

Tenure security and oil palm expansion on customary lands in Indonesia, case study in West Kalimantan

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ABSTRACT

This document presents an empirical study on the consequences of the lease of customary lands to an oil palm company on the tenure security of the local *Iban* communities, at the community and the individual level, in four villages in the Kapuas Hulu regency of West Kalimantan, Indonesia. Eighty-eight semi-structured interviews with randomly selected family-heads, their spouse and several key-informants showed that the promise of the company to give back 20% of their harvest to the villagers convinced most villagers to hand over part of their lands in 2008 and 2009. Only one village refused the arrangement and was in conflict with the oil palm company.

The decision-making process to allow the company to use customary lands was based on consensus and involved the participation of all household heads, although the community leaders probably played an important role by their strong influence on the other villagers. Women and young people appeared as not being consulted. While most villagers had a perception of high tenure security, I found that their land rights could be threatened by the incomplete recognition of customary institutions by the government, unclear regulations and the concentration of the information and key-documents by the local elite. A cooperative regrouping the people owning land inside the oil palm plantations is the interface between them and the company and will be responsible to distribute the benefits from the oil palm plantation to the owners. This new institution will probably play a key-role in ensuring the respect of the villagers' land rights and the degree of control they will be able to exercise on this cooperative is a crucial issue.

Key words: land rights, tenure security, oil palm plantation

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Driven by an increasing global demand for edible oil and biofuel, the oil palm production throughout the world rose from 120 million tones of fruits in 2000 to 207 million in 2009, representing a growth of 70% in 10 years (FAO 2010). Although palm oil prices dropped as a consequence of the 2008 economical crisis, they are already recovering and the demand for palm oil is expected to keep on growing. Since 2005, Indonesia has been the first producer of palm oil in the world, followed by Malaysia and far before Nigeria, the third producer, according to the IPOC (cited by (Sheil et al. 2009). Indonesia and Malaysia produce together about 90 % of the world's crude palm oil (USDA 2008 cited by Sheil et al. 2009).

In Indonesia, since the beginning of the 80's, the total area planted with oil palm increased by over 2100 %, reaching 4.6 million hectares in 2008 and 5.2 million in 2009 (FAO 2008, 2009). In 2009, Indonesia grew oil palm on about 10% of its agricultural area. By 2020, the government plans to increase the national crude palm oil production from 19.2 in 2008 to 40 million of tons (Ministry of Agriculture of Indonesia 2009 cited by Feintrenie, Chong, and Levang 2010). Provincial and local governments have planned to grant licenses for oil palm plantations on additional lands, representing about 20 million ha (Sirait 2009). Under such circumstances, OPP (oil palm plantations) can be expected to keep on spreading throughout Indonesia, especially in the Outer Islands.

1 THE IMPACTS OF OIL PALM PLANTATIONS ON LOCAL COMMUNITIES

1.1 Social and economical impacts

Oil palm plantations are famous for their continuously denounced impact on the environment, namely deforestation, destruction of biodiversity, water pollution and carbon emissions (Sheil et al. 2009). The competitive use of oil palm for biofuel production is also a potential threat for the food security of poor people.

However the impact of OPP on the livelihood of local communities is not fully understood. While it can foster their economical development, serious social issues have also been reported. An important part of the information is either produced by NGOs or OPC, and there is a need for objective research (Sheil et al. 2009; Rist, Feintrenie, and Levang 2010).

In Indonesia, several conflicts affecting local communities and related to OPP have been reported. Some of them involve serious human right violation and "land grabbing". According to Sawit Watch, in 2008 West Kalimantan was the second province where most conflicts were found (Sirait 2009, 40). Low wages and debts for oil palm plantation smallholders may lead to impoverishment. In addition, the compensations paid by the company to the local communities are often very low and

their promises not completely fulfilled, which can trigger further conflicts (Colchester et al. 2006; Marti 2008; Sheil et al. 2009; Sirait 2009).

Yet Feintrenie, Chong, and Levang (2010) demonstrate that under certain conditions, oil palm plantations provide smallholders with particularly high economic benefits. Moreover, the international campaigns led by various NGOs to denounce the negative impacts of OPP have repercussions on the exigencies of palm oil buyers (such as Unilever or Nestlé). In the same way, the development of certification schemes for OPP like the Roundtable on Sustainable Palm Oil (RSPO) is a factor pushing the oil palm grower to adopt better practices (RSPO INA-NIWG 2008).

In fact, the differentiated impact of OPP inside local communities remains another important question that hasn't been studied a lot (although the effects on women have been more documented, for example by Sirait 2009).

1.2 Customary rights, land concessions and the State in the Indonesia

In Indonesia, the majority of oil palm plantations are held by private companies gaining access to the land through the government, although smallholder's plantations are constantly increasing (Directorate General of Estate of Indonesia 2010). When a government grants *de jure* rights to a company on a land, it implies a confrontation (that can trigger conflicts but also cooperation) between these official rights and the rights other actors actually exercise on this same land.

Private investors gain use rights to land (HGU: *Hak Guna Usaha* or exploitation and utilization right) through local and central governments that issue plantation permits. Those permits are granted either on "State Land" or on the national forest zone (*kawasan hutan*) that is classified as conversion forest, both being controlled by the State according to the Indonesian legislation. However several scholars showed that in practice these lands are often used and controlled by local people who claim customary land rights that are not fully recognized by the State (Wadley 2005; Sirait 2009; Singer 2009; Roth 2009; Penot 2003; Moniaga 2009; Moeliono, Wollenberg, and Limberg 2009; Fay, Sirait, and Kusworo n.d.; Contreras-Hermosilla and Fay 2005; Colchester et al. 2006).

Under the Indonesian law, customary land rights are not fully recognized and may be overlooked when the "national interest" or the "interest of the State" require it. The fuzzy definition of these concepts in the law creates space for interpretation and has been often used in the past to grant customary lands to private investors without consideration for the local communities. Some customary institutions have only recently been officially recognized, but their recognition depends on the will of local governments. As a consequence, many customary land rights practices still have little official recognition and protection.

In Indonesia, local governments are planning to grant 20 million ha of additional plantation concessions by 2020 (Sirait 2009). Considering the several studies describing oil palm plantation as a threat to customary right holders and the low degree of recognition of customary rights in the Indonesian legislation, it seems relevant to study the impact of oil palm plantation on the tenure security of local communities. The study presented in this document is guided by this general research question: “how does the large scale transfer of use-rights of land from local communities to a private company affect and challenge land-rights security and forest-resource access security of local people?”. Working on this issue is a way to contribute to the research on the factors driving land tenure security in forest dwelling or forest adjacent communities.

2 METHODOLOGICAL AND CONCEPTUAL ISSUES

2.1 What is tenure security?

The notion of tenure security has been discussed by several scholars (Van Gelder 2010; Sjaastad and Bromley 2000; Place, Roth, and Hazell 1994; Lund 2000; Maxwell and Wiebe 1998; Le Roy, Karsenty, and Bertrand 1996; Lavigne-Delville, Ouedraogo, and Toulmin 2002). It basically refers to the probability of a right holder to lose or have his land right violated. A simplistic perception would view it as the likelihood to lose one’s land.

Because tenure comprises a bundle of rights as it was described by (Schlager and Ostrom 1992), individuals and groups can have multiple simultaneous and/or sequential rights to land and land-based resources. These rights can be interdependent based on diverse local arrangements. Thus the concept of tenure security cannot be reduced only to the concept of losing the parcel of land. In communities where land is seen as a bundle of resources rather than a geometric area, and where multiple tenures determine the access to these resources, the above definition is inadequate. Barrows and Roth (1990, p. 292) for example suggest that tenure security can also be defined more broadly as the perception of the likelihood of losing a specific right to cultivate, graze, fallow, transfer, or mortgage.

