

Towards a Profiling System for Independent Smallholders and Medium-Scale Growers:

Report Submitted to the Roundtable on Sustainable Palm Oil and Medium Grower Task Force

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October 25, 2020

*This study is the results of an independent study, commissioned by the RSPO to advise its standard setting. The analysis and interpretation are those of the named authors and not those of the RSPO.

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1 INTRODUCTION

In recent years, the RSPO has been working to enhance the inclusivity of the RSPO for independent smallholders, resulting in the endorsement of the RSPO Smallholder Strategy in 2017 and an Independent Smallholder Standard (RISS) in 2019. The definition of independent smallholders adopted under the new standard is broad. This has created scope for other actors such as land speculators, absentee landlords and medium-scale growers to subvert the intention of the new standard to improve the inclusivity of the RSPO for independent smallholders. This, in turn, has created the need for an inclusive and robust system for the certification of medium-scale growers, and for matching the definitions of different producer categories to the characteristics of actual growers and the challenges they face in different contexts. Towards this end, the RSPO commissioned an independent research study for the development of a profiling system of palm oil producers. A team from the University of Georgia under the coordination of Dr. Laura German was contracted for this purpose. The study included an analysis of formal definitions of producer types, and a country-level analysis to identify the actually existing characteristics of diverse palm oil producers and the challenges they face in gaining RSPO certification, in each of 15 countries.

2 AIMS AND SCOPE

The study was guided by the following objectives:

- 1 To better understand the characteristics of palm oil producers in each of the focal countries, with a focus on small- and medium-scale growers; and
- 2 To develop a profiling system of palm oil producers as a crucial input into the development of a new standard for medium-scale growers and the ongoing improvement of the RISS.

The geographical scope of the study included Africa (Côte d'Ivoire, Ghana, Liberia, Nigeria, Sierra Leone); Asia-Pacific (Indonesia, Malaysia, Papua New Guinea, Solomon Islands, Thailand); and Latin America (Brazil, Colombia, Guatemala, Honduras, Brazil and Mexico). By targeting such a vast array of geographies, we hoped to identify the variability in small- and medium-scale producers and industry dynamics across countries and regions.

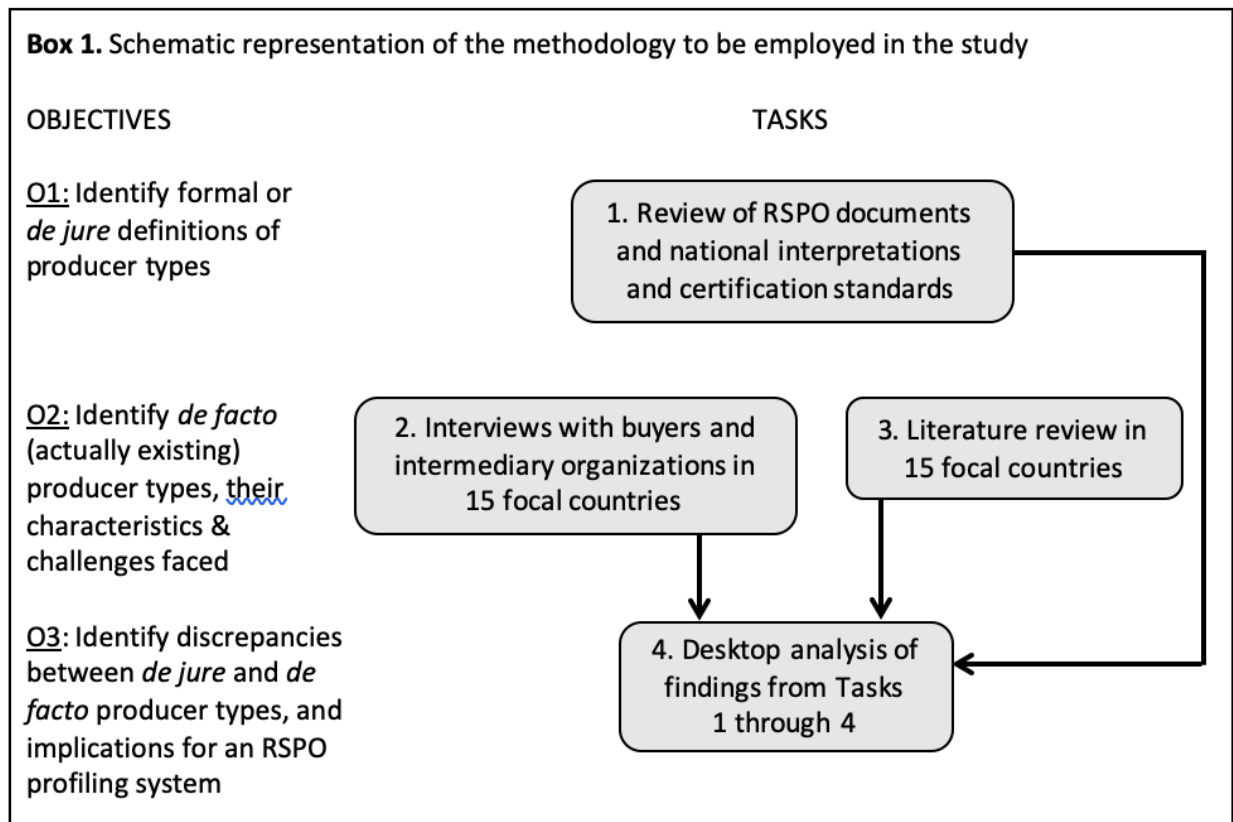
3 METHODOLOGY

The methodology as initially proposed consisted of four key tasks that map onto three primary study objectives and two levels of analysis, as schematized in Box 1. The first task consisted of the review of formal definitions of producer types from the RSPO (e.g. 2018 Principles and Criteria, RISS); national interpretations of RSPO Principles and Criteria¹; and national sustainability standards, where present. The variables used to analyze de jure grower classifications were identified inductively, as an emergent feature of the reports analyzed (for

¹ See: <https://rspo.org/resources/certification/rspo-national-interpretations/national-interpretation-p-c-2018>.

additional detail on the methodology, please refer to Appendix I). The second step consisted of a country-level analysis to identify the *de facto* or actually existing characteristics of diverse palm oil producers and the challenges they face in gaining certification, based on stakeholder interviews and literature reviews. Task 2 (interviews) targeted those deemed to be most knowledgeable about grower characteristics and/or certification challenges in each country, with an aim of interviewing at least one individual from each of two categories: industry; and civil society or academia. Task 3 (literature review) consisted of the review of key peer reviewed publications, as identified through literature searches and interviewees. Together, Tasks 1 through 3 culminated in a comparative review of *de jure* grower classifications; and fifteen country case studies detailing the *de facto* characteristics of different types of growers, the challenges faced by small- and medium-scale growers in certifying with the RSPO, and a discussion of other considerations that emerged in the process of carrying out the research. For a list of interviewees, please refer to Appendix II.

