

The Frederick S. Pardee Center for the Study of the Longer-Range Future

# Smallholder Challenges in the Growing Palm Oil Industry



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Palm oil has rapidly emerged over the past decade as a prominent food commodity. With global demand steadily increasing, production has doubled in the last ten years. In 2012, almost 50 million metric tons of palm oil were consumed — accounting for US\$40 million of imports globally — making it the most widely used vegetable oil. Consumers in developed countries can now find palm oil in manufactured food products, cosmetics, and cleaning supplies. Developing countries, particularly India, serve as important palm oil consumers because of the product's widespread use as cooking oil.

Throughout Southeast Asia, large plantations dominate the enterprise for cultivating oil palms. These plantations can cover hundreds of thousands of hectares, occupying formerly forested areas (Colchester et al. 2006). While these plantations are often established through national development plans and now comprise a significant majority of palm oil production, they are hardly representative of the overall enterprise. Smallholders, typically defined as farmers operating less than 50 hectares of land, constitute a substantial sector of the

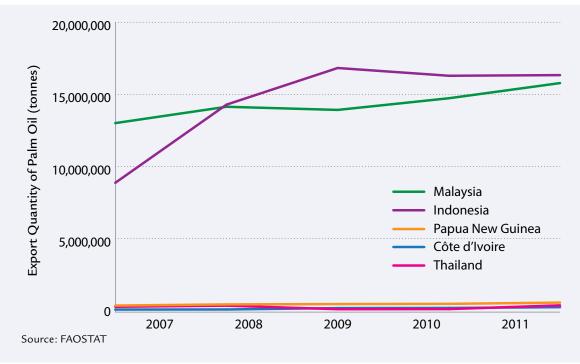
production of palm oil in Southeast Asia. Smallholders account for an estimated 40 percent of the total cultivated land area and produce approximately one-third of the global supply of palm oil (Vermeulen and Goad 2006; FSG 2011).

Though smallholders comprise a substantial sector of the industry,

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they continue to face distinct challenges as their livelihoods and interests are threatened by land conflicts, market vulnerability, and low crop yields. With the continued expansion of the palm oil industry to meet global demand, there is a need for action by domestic governments,





industry stakeholders in the Roundtable on Sustainable Palm Oil, and non-governmental organizations (NGOs) for protection of the smallholder sector and rural livelihoods.

#### The Palm Oil Industry and the Role of Smallholders

Palm oil is the most widely used edible oil, followed by soybean and rapeseed oils (WWF-India 2013; FAOSTAT 2013; Corley 2009). As a crop, the oil palm is highly productive; per hectare, it yields more crude oil than any other vegetable oil crop (Corley 2009). As a result, palm oil is readily available and relatively cheap, leading to its widespread use for cooking in developing countries and manufacturing in developed countries. Due in part to the oil palm's characteristically high yield and year-round harvesting, palm oil has also shown promise as a biofuel. Palm oil's sustained global demand and its increasingly diverse applications have made it an important commodity, creating the incentive for tropical countries to expand cultivation.

Indonesia and Malaysia have long been the dominant exporters of palm oil. However, the increased demand for the commodity has fueled efforts in other regions to expand cultivation of the oil palm as a means of boosting export economies. Indonesia and Malaysia together produce more than 80 percent of the global supply of palm oil. Indonesia exported 16.3 million metric tons of palm oil in 2011, with Malaysia close behind at 15.8 million metric tons (FAOSTAT 2013). Other countries in Southeast Asia, Africa, and Latin America are expanding their oil palm cultivation to take advantage of the booming market (Colchester and Chao 2011; Wich et al. 2014; Craven 2011). Figure 1 displays the rise in palm oil production since 2007, and illustrates the striking gap that exists between Malaysia and Indonesia and the next top three producers.

