsistence farming will not be attractive anymore and thus workers or local people have to rely on the local markets for their food supply. This certainly increases living cost, which may lead to food crisis at the micro level. The situation for plantation workers might be worse since their low wages further limit their access to food from the market.

Acknowledgement

The author would like to thank the International Center for Development and Decent Work, University of Kassel, for providing financial assistance for the field research. The author would also express her gratitude to the journal reviewers for their feedbacks to this article.

Conflict of Interests

The author hereby declares that there are no conflicts of interest.



References

- Arbache, J.S., Dickerson, A., and Green, F. (2004). Trade Liberalisation and Wages in Developing Countries, *The Economic Journal*. 114: F73-F96
- Badrun, M. (2010). *Tonggak Perubahan: Melalui PIR Kelapa Sawit Membangun Negeri*. Jakarta: Direktorat Jenderal Perkebunan Kementerian Pertanian Republik Indonesia
- Berik, G., and Rodgers, Y.v.d.M. (2008). The Debate on Labour Standards and International Trade: Lessons from Cambodia and Bangladesh, University of Utah Department of Economics Working Paper No: 2007-03
- Beyer, H., Rojas, P., and Vergara, R. (1999). Trade Liberalization and Wage Inequality, *Journal of Development Economics*. 59:103-23
- Blanton, S.L. and Blanton, R.G. (2009). A Sectoral Analysis of Human Rights and FDI: Does Industry Type Matter?, *International Studies Quarterly*. (3)2: 469-93
- Brown, D.K., Deardorff, A.V., and Stern, R.M. (2003). The Effects of Multinational Production on Wages and Working Conditions in Developing Countries. National Bureau of Economic Research Working Papers No. 9669
- Casson, A. (1999). The Hesitant Boom: Indonesia's Oil Palm Sub-Sector in an Era of Economic Crisis and Political Change. Center for International Forestry Research
- Chamim, M., Irawanto, D.S., Pareanom, Y.A., Hae, Z., Budiman, I. (2012). *Raja Limbung: Seabad Perjalanan Sawit di Indonesia*. Jakarta: Sawit Watch dan Tempo Institute
- Colchester, M., Jiwan, N., Andiko, Sirait, M., Firdaus, A.Y., Surambo, A., Pane, H. (2006). Promised Land: Palm Oil and Land Acquisition in Indonesia- Implications for Local Communities and Indigenous People, Forest People Programme and Perkumpulan Sawit Watch
- Cragg, M.I. and Epelbaum, M. (1996). Why has wage dispersion grown in Mexico? Is it the incidence of reforms or the growing demand for skills?, *Journal of Development Economics*. 51: 99-116
- Desjonquieres, T., Machin, S., and Van Reenen, J. (1999). Another Nail in the Coffin? Or Can the Trade Based Explanation of Changing Skill Structures Be Resurrected?, *Scandinavian Journal of Economics*. 101(14): 533-54
- Directorate General of Estates (2011). *Tree Crop Estate Statistics of Indonesia 2010-2012*. Jakarta: Directorate General of Estates, Ministry of Agriculture Republic of Indonesia
- Feenstra, R.C. and Hanson, G.H. (1997). Foreign direct investment and relative wages: Evidence from Mexico's maquiladoras, *Journal of International Economics*. 42: 371-93
- Goenadi, D.H., Drajat, B., Erningpraja, L., and Hutabarat, B. (2005). *Prospek dan Pengembangan Agribisnis Kelapa Sawit di Indonesia*. Ministry of Agriculture, Research and Development Department
- Hanson, G.H. and Harrison, A. (1999). Trade Liberalization and Wage Inequality in Mexico, *Industrial and Labor Relations Review*. 52 (2): 271-88
- Indonesian Palm Oil Board (2010). *Fakta Kelapa Sawit Indonesia*. Jakarta: Indonesian Palm Oil Board
- Ing, L.Y. (2009). Lower Tariff, Rising Skill Premium in Developing Countries: Is It A Coincidence, *The World Economy*, 1115-11133
- International Labour Office (2007). *Project on Dynamics of International Labour Standards*. International Labour Organization
- Kucera, D. (2002). Core Labour Standards and Foreign Direct Investment, *International Labour Review*. 141(1-2):31-69
- Maskus, K. E. (1997). Should Core Labour Standards be imposed through International Trade Policy. The World Bank Policy Research Working Paper No. 1817
- Mather, C. (2008). Value Chain and Tropical Products in a Changing Global Trade Regime. International Centre for Trade and Sustainable Development, Issue Paper No. 13
- McCarthy, J.F. (2010). Process of inclusion and adverse incorporation: oil palm and agrarian change in Sumatra, Indonesia, *Journal of Peasant Studies*. 37(4):821-850
- McCarthy, J.F. and Cramb, R.A. (2009). Policy narratives, landholder engagement, and the oil palm expansion on the Malaysian and Indonesian frontiers, *The Geographical Journal*. 175 (2):112-123
- Morone, P. (2003). Globalisation and Inequality: the Effects of Trade Liberalisation on Developing Countries. Science and Technology Policy Research, Electronic Working Paper Series No. 42