As initially envisioned, the methodology was to conclude with a desktop analysis to bring together the findings from Tasks 1 through 3 and develop a proposed profiling system. Yet in practice, the need to synthesize findings at regional level as a means to ensure that the dynamics unique to each region were not lost in the final synthesis became clear. These regional level findings then needed to be further synthesized at the global level in the process of exploring implications for a profiling system. As such, the profiling system emerged more from these syntheses than the comparison of *de jure* and *de facto* classification systems per se.



Other changes to the methodology as initially envisioned included adjustments in the number or balance of interviewees due to budgetary limitations or logistical challenges. The *number* of interviewees in each country varied from two to four, with additional interviews taking place in cases where initial contacts suggested we speak to someone more knowledgeable within their organizations or networks, or prospective interviewees were late to respond and we had already secured interviews with other individuals. The *balance* of interviewees diverged from the methodology when the interviewee in question could not be readily classified into either industry or NGO camps (e.g. Solidaridad, an NGO representing the smallholder perspective) or when we were unable to secure an interview with someone in the targeted category.

It is important to also discuss the limitations of the methodology for achieving the core goals of the study. The budget cap on the project restricted us to just under two days for each country case study, including interviews, literature review and write-up. This limited the number of people we could interview and the number of papers we could review, while also limiting us to achieving the minimum understanding possible to answer the key research questions. This meant that the findings were often produced without the nuance, contextualization or ability to adequately interpret findings that a more comprehensive analysis would have provided. What this meant concretely included producing estimates of grower characteristics that were not necessarily backed by measurement; a focus on papers with a very specific geographical coverage that may not reflect the situation more broadly, or a focus on certain types of growers more than others (e.g. smallholder rather than medium-scale growers) because the literature was patchy and this was the information that could more readily be found; or an analysis emphasizing the factors underlying certification challenges (e.g. labor), but not the actual dynamics behind these variables (which can give the impression of constraints that apply more uniformly than is actually the case).

A second set of constraints concerned the interviews themselves. By nature of the expertise of different interviewees, some people were far more knowledgeable about a particular question than others or could not answer any given question. This often varied between interviewees, as depth of knowledge on grower characteristics seemed to be built from a different set of roles and experiences than knowledge on constraints to certification. The depth of understanding on any given question also varied considerably across interviewees. At times, this led to two sets of grower typologies for a single country that were difficult to reconcile. As a consequence, we attempted to blend classifications (where compatible) or drew more heavily in our write-up on those individuals who demonstrated the most intimate knowledge of the actual situation on the ground. Yet the more significant shortcoming emerged from biases introduced by our roles and affiliation with the RSPO, and its perceived implications. For example, some interviewees seemed to hesitate in answering certain questions given the perceived risks of doing so, or provided answers that they deemed to be strategically more advantageous for them. This is an issue that was particularly salient for defining what constitutes an independent and scheme smallholder, and to a lesser extent, establishing the boundaries between small-scale and medium-scale growers. Others had difficulty going beyond the *de jure* grower classification to characterize the reality on the ground, because they were very steeped in RSPO definitions and requirements. In such cases, medium-scale growers might be defined as “X” because the RSPO

defines them as “X”, even if these definitions are not reflective of realities on the ground. In such cases, we did our best to tease out what was driving the answers given, and to analyze our findings according to the perspectives that seemed most in line with the study’s core aims.

A final set of constraints concerned the ability to effectively interpret findings. Throughout the study, the evidence could be evaluated in a general sense or with respect to the ultimate purpose of such a study. While the team opted for the latter, our limited understanding of internal discussions within RSPO and the MGTG hindered our ability to achieve this in full.

4 DE JURE GROWER CLASSIFICATIONS

Seven major characteristics were used in de jure classifications of independent smallholders and scheme smallholders: area of planted oil palm, principal source of income, principal source of labor, whether subsistence crops are grown alongside oil palm, independence of management, presence of external support from government or private sector, and the presence of a structural or contractual attachment to a mill (Table 1). Their use was found to vary by country.

Table 1. Indicators utilized in *de jure* grower classifications

Indicator	Definition
Planted Area of Oil Palm (hectares)	The actual land planted with growing oil palm owned, leased, or managed by the individual grower; unplanted land and land planted with other crops is excluded
Labor Source	The extent to which labor is sourced within or outside of the family which owns, leases, or manages the land
Principal Source of Income	The source of the majority of a grower’s income, which may be the farm in general, oil palm in particular, or any other unspecified source
Subsistence Crops	Whether or not a grower sometimes grows subsistence crops alongside oil palm. ^a
Independence of Management	The ability of a grower to independently decide how to manage land, crops, finances, labor, and other operations on the farm. In general, independence of management is the primary quality that distinguishes independent smallholders from scheme smallholders
External Support	Whether or not support is sometimes received from any kind of external body including governments, NGOs, and the private sector
Attachment to Mill	The structural or contractual attachment or obligation of a grower to a particular oil palm mill

^a This indicator tends to be interpreted as something optional, not as a necessary condition.

The use of these indicators in the de jure grower classifications for each of the focal countries is summarized in Table 2 (independent smallholders) and Table 3 (scheme smallholders). In general, national sustainability standards and RSPO National Interpretations lacked any significant mention or definition of *medium grower*. The two exceptions were Honduras and Thailand. The Honduran government legally defines a *medium grower* as one which cultivates between 11 and 50 ha of oil palm, and the RSPO's National Interpretation for Thailand defines medium growers as farms with between 50 and 1000 ha of planted oil palm.

De jure classification systems located in RSPO's National Interpretations and national sustainability standards define *smallholders* as growers who cultivate oil palm on an area of land smaller than or equal to some upper limit (varying by standard between 10 ha and 50 ha), whose labor is primarily sourced from the family, whose principal source of income is the farm, and who sometimes grows subsistence crops alongside oil palm. Although classifications vary somewhat from country to country even in this definition of *smallholder*, planted area of oil palm under 50 hectares, family-sourced labor, the farm as the principal source of income, and the growth of subsistence crops are the most common classifying factors for smallholders across countries and standards. *Independent smallholders* are further defined by generally being independent managers of their own farms, typically without any formal attachment to a specific mill. *Scheme smallholders*, contrastingly, are defined in de jure classification systems as lacking independent management power, often having formal attachment to a specific mill, and sometimes receiving any kind of support from any external body.

These classifications of *smallholder* in general, and *scheme* and *independent smallholder* in specific vary, though not hugely, between countries. Although most National Interpretations and sustainability standards set the maximum amount of land that can still classify a grower as a smallholder at 50 ha, four of the 15 countries surveyed use a lower maximum land area in either a national interpretation or sustainability standard. Brazil's Sustainable Palm Oil Production Program, for example, classifies only those growers cultivating 10 ha or less as smallholders. Further, classification systems vary in the number of criteria used to define smallholders. For example, one standard (e.g. Brazil and Malaysia's national sustainability standards) may classify any grower cultivating less than 40 hectares as a smallholder, while another (e.g. Colombia and Ghana's National Interpretations of RSPO Guidelines) may specify that a grower must cultivate less than 50 ha, use family sourced labor, take the majority of their income from the farm, and sometimes grow subsistence crops to be classified as a smallholder. Similarly, while seven countries specify that a smallholder must have a formal attachment to a mill to be considered a scheme smallholder, the Honduran National Interpretation further specifies by defining scheme smallholders as those who have been contractually attached to a mill for at least fifteen years. In summary, de jure classifications for *independent smallholder* tend to include independent management and a lack of attachment to a mill, and do not make any specific claims about external support, while classifications for *scheme smallholder* include a lack of independent management, an attachment to a mill, and presence of external support.