Indonesia has aggressively encouraged development of the oil palm sector and has doubled its annual export quantity since 2007; the government intends to re-double its output by 2020 (Rist et al. 2010, citing the Ministry of Agriculture of Indonesia). Malaysia also has plans to increase its output dramatically, raising questions about the impact these plans might have on smallholders, a group that is already being marginalized in efforts to produce more palm oil (Rist et al. 2010, citing the Ministry of Agriculture of Indonesia; World Bank Group 2011). These ambitious expansion plans raise concerns about the necessary land allocations, yields, and infrastructure required for governments and communities to increase production so dramatically.

#### Palm Oil Production: Large Plantation vs. Smallholding

Large, private estates dominate oil palm cultivation in Indonesia and Malaysia. In many cases, these estates are promoted by government development plans and established as a means of investing in a growing commodity industry (World Bank Group 2011). Aside from the global demand for palm oil, the oil palm has many benefits as a crop, making it attractive to investors seeking profitable agricultural products. The oil palm requires a relatively low labor input, it can be harvested soon after planting, and it has a higher per-hectare yield than do other vegetable oil-producing crops, such as rapeseed and canola (Sayer et al. 2012; Oil World 2010; Vermeulen and Goad 2011). These benefits, among others, have encouraged firms to establish large plantations, often in previously forested areas. While large plantations cover vast expanses of land, and have received much attention as the face of palm oil production, they are hardly representative of the entire palm oil production sector. Small farmers and rural communities have also taken advantage of the benefits that the oil palm offers.

The prevalence of small farmers, who contribute significantly to the production of this highdemand — albeit controversial — commodity, has grown significantly in the last few decades (McCarthy 2010). By many official definitions, a smallholding of oil palms comprises 50 hectares or less, and is typically family-operated. The fact that these seemingly insignificant plots of land make up one of the fastest growing sectors in the industry is remarkable, considering the oil palm is notorious for being a monoculture crop grown on large estates.

Smallholder prevalence has increased substantially in Malaysia and Indonesia (Cramb and Sujang 2013; Lee et al. 2014). Indonesia, in particular, has seen an 11.12 percent increase in smallholder land area annually, a growth rate higher than that of private plantations or state-owned farms (Lee et al. 2014). Smallholder production is significant in other states as well. Thailand's oil palm cultivation is 76 percent small farmer-operated, while 42 percent of Papua New Guinea's oil palm is represented by this sector (FSG 2011). These figures indicate that as demand for palm oil grows, the smallholder sector is a major player that should be understood. Development of oil palm cultivation in Indonesia. Malaysia, and other countries see

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of oil palm cultivation in Indonesia, Malaysia, and other countries seeking higher exports highlights the need for addressing challenges that the sub-sector faces. The following sections discuss issues facing smallholders that threaten rural livelihoods in regions where oil palm expansion is being promoted for its development potential.

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#### Current Challenges in the Smallholder Sector

The prevalence of smallholders is accompanied by diversity; across islands, regions, and countries, smallholdings vary in size, land ownership, and management. However, as a sector, smallholders face shared and complex challenges in the current climate of the palm oil industry. Three salient challenges are land tenure, market vulnerability, and low crop yields (Colchester and Chao 2011; Vermeulen and Goad 2006).

#### Land Tenure and the "Poverty Trap"

Land tenure is a complex issue that has greatly impacted palm oil smallholders and rural communities for decades. As oil palm expansion occurred in Indonesia and Malaysia in the mid- to late 20th century, state-sponsored rural development programs were withdrawn as new neoliberal policies favored private investments. The resulting agricultural privatization and large oil palm plantations fueled rural conflicts. Land-grabbing and violations of customary land rights were common, as the governments of Indonesia and Malaysia favored private investments in logging and agricultural development instead of honoring historic, though muddled, land rights of indigenous communities (Köhne 2014; McCarthy and Cramb 2009; Cramb and Sujang 2013). This redistribution of land rights fell under grey areas of the law, resulting in seizure of land without prior consultation or reimbursement (McCarthy and Cramb 2009).