Conventional definitions describe tenure security as depending from the range of rights held from the bundle of rights described by Schlager and Ostrom (1992), their assurance –the degree of certainty that these rights won’t be violated now and in the future– and duration, i.e. the length of time over which rights can be exercised (Place et al. 1994 in Fuys et al. 2008).

This definition is questionable. Sjaastad and Bromley (2000) defend the idea that tenure security is only the assurance of rights. They argue that the security of one right is not necessarily related to the other rights held in the bundle of rights and to the range of rights held. A right-holder can have a wide range of rights that are less secure than more restricted rights. In the same way, the period of time over which rights are held (their duration) isn’t necessarily linked to their security.

Uncertainty over the duration of rights can create insecurity, but not the duration in itself (Sjaastad and Bromley 2000). For Lund (2000) this notion of tenure security (as dependant on the range and the duration of rights) “confuses the concept of ‘private property’ (implying the right to alienation) with high tenure security (implying ‘full command’)”.

Consequently, tenure security should be considered as a complex, relative and continuous notion. The following definition will be used: tenure security is the assurance for the right-holder to be able to exercise his right now and in the future (assurance of rights, as defined by Sjaastad and Bromley 2000) and to be able to reap the benefits of the labor and capital invested in the resource.

2.2 *How to approach tenure security?*

Because tenure security is an abstract notion corresponding to a probability that can't be directly measured, researchers have no choice but to use indicators to estimate the degree of tenure security in a concrete situation. However, these indicators tend to be associated to the factors presumed to enhance tenure security or to the supposed consequences of tenure security.

The formal recognition of the existing land rights through the holding of registered land titles or the legal comprehensiveness of the proof of ownership have implicitly been represented as the main condition for tenure security (Deininger and Cham 2004). This causality has been more and more questioned and replaced by a more complex perception of the issue of tenure security. The link between titles and tenure security has been shown to be complex, and depending on the power (particularly political power) and wealth of the different actors: “the issue is not one of mere title and security but of security for whom” (Sjaastad and Bromley 2000).

Actually, to focus only on the formal recognition of land rights is to neglect their diverse dimensions. The tenure security related to the formal recognition of rights (which can be called *de jure* tenure security) can be disconnected from the actual tenure security (*de facto* tenure security), which is the objective probability to lose one's actual right. The perceived tenure security by the right-holder is also another dimension that might not be related to the two others and should be included in empirical studies (Van Gelder 2010; Broegaard 2005).

Many indicators usually used to assess tenure security seem to be based on a static vision of tenure security and taken one by one they fail in accounting the complex and diverse reality of land rights (Mwangi and Markelova 2009).

Land rights security is indeed embedded in on-going institutional, social and individual processes that have to be taken into account. Berry showed for example that in Africa access to land and other productive assets was gained through their status and the integration of individuals into social networks, and so that tenure

security was improved through investment in social relationships (Berry 1989). As (Lavigne-Delville, Ouedraogo, and Toulmin 2002) say:

“So it is possible to hold title and be insecure (if a stronger party prevents one from enjoying one’s rights), or to be secure on borrowed land, even if the contract is short-term, provided that one has a good relationship with the grantor and the contract is renewed year after year.”

The existence of different and overlapping authorities backing land rights and arbitrating land disputes is also often a reality that has to be taken into account and that can be a factor weakening land rights (Lund 2001). In the 90’s efforts have been made to reconcile customary and statutory tenure systems (Lavigne-Delville, Ouedraogo, and Toulmin 2002), however, this is a hard task because of the diversity and flexibility of customary tenure systems (Unruh 2006). Tenure security is also intrinsically related to conflicts and to the individual ability to defend its rights, by doing “forum shopping” for example (Griffiths 1986; Lund 2001; Meinzen-Dick and Pradhan 2002).

To sum-up, tenure security depends on many social, political, institutional factors that change over time. It can’t be directly measured but can be approached by studying indicators that will change according to the situation, as tenure security expresses itself in various forms; but may also change over time.

2.3 Private large scale plantation and tenure security

As explained before, the study aims at uncovering how the establishment of a large scale plantation on customary lands affects the security of the land rights or tenure security for local people. In this case, tenure security should be approached through the observation of actual changes in local people’s land rights on one hand (have land rights been and are they violated?) and the identification of potential threats (are they likely to be violated?) in the present and in the future.

In this case study, oil palm plantation is established by private companies on customary lands, lands that are actually used and controlled by local communities. It can thus be expected that on the area to be planted, their land rights will be strongly modified. It could be said that if the establishment of oil palm plantation result in the loss or the attenuation of land rights of local people, these rights can be said to be rather insecure. However, the question of the consent and the participation of local people in the process defining their new rights and those of the company is essential. The question of the extent to which the benefits they derived from their land rights are maintained, replaced or lost is also to be studied.

In the context of this study, several conditions are necessary for a land right to be secure:

- the oil palm plantation is established with the consent of local communities exercising customary rights on the land,

- more generally, local communities have a high control on the process defining the arrangement and the reallocation of land rights between them and the oil palm company,
- if rights or access are lost, the loss is compensated and approved by the right-holder,
- the arrangement defining new rights is enforced,
- villagers are able to claim, maintain and defend their rights,
- no threats are identified, or they are unlikely to actually challenge rights.

Focused on these issues, the empirical study was performed with *Iban Dayak* communities because they are the biggest ethnic group whose livelihoods directly depend on forest and land in Kapuas Hulu, as is explained in the following section.

2.4 *Presentation of the empirical study*

The empirical study was carried out in Indonesia, because it is the 1st palm oil producer and a wide expansion of OPP is to be expected, as explained before. The province of West Kalimantan has been chosen because it is the province where the widest expansion (5 million ha) of OPP is planned (Sirait 2009). It is also the 2^d province (after Sumatra) with most conflicts between oil palm companies and local communities (Marti 2008).

In West Kalimantan, OPP have been spreading from the west to the east. Few studies have been made about the first years after the establishment of the plantations. Especially, no deep study has been made in Indonesia about the processes defining the arrangement, or the contract between local communities and the company, about the way land rights were negotiated and redefined between local communities and the company, but also among local people themselves at the arrival of the company. This is why the empirical study has been carried out in Kapuas Hulu, where the large scale development of oil palm plantations by private companies has begun only 2 years ago, on the western part of the regency.

Some parts of Kapuas Hulu forests have been exploited by private or state companies in concessions allocated by the central state during Suharto's regime. Illegal logging activities mostly led by Malaysian investors and involving local *Dayak* and *Melayu* communities increased dramatically since the end of Suharto's regime in 1998 (Wadley 2006), but they have almost completely stopped nowadays. The resulting ex-logging areas tend now to be converted into oil palm plantation (Jeans 1997), although this activity is less spread in Kapuas Hulu district than in the rest of West Kalimantan (Wadley and Eilenberg 2006).

Two main ethnic groups are living in this area: the *Dayak* and the *Melayu*. Living in upper lands, the *Dayak* are mainly shifting cultivators of rice and other crops whereas the *Melayu* live around the lakes and rivers in the lower part of the region. Fishing is *Melayu* major livelihood. They also collect wild honey and wax to sell them and timber and rattan harvesting for local use is an important activity. Some studies revealed that many other non wood forest products were used by *Melayu* people (about 80%) (Wadley, Colfer, and Hood 1997; Colfer et al. 2000).

