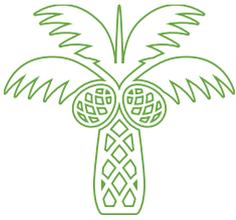


The role of village assemblies in overcoming barriers to smallholder inclusiveness: examples from Indonesia



Edi Purwanto
Darkono Tjawikrama



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

Introduction

Indonesia is the largest palm oil producer in the world with exports being the 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 land tenure, poor productivity, vulnerability to price variations, the role of middleman, requirements for compliance with certification (ISPO, RSPO) and aging plantations that require replanting after 25 years (IRE 2018).

Unlike some other crops such as coffee, cocoa and rubber, processing of oil palm is dependent on industrial mills, as fresh fruit bunches must be processed within 48 hours after harvesting. This explains why smallholder oil palm development originally took place in nucleus estate-smallholder schemes, where a company develops oil palm on a land concession. Most is managed as nucleus estates and 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 economic improvement of 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.

Despite a government decree (Law No. 39/2014) which states that the purpose of plantation development is to improve community welfare, unfortunately oil palm related policies are also known to have increased vulnerability of oil palm farmers in multiple occasions, especially independent smallholders. Policy is often more in favor of 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 and consequently often unfavorable for independent smallholders and community empowerment (IRE 2017). The issuance of Presidential Instruction (INPRES No. 8/2018), concerning the temporary suspension (moratorium) of land expansion and evaluation of oil palm plantations, should enable that smallholders play increasingly bigger roles in the oil-palm plantation industry, as smallholders will potentially become the target for plantation area expansion by big growers.

Different models of palm oil production in Indonesia

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

The paper reports on a comparison of three institution 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

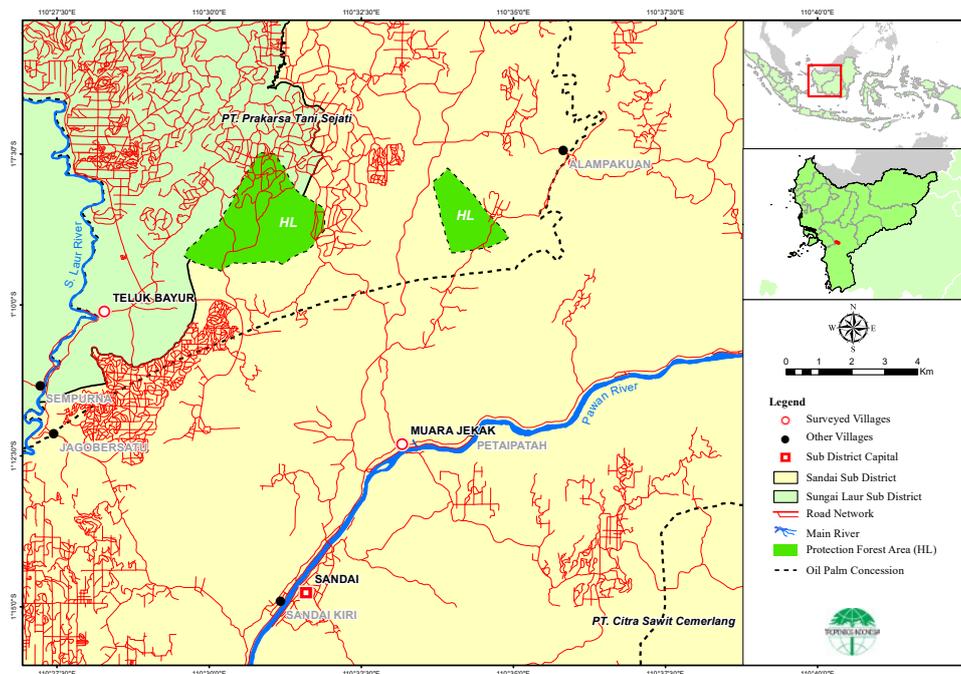


Figure 1. Research sites in Muara Jekak and Teluk Bayur villages

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, followed with isolated plantings of oil palm. But from 2004, the local government leader (the regency head or Bupati) began to push for major expansion of oil palm plantations. Considering the growing development of smallholder plantations with different institutional arrangements at village level, the role of village government 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 that arose 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. It holds permits for 20,000 ha, and 20% by law must be managed in partnership with local communities. About 12,000 ha is designated as nucleus plantation in which the company received a legal concession permit (HGU) from the National Land Agency, while 3,400 ha is allocated as plasma plantations managed by three villages in the surrounding concession, Muara Jekak, Teluk Bayur and Jago Bersatu.