"Smallholders that made the quick transition from subsistence farming to oil palm production entered into an agronomy they knew little about." In other cases, small farmers or rural communities officially owned some land that was pegged for oil palm development. Under state-mediated negotiations, communities were — and still are — persuaded to relinquish land to private oil palm investors. A smallholder might enter into a vague or unwritten contract that prompts the private estate to withhold a share of land for undetermined lengths of time. Smallholders are trapped

into low-wage jobs and with no legal power to negotiate their circumstances (McCarthy and Cramb 2009). While the World Bank looks to tree crop cultivation as a "pathway out of poverty", oil palm smallholders have often fallen into the financial troubles in the industry (World Bank 2007; Cramb and Sujang 2013). As described by Colchester et al. (2006), "much more still needs to be done if oil palm estates are to contribute to community development rather than become poverty traps." Palm oil-producing countries must honor legal and customary land rights among smallholders and rural communities. Otherwise, land conflicts will continue in these regions and rural livelihoods will be threatened further.

#### Market Vulnerability and Economies of Scale

Prices for fresh fruit bunches (FFB) — the product that is harvested from plantations and farms prior to being processed into palm oil — fluctuate relatively rapidly (Colchester and Chao 2011). Due to economies of scale, a drop in FFB premiums affects small farmers more than large, private plantations. Prior to oil palm expansion, it was common for farmers to have a diversity of crops, but having a single source of income increases their economic vulnerability (Pichler 2013). While many farmers cultivate oil palm as a means of leaving behind a subsistence lifestyle, a sudden downturn in FFB premiums can mean the difference between a net profit and a net loss from their few hectares. In Indonesia, the Ministry of Agriculture sets the formula for fair pricing of FFB, but smallholders are not involved in this process (Teoh 2010). This lack of political participation threatens smallholders' continued vulnerability in an ever-changing industry. As a group, smallholders risk being left behind in a relatively unstable commodity market.

#### Inadequate Agricultural Training and Knowledge

Smallholders that made the quick transition from subsistence farming to oil palm production entered into an agronomy they knew little about. Lack of education, training, and oral history led to inefficient, high-input agricultural practices. With more efficient use of fertilizers, land, and labor, smallholders can potentially increase their yields. While large, profitable plantations invest in widening their profit margins, many smallholders don't have the resources to do the same. An ad hoc approach to palm cultivation has contributed to the startlingly low yields among the smallholder sector. The average yield per hectare of oil palm smallholders is dramatically lower than that of larger estates, and independent smallholders – who operate without support from the government or private firms - bring in less income (Lee et al. 2014; Yaacob, personal communication 2014). Some studies show that a farm's low yield typically results from the farmer's choice of planting materials, insufficient fertilizer use, and early harvesting of unripe FFB, indicating that the poor understanding of efficient agricultural practices is limiting smallholders' productivity (Teoh 2010; Lee et al. 2014). Along with land tenure issues and market vulnerability, low yields contribute to poverty. Improving smallholder training and providing more cooperative support to independent smallholders can potentially aid the improvement of yields in the sector.

#### Addressing Smallholder Challenges

As the palm oil industry expands with increased production and consumption, the challenges that smallholders face are bound to persist if there is no intervention by individual countries or international initiatives. There are various policy options for approaching smallholder challenges and protecting the sector's interests in the industry. First, leveraging the Roundtable on Sustainable Palm Oil (RSPO), a market-based environmental initiative, can provide an industry forum in which smallholders' interests can be represented. Second, the implementation of protective domestic policies has the potential for providing legal safety for smallholders and their livelihoods. Third, NGO advocacy for smallholder wellbeing must continue to be supported and encouraged. Overcoming the current challenges facing the sector is a step toward maintaining the smallholder group as palm oil continues to serve as a major global commodity, though there is no silver bullet.

The RSPO represents opportunities for protecting smallholder interests within the industry. The RSPO has served as a non-state, market-based initiative aimed at reducing the negative environmental and social impacts of the palm oil supply chain. The organization is governed by its members, which are firms that serve as part of the supply chain. Oil palm growers can seek RSPO certification for achieving sustainability standards. The RSPO has a stated vision of a 100 percent sustainable palm oil industry, and so targets certification of large, private firms in order to achieve a high volume of sustainable palm oil production (Pichler 2013). The RSPO has become the largest, and arguably the most successful, sustainability initiative for palm oil.