Table 2. De Jure Classifications for Independent Smallholders (*Y = Yes, N = No, NS = Not specified*)

Country	Standard	Year Updated	Area Oil Palm (ha)	Income Source	Labor Source	Subsistence Crops	Independence of Management	External support	Attachment to Mill
Brazil	Sustainable Palm Oil Production Program	2010	≤10	NS	NS	NS	NS	NS	NS
Colombia	Colombia National Interpretation	2019	<50	Farm	Family	Y	NS	NS	NS
Côte d’Ivoire	Côte d’Ivoire National Interpretation	2020	≤50	Farm	Family	Y	Y	NS	N
Ghana	Ghana National Interpretation	2019	<40	Farm	Family	Y	Y	Y	N
Guatemala	Guatemala National Interpretation ^a	2015	<50	NS	Family	Y	Y	NS	N
Honduras	Honduras National Interpretation	2015	<50	Oil Palm	Some family	NS	NS	N	N ^a
Indonesia	Indonesia National Interpretation	2018	<50	Farm	Family	Y	Y	NS	NS
	Indonesian Sustainable Palm Oil	2013	≤25	NS	NS	NS	NS	NS	NS
Liberia	Liberia National Interpretation	2018	<50	Farm	Family	Y	Y	Y	N
Malaysia	Malaysian National Interpretation	2019	<50	Farm	Family	Y	Y	NS	NS
	Malaysian Sustainable Palm Oil	2019	<40.46	NS	NS	NS	Y	NS	NS
Mexico	Mexico National Interpretation	2020	<50	Farm	Family	Y	Y	NS	NS
Nigeria	Nigeria National Interpretation	2019	<50	Farm	Family	Y	Y	Y	N
Papua New Guinea	Papua New Guinea and Solomon Islands National Interpretation	2019	<50	Farm	Family	Y	Y	NS	NS
Thailand	Thailand National Interpretation for Smallholders	2012	<50	Farm	Family	Y	Y	NS	NS
Sierra Leone	Sierra Leone National Interpretation	2014	<50	Farm	Family	Y	Y	NS	N
Solomon Islands	Papua New Guinea and Solomon Islands National Interpretation	2019	<50	Farm	Family	Y	Y	NS	NS
International	RSPO Independent Smallholder Standard	2019	≤50	NS	NS	Y	Y	NS	NS

^a A National Interpretation for Guatemala is currently being negotiated by a number of interested parties.

^b In Honduras, an independent smallholder can have a contract with a mill for no longer than 15 years.

Table 3. De Jure Classifications for Scheme Smallholders (*Y = Yes, N = No, NS = Not specified*)

Country	Standard	Year Updated	Area Oil Palm (ha)	Income Source	Labor Source	Subsistence Crops	Independence of Management	External support	Attachment to mill
Brazil	Sustainable Palm Oil Production Program	2010	≤10	NS	NS	NS	NS	NS	NS
Colombia	Colombia National Interpretation	2019	<50	Farm	Family	Y	NS	NS	NS
Côte d'Ivoire	Côte d'Ivoire National Interpretation	2020	≤50	Farm	Family	Y	N	NS	NS
Ghana	Ghana National Interpretation	2019	<40	Farm	Family	Y	N	Y	Y
Guatemala	Guatemala National Interpretation	2015	<50	NS	Family	Y	NS	Y	Y
Honduras	Honduras National Interpretation	2015	<50	Oil Palm	Some family	NS	NS	Y	Y ^a
Indonesia	Indonesia National Interpretation	2018	<50	Farm	Family	Y	N	NS	NS
	Indonesian Sustainable Palm Oil	2013	≤25	NS	NS	NS	NS	NS	NS
Liberia	Liberia National Interpretation	2018	<50	Farm	Family	Y	N	Y	Y
Malaysia	Malaysian National Interpretation	2019	<50	Farm	Family	Y	N	NS	NS
	Malaysian Sustainable Palm Oil	2019	<40.46	NS	NS	NS	N	NS	NS
Mexico	Mexico National Interpretation	2020	<50	Farm	Family	Y	N	NS	NS
Nigeria	Nigeria National Interpretation	2019	<50	Farm	Family	Y	N	Y	Y
Papua New Guinea	Papua New Guinea and Solomon Islands National Interpretation	2019	<50	Farm	Family	Y	N	NS	NS
Thailand	Thailand National Interpretation for Smallholders	2012	<50	Farm	Family	Y	N	NS	Y
Sierra Leone	Sierra Leone National Interpretation	2014	<50	Farm	Family	Y	NS	NS	Y
Solomon Islands	Papua New Guinea and Solomon Islands National Interpretation	2019	<50	Farm	Family	Y	N	NS	NS
International	RSPO Independent Smallholder Standard	2019	≤50	NS	NS	Y	N	NS	NS

^a In Honduras, a scheme smallholder is a grower that has held a contract with a mill for at least 15 years.

5 COUNTRY-LEVEL ANALYSIS OF PALM OIL PRODUCERS

5.1 Africa

5.1.1. West Africa Regional Overview

Oil palm (*Elaeis guineensis*) originated in the tropical forests of West and Central Africa and has been cultivated in the region for thousands of years. It is not only a primary source of cooking oil for most of the region, but also provides a variety of other services, including fodder for livestock, roofing material, biofuel, wine, and oil for soaps and cosmetics. Because it is so tightly integrated into West African culture, there is high demand for oil palm fruit and oil in both local and regional markets. In fact, all RSPO focal countries, and the larger ECOWAS region in general, are net importers of palm oil.² Historically, production has taken place in wild groves all over the region, but this shifted during the colonial period with the introduction of the plantation model. Violent occupation and land theft resulted not only in large areas of forest being cleared for plantation farming, but also in many wild groves being taken over by foreign companies (GRAIN 2019).

Post-independence, countries nationalized their oil palm industries and re-established the old colonial plantations with the help of loans from the World Bank. These parastatal companies used public funds and sometimes armies to develop the large plantations, many of which were privatized (also by World Bank efforts) during the structural adjustment programs of the 1990s.³ What this means is that the land conflicts of today – one of the primary challenges to any development of the oil palm industry in West Africa – are based on long histories of dispossession by foreign powers. According to GRAIN (2019), only 9 of the 52 large-scale oil palm plantations in Africa have been able to meet RSPO certification standards, raising the question of what a responsible investor might look like in the region.⁴

Today, less than 5% of global palm oil comes from Africa (see Table 4), the majority of it (80% or more) produced by smallholder farmers and processed by small-scale or artisanal mills. As plantations come under increased scrutiny, attention has turned to these smallholder farmers as the best hope for revolutionizing the oil palm industry in West Africa. This is mainly framed as intensification of existing plots via “best management practices” (Solidaridad 2019).