Research was undertaken in two villages in 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 Sub-district) has 783 households and is very accessible, near to Sandai town on the Pawan river and the provincial Pontianak-Ketapang road, while Teluk Bayur (Sungai Laur Sub-district) has 800 households and is on the Laur river with lower accessibility. Prior to 2001, most villagers grew rubber trees on plots of 5 ha on average, before developing oil palm plantation, though some still retain rubber and traditional fruit-based agroforestry (*tembawang*).

Primary data was collected using direct observation and semi-structured interviews, interviewee selection based on suggestions by village officials, supported by secondary data from literature reviews. The collected data were analyzed using descriptive and quantitative approaches. Twelve farmers

from each village were interviewed, also six village elders and three officials. Table 1 provides an overview of the profiles of the three types of smallholders plantations included in this research and results of the various analyses per household are presented in Table 2.

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 4-yr establishment period	Company	company	farmer
Maintenance after establishment	Village	farmers	farmer
Cost for 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 >IDR 1 million	village cut 30% of each sale >IDR 1 million
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	poor	poor
Effort towards 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 since the company conducted land clearing based on the IUP plantation area permit rather than negotiation with individual land owners. Realizing the problem, villagers met and agreed that this land would be managed collectively by the village government with administrators rotated every two years through village general assemblies, with day-to-day management sub-contracted 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 has not yet applied for certification itself.

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 month, to students from kindergarten until university. The village general assembly also decided to invest on selected infrastructure



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

development, and part of the profits was deposited in a fund to cover the costs of replanting after 25 years. The remainder of the annual profit was shared equally amongst all household.

Since 2010, the village assembly also provided individual loans for developing independent smallholder plantations. These were focused on those who have legally respected productive land but limited resources to establish oil palm plantations, but for the sake of equality, are limited to 1 ha per household. Knowledge and experience of good agriculture practices obtained from nucleus plantation had been fully implemented without constraints. This had increased monthly productivity of fresh fruit bunches to 2 t/ha or nearly equal that of nucleus plantations, and according village officials, there are still 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 was established and 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 cooperative and not collectively by the village. This resembles model 'd' of Daemeter (2015). Another common system which involves leased community land, resembles model 'e' of Daemeter (2015). In this model, the company does not hand over land to farmers but controls the management and provides regulars report on the financial balance.

Farmers as individual owners were responsible for maintenance and had free choice for selling their fresh fruit bunches. But all farm inputs such as fertilizers, agrochemicals and contracted labour were supplied by the company, with loan repayments deducted from sales, so all farmers continued to supply 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 their 2 ha some 2.4 t of fresh fruit bunches per month (120-150 bunches each weighing 20-30 kg) at an average price of IDR1200 (US\$0.08) per kg. The gross income from oil palm per farmer was thus about IDR2.8 million 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 Deameter typology 'a') was funded by loans from the village government that cover the costs of land preparation and seedling procurement. Maintenance costs during establishment varied between farmers so loan amounts were not the same, IDR6.5-18 million (US\$451-1250) per ha. Repayments to the village was made through 30% deductions of total earnings from farmers who receive at least IDR1 million (US\$70) per month.

In 2016, Muara Jekak village established 'Bumdes', a business established through a village general assembly, managed by professionals and independent of village officials though most of the capital is village owned. Bumdes is a social business to manage villages assets, enhance economic development, community welfare and leverage additional village revenues. As such, its activities are not allowed to harm existing community businesses, but to 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 central government, since 2016, each village or village groups are stimulated to establish Bumdes to promote local products.

Since 2016, the number of Bumdes has mushroomed but most do not function optimally, with the one in Muara Jekak considered exceptional. It has been active in addressing poor pricing by intermediaries (middlemen), and as distributor of high quality oil palm planting materials and fertilizer, which are not easily accessed 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, and while only 150 ha, with good institutional governance, the revenue from this supported village infrastructure development and was distributed fairly to all village households. And more importantly, it has triggered smallholders to establish independent plantations. Otherwise, farmer-managed plasma plantations would still be very much dependent on the company more than 10 years since hand over, and income would be less than for independent smallholders. But in all cases, income generation is highly susceptible to price fluctuation, while future income sustainability after the first rotation remains uncertain with no savings for replanting.

Based on interviews with village officials, large oil palm plantation companies had generated significantly livelihood improvements. Before the establishment of the company, most households were dependent on forest-based activities such as illegal logging as the only source of cash income. With the establishment of oil palm, livelihoods have changed from extraction to production, stimulating their capacity as entrepreneurs. As illegal loggers, they only thought of how to earn money today, giving limited thought on the future. Now, as palm oil producers, they think mid- and long term, needing 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 of the need to conserve remaining forests through village regulations.

