

# The role of village assemblies in overcoming barriers to smallholder inclusiveness: examples from Indonesia

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Smallholder harvesting oil palm fresh fruit bunches. Photo: Tropenbos Indonesia



**“The key enabling condition for smallholder inclusion is good village governance.”**

## Introduction

Indonesia is the largest palm oil producer in the world. Palm oil exports are the country’s largest source of foreign exchange, contributing US\$23 billion in 2017 (Winrock International 2017). About 34% of national crude palm oil production is from smallholders, but there are barriers to increasing smallholder inclusion. These include lack of land tenure, poor productivity, vulnerability to price variations, the role of middleman, requirements for compliance with certification (Roundtable on Sustainable Palm oil, or RSPO; national Indonesian Sustainable Palm Oil, or ISPO) and aging plantations that require replanting after 25 years (IRE 2018).

Unlike with some other crops such as coffee, cocoa and rubber, processing of oil palm is dependent on industrial mills, since fresh fruit bunches must be processed within 48 hours of harvesting. This

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explains why smallholder oil palm development originally took place in nucleus estate-smallholder schemes, where a company had developed oil palm on a land concession. Most palm oil production is managed as nucleus estates, some in partnership with local communities where the company provides inputs, technical assistance and finance, with ownership transferred to smallholders after the cost of establishment is repaid. In the last ten years, after witnessing the economic improvement of their neighbours involved in palm oil production, farmers have also started to develop independent plantations; for example, on their own farmland or by cutting secondary forest.

Unfortunately, despite a government decree (Law No. 39/2014) which states that the purpose of plantation development is to improve community welfare, policies related to oil palm are known to have increased the vulnerability of oil palm farmers on multiple occasions, especially independent smallholders. Policy often favours larger companies, which limits opportunities for local governments to make efforts to support smallholder oil palm farmers. The widespread nucleus-smallholder relations are rarely inclusive; consequently, they are often unfavourable for independent smallholders and community empowerment (IRE 2017). The issuance of a Presidential Instruction (INPRES No. 8/2018) concerning the temporary suspension (moratorium) of land expansion and evaluation of oil palm plantations should enable smallholders to play increasingly bigger roles in the oil palm plantation industry, since smallholders will potentially become the target of plantation area expansion by large growers.

## Models of palm oil production in Indonesia

In Indonesia, there are five main models for smallholder oil palm cultivation (Daemeter Consulting 2015). These are (a) small-scale independent farmers linked to the supply chain via local agents; (b) larger-scale independent farmers linked to the supply chain via local traders or mills; (c) farmer groups or farmer-managed cooperatives that trade directly with mills; (d) plots managed by smallholder farmers and linked with company plasma schemes; and (e) company-managed, smallholder-owned plantations on leased community-lands. These five models are present to varying degrees in different areas. They have varied benefits and risks in terms of degrees of inclusivity, productivity, farmer profitability, access to reliable markets and quality inputs such as seedlings and fertilizer (Daemeter Consulting 2015).

This article reports on a comparison of three institutional models for smallholder oil palm plantation in Ketapang District, West Kalimantan, equivalent to models (a) and (d) of Daemeter Consulting (2015), and an assessment of the level of inclusivity and the relative impacts. Findings include the opportunities to overcome barriers due to lack of inclusivity by intensifying the role of village government.

## Organization and setting

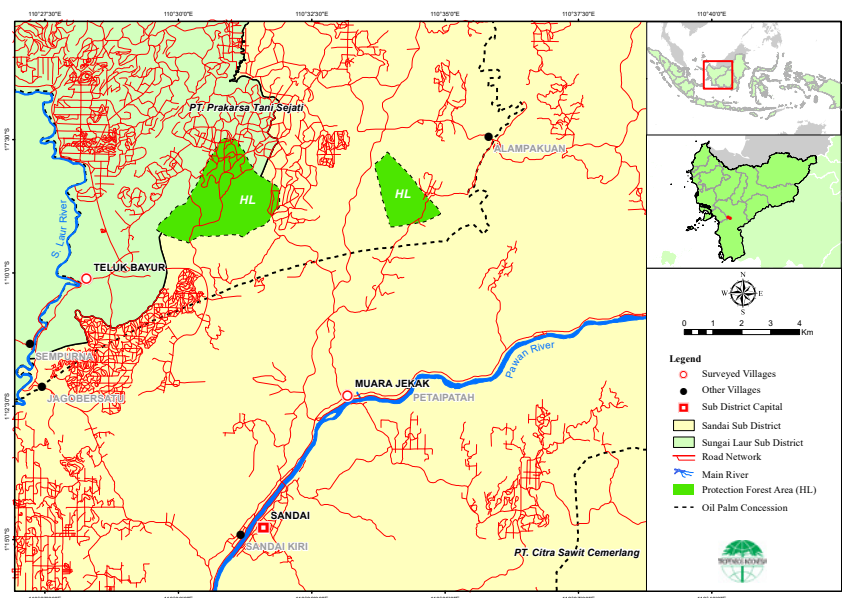
Until the 1980s, Ketapang was covered with forest, which was then heavily logged to supply global markets with tropical timber. This was followed by isolated plantings of oil palm. In 2004, the local government leader (the regency head or *Bupati*) began to push for a major expansion of oil palm plantations. Considering the growing development of smallholder plantations with different institutional arrangements at the village level, the role of village governments was strengthened after the issuance of Law No. 6/2014, whereby villages became self-governing communities with authority based on governance rights within their jurisdictional areas.