² Côte d’Ivoire, Ghana, Liberia, Nigeria, and Sierra Leone (though according to Solidaridad, Côte d’Ivoire covers its domestic production needs).

³ Sierra Leone is an exception.

⁴ In 2016, GRAIN reported that over 65 large-scale land deals for oil palm (covering 4.7 million ha) had been signed in Africa from 2000-2015. Their 2019 report (p. 2) updated the data to show that strong resistance to these deals by local communities, framed as land grabs, has resulted in a significant decline in the total area under these agreements, now around 2.7 million ha. At least 27 large-scale plantation projects have failed or been abandoned, and only 220,000 ha has actually been converted to oil palm plantations or replanted with new palm in the last five years (GRAIN 2019). In other words, the great hopes for expansion of oil palm plantations into West Africa based on growing global demand has not come to fruition.

Table 4. Production area and volume in West African countries, 2018

Country	Area harvested (hectares) ^a	Palm oil production (metric tons) ^b	Proportion of global production (%)
Côte d'Ivoire	339,459	514,000	0.7
Ghana	370,297	375,000	0.5
Liberia	17,955	42,000	0.06
Nigeria	3,015,530	1,015,000	1.4
Sierra Leone	27,691	36,000	0.05

^a FAOSTAT.

^b USDA Foreign Agricultural Service's Crop Explorer, data for palm oil. Available at: https://ipad.fas.usda.gov/cropeplorer/cropview/commodityView.aspx?startrow=1&cropid=4243000&sel_year=2020&rankby=Production.

The majority of smallholders in the region harvest wild groves or small farms that have low yields and require low levels of inputs and labor. Their main variety is the indigenous *Dura*, but they also grow the higher yielding *Tenera* variety, introduced in the 1960s and 1970s as part of the plantation model. Oil palm is often intercropped with other cash or food crops, and labor comes from the household and/or from casual local hires. Smallholders also have little access to formal land titles or other documentation, as most land tenure systems are based on customary law or a complicated mix of legal rights. Owners of newly inherited land are often not sure about the details of the previous arrangement (between their parents and traditional authorities, for example), which is common in the region but incompatible with RSPO standards. This is one of the major impediments to pursuing certification in the region as RSPO requires formal land documents, and titling/registration is hard to pursue ("tedious and costly").⁵ Titles are often required for loans as well, which makes expansion or intensification difficult. There are also gender limitations, as women are often not able to own land.

Grower Profiles

In 2014, Proforest conducted a study attempting to categorize the oil palm smallholder in Africa, with the main distinction being the level of support provided. The two main categories are *independent* and *supported* smallholders.⁶ Independent smallholders are the majority of oil palm producers in West Africa. *Supported smallholders* are either fully managed by a company (often called *scheme smallholders*) or have varying levels of support with the main relationship being a secure market for their crop (often called *outgrowers*).⁷ In West Africa, support outside

⁵ August 21, 2020 interview with a representative of Solidaridad-Côte d'Ivoire.

⁶ In the literature, there is a third category of *supported cooperatives* (also called clusters, associations, etc.) but these were found to be relevant primarily in Côte d'Ivoire.

⁷ In Côte d'Ivoire, however, "outgrower" is associated with *grands planteurs*, who have larger farms (over 200 ha).

of a scheme model is mostly unorganized and limited – often “support” can simply be code for a connection to a buyer.

According to Small’s (2014) report on oil palm growers in Liberia and Sierra Leone, smallholders fall into three groups:

1. *Independent farmers or groups of farmers.* These are farmers who manage their own lands without any direct support from either government or private companies. Independent farmers have greater autonomy in the management of their farms, and are free to sell their products to any buyers either directly or through traders;
2. *Supported smallholders.* These are farmers who manage their own plantations with some support from government or the private sector. The basic concept is that the government agency or private company provides technical assistance and inputs of seed stock, fertilizers and pesticides, access to finance, etc. There generally is a verbal or written contract delineating the agreement, and part or all of production by these smallholders are sold to the company.
3. *Managed smallholders.* These are farmers, whose land is fully managed by the company. Generally, the management activities include land preparation, planting, maintenance and harvesting activities. All production on smallholder lands is typically sold to the company, and the costs of management are generally subtracted from the incomes received by the smallholders.

It should be noted that smallholder profiles are mixed in terms of crop variety, land size and tenure, housing, labor, technology/equipment, processing facilities, farming methods, and support agreements. Any instinct to categorize by one (or more) of these variables reduces the complexity of the smallholder landscape. In terms of support agreements, for example, understandings of what a “contract” is can vary widely, and relationships with buyers are not always seen as binding. The one statement that all countries agreed upon was that the 50-hectare designation RSPO uses to define smallholders is too big to accurately represent the smallholder in West Africa.

Of the five focal countries in the West Africa region, two have what are considered “medium-size” plantations. In Ghana, there are *small and medium-sized plantations* that have a similar model to the large estates.⁸ These plantations range from 50 – 1,000 ha and buy fruits from outgrowers and smallholders close to them. They also hire labor from outside. Within this group, the medium-sized growers have their own mills. They process fruit into industrial grade oil for sale to the secondary processors who process it to vegetable oil, soap, etc. in the country. In Nigeria, there are also *small and medium-size plantations* ranging from 100 – 5,000 ha (PIND 2011). The smaller of these are typically owned by individuals or cooperatives and the medium-sized owned by the government or corporations. Medium-sized plantations tend to

⁸ August 26, 2020 interview with a representative of the Oil Palm Development Association of Ghana.

have better mills, hire outside labor, and provide some housing. They also have higher yields due to the ability to maximize the benefits of secure land tenure and plant improved seedlings.

In Liberia, interviews suggested the presence of medium-sized farms (approximately 100-250 ha) that may or may not have their own mills.⁹ In both Liberia and Côte d'Ivoire, there are additionally “people of influence” (high level officials and government Ministers) who buy big pieces of land (anywhere between 200 – 1000 ha) to grow oil palm for the large estates. In Côte d'Ivoire they are called *grands planteurs* and have their own mills. In Liberia, they typically do not have their own mills, but rather sell to the concessions or elsewhere.¹⁰ It is difficult to say that these should be categorized as medium-scale growers (rather than large-scale), and the perception regionally is that only Ghana and Nigeria have what would be called medium-scale growers.¹¹

Certification Challenges

There are several challenges to RSPO certification in West Africa. The main challenge is that RSPO standards do not fit the reality of most African smallholders. For many, the cost of accessing necessary resources (tools, planting material, fertilizers, etc.) is prohibitive, and the ability to comply with standards that are not the norm in their country, virtually impossible. Documentation is a huge problem in this regard, specifically around land tenure. Additionally, all countries note that low productivity is a major constraint, especially in terms of making premium pricing a suitable incentive. Overcoming these challenges would require developing locally relevant standards in partnership with governments and responsible investment practices in partnership with private companies and other investors. Most countries are attempting exactly this with the creation of National Oil Palm Platforms.