- Mosley, L. and Uno, S. (2007). Racing to the Bottom or Climbing to the Top? Economic Globalization and Collective Labor Rights, *Comparative Political Studies*. 40(8):923-948
- Munshi, F. (2008). Does openness reduce wage inequality in developing countries? A Panel data Analysis, <http://gupea.ub.gu.se/bitstream/2077/2665/3/gunwpe0241corr.pdf>
- Rasiah, R. and Shahrin, A. (2006). Development of Palm Oil and Related Products in Malaysia and Indonesia. University of Malaya
- Richter, B. (2009). Environmental Challenges and the Controversy about Palm Oil Production – Case Studies from Malaysia, Indonesia and Myanmar. Friedrich-Ebert-Stiftung Singapore
- Rist, L., Feintrenie, L., Levang, P. (2010). The livelihood impacts of oil palm: smallholders in Indonesia, *Biodiversity and Conservation*. 19:1009-1024
- Robbins, D. (1994). Worsening Relative Wage Dispersion in Chile during Trade Liberalization, and its Causes: Is Supply at Fault?. Development Discussion Paper No. 484, Harvard Institute for International Development
- Robbins, D. (1996). HOS Hits Facts: Facts Win; Evidence on Trade and Wages in the Developing World: Development Discussion Paper No. 557, Harvard Institute for International Development
- Rogovsky, N. and Sims, E. (2002). Corporate Success through People: Making International Labor Standards Work for You, Geneva: International Labour Organization
- Siagian, S., Hotler, Anto, Benhidris, Supono, Jiwan, N., and Hasibuan, F. (2011). Miljoenen van Palm Olie Plantages: A Working Paper on Labour Rights Situation and A Recommendation to Build Just Labour System Guideline for Palm Oil Plantation Workers in Indonesia. Kelompok Pelita Sejahtera, Lentera Rakyat and Sawit Watch
- Surambo, A. (2010). Independent Planters, http://www.sawitwatch.or.id/index.php?option=com_content&view=article&id=73%3Apekebun&catid=49%3Akategori-buku&lang=en (Retrieved on June 10, 2011)
- Susila, W. R. (2004a). Contribution of Oil Palm Industry to Economic Growth and Poverty Alleviation in Indonesia, *Jurnal Litbang Pertanian*. 23 (3):107-114
- Van Gelder, J. W. (2004). Greasy Palms: European buyers of Indonesian palm oil. Friends of the Earth
-
1. The Agrarian Law adopted by the colonial government in 1870 enabled the establishment of state-owned plantations as the Law declared all land not under permanent cultivation as "waste land" (van Gelder 2004: 18). Thereafter, Dutch developers were also offered as much land as they needed on 75-year renewable leases at nominal rent (ibid.).
 2. Riau is a province in Indonesia that has the largest oil palm plantations in the country. In 2010, oil palm plantations covered 2 million hectares in the province, producing almost 30% of total crude palm oil (CPO) output in the country (Directorate General of Estates 2011: 9).
 3. Kapling refers to a plot of 2 ha. According to the NES scheme, each plasmasmallholder is given 2 ha to cultivate palm trees.
 4. Assuming \$ 1 = Rp 10.000
 5. *Nangkos* comes from the word *jangkos*, which literary means empty bunches. The activity of *nangkos* refers to the activity of spreading or applying empty bunches onto the plantation plots. In this way, empty bunches are treated as organic fertiliser for the plots.