While the RSPO is, by structure, a transparent and inclusive operation, smallholders have been generally excluded from RSPO negotiations and certification processes. Large corporations heavily dominate the RSPO's governance. Smallholders would benefit greatly from more inclusive involvement in the organization. The RSPO is a large forum in which stakeholders can present their concerns about the palm oil industry and negotiate standards for environmental and social sustainability. While the RSPO sets standards for firms to provide fair wages and support rural workers, there has been little progress in engaging smallholders in the organization's global sustainability initiative. Smallholder attendance at the RSPO's annual General Assembly is rare, as language barriers and long and expensive travel limit the ability of smallholders to participate in negotiations (Pichler 2013; Leegwater, personal communication 2014). Also, there have been accounts of smallholders expressing frustration over being shut out of RSPO negotiations or being overshadowed by firms that hold more political power within the organization (Köhne 2014; Pichler 2013). The RSPO has taken some steps toward establishing a functional working group dedicated to addressing smallholder-specific issues to aid the certification process for small farmers. Also, a relatively new Smallholders Support Fund provides capital to smallholders for improving yields and obtaining certification for sustainability. While these programs within the RSPO have yet to show increases in smallholder inclusion or certification, they are steps in the direction of protecting smallholder interests. Increased engagement of smallholders in the RSPO can potentially bring more urgency to addressing the sector's challenges.

"Preemptive support in political advocacy, agricultural training, and finance can prevent the vulnerabilities that have affected smallholders ..." There is currently a distinct need for programs that engage smallholders as a sector on the domestic level and that implement protective national policies. Neoliberal policies that have encouraged development through foreign investment in Indonesia and Malaysia have driven the establishment of large, private oil palm plantations that do not adequately respect the land tenure of rural communities. Domestic policies that protect rural land

tenure are necessary as estates continue to be established (Vermeulen and Goad 2006; World Bank Group 2011; Köhne 2014). Rural agencies need to actively assist communities in understanding their land rights, engaging politically, and establishing effective dispute resolution in the case that land conflicts occur.

Finally, NGOs are crucial in protecting smallholders' rights and livelihoods. International and regional NGOs — such as Solidarid and Sawit Watch — have served as proxy representatives for smallholder interests in RSPO meetings and as advocates for smallholder rights in negotiations over land conflicts. However, NGO support is not sufficient for sustained protection of the smallholder sector. The present NGO effort must be coupled with a deeper commitment to smallholder issues in the RSPO and in state governments.

#### Conclusion

The persistent growth in global demand for palm oil has spurred the expansion of oil palm cultivation in equatorial regions. This expansion is dominated by large plantations, raising concerns about the future of smallholders, who make up 40 percent in the industry's land base and account for one-third of total palm oil production. Smallholders face obstacles in land conflicts, commodity prices, and crop production. These challenges contribute to rural poverty and marginalization of the sector, so there is a current need for domestic policies that protect smallholder interests, particularly by recognizing or granting land ownership in vulnerable rural communities.

Efforts to increase participation within the RSPO can further engage smallholders in the sustainable development of the industry. As the RSPO grows, and as an increasing number of industry firms work toward establishing a market for certified palm oil, smallholders risk being shut out of a premium market for their products. Additionally, continued – and bolstered

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– advocacy and support from NGOs will further this process of engaging smallholders and defending their livelihoods.

These efforts are necessary to address smallholder challenges not only in Southeast Asia, but in other regions as well. In recent years, palm oil expansion has occurred in Africa and Latin America. With scant research currently available that explores the impacts this expansion has had on rural communities in these regions, NGO initiatives and the RSPO must provide support for smallholdings that emerge. Preemptive support in political advocacy, agricultural training, and finance can prevent the vulnerabilities that have affected smallholders throughout Indonesia and Malaysia from occurring in other regions as well.