Another significant constraint is the lack of awareness of the RSPO process in general (what it is, what the requirements are, and why it is important), which results in a lack of incentive to join. According to the Director of Proforest Africa, any company who has strong links to its growers (i.e. is already providing loans, seedlings, trainings, and other resources to scheme smallholders), should be able to extend those resources toward RSPO certification.¹² Without this support, certification will not happen.

Additionally, the huge market demand (both locally and regionally) makes it relatively easy to sell both FFBs and CPO without the need for certification. Certainly, medium-scale growers tend to have access to more resources, more secure land tenure and appropriate documentation, and growing practices more in line with RSPO standards. In theory, this makes it easier for them

⁹ August 17, 2020 interview with a representative of SDI-Liberia; August 21, 2020 interview with a representative of Solidaridad-Liberia.

¹⁰ August 17, 2020 interview with SDI-Liberia; September 10, 2020 interview with Solidaridad-Côte d'Ivoire; data on land size interpreted from SDI (2019).

¹¹ September 2, 2020 interview with a representative of Proforest.

¹² September 2, 2020 interview.

to pursue certification. However, they are such a small percentage of the oil palm landscape in West Africa that they might not be as strategic a focus as smallholders in terms of RSPO expansion. In general, it is unclear how and to what extent engaging in the RSPO process might benefit smallholder farmers who are not strongly attached to large-scale plantations with the resources to pursue such costly and complex certification.

Other Considerations

While there are regional similarities, each of the focal countries has its own land, labor, and market issues that suggest even a regional approach might not promote high levels of smallholder inclusion. Liberia and Sierra Leone, for example, are dealing with the legacy of civil war and the repercussions of large-scale land investment by foreign corporations much more so than Ghana, which has had more success in guaranteeing land tenure for smallholders. Côte d'Ivoire has a comparatively robust export sector, and is the only country with a cooperative system in place to organize farmers (though the efficacy of this system is in question). Nigeria, while being the largest producer of oil palm in Africa with a population aware of the benefits of development, lacks the proper investment to spur necessary revitalization in the sector. These are all limitations that RSPO may not be qualified to address.

5.1.2. Côte d'Ivoire

Oil palm production in Côte d'Ivoire looks slightly different than the rest of West Africa. It is divided up into two sectors, industrial plantations (75,000 ha) and village plantations (220,000 ha).¹³ There is a comprehensive cooperative system in place, developed after the privatization of the oil palm industry in 1995. Oil palm production was initially part of a national development strategy begun in the 1960s to increase competitiveness on the global stage via diversification (outside of cocoa and coffee). Under the First Palm Plan from 1963-1985 and the Second Palm Plan from 1985-1995, Côte d'Ivoire became an exporter of palm oil. Smallholder yields ranged from 12-16 tons per hectare.¹⁴ After the privatization of the state's palm oil firm (PALMINDUSTRIE), production decreased. Current smallholder yields are around 4-8 tons/ha.¹⁵ Under the Third Palm Plan (2012-2020), production is projected to increase from 400,000 to 600,000 tons per year with most of the focus on improving smallholder yields. Côte d'Ivoire is currently the second highest producer of palm oil in Africa (behind Nigeria) with 515,000 tons per year.¹⁶

Côte d'Ivoire is a net importer of palm oil, though it exports more than other African countries (40% of its CPO).¹⁷ It is a regional processor, importing from places like Liberia, which do not

¹³ August 21, 2020 interview with representatives of Solidaridad-Côte d'Ivoire.

¹⁴ <http://rsep.rspo.org/index.php/oil-palm-smallholder-initiatives-worldwide/item/cooperatives-in-Côte-d-ivoire>

¹⁵ <http://rsep.rspo.org/index.php/oil-palm-smallholder-initiatives-worldwide/item/cooperatives-in-Côte-d-ivoire>

¹⁶ <http://www.worldagriculturalproduction.com/crops/palmoil.aspx>, according to the Solidaridad interview, Côte d'Ivoire produced 536,000 tons in 2019.

¹⁷ September 10, 2020 interview with the country representative of Solidaridad-Côte d'Ivoire.

have the mill capacity. Some of the largest mills in country even have farms in Liberia. Four large transnational companies have invested in 17 industrial mills in the country, PalmCI being the largest (12 mills).¹⁸ The fifth company, DekelOil, is supposedly one of the last remaining oil palm developers in West Africa who is not in partnership with a major Asian palm oil corporation (DekelOil 2015).¹⁹

Industrial production is all CPO (for refined oil, margarine, and soap). This CPO is sold domestically and exported to neighboring countries. Village plantations produce fruit for artisanal transformation (red palm oil) and industrial uses. According to Cheyns and Rafflegeau (2005), primary processors are seen as the only market for FFB in certain geographical areas due to lack of other buyers (what they call structural inertia). Production models run the spectrum in terms of efficiency. They can include the indigenous varietal (*Dura*) “that just grows everywhere,” and can be mixed with other subsistence crops.²⁰ This can be eaten as fruit or very lightly processed in villages.

Oil palm is not a high contributor to deforestation in Côte d’Ivoire. It accounts for 8-11% of forest destruction, mainly due to the small size of farms.²¹ One of the biggest sustainability issues is the need for increased yields. This intensification is seen as what will help protect forests and increase incomes. Cooperatives are necessary in this context to implement farmer trainings. Solidaridad claims to have done this with great success. Smallholder yields have doubled (increasing from 4 to 8 tons per hectare) due to the RSSF program.²²

Grower Profiles

According to Solidaridad, oil palm production is divided up into two sectors, the industrial plantations (75,000 ha) and village plantations (individual outgrowers) (220,000 ha).²³ In 2019, Côte d’Ivoire produced 536,000 tons of CPO, and around 2.5 million tons of FFB. It is the second largest producer in Africa, behind Nigeria. Importantly, production is organized under the AIPH (Association Interprofessionnelle de la Filière Palmier à Huile – in English, the Interprofessional Oil Palm Association). There are 44,866 growers in total.²⁴

¹⁸ PalmCI is a subsidiary of SIFCA, which owns Africa’s largest oil palm refinery (in Abidjan) and is the largest private employer in CDI (29,000 employees). It is the largest exporter of edible oil in the region, has networks in Liberia, and is currently expanding into Nigeria (Monnier 2017).

¹⁹ DekelOil was set up by an Israeli conglomerate and the Siva group, based out of Belgium and owned by an Indian billionaire. It has been accused of land grabs worldwide.

²⁰ August 21, 2020 interview with representatives of Solidaridad-Côte d’Ivoire.

²¹ August 21, 2020 interview with representatives of Solidaridad-Côte d’Ivoire.

²² August 21, 2020 interview with representatives of Solidaridad-Côte d’Ivoire.

²³ In French, these are the *plantations industrielles* and the *planteurs villageois*.

²⁴ August 21, 2020 interview with representatives of Solidaridad-Côte d’Ivoire, email correspondence with the AIPH said “45,000 growers”

There are three branches of AIPH:²⁵

1. An association/federation of small outgrowers (FENACOPAH-CI) organized into 32 cooperatives;
2. Association of large mills (GITHP) – currently 16 mills; and
3. Association of small and medium-sized mills (APROSAPCI) – currently 20 mills.