Three research questions are assessed in this article: (a) What smallholder organizations best enhance inclusivity? (b) How can village governments ensure equitable distribution of benefits in the villages? (c) What role can village business units (*BUMDes*) play?

In 1989, Muara Jekak and Teluk Bayur villages fell within the plantation area permit or IUP (*Ijin Usaha Perkebunan*) of the Prakarsa Tani Sejati company, now part of Global Palm Resources Holdings Limited Group and member of RSPO. The organization holds permits for 20,000 ha, and by law 20% of this must be managed in partnership with local communities. About 12,000 ha is designated as nucleus plantation, for which the company received a legal concession permit (HGU) from the National Land Agency, while 3,400 ha is allocated as plasma plantations and is managed by three villages in the surrounding concession: Muara Jekak, Teluk Bayur and Jago Bersatu.

Research was undertaken in two villages in the Pawan watershed (Figure 1) on undulating terrain between hills covered with protected secondary forest, some 300 km from Ketapang City, and dominated by ethnic Malays. Muara Jekak (Sandai Subdistrict) has 783 households and is very accessible, near Sandai town on the Pawan River and the provincial Pontianak-Ketapang road. Teluk Bayur (Sungai Laur Subdistrict) has 800 households, is on the Laur River and is less accessible. Prior to 2001, most villagers grew rubber trees on plots of 5 ha on average, before developing oil palm plantation, although some still retain rubber and traditional fruit-based agroforestry (*tembawang*).

**Figure 1. Research sites in Muara Jekak and Teluk Bayur villages, Ketapang District, West Kalimantan**



Primary data was collected using direct observation and semi-structured interviews. Interviewees were selected based on suggestions by village officials, and supported by secondary data from literature reviews. The collected data were analyzed using descriptive and quantitative approaches. Twelve farmers from each village were interviewed, as well as six village elders and three officials.

Table 1 provides an overview of the profiles of the three types of smallholder plantations included in this research and Table 2 summarizes the results of the various analyses per household.

**Table 1. Profile of smallholder plantations in the study area**

Item	Plasma managed by village (PMV)	Plasma managed by individual farmer	Independent
Plantation developer	company	company	farmer
Source of capital	company	company	village (PMV)
Development and maintenance during four-year establishment period	company	company	farmer
Maintenance after establishment	village	farmers	farmer
Costs of farm inputs	village	loan from company	farmer
Company cost recovery during establishment period	company takes 30% of each sale	company takes 30% of each sale >US\$70	village cut 30% of each sale >US\$70
Land ownership	village	farmer	farmer
Report of FFB production	village	company	not relevant
Transparency of production reports	highly transparent	poor	not relevant
Management inclusiveness	high	poor	not relevant
Deposit for replanting	available	not available	available
Benefits to social development	high	low	poor
Effort toward certification	none	none	none

### Plasma managed by Muara Jekak village

In 1990, the company informed Muara Jekak villagers that they would establish oil palm in partnership with the local community. After three years of negotiation, the agreement reached was that the village would receive 150 ha of plasma plantations to benefit only 75 of the 783 households. This was further confused because the company conducted land clearing based on the IUP plantation area permit rather than through negotiation with individual land owners. Realizing the problem, villagers met and agreed that their land would be managed collectively by the village government. Administrators would be rotated every two years through village general assemblies, with day-to-day management subcontracted to professionals. This resembles model (d) of Daemeter (2015).