Along with swidden agriculture, *Dayak* people are also hunters and forest products (mostly food²) gatherers. Enriching forest patches with fruit trees, rubber or other trees, they practice some agroforestry (Wadley, Colfer, and Hood 1997; Colfer et al. 2000). Lots of young people used to leave their village to work in Sarawak in Malaysian palm oil plantation or timber industries (Wadley 1997; Giesen and Aglionby 2000), a migration pattern that has declined strongly due to restrictions issued by the Malaysian government. The majority of *Dayak* people in Kapuas Hulu district are *Iban Dayak*. Because they represent the largest ethnic group whose livelihoods strongly depend on land and forest resources, the study was performed in *Iban Dayak* communities.

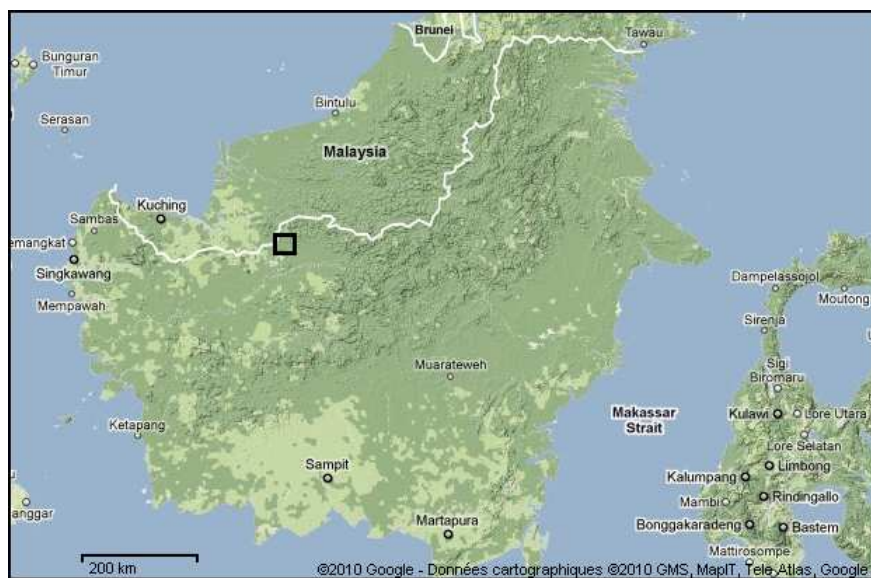


Figure 1: Location of the study area

Four villages were selected in the western edge of Kapuas Hulu district: A, C, D and B. These villages are almost exclusively composed of *Iban Dayak* people.

The studied villages are one of the first villages with oil palm plantation (the oldest palms have been planted in the second half of 2008 in B). On part of the territory claimed by these villages, oil palm has been recently planted:

	Village A	Village C	Village D	Village B
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² Colfer et al. (2000) found that in an *Iban* village, 90 % of the items collected in the forest were primarily food.

Number of houses	58	20	29	65
Village territory (ha)	> 4 000	4 000 to 5 000	4 640	4 000 to 5 000
OPP (ha)	?	2 400	2 640	462

In each village, semi-structured interviews were performed with “key informants” (mostly village leaders: *kepala desa*, *kepala dusun*, *patih*) from the villages and randomly selected family-heads. The wives of the family heads were also interviewed separately, when possible (or another female member of the household, with preference for elder women because I assumed they would speak more freely than young women).

Although no formal data were available, information from local inhabitants indicated that the majority of the villages there were composed of 10 to 30 houses. So, for the villages that have accepted the company, two medium-sized villages and one big village, were selected. The village A was selected because it was one of the few villages refusing OPP.

The duration of the field work³ (8 weeks, from the beginning of June until the end of July 2010) was the first constraint limiting the number of interviews. It was organized in order to stay 10 to 15 days in each village. Because of the time repartition, two different percentages have been chosen for the two bigger and the two smaller villages. In A and B, we planned to interview people in about 30% of the houses and in C and D, 60%. Then, in each household we tried to interview both men and spouses.

Here is a table resuming the repartition of people interviewed:

village	number of houses	INTERVIEWED					
		number of interviewed	number of key-informants	number of houses	number of men	number of women	% houses
Janting	58	17	3	16	10	6	28%
A	65	25	2	18	15	11	28%
B	20	20	1	12	12	7	60%
C	28	24	3	15	13	8	54%
D	171	86	9	61	50	32	36%

In the next section, I present the main results of this analysis (this empirical study has been described in detail by Clerc (2010)).

3 RESULTS OF THE CASE STUDY

3.1 Local social organization and tenure context

The traditional organization of *Iban* societies have been altered by the Indonesian national regulations. In 1979 the Indonesian State issued the Village Law to replace the diverse local and customary institutions by a uniform system. Each settlement was given the status of *dusun* (or “hamlet”), and all *dusun* were

³ The field work and the study have been financed and carried out in the context of the CIRAD led and European Commission funded project called “collaborative land use planning and sustainable institutional arrangement for strengthening land tenure, forest and community rights in Indonesia”

regrouped to form larger administrative organizations, the *desa* (or “village”). The inhabitants of a *dusun* elect a *kepala dusun* (or hamlet head), and all villagers pertaining to a same *desa* elect a *kepala desa* (or village head) who has a higher position than the *kepala dusun*. Several *desa* are clustered to form a sub-district (*kacamatan*) administered by a *camat* appointed by the government of the district (Harwell).

In the region of the study, the traditional figure of the *patih* has however been conserved as the customary authority in charge of solving conflicts inside and between *Iban* villages. Each *patih* rules several *dusun*. If the conflicts can't be solved by the *patih*, help can be asked to the *patih* regulating other longhouses.

The main activity of 89% of the respondents was swidden agriculture, based on paddy growing in the *ladang* (local name given to the rice crop in this agrarian system). The fallow period is around 10 years, sometimes 7 or 8 years. Some vegetables are also planted with paddy.

All *ladang* are established by clearing privately-owned fallow-lands (*damun*). Most of *damun* are inherited, but the private property-right was acquired by ancestors by clearing forest. Most households farm on their own land, although they don't have any land title. In some cases, *damun* are commonly held by sisters and brothers. If one village member definitively moves away from the village to another place, he loses his plots of lands, although he conserves a special use right.

Forest, or *pulau*, defined as the lands that have never been cleared by the villagers nor their ancestors (thus old-grown forests), is commonly-held by the members of the village. There are different types of *pulau*, some being considered as sacred and protected, other maintained for their pool of timber or other forest resources. Most fruits are collected from young trees villagers planted on their own near their house (like banana, mango, jack-fruit, pineapple,...), and in a kind of agro-forest, called *tembawai*, which corresponds to former settlement areas. At these places, near their house, villagers' ancestors planted fruit trees, like durian, jack fruit, rambutan trees, which are still used by current villagers. The *tembawai* are also commonly owned by the villagers.

3.2 Oil palm plantation established with the consent of local communities?

3.2.1 Generally, yes

The land that has been planted by the company was used and controlled by the local communities. The lack of a strong recognition of their customary rights in the official regulations could put these communities in a vulnerable situation and allow the company (whose claim has been backed by the support of the national and local government through the issuance of a plantation permit) to take over the lands. However, only 11% of the respondents felt compelled to hand over their land to the oil palm company and for three of the villages (C, D and B), the relationship with the

company was good and based on cooperation, as it can be deduced from the figure 2. Actually in these villages, nobody told me that the plantation had been imposed to the villagers, and the big majority of them considered the situation with the oil palm company to be good.