Solidaridad considers smallholders under the standard RSPO definition: where land is less than 50 ha, labor comes primarily from the family, and oil palm is the main source of income (via price of FFB). This is clarified in their 2017 baseline report, which gives the average farm size as 15 ha, with 6-8 ha in oil palm. Smallholders account for about 70% of all production.

There are varying levels of support for smallholders (via government extension, via Solidaridad in the form of farmer training groups, and via their own cooperatives) but this support seems limited. Support can be a function of location and what mills they sell to. In other words, the difference between growers is in their access to benefits.²⁶ If they are not part of a cooperative or have an attachment to a mill, they do not have much access. The large mills do provide basic guidance, but only in terms of streamlining their production process. And the government does not provide financial support, only extension/facilitators.

There is a competing narrative around the success of the cooperative model in Côte d'Ivoire. When the government privatized the oil palm sector in 1995, cooperatives took over industry organization and management. This was modeled on the cocoa industry and grouped by region/cluster. Solidaridad is exporting this “successful” coop model (primarily in Ghana) as part of its SWAPP program. But evidence from Solidaridad’s 2017 baseline study suggests that the cooperative model is inefficient and weak. Growers join out of obligation rather than expected benefit. The system is present, but it does not function in a way to promote innovation or increase farmer support systems.²⁷

While the interview with the Solidaridad oil palm team did not identify a medium-scale grower in Côte d'Ivoire, an interview with the Country Representative pointed out the presence of the *grands planteurs*, or those considered outgrowers for the industrial plantations.²⁸ These farms can range from 200 – 1000 ha, and are owned by those who live in cities (primarily Abidjan), not in actual villages. Calling them “*planteurs villageois*” (as smallholders are called) does not accurately represent their land holding or growing model. But they are not technically part of the *plantations industrielles* either because they are outgrowers. These growers have their own staff and transportation infrastructure, and are often high-level officials or Ministers from the capital.

²⁵ While there are farmers and mills that are not a part of the associations of AIPH, the majority of the industry works through this structure.

²⁶ There are instances of contracts between growers and mills, see section on contracts below.

²⁷ September 10, 2020 interview with the country representative of Solidaridad-Côte d'Ivoire.

²⁸ September 10, 2020 interview.

Supported Smallholders under Contract

According to DekelOil, they have signed contracts with more than 5,000 local smallholders around Ayenouan, covering 17,000ha of existing oil palm plantations.²⁹ Under these agreements, DekelOil is responsible for buying 100% of the fruit, transporting it from the plantations to the factory, and paying the published AIPH price (minus any quality control deductions). Though the company says it carried out “due diligence” checks, the experience of the villagers from Ayenouan tells a story of false promises and land grabs (World Rainforest Movement 2018). Some of these villagers are now organizing to get out of the contracts and warn others of entering into any agreement with the company. It is notable that the company received a grant from the World Bank in 2015 to further expand in the area, taking control of an additional 10,000ha of land (World Rainforest Movement 2018).

Certification Challenges

The greatest social challenge for smallholders is secure land tenure.³⁰ RSPO requires formal land documents, and titling/registration is hard to pursue (“tedious and costly”). Less than 2% of all land in Côte d’Ivoire is legally registered. Titles are required for loans as well, which makes expansion or intensification difficult. There are many land issues related to inheritance (for example, new owners not being sure what the arrangement was for their parents, not having a formal title, and women not being allowed to own land), but also to migration from neighboring countries and from the northern part of the country. Migrants want to go where the land is good for growing, which puts pressure on the fertile southern region.

Currently, there are no RSPO certified smallholders in Côte d’Ivoire. There are RSPO certified mills, as well as newly certified plantations under the management of SIPEF-CI and Agrivar. The RSPO smallholder support fund (in partnership with Solidaridad) was a three-year program that targeted 5,000 smallholders in an effort to get group certification. They were trained in “best management practices” to increase yields and educated on the benefits of RSPO certification, with the hope that they will continue the process on their own. Mills are more likely to be certified as a requirement of their market, and can receive help from their international buyers. Growers in Côte d’Ivoire, however, do not have to undergo certification because they can sell to local mills. Per Solidaridad, the main challenges to certification are awareness (understanding the benefits) and cost. According to the AIPH, in addition to cost, a main limitation is the lack of potential market opportunities for certified oil palm in the country.

Another significant issue is related to the complexity of RSPO standards, especially the pricing premiums. According to Solidaridad’s Country Representative, RSPO’s rules and regulations are not only based on a SE Asian standard, but they are too numerous and complex to be applied in

²⁹ See: <http://www.dekeloil-francais.com/page.php?plD=52&ppID=3>.

³⁰ August 21, 2020 interview with representatives of Solidaridad-Côte d’Ivoire; September 7, 2020 email correspondence with AIPH.

Côte d'Ivoire.³¹ Compared with the experience of cocoa farmers, who have a sector based on clear and transparent pricing, premium pricing for oil palm might not even result in a profit when taking into account the investment and effort expended. He recommended increased partnership with the government to reflect the African reality, as well as yearly benchmarks that could provide incentive to small growers. His view is that the lack of smallholder productivity is a primary challenge to certification. Without investment to promote best management practices and increase productivity, farmers are not in a position to pursue certification.

5.1.3. Ghana

Oil palm (*Elaeis guineensis*) originated in the tropical forests of West Africa and has been cultivated in Ghana for thousands of years. Ghana was the first country to export oil palm (c. 1820) during the colonial period, as a direct result of demand generated by the British Industrial Revolution (Khatun et al. 2020). By the 1880s, oil palm accounted for 75% of Ghana's export revenue (Danyo 2013). Through the first part of the 20th century, Africa led the world in total production and export of palm oil. By the 1960s, it was dramatically surpassed by production in Malaysia and Indonesia³². Since independence in 1957, there have been various attempts by the Ghanaian government to revive what is seen as an under producing (low yielding³³) oil palm industry, without much success.

In 2002, the Government of Ghana (led by the New Patriotic Party) launched the President's Special Initiative (PSI) on Oil Palm, centering smallholder farmers as the engines for redeveloping a viable export program while at the same time alleviating rural poverty (Khatun et al. 2020). Ghana's traditional land tenure system makes it difficult to find contiguous land areas sufficient for large-scale production, a primary reason why smallholdings were (and still are) focal points for expansion strategies. Though ostensibly supported at the highest levels, the PSI-Oil Palm failed dramatically over a period of three years, beset by political fragmentation and elite infighting (Asante 2013). The "pro-poor" framing of the PSI-Oil Palm as a vehicle for improving rural livelihoods is currently being reconceived as a National Development Policy based on environmental sustainability and certification, again under the NPP (who are back in power as of 2016). The strategy is to focus on "best management practices" and yield intensification, as expansion is not a viable option.