Seeing the clear benefits, management by the village was well organized, allowing rapid repayment of the loan for plasma establishment, followed by annual net profits of IDR3-4 billion (US\$210,000–280,000.) The labour needed to manage the plantations was drawn from men and women villagers paid the government minimum wage. Women are generally involved in harvesting, receiving IDR600 (US\$0.04) per kg. The village sold all its harvest to the company, which is a RSPO member, but so far, the village itself has not yet applied for certification.

The revenue was equitably used for enhancing community welfare. The village council paid the health insurance of all villagers, and educational fellowships of IDR100,000-500,000 (US\$7–35) per





Plasma managed by Muara Jekak Village Government, about 20 years old. Photo: Tropenbos Indonesia

month to students from kindergarten until university. The village general assembly also decided to invest in selected infrastructure development, and part of the profits were deposited in a fund to cover the costs of replanting after 25 years. The remainder of the annual profit was shared equally among all households.

Since 2010, the village assembly has also provided individual loans for developing independent smallholder plantations. These were focused on those who had legally protected productive land but limited resources to establish oil palm plantations. For the sake of equality, loans are limited to 1 ha per household. Knowledge of and experience in good agriculture practices obtained from nucleus plantations had been fully implemented without constraints. This had increased the monthly productivity of fresh fruit bunches to 2 t/ha — nearly equal to that of nucleus plantations. According to village officials, there is scope to raise yields by a further 50% or more.

### **Plasma managed by Teluk Bayur farmers**

Based on an agreement between a company and Teluk Bayur village council in 2000, 490 ha of plasma were established. After four years of maintenance, management of 2 ha each was handed over to 245 farmers. Here, plantations are managed by individual farmers in close cooperation with the company through cooperatives and not collectively by the village. This resembles model (d) of Daemeter (2015). Another common system that involves leased community land resembles model (e) of Daemeter (2015). In that model, the company does not hand over land to farmers but controls the management and provides regular reports on the financial situation.



Smallholder harvesting fresh oil palm fruits. Photo: Tropenbos Indonesia

Farmers as individual owners were responsible for maintenance and could choose how to sell their fresh fruit bunches. Since all farm inputs — such as fertilizers, agrochemicals and contracted labour — were supplied by the company, with loan repayments deducted from sales, all farmers continued to sell to the same company. The selling price was defined by the local government, but the company controlled sorting and quality grading and defined total monthly selling weight. On average, each farmer produced from his or her 2 ha some 2.4 tonnes of fresh fruit bunches per month (120–150 bunches, each weighing 20–30 kg) at an average price of IDR1,200 (US\$0.08) per kg. The gross income from oil palm per farmer was thus about IDR2.8 million (US\$195) per month, or IDR2 million (US\$139) net after deduction of maintenance costs.

However, interviews indicated that these farmers had a poor grasp of financial management and that they were not saving any money for future replanting, although their plantations were more than 15 years old. Furthermore, the extra income gained was only able to support their children's education costs until secondary school, and no further.

### **Independent smallholders in Muara Jekak village**

Establishment of independent plantations resembling Daemeter model (a) was funded by loans from the village government that cover the costs of land preparation and seedling procurement. Maintenance costs during establishment varied among farmers, so loan amounts varied from IDR6.5 to IDR18 million (US\$451 - US\$1,250) per ha. Repayments to the village were made through 30% deductions of total earnings from farmers who received at least IDR1 million (US\$70) per month.

In 2016, Muara Jekak village established *BUMDes*, a business established through a village general assembly, that is managed by professionals and independent of village officials, although most of

the capital is village owned. *BUMDes* is a social business to manage village assets, enhance economic development and community welfare and leverage additional village revenues. As such, its activities are not allowed to harm existing community businesses, but should strengthen capacity and overcome barriers through facilitation, delivery of services, synergizing efforts and creating added value. *Bumdes* play a role of intermediary, supplier and distributor. With increasing annual village funds delivered by the central government since 2016, each village or village group has been stimulated to establish *BUMDes* to promote local products.

Since 2016, the number of *BUMDes* has mushroomed, but most do not function optimally; the one in Muara Jekak is considered exceptional. It has been active in addressing poor pricing by intermediaries (middlemen), and in distributing high-quality oil palm planting materials and fertilizer, which are not easily obtained by smallholders. It also functions as a transportation service provider from plantations to collection points.