## Bibliography

Colchester, M., Jiwan, N., Andiko, Sirait, M., Firdaus, A.Y., Surambo, A., Pane, H. 2006. Promised Land: Palm Oil and Land Acquisition in Indonesia — Implications for Local Communities and Indigenous Peoples. Forest People Programme and Sawit Watch, Moreton-in-Marsh, England.

Colchester, M., Chao, S. 2011. Oil Palm Expansion in South East Asia: an overview. In: Colchester, M., Chao, S. (Eds.), *Oil Palm Expansion in South East Asia*. Forest People Programme and Sawit Watch, Moreton-in-Marsh, England, pp. 1-23.

Corley, R.H.V. 2009. How much palm oil do we need? Environmental Science & Policy 12 (2): 134-139.

Cramb, R.A., Sujang, P.S. 2013. The mouse deer and the crocodile: oil palm smallholders and livelihood strategies in Sarawak, Malaysia. *The Journal of Peasant Studies* 40 (1): 129-154.

Craven, C. 2011. The Honduran palm oil industry: Employing lessons from Malaysia in the search for economically and environmentally sustainable energy solutions. *Energy Policy* 39 (11): 6943-6950.

FAOSTAT. 2013. Food and Agriculture Organization of the United Nations. Data available at <a href="http://faostat.fao.org/">http://faostat.fao.org/</a>

FSG. 2011. Improving the livelihoods of palm oil smallholders: The role of the private sector. FSG Social Impact Advisors, commissioned by the World Bank Group.

Köhne, M. 2014. Multi-stakeholder initiative governance as assemblage: Roundtable on Sustainable Palm Oil as a political resource in land conflicts related to oil palm plantations. *Agriculture and Human Values* 31 (3): 469-480.

Lee, J.S.H., Ghazoul, J., Obidzinski, K., Koh, L.P. 2014. Oil palm smallholder yields and incomes constrained by harvesting practices and type of smallholder management in Indonesia. *Agronomy for Sustainable Development* 34 (2): 501-513.

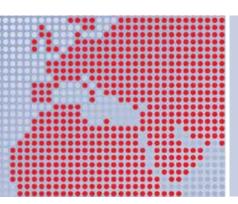
Leegwater, Marieke (RSPO Member NGO representative) 2014. Personal communication, July 10.

McCarthy, J.F. 2010. Processes of inclusion and adverse incorporation: oil palm and agrarian change in Sumatra, Indonesia. *The Journal of Peasant Studies* 37 (4): 821-850.

McCarthy, J.F., Cramb, R.A. 2009. Policy narratives, landholder engagement, and oil palm expansion on the Malaysian and Indonesian frontiers. *The Geographical Journal* 175 (2): 112-123.

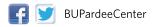
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Rist, L., Feintrenie, L., Levang, P. 2010. The livelihood impacts of oil palm: smallholders in Indonesia. *Biodiversity and Conservation* 19 (4): 1009-1024.

Teoh, C.H. 2010. Key sustainability issues in the palm oil sector: A discussion paper for multistakeholders consultations. The International Finance Corporation of The World Bank Group, Washington, D.C.

Vermeulen, S., Goad, N. 2006. *Towards better practice in smallholder palm oil production*. International Institute for Environment and Development Natural Resource Issues Series. London, UK, pp. 10-11.

Wich, S.A., Garcia-Ulloa, J., Kühl, H.S., Humle, T., Lee, J.S.H., Koh, L.P. 2014. Will oil palm's homecoming spell doom for Africa's great apes? *Current Biology* 24 (14): 1659-1663.

World Bank. 2007. Agriculture for development. The World Bank, Washington, D.C.

World Bank Group. 2011. The World Bank Group framework and IFC strategy for engagement in the palm oil sector. The International Finance Corporation of The World Bank Group, Washington, D.C.

WWF International. 2013. Palm oil buyers scorecard: Measuring the progress of palm oil buyers. The World Wildlife Fund International, November 2013.

WWF-India. 2013. Palm oil market and sustainability in India. The World Wildlife Fund India. Market Transformation Initiative Report, 2013.

Yaacob, Salahudin (RSPO Secretariat Upper Manager) 2014. Personal communication, July 14.