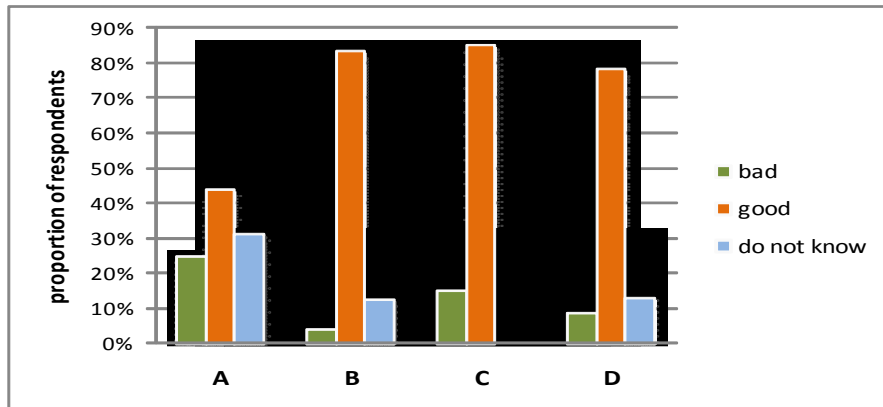


Figure 2: perception of respondents about the situation with the oil palm company

In fact, most respondents explained that representatives from the oil palm company came to the village and organized meetings with villagers to ask their permission to use their lands. They first and mainly met with the village leaders⁴, in the village or inviting them to meetings outside the village, but several meetings with all the family-heads of the village were also organized. They called it *sosialisasi*.

3.2.2 The case of the village A

A is the only village that dismissed the oil palm company (OPC). The OPC proposed an arrangement with A first to open OPP, but they refused, mainly because the OPC failed in providing them written guarantee on benefit sharing and on the security of their land rights:

“Until the end of my life, I won’t accept because there is no arrangement or agreement with them. No, there is no agreement with the oil palm people. Later, it’s like this, if they make a written agreement, a written contract, describing how it is going to be with the community, I agree!”(A’s kepala dusun)

However, the OPC established plantation on one part of the territory claimed by A, but considered as theirs by the people of the neighboring village (E) who are favorable to OPP. A bases its claim on the fact that A was the first village to be created and that A’s funders were the ones who cleared the primary forest, establishing by doing so a complete ownership right to the cleared area for them and their descendants (A’s current inhabitants). E was funded later and the area that they ceded to the OPC had only been lent to them by A. But E claims now complete ownership on this land. The conflict couldn’t be solved, because of the co-existence of the traditional and the official dispute resolution institutions, none of them being dominant. In fact, A wanted to solve the conflict by the traditional way, but E refused

⁴ The expression “village leaders” refers to the *kepala desa*, *kepala dusun* and the *patih*.

and proposed instead to go to the court, which was rejected by A because they consider it as unaffordable for a village that doesn't have the financial support of the OPC.

During the illegal logging period, the lack of clarity in the delimitation of the village territory triggered inter-village conflicts that were rather difficult to solve. The comments of several respondents confirmed the issue raised by (Yasmi et al. 2007). However, the intervention of the State and the army as arbitrary authorities allowed the resolution of the conflicts, by the physical delimitation of the boundaries between the villages where the conflicts were the most serious. Yet, no official map exists nowadays, and the suspicion provoked by the intervention of an Indonesian NGO doing participatory mapping shows that boundaries are still a sensible issue.

The conflict between the village A and E hasn't been solved so far, a situation that the leaders of A explain by the collusion between E, the OPC and the State. They feel helpless and don't know how to make their rights recognized. In this case, the confusion created by the legal pluralism characterizing the institutional environment and the absence of official maps delimiting the boundaries of the territory of each village clearly played against A. They enabled the OPC to get round A's refusal.

3.2.3 Designation process of lands to be planted

In the villages where the OPC has been accepted, the question of who designates the piece of land to be transferred to the company is also relevant to study intra-community tenure security. For tenure security to be high, the right-holders to a piece of land should be able to choose whether or not it could be handed over to the company.

The first element delimiting the potential plantation area was the permit issued by local government. Inside the permit area, the company would ask use rights transfer to each owner.

Three kinds of lands have been transferred to the company: private fallow lands, "empty lands" (with no owner) and commonly owned forestlands. Once the villagers took the general decision to allow the company on their land, they had to designate which plots could be used by the company inside the permit area. In order to organize and coordinate this process, the company asked each village to create an "UPA" (*Unit Pelayanan Anggota* – service unit for the members of the cooperative) and designated the leading group of the UPA who would function as an interface, a go-between the company and each individual land owner. The UPA would also meet with each family-head owning land inside the permit area and ask them if they were willing to allow the company to work on their plot.

When selecting the land on which the company would be allowed to work on, the villagers had to coordinate and frequently meet, because they tried to give a continuous block of land to the company. The UPA probably played an important role as a coordinator between the different family-heads. Although the information was hard to obtain, I assume this was one of the conditions the company required to plant the land, in order to reduce costs. Another reason that has been referred to several times was the concern of minimizing the risks of fire for the planted area. Because local people use to slash and burn their fallow lands to grow rice, the frequency of land fire is rather high in this area.

Many respondents really insisted that the company didn't force the villagers to give away their land. In the case someone has a fallow he wants to keep for himself, and if this land is surrounded by lands that other people own and want to give away to the company, he can keep his land, and it will be "enclaved" (this term, used by all the respondents, means that the company will take its position with a GPS, that the land won't be damaged by the company and that the owner is still free to use it as he wants).

However, some respondents (few) felt compelled to give away their land (11% of the respondents). One of them explained that his plot was too small to be preserved as an "enclave" and not attached to any "block" that was "enclaved". The others were afraid not to be able to control the fire when they burn their fallow and by doing so to damage palms (they would then have to pay a high compensation to the company for each destroyed palm). Yet, concerning private plots, it seems that the majority of the owners could choose which plots they would hand over to the company.

In addition, part of the land transferred to the company was commonly owned forest lands. The household-heads would also gather with the village leaders and discuss which one should be kept and which one could be cleared and planted. In fact, in each village, some forests have been intentionally protected from the land use conversion by local people. These are cemetery forests, for cultural reasons, *tembawai*, also for cultural reasons and because of the source of fruits they represent, as well as other *pulau*, in some cases, because of the stock of timber they represented for the villagers now and for their descendant later. In B and D, mountainous areas where also conserved, one of the reasons why is the fear that the river originated from there and used as the main source of fresh water, become dirty. In C, people insisted on the fact that forest lands with big trees (*kayu besar*) hasn't been converted and "kept for the grandchildren later". This kind of decision didn't seem difficult to take, as the cultural and economical value of certain kind of *pulau* appears to be obvious to everybody.

3.3 *The arrangement: modification of land rights and access, compensation*

3.3.1 *The arrangement between the oil palm company and the villagers*

According to the information given by villagers, the company is only renting their land, which means the company has use-rights to these lands for the next 25 to 30 years (duration of the productive plantation period). On the land that has been planted, villagers lose their use-rights, but they are still considered as the owners of the land, and they expect to get their plots back at the end of the contract (25 to 30 years), and then to have the choice to let the company achieve a new plantation if they want to.

For each hectare that is transferred to the company, each owner received 250 000 Rp as “*simpak beliung*” (to compensate them for the labour they or their ancestor had to provide to clear the land when it was still common forest lands).

As said before, a portion of the land that has been planted was actually common-land. The villagers decided to divide the benefits received from the company for these lands, so that each family-head (in D and B) or each household (in C) would receive the same amount of money from these commonly-owned lands.