Oil palm production in Ghana is separated into two sectors, one for home consumption and one focused on industrial use for domestic manufacturing. This bifurcation results in a diversity of

³¹ September 10, 2020 interview.

³² See: <http://www.fao.org/3/y4355e/y4355e03.htm>.

³³ Smallholders productivity is estimated at 30-50% of large plantations in Ghana, and West Africa in general has a significant yield gap compared to SE Asia. Adjei-Nsiah et al. (2012) finds: "While the fresh fruit bunches in Southeast Asian countries yield around 20 tons/ha (Jalani et al., 2002) those of Ghana yield around 3-6 tons/ ha by small-scale farmers and 11-14 tons per hectare by industrial estates (Opoku and Asante, 2008)." See also: Rhebergen 2019.

products, markets, and livelihood opportunities. There are two main varieties grown – the *Dura* and *Tenera*. *Dura* is the wild variety, and is highly prized in the larger ECOWAS region because of its taste and fat content (Proforest 2014). *Tenera* is the higher yielding industrial variety grown on larger plantations. Independent smallholder farmers are responsible for at least 70% of FFBS (fresh fruit bunches) and 60+% of crude palm oil (CPO) in Ghana (Khatun et al 2020)³⁴. Production systems can be mixed (both varieties) and intercropping with other food crops is common with the *Dura* variety. Most processing of CPO is done by small-scale processors, mainly women (Adjei-Nsiah and Klerkx 2016, Oosterveer et al. 2014, Yawson 2015) at mills called *Kramers*. There is a deficit of red palm oil in local and regional markets due to high demand (Adjei 2014). In fact, Ghana and the larger ECOWAS region are net importers of crude palm oil (Khatun et al. 2020, Yawson 2015).³⁵ The differentiated nature of the oil palm sector in Ghana allows for multiple forms of market engagement and various options for securing livelihoods, offsetting some processes of adverse inclusion found in other regions. Because of the high demand, transnational companies have “loosened” commodity relations, opening markets to non-contract farmers and allowing “side-selling” from contract farmers (Manley and Leynseele 2019).

The four largest industrial plantations in Ghana are located in the southern tropical forests:

1. Ghana Oil Palm Development Company (GOPDC) – Eastern Region
2. Benso Oil Palm Plantation (BOPP) – Western Region
3. Twifo Oil Palm Plantation (TOPP) – Central Region
4. Norpalm – Western Region

As of 2014, there were eight medium-scale processing facilities, and 400 small-scale processors (Adjei 2014, Fold and Whitfield 2012) in addition to the four industrial mills associated with the above plantations. Currently, there are approximately 350,000ha under oil palm cultivation in country. Independent smallholders account for 80% of this production, estates plus their smallholders and outgrowers 18%, and medium-scale growers 2%.³⁶

There is some tension between narratives of smallholder farmers as lacking in technology, knowledge, and production capability and those of smallholder farmers as already having viable production models that ensure environmental sustainability and secure livelihoods. According to Khatun et al. (2020), over 50% of deforestation in Ghana is related to agricultural expansion, but only 7% of that is associated with oil palm, citrus, and rubber *combined*. Cocoa production is by far the largest driver of deforestation, but the push for oil palm expansion as a development strategy could make it a significant contributor in the future. The *Dura* variety, as

³⁴ Most of the literature assigns 80% of palm oil production in Ghana to smallholder farmers and 80% of processing to small-scale processors (Proforest 2019, Oosterveer et al. 2014, Yawson 2015). Adjei-Nsiah et al. (2012) states “small private farms” produce 80% of the oil palm crop in Ghana.

³⁵ CPO production is around 245,000mt per year, and does not meet national demand. Ghana imports 30,000mt per year from Asia (Khatun 2020).

³⁶ August 14, 2020 interview with researcher at the University of Ghana.

it is integrated into other cropping and forest systems, seems to present less of a threat to secure forests and biodiversity than large-scale monocropping of *Tenera*. But calls for intensification on smallholder plots could change this as well. It is not clear that preparing smallholder farmers for export markets via certification is compatible with local skills, knowledge, and markets.

Grower Profiles

Smallholder Characterization

Most smallholders in Ghana typically produce on lands much less than 50 ha the RSPO designates. The Ghana national interpretation of the RSPO's P&C uses a threshold of 40 ha, though most smallholders are producing on plots less than 10 ha, often alongside other crops. One of the main reasons for this is the limited access to land. In areas where land access is not a problem, labor availability, input needs, and market access constrain smallholder models (Proforest 2014). Smallholders are categorized as *supported/associated* or *independent*.

Large estate plantations in Ghana have *associated smallholders* who can be characterized as: 1.) scheme smallholders, 2.) outgrowers, or 3.) partially independent. The estate plantations are typically nucleus estates, owned by companies. Their mills range from 20t – 60t/hr. Their land area ranges from 6,000 ha to 10,000 ha. Benso, for example, has 6,799ha (TOPP about the same). GODPC has between 8,000 – 10,000ha between all concessions.

According to the Oil Palm Development Association of Ghana (OPDAG), the three types of associated (or “institutionally affiliated”) smallholder farmers are:³⁷

1. *Scheme smallholders*. Those who are tied to estates with plots between 2.5-10ha. Often, an estate will be set up around a village (that land having been leased to the company from the government), absorbing the land and labor and concentrating it around the village. Farmers often apply to lease the land back from the company and are dependent on company maintenance and technical support. They grow high yielding/industrial varieties. Scheme smallholders are located on the concession land itself. For BOPP, out of the total 6,799 ha, 1,650 ha were developed into a scheme smallholder group (almost 25%). The land was given to 438 community members in 4 ha plots. This is more or less a lease situation between the bank, the company, and the smallholders. BOPP buys all fruits and the bank pays the growers after deductions have been made from their revenue. This is considered “a sustainable corporate social responsibility project.” The company has complete control over management. They ensure the planting material, pest management, fertilizer regimes, standards of maintenance, etc. This part of the plantation is seen as “as good as” the company land in terms of production. This makes it easy to certify the nucleus estate and scheme

³⁷ August 26, 2020 interview with a representative of the Oil Palm Development Association of Ghana.

smallholders at the same time (which BOPP did in 2014). Twifo and GODPC also have scheme smallholders and are also certified.

2. *Outgrowers farmers (also called supported farmers)*. These are farmers who typically have plots between 5-50ha and often have ties to an estate as well. They own their own land outside of a concession, which they bring to the company to make an agreement. A typical agreement is that the company provides a manager, and a bank finances the development fees. These farmers may or may not be contractually obligated to a plantation or mill. They tend to have secure land tenure, suitable land, and the ability to produce for mills (meaning they also grow export varieties). Some outgrowers are RSPO certified as well (i.e. Twifo). This is almost the same as a scheme smallholder, with the exception of land ownership. Outgrowers have varying levels of association with mills. Some are tightly bound, some are not.
3. *Partially independent smallholders*. This seems to be a catchall category for those arrangements that do not fit the scheme or outgrower categories. An example is the Golden Star Mining Corporation, who gave part of their land to community growers to start growing oil palm. These growers are technically their own entity (GSOPP – Golden Star Oil Palm Plantation), but use the company’s resources and sell to BOPP through an “arrangement.”