## Discussion

Smallholder inclusion is highly influenced by the equitable distribution of benefits. This is clearly shown by the village-managed plasma plantations. Although the village managed only 150 ha, with good institutional governance the revenue from this supported village infrastructure development and was distributed fairly to all village households. More importantly, it has triggered smallholders to establish independent plantations. If not for this initiative, farmer-managed plasma plantations would still be very dependent on the company more than ten years later, and income would be less than for independent smallholders. In all cases, income generation is highly susceptible to price fluctuation, and the sustainability of future income after the first rotation remains uncertain, with no savings for replanting.

**Table 2. Income per capita and source (IDR per year) between two types of farmers in two villages**

Income source	Income per household				Income per capita	
	Independent		Plasma		Independent	Plasma
	Muara Jekak		Telok Bayur		Muara Jekak	Telok Bayur
	IDR	%	IDR	%	IDR	IDR
<b>1. Agriculture</b>						
Oil palm plantation	30,971.111	28	58,174.222	68	7,964.000	15,399.059
Rubber plantation	906,667	1	7,066.667	8	233,143	1,870.588
Paddy field (subsistence)	88,800	0.1	1,008.333	1	22,834	226,912
<b>2. Worker</b>	n/a	0	55.556	0.1	n/a	14,706
<b>3. Entrepreneur (home industry, small business)</b>	62,155.556	55	13,333.333	15	15,982.857	3,529.412
<b>4. Professional/official (village, government, company)</b>	17,333.333	15	3,555.556	4	4,457.143	941,176
<b>5. Other</b>	644,444	1	2,155.556	3	165,714	570,588
<b>6. Total income per year</b>	112,099.911	100	85,349.223	100	28,825.691	22,552.441
<b>7. Income per day</b>	n/a	n/a	n/a	n/a	78,974	61,788

Based on interviews with village officials, large oil palm plantation companies had generated significant livelihood improvements. Before the establishment of the company, most households were dependent on forest-based activities such as illegal logging as their only source of cash income. With the establishment of oil palm, livelihoods have changed from extraction to production, stimulating the capacity of villagers as entrepreneurs. As illegal loggers, they thought only of how to earn money each day, with limited consideration of the future. Now, as palm oil producers, they think in the mid and long term, knowing that they need to set aside money for the period before new plantations begin to yield fruit, and for replanting. The high labour demand of oil palm plantations has also reduced illegal logging as a source of short-term income, with many respondents considering the need to conserve the remaining forests through village regulations.

Smallholder plantations are operated within village jurisdictions, and national law No. 6/2014 requires each village to establish village business units (*BUMDes*). Similar villages can develop inter-village business units. Such socio-economic institutions — which comprise several villages in the same landscape — aim to strengthen village assets and potential products (IRE 2018). In oil palm areas, inter-village business units should be able to overcome barriers in the value chain such as procurement of farm inputs, and can act as intermediaries that favour smallholder interests.

## Lessons learned

Six lessons can be learned from this research. The first and overarching one is that good village governance is key to increasing smallholder inclusion throughout the value chain. This starts with checking the legality of land during plantation development, providing loans and technical assistance for implementing good agricultural practices, providing transportation from plantation to mill, and negotiating prices with oil palm fruit buyers. Muara Jekak village is an excellent example of such effective village governance.

Second, the extent of increases in productivity and in revenue from smallholder plasma plantations is very much determined by the level of inclusivity regarding the relationship with the nucleus plantation, especially in decision-making processes and the transparency surrounding profit sharing.

Third, the model of plasma plantations managed by village assemblies with inclusive decision making is a good institutional choice. It can enhance smallholder productivity and equitably distribute benefits to all households in the village. More recently, there have been more opportunities through the stimulation of village business units (*BUMDes*) to overcome barriers faced by independent smallholders related to land tenure and good agricultural practices.

Fourth, oil palm plantation development has significantly changed the source of livelihoods, from forest extraction to farm production. In addition, generating entrepreneurship also has the potential to stimulate the protection of remaining forests.

Fifth, government and civil society organizations play an important role in improving transparency and smallholder inclusiveness in established nucleus-plasma companies.

Sixth, together these factors could have a significant positive impact on landscapes and on forests, and could improve land-use sustainability in general.



Efforts to help smallholder farmers enhance their bargaining position are urgently needed, however. Villages where a larger part of the land has been used by large and smallholder oil palm plantation (oil palm villages) should begin to consider the existence of social and economic institutions at the local level to address the issues that result from this use.

## Acknowledgements

Thanks to Yana Buana and Rahmawati (consultants), Irpan and Jaswadi Jabir (Tropenbos Indonesia) for data collection and preliminary analysis.

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