The right of the land-owners to the stream of benefits derived from the land is partly conserved, in the sense that for 20% of the area that has been transferred to the company, the owner receives the net benefits from the extraction of the fruits. This part of the planted area is called “plasma” plantation. For the rest of the plantation, (80% of the total planted area), the benefits go to the company, as illustrated in the following figure:

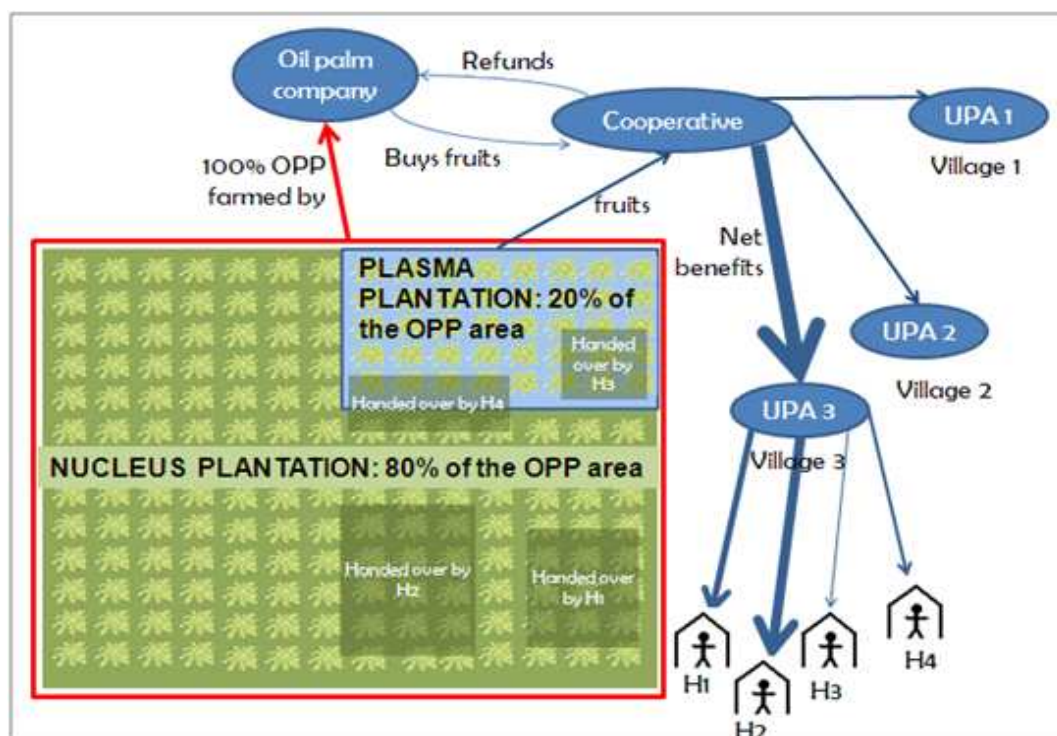


Figure 3: Benefits sharing between the oil palm company and villagers

Inside the community the benefits will be shared according to the number of ha each family-house has given away to the company. So if somebody gave 10 ha of his own lands to the company, he will receive the benefits generated from 2 ha of plantation. In addition, each family-head (in D and B) or household (in C) will receive benefits associated to the common lands that have been given away.

For example, if 100 ha of common lands have been planted by the company in the territory of a village of 20 households or family-heads, each household (or family-head) will receive each month the net benefits generated from $20\% \times 100 \text{ ha} / 20 \text{ households} = 1 \text{ ha}$. Although no document has been signed to guarantee a fixed or a minimum amount, the company used the example of its plantation in Riau, Sumatra to convince the villagers, where each ha of plasma plantation generated a net benefit of 2 to 3 millions Rp. In Riau, each household possesses 1,8 ha of plasma plantation, which means that each household receive 4 to 5 million Rp each month.

A cooperative regrouping all villagers owning part of the plasma plantation (from the transfer of their own private land or common lands) will be responsible for the redistribution of the benefits according to these rules.

The right of villagers to get benefits from their lands has been at least partly conserved, at the level of the village and of the individuals. However, the distribution of benefits between the OPC and the communities (80% and 20%) is highly unequal, and the costs the OPC has to bear for the rent of the land in themselves are very low.

The whole plantation (both plasma and non-plasma plantation) is managed and grown by the company, but the costs associated to the management of the plasma plantation have to be reimbursed to the company by the cooperative (so, indirectly by the land-owners).

During the first 4 years, the plantation is unprofitable because there isn't any production yet. The costs are paid on credit by the cooperative to the company (the supervisor of the cooperative estimated the debt to 47 millions of Rp for each ha). When the plantation begins to be productive, the costs associated to the care, the harvesting of the plasma plantations, the management of the cooperative, as well as the payback of the credit are deduced from the profits earned by the sale of the harvest. The money remaining (which is expected to be around 70% of the gross benefits) is then redistributed to the land owners⁵.

Thus the amount of money that villagers will receive each month corresponds to the net benefits generated each month by the sale of the yield in the plasma plantation, which means that the costs borne by the company for the plasma

⁵ This system was explained to me by the supervisor of the cooperative who was living in B.

plantation will be deduced. Consequently, we can say that the renting of villagers lands by the company is virtually costless in financial terms, except the 250 000 Rp/ha paid at the beginning. However, most villagers didn't complain about this fact, and actually they didn't even mention it, probably because most of them feel that that they will anyway get more benefits from their lands with the oil palm plantation than before.

3.3.2 Modification of access to land

The oil palm plantation was established on forest lands mixed with fallow lands that were regularly used. Of course it reduced the agricultural area available for local people, as shown in the figure 4. Before the arrival of the oil palm company, about 25% of the households had more than 20 fallow lands to farm whereas now, this figure dropped to 4%, and the proportion of households owning less than 10 plots to farm increased considerably. As most people farm on their own lands, it means that the area available for each household to farm has been reduced.

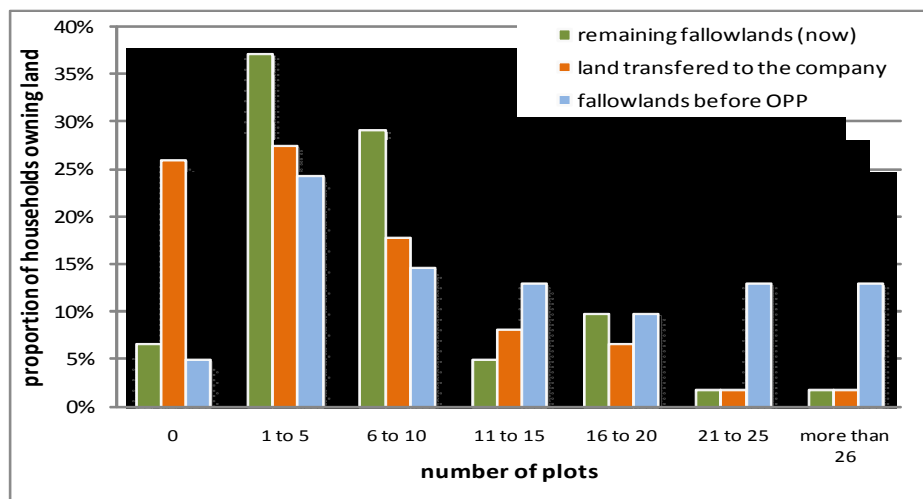


Figure 4: number of plots owned by households before and after the oil palm plantation and number of plots handed over to the company

More important is the question of the perception of villagers on land scarcity. Do they feel that there isn't or won't be enough land available for them?