Table 2. Income per capita and source (IDR per year) between two types of farmers in the 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
1. Agriculture						
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
2. Worker	-	0	55,556	0.1	-	14.706
3. Entrepreneur (home industry, small business)	62,155,556	55	13,333,333	15	15.982.857	3.529.412
4. Professional/official (village, government, company)	17,333,333	15	3,555,556	4	4.457.143	941.176
5. Other	644,444	1	2,155,556	3	165.714	570.588
6. Total income per year	112,099,911	100	85,349,223	100	28,825.691	22.552.441
7. Income per day					78.974	61.788

Considering that smallholder plantations are operated within village jurisdictions, the national law No. 6/2014 requires each village to establish village business units (Bumdes), and similar villages can develop inter-village business units. Such socio-economic institutions comprising several villages in the same landscape aim to strengthen village assets and potential products (IRE 2018). As such, 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 learnt

Six lessons are drawn 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, provide 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.

Secondly, the level of increases in productivity and revenues from smallholder plasma plantations is very much determined by the level of inclusivity regarding the relationship with the nucleus plantation, and especially in decision making processes and the transparency surrounding profit sharing. Thirdly, plasma plantations managed by village assemblies with inclusive decision making is a good institutional model to enhance smallholder productivity and which can equitably distribute benefits to all households in the village. And more recently, there are 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, and generating entrepreneurship that also has the potential to stimulate protection of remaining forests. The fifth lesson we draw is the importance of the role of government and civil society organizations to improving the transparency smallholder inclusiveness of established nucleus-plasma companies. Finally, together this could have a significant positive impact on landscapes and on forests, and improve land use sustainability in general. Efforts to capacitate smallholder farmers to enhance

bargaining position are urgently needed. Villages of which larger part of the lands have been used by large and small holder oil-palm plantation (oil palm villages) should begin to consider the existence social and economic institutions at local level to address the problem.

Acknowledgements

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

References

Daemeter Consulting 2015. *Indonesian oil palm smallholder farmers: A typology of organizational models, needs, and*

investment opportunities. Bogor, Indonesia: Daemeter Consulting. 20pp.

IRE (Institute for Research and Empowerment), 2017. *Mengembangkan BUMDesa untuk Petani Sawit*. Policy Brief. Institute for Research and Empowerment (IRE) Yogyakarta, and Oxfam. 4pp.

IRE (Institute for Research and Empowerment), 2018. *Resolusi Desa untuk Penataan Sawit Rakyat*. Institute for Research and Empowerment (IRE), Yogyakarta, Kehati and UKAid.

Winrock International, 2017. *The key characteristics of independent smallholders in the context of sustainable palm oil. Profile: Bengkalis and Siak District, Riau, Ketapang and Kubu Raya District, West Kalimantan, and North Konawe District, Southeast Sulawesi*. BUKU 4. USAID, Winrock International and SPKS. 180pp [English and Bahasa Indonesia].

This paper was submitted for inclusion in the forthcoming edition of **ETFRN News 59 - Exploring inclusive oil palm production**, due for release in early 2019. This will contain 20 papers plus interviews, presenting examples of innovative and inclusive palm oil production systems. It will assess what has not worked, but importantly, it will analyse what positive practices and policies have worked for more inclusive palm oil production and why, as we strive towards more collective and sustainable solutions to this apparently intractable problem.

This paper will undergo final editing prior to publication of the complete edition, and as such, could differ from the version presented here.

The views expressed herein are the sole responsibility of the authors and can in no way be taken to reflect the views of ETFRN or Tropenbos International.

Published by: Tropenbos International, Wageningen, the Netherlands

Copyright: © 2019 ETFRN and Tropenbos International, Wageningen, the Netherlands
Texts may be reproduced for non-commercial purposes, citing the source.

Issue date: January, 2019

Authors: Edi Purwanto, *Director Tropenbos Indonesia, Bogor, Indonesia*
(edipurwanto@tropenbos-indonesia.org)

Darkono Tjawikrama, *Master student of the graduate school of the Natural Resource and Environmental Management, Bogor Agriculture University (IPB), Bogor, Indonesia*
(darkono9@gmail.com)

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



ETFRN
c/o Tropenbos International
P .O. Box 232,
6700 AE Wageningen,
the Netherlands
tel. +31 317 702020
etfrn@etfrn.org
www.etfrn.org