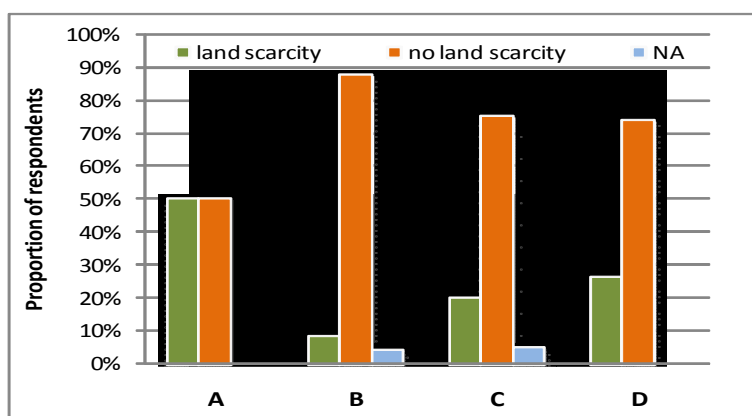


Figure 5: perception of future land scarcity in each village

As shown in the figure 5, most villagers think that they still have enough land to cultivate, except in village A (which might explain their refusal of the OPP). In the studied region, the demographic density is very low, each village having a territory of at least 4 000 ha for less than 70 households (the average demographic density in Kapuas Hulu is 7 persons/sqkm according to the *Badan Pusat Statistik*). However, some households have few lands to farm (more than 35% have less than 5 plots) and could face decreasing yields if they keep slash and burn extensive practices, as some villagers often recognize it. Many are considering or begin to use fertilizers and herbicides, although these inputs are expensive. They rely on the income from their work in the OPP as daily labourers and the future benefits generated by the plantation to intensify their agricultural practices and be able to farm the same plot on a continuous basis, or even buy the majority of their food.

For the most vulnerable households (having less than 10 fallow lands and no regular nor considerable income), Clerc (2010) calculated the benefits they would get when the plasma plantation is mature (8 years). Each household would get more than 1 000 USD per month (in the village B, C and D, that accepted the OPP), which is much more than the average monthly expenditure estimated to 30 USD/capita in West Kalimantan in 2005, according to the *Badan Pusat Statistik* (<http://kalbar.bps.go.id/tengah.htm>).

To conclude, oil palm plantations reduced the availability of agricultural land for villagers and some of them will have to intensify their practices to maintain their yields. However most don't consider it as a problem, as they expect to receive high incomes from the plasma plantation that will enable them to buy inputs or even to stop their agricultural activities.

3.3.3 Modification of access to forest resources

The oil palm plantation was established on forest lands mixed with fallow lands and villagers conserved some of their forests. Yet even converting fallow lands to a monospecific plantation is a radical ecological change and has environmental consequences. Most respondents observed a decrease in forest resource (cf figure

6), especially game and fishes. The decrease in timber sources appears to be also partly due to the land use change (but a probably big part of the former timber stock had already been removed during the illegal logging period). In total 66% of the respondents noticed a decrease in forest resources while 31% identified the OPP as one of the cause to this decrease.

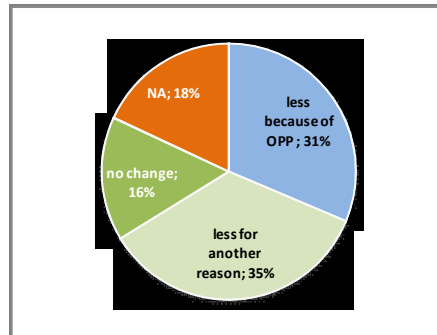


Figure 6: respondents' perception of the evolution of forest products

The Figure 77 shows that the more people use the forest (and thus the more they are dependent on forest resources), the more they tend to observe a loss in forest resources, which suggests that the impact of OPP on forest resources is more felt by forest-dependents individuals.

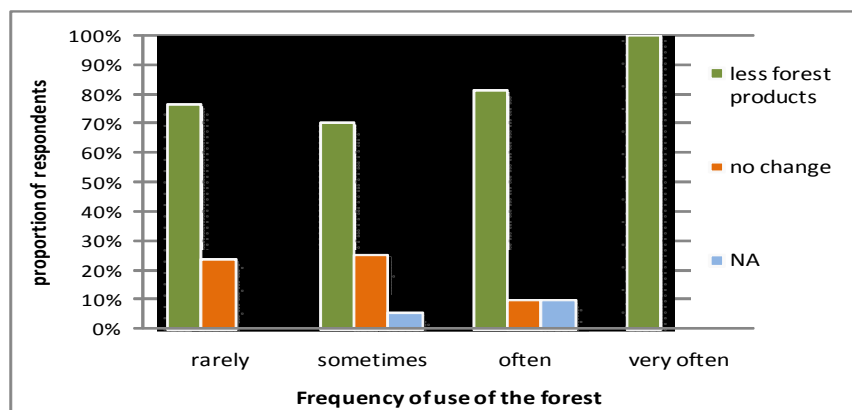


Figure 7: perception of forest resources decline and frequency of use of the forest⁶

Another phenomenon related to the arrival of the oil palm company is the “commoditization” of the relationship between villagers and their natural resources, as a food-commodities market is developing : villagers (and newcomers) getting an income from their work in the plantation tend to buy more basic goods than before (instead of searching and collecting them on their own). Consequently, a higher proportion of the non-wood forest resources such as food products from the forest are extracted to be sold.

⁶ “rarely”: people going to the forest 1 to 3 times a year, “sometimes”: 1 to 3 time a month, “often”: some times in a week, “very often”: every day; these categories are exclusive; cf appendix 6 and 9 for original data

This trend, combined with the reduction of forest and wood lands, corresponds to a higher pressure on the remaining forest resources. This might have negative consequences on the households receiving the lowest income, which are probably more dependent on forest resources for their own subsistence. But as said before, this is expected to be compensated by the high benefits each household will receive from the plasma plantation.

In fact, most respondents don't consider that their rights to forest resources are or could be threatened, as shown in the figure 8. None of the people observing no change in forest resources feel their rights to the forest threatened while more than 10% of those observing depletion feel their rights to use the forest as potentially threatened in the future. However, the p-value of Fisher exact test is 0.3556 (if missing data are excluded), which shows that the feeling of threat on forest rights is not correlated to the observation of forest resource depletion. In fact, only one respondent, a member of the village A, perceived the misappropriation of forest resources by the OPC as likely.

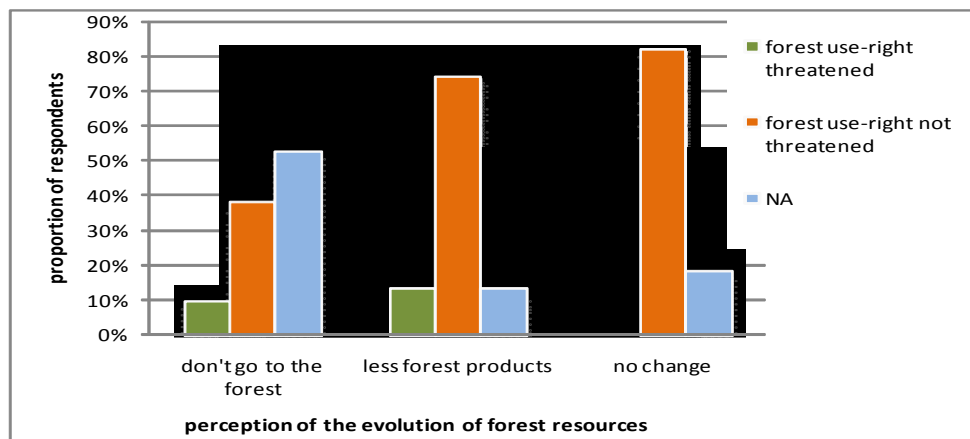


Figure 8: perception of the evolution of forest resources and perceived forest use-rights security

This analysis highlights the fact that while many respondents observed the decrease of forest resources and land, they are satisfied with the OPP and don't perceive it as a threat for their land rights and access to the forest. They actually receive other benefits in the form of wage labor but also the promise of high financial return when the OPP will be productive. In addition, they didn't consider the land transfer to the company and the related destruction of some forest resources as imposed, because the decision to do it was made by them. As a consequence, except for some respondents in A, the villagers don't consider that their land rights have been threatened nor violated by the OPC.

3.4 Local people's degree of control in right allocation process

The fact that the OPP have been established with the consent of the local communities in most villages and that they are supposed to get compensations they

consider as sufficient is not enough to consider their land rights as secure. The question of the bargaining power of the villagers and their degree of control in the process of right allocation between them and the company is also relevant. One can expect that the higher the bargaining power of the community, the higher the incentive for the company to respect the arrangement described above, and to honor their promises. At an individual level, the higher the participation or the control in the process defining the contract/arrangement between the community and the company, and more generally in decision-making processes about land, the lower the probability to lose one's right during these processes.

3.4.1 Communities with a low bargaining power

Two main factors influencing a negotiation process are the level of trust and the repartition of power. In our cases, the level of trust between the company and villages was pretty high (except in A's case) and the power unequally distributed between the company and the local community when it comes to negotiation on compensations and benefits sharing.

Just one village, D, tried to engage in negotiations on the 20%/80% ratio and on *simpak beliung*. However, they finally accepted the initial proposal of the company, which corresponds to the figures mentioned above.

Why did they "lose" the negotiations? First, from the beginning they agreed with the project of the company, they agreed with the idea of OPP. They hesitated at the beginning, as explained before, but never directly opposed the very idea of oil palm plantation by a private company.

Second, they didn't try to agree with the other villages on a common strategy to require higher compensation: the company came to D first. The people told them they wanted higher compensations. The company said that it would be difficult to accept it because they would lose too much money, and that they had to think about it and ask to higher level of hierarchy inside the company. Then, the villagers didn't hear from the company for several weeks. During this time, the company visited other villages (B and E) who accepted their proposal. When the company came back to D they explained to the villagers that the other villages already accepted the arrangement, and that it wasn't fair to apply different level of compensation to the different villages. Then, the same conditionality was applied in all the villages.

Third, some people explained that compensations had already been agreed with the district government and consequently couldn't be changed because it had become a government rule. They didn't refer to any official document and when asked how they knew it, they answered that they heard it from the OPC, which reflects their low degree of information on regulations.

To sum up, the oil palm company actually asked for the permission of villagers, and in doing so recognized their property rights to the land although these rights are not based on official property titles but rather on local customary tenure system. However, the local people had a very low bargaining power about the compensations associated with the right-transfer, and were finally ready to accept a strongly unbalanced share of benefits. One of the main reasons according to me is that local people want to quickly improve their economical situation and have few information about other cases of oil palm plantation. In such a remote and isolated area from the economical center, they currently see the oil palm plantation as the only way to reach better living conditions.

3.4.2 Differentiated degree of control inside communities

Inside the villages, the decision-process to allow the oil palm plantation was apparently fairly participative.

It was lead by village leaders in consultation with the local people and required their approval. Internal meetings were regularly organized until a common agreement was achieved inside the village to accept the company. Each household would send to these meetings the family-head ruling the household, most of them being male. The final decision to allow the oil palm plantation was only reached when all household representatives approved it. This is reflected in the **Error! Reference source not found.** showing that, except in A, the majority of the respondents considered that allowing the OPC to work on the village territory was a decision made by the whole village and not only by their leaders.

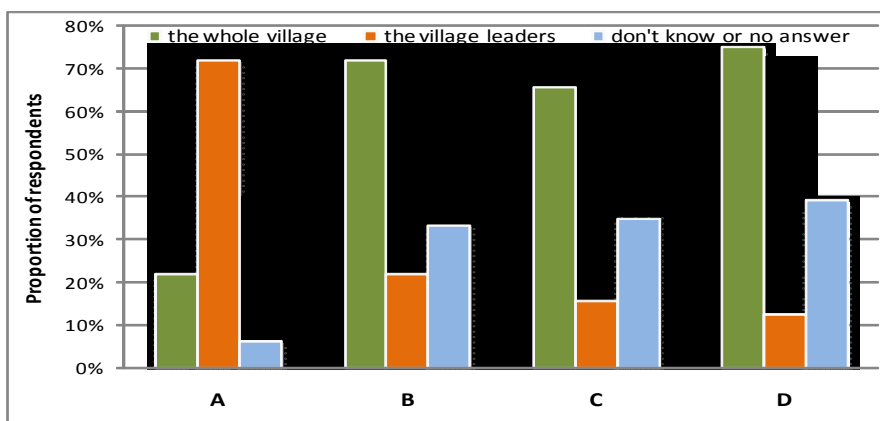


Figure 9: Answer to the question "Who made the decision to allow or not the OPC to work on the village territory"

The fact that most people told me that the whole village made the decision to transfer the land to the company doesn't mean that each villager had the same degree of control on the final decision.

First, the village leaders seem to have the strongest influence on the decision, through their influence on individual's own opinion (which is an influence of the local social norms). It is related to the fact that most villagers recognized their authority and, what seems even more important to me, most villagers apparently considered them as the individuals the most able and skilled in the village when it comes to make collective-level decisions.

In addition, some people felt compelled to give away their land because the surroundings of their plots were to be planted and they didn't wanted to bear the risk of unintentionally damage the palms when burning their fallow lands. We can then deduce that people owning lots of land inside the plantation permit boundaries had more influence in the process of drawing the palm plantation, fallow-lands and forest landscape.

It is also obvious that people who don't own private land, although they are few, have less control in this process, because they don't have lands, but also, it seems that they are less involved in the decision-making process on the question of common-lands. Some didn't join the meetings, and other explained that because they didn't have lands to give away, they were not in a position to make the decision. However, it is important to mention that none of them complained that the oil palm plantation reduced their access to the forest, and most households did have private plots inside the permit area.

The categories of people who had the less control in decision making were women and young people. As said before, most of the meetings gathered household-head or representative. One to 3 family (or couple) would live in the same house. For each couple, the male has the status of family head. Exceptionally, when the male is dead or isn't at home, and when there isn't another mature male the house, the family-head status is transferred to the woman. When only one family (couple) lives in the house, the family-head participates in the village meetings. When a house has several family-head it is usually the older family-head who participates to meetings. Because of this organization, most women don't participate in meetings, as well as young people as long as they live in their parents' house. When a decision about land is made inside a household, for example the decisions to hand over plots to the oil palm company, most women don't participate. 85% of the male interviewed said that they participated in decision making in their household whereas 35% of the female interviewed did.

To sum up, gender, age, social status and number of plots owned appeared to be the main assets affecting the degree of control each individual had. It seems that women and young people have land rights that are less secure because they are usually not fully involved in decision making processes.

3.5 Enforcement of arrangement

As explained before, the OPP have been established with the consent and the participation of the usual decision-makers of local community (except in the village A because of unclear boundaries with the neighboring village). The villagers accepted to hand over some of their lands because they were promised job opportunities, high benefits and the company told them that their lands would be given back to them at the end of the plantation period. This arrangement in itself doesn't appear as a threat to their land rights as it is based on the recognition of their customary rights. The tenure security of villagers is rather related to the enforcement of this arrangement. To which extent is the oil palm company likely to fulfill its promises? To which extent are the villagers able to ensure the enforcement of the arrangement between them and the company? More generally, to which extent are they able to defend their rights, as a community and as individuals?

3.5.1 Enforcement of the arrangement, now

The first way to answer this question is to look at the current behavior of the company about the respect of the boundaries of the lands handed over by villagers and the payment of the compensation.

In general, the OPC respects the boundaries of the land the communities handed over. There are only few cases where the OPC has encroached on the land the local people wanted to keep for themselves, most of them occurred in the village C.

The UPA and the cooperative are the entities responsible to supervise on the ground the activities of the company and to ensure that the lands the villagers designated as "enclaves" were not worked on by the company. It seems that they play a key-function. In D, the leader of the local UPA, who was also the *kepala dusun*, explained to me that he went everyday in the plantation area to control that there were no encroachment on the enclave lands. He considered that without this control, the staff of the company would probably damage these lands:

"- From the beginning until the end, I go to the field, in the area where the company works..."

- You go there to do what?

- to guide the people there, from the beginning to the end. That's why I have to go there every day now. I'm afraid they work on the lands that are "enclaved", that are not handed over."

The supervisor of the cooperative, who was living in B and was involved in the supervising activities there, made the same comments. More time on the field would have allowed me to interview more people from the cooperative and the UPA and to produce more reliable conclusion on this aspect.

3.5.2 Enforcement of the arrangement, in the future

Because the plantations have been established recently and are not yet mature, only hypothesis can be made about this question, especially when it comes

to benefit sharing. As said in the last section, it will partly depend on the management of the cooperative, the control the local communities can have on it and their ability to defend their right in case of conflict.

As the interface between the company and the local communities and as the structure responsible of the financial management of the benefits derived from the plasma plantation, the cooperative is assigned a critical role for the tenure security of the villagers. The importance of the management of the cooperative has also been emphasized in other case studies on the impacts of oil palm plantations of local communities (Rist, Feintrenie, and Levang 2010).

A low degree of trust between the community and the cooperative can create conflicts between them, a situation the OPC would tend to manage by directly taking over the complete management of plasma plantation, thus decreasing further the degree of control the villager can have on it (Feintrenie, Chong, and Levang 2010). But even a situation with a high level of trust between the communities and the cooperative can threaten their tenure security if the cooperative captures a part of the benefits or is not equitable in its way to redistribute them. This is why the degree of information of the land holders and of accountability of the cooperative is critical.

Regulation mechanisms have been designed by the company to ensure the good management of the cooperative. Although the current and first cooperative leaders were not elected (they had to pass a test and an interview with a panel composed of company representatives, village-leaders and government officials), the leaders of the cooperative will be elected by the landowners once the palms are productive. The cooperative also includes a supervising structure, separately elected, who will be responsible to check the compliance of the cooperative to the contract established with the company, and will be entitled to have it audited by the company.

Nevertheless, the highly unbalanced distribution of information involves a risk of elite capture by the leaders of the cooperative and of manipulation of the cooperative by the company at the expense of the local communities. One of the most important observations I made on the field is that none of the villagers was in possession of any signed, written contract specifying the arrangement with the company⁷ and that very few villagers actually knew how the plantation, and the plasma plantation in particular, would be managed. The rule of the 20%/80% for benefit sharing wasn't known by many people, and even fewer respondents could tell the exact role of the cooperative.

The strategic position of the cooperative appears thus again when considering tenure security through the lenses of documents and information about the land transfer contract. The main people who could give me details on the arrangement

⁷ Yet, they had signed a document when they received the *simpak beliung*, but it was kept by the company.

with the company were the members of the UPA and the cooperative leaders or some individuals having special function in the company. The few individuals who knew the reasons for the absence of written contract explained me that these documents would be created once the plantation were productive, and that they would be kept by the leaders of the cooperative. The villagers could then ask for copies but couldn't be given the original documents.

According to the supervisor of the cooperative, the ground-contract framing the arrangement between the company and the villagers was the Memorandum of Understanding (MOU) contract, which determines the modality of the attribution of use-rights to the land to the company. As explained by him, this contract hadn't been signed between the company and the local community, but between the company and the cooperative leaders as representatives for the villagers. The cooperative supervisor told me that the absence of individual contracts had been decided at the level of the district in order to prevent individuals from directly bearing the burden of the debt associated to the first un-productive years of the plantation. He cited the example of another district of West Kalimantan where individuals were not able to manage the payback of the credit and were finally compelled to sell their land to reimburse their debt.

Yet, the majority of the respondents didn't seem to know all these information and this may undermine their ability to defend their rights, especially in case of conflict with outsiders or the cooperative. It is possible that more information will be shared when the oil palms will begin to be productive, but it is not sure. In fact, during my field work, no public meeting about oil palm were organized anymore inside the village and villagers didn't seem to have initiated or planned any information-sharing process. Most villagers didn't express any discontent about it, they seemed to accept it, which could be explained by the trust existing in the villages.

The last aspect that could endanger the land rights of the villagers on the long run is the question of the ownership of the planted lands after the leasing period, and of the related rule that will be enforced. It is clear that according to most villagers, the OPC made the promise to give their land back to them at the end of the productive period, that is to say, in 25 to 30 years. However, the absence of land titles, combined with the ambiguity created by the legal pluralism characterizing the institutional environment introduces the threat for the customary owners to lose their land if the government claims ownership on them. This was perceived by few respondents who worked on a daily basis in the closest town, which probably broadened their access to information in comparison to the other villagers.

It is rather unlikely for villagers to lose their rights on the plasma plantation because the cooperative is supposed to document their ownership on this part of the plantation, but it might happen with the core plantation area.

CONCLUSION

One of the main findings is that the majority of the villages had good relationship with the OPC and voluntarily handed over their land. Apart from the case of A (which is also debatable), my study doesn't support the accusation that OPP systematically involves land-grabbing.

The system of benefits sharing proposed by the OPC to the local communities as well as the related working opportunities convinced them to entrust their land to the company. The fact that they were apparently given the authority to reject or accept the OPC's operations on their land and to designate which land would be handed over also improved the social acceptability of OPP and allowed them to preserve and maintain their control on the "enclave-lands".

Yet the allocation of lands for the OPC is also the outcome of a negotiation process between actors (the OPC and the village) having highly unequal power. As shown in the case of A. The outcome of the interaction between the OPC and the local communities is an agreement satisfying most villagers while at the same time restricting their right to the stream of benefits to only 20% of their initial land.

The decision-making process inside local communities is based on consensus, which enabled the representative of each household to participate in the decision about OPP. In addition, the land-owners' right to decide whether or not to hand over their land was recognized, although limited by the risk inhering in reserving plots for slash and burn agriculture in the middle of a high-value oil palm plantation. However, and the decision making process excluded some category of villagers, especially women and young household members, thus indicating a lower tenure security for these persons.

The question of the ownership of the planted land after the leasing period is critical in assessing the long-term tenure security of local communities. The scenario of the State taking over the whole OPP appears rather unlikely, because the villages are located in a strategic situation, in the borderland with Malaysia, where concerns about national security are an incentive for the government to avoid conflicts with the local population. However, it is not unlikely for the local communities to lose part of their land.

Finally, the central role the cooperative is destined to play in the management of the plasma plantation suggests that the tenure security of the villagers will strongly depends on this new institution. The concentration of the information in the cooperative leaders (and to a lesser extent in the village leaders) and the tendency of the village leaders to reap more benefits from the OPC than the other villagers indicates that there could be a risk of elite capture of information and benefits from the plasma plantation. The extent to which it could threaten the tenure security of the villagers is beyond the scope of this study. Yet from a theoretical point of view, elite

capture is a factor that potentially reduces tenure security for the non-elite right-holder because it may reduce the ability of the local authority to defend his right in case of conflict.

In any case, the assurance for the villagers not to lose part or all their land rights in the future depend on their capacity to make the OPC honor its commitment, to avoid elite capture of information and benefits and to control the activities of the newly created cooperative. More research including the interviews of external actors is needed to get a more complete picture of the land tenure issue. A review of the official documents, especially the contract signed between the cooperative and the OPC, the document from the OPC signed by villagers as well as the local regulation would also be necessary to have a more precise assessment of the tenure security of the villagers.

The situation with OPC discovered *Iban* communities in Kapuas Hulu doesn't match with the scenario of violent land grabbing described by several NGOs, but several threats to local people's land rights have been identified. I hope that this study will contribute to a better understanding of the impact of OPP on local communities' tenure security and to the designation of policies able to minimize the negative social impacts of OPP while maximizing the positive ones. Such policies are essential because OPP will probably continue to develop, especially in Indonesia (Feintrenie, Chong, and Levang 2010).

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