Support for both outgrower and scheme smallholders can include: seedlings and other planting material, fertilizer, herbicide, soil preparation, and training/extension services. Independent (see below) and supported farmers are paid the same for FFBs, although supported farmers (sometimes called contract farmers) might have other deductions and bonuses (Manley and Leynseele 2019). Contract relationships have become less strict over the past few years due to companies need for fruit and desire to keep farmers happy. Ghana does not, as yet, have a robust cooperative system for oil palm producers. What NGOs like Solidaridad are trying to do is form them into clusters or groupings so that they can get certified. Most outgrower and supported smallholder schemes were financed by aid from the World Bank, EU, or other multilateral donors (Fold and Whitfield 2012).

In addition to associated/supported smallholders, there are also *independent smallholder farmers* with plots ranging from 1-10ha. These farmers were also referred to as “micro-smallholders.” It is estimated that these growers account for more than half of all oil palm production in Ghana. They plant on family lands and have anywhere from a few trees to a few hectares. They are scattered across the landscape and do not typically apply fertilizers or have formal maintenance regimes. They have low yields (~5 tons/ha), but not much incentive to increase them. These farmers are not attached to any mill, and they primarily (95%) use small-scale processors (SSPs). However, they may sell to medium-scale processors if they want. They have no attachments and are self-managed and self-financed.³⁸ They also receive no support or training, unless it is from a targeted program run by a civil society organization (Khatun et al. 2020). There are two main reasons for selling to SSPs: One, they can receive support from SSPs

³⁸ August 14, 2020 interview with researcher at the University of Ghana.

in the form of credit to maintain farms, and 2.) SSPs will buy fruits from their farms, reducing transport costs.³⁹ These farmers can also sell fruit bunches directly to consumers, and therefore, do not have to be located close to a mill. Labor is done by individuals (mainly families – although this is changing as children are educated and leave rural areas), and is not formalized (labor is just as often directed toward cocoa or other food crops). Can grow *Dura*, *Tenera*, or other varieties. Some of these farmers can be “adopted” by managers of large plantations and receive a little bit of support – i.e. technical training. But “if you help them, there is no guarantee that they will sell to you.”⁴⁰ In fact, they can sell elsewhere (side-selling) in order to dodge plantation deductions.

Manley and Leynseele’s (2019) detailed survey of 60 farmers in the Eastern Region further divides farmers up into four groups:

1. Faithful contract farmers who are happy with contract relationship (17% of study group with average 8.4ha of land);
2. Contract farmers who sell both to a company and who “side-sell” to local, small-scale mills/Kramers (22% of study group with average 5.9ha of land);
3. Independent farmers who can choose to sell to either local or global markets (35% of study group with average 5.5ha of land); and
4. Independent (marginalized) farmers who sell only to the Kramers, or process themselves (27% of study group with average 4ha of land).

In terms of mill characterization, a recent study “calculates that small-scale and village mills utilize about 68 percent of the oil palm fruit bunches produced in Ghana (and account for 55 percent of the crude palm oil produced); that medium-size mills use about 12 percent of total fruit bunches, but this is an over-estimation because one of the mills stopped operating; and the large-scale estates use about 19-20 percent of total fruit bunches produced” (Folk and Whitfield 2012, p. 14 citing Ecorys & CDC 2010).

*Medium-Scale Growers*⁴¹

In addition to the large estate plantations above, there are also *small and medium-sized plantations* that have a similar model, but are smaller. It is estimated that there are more than ten of these size estates. Examples are Juaben Oil Mills and Ameen Sangari. They have very small nucleus estates, from 40 – 1,000 ha (though one interviewee characterized medium-scale as 100-500ha). They buy fruits from outgrowers and smallholders close to them, and they hire labor from outside. These plantations can be owned by an individual or a family, and over the years many of these companies have often collapsed or gone bankrupt. If the founding owner dies, it is often difficult for heirs to cooperate and keep the business running. The ones still

³⁹ August 14, 2020 interview with researcher at the University of Ghana.

⁴⁰ August 26, 2020 interview with a representative of the Oil Palm Development Association of Ghana.

⁴¹ August 26, 2020 interview with a representative of the Oil Palm Development Association of Ghana.

there and running will be a target of the OPDAG as they are seen as major actors in the future oil palm landscape. Within this group, the medium-sized growers have their own mills. They process into industrial grade oil for sale to the secondary processors who process it to vegetable oil, soap, etc. in the country.

For all grower groups, estimates of total production break down to approximately 70% independent, small, medium, and micro growers and 30% large estates (which include the plantations, scheme smallholders, and supported outgrowers).

Certification Challenges

According to one interviewee, there is no big challenge to certification as long as there is a remunerative market for the grower, and the buyer is prepared to pay for the certification cost.⁴² If there are incentives for farmers to register, they will be prepared to undertake the certification process. This narrative varies slightly from that of another interviewee, who stated that smallholders have to be associated with a large estate to even attempt certification.⁴³ It is too costly and requires too much expertise. As an example, it took BOPP three years just to get approval under the new RSPO planting procedure for their outgrowers. This interviewee also suggested that all smallholders should qualify under the simplified standard, including scheme smallholders. If Ghana is to get estates to replicate smallholder models, then the barrier to entry must be lower (while obviously following all standards).

Khatun et al. (2020) see it a bit differently, citing lack of smallholder input into sectoral decision-making processes as a key impediment. Without a “seat at the table,” it is unlikely that certification will give farmers access to key livelihood mechanisms promised by plantations. Additionally, independent farmers do not receive any extension or training support from the government, companies, or even NGOs (if they are not organized into recognized groups). Seed quality, in particular, is a problem in terms of addressing the low productivity of smallholders. Regardless, though certification is not seen as having the potential to improve livelihoods, many farmers see it as a net benefit as it provides access to mills and markets as well as increased knowledge and technology.

Where the challenge lies for smallholders is in producing for industrial grade oil. According to Khatun, if RSPO had regional or site specific criteria for growers, then it would be easier to encourage them to join.⁴⁴ Regional and local markets, however, do not require the same amounts of labor, transportation, processing capabilities, etc. that producing for export does. Smallholder farmers are underproducing and need assistance, but they also need to keep their supply chains short in order to profit – a goal that might not be in line with RSPO certification for export.

⁴² August 14, 2020 interview with researcher at the University of Ghana.

⁴³ August 26, 2020 interview with a representative of the Oil Palm Development Association of Ghana.

⁴⁴ August 18, 2020 interview.

For medium-scale growers/mills, they have to have a certain caliber of legal, financial, and administrative staff (and pay well to keep them employed) to negotiate the RSPO process. Even with higher yields and premium prices associated with RSPO, it takes so long to get certified that they might not have the financial stamina to even begin the process.⁴⁵ The OPDAG suggests a jurisdictional approach to certification – to lower the barriers to entry for this type of independent farmer (outlined in Proforest 2019). This means mapping out an entire district (whether using political or ecological boundaries) to ascertain where oil palm can and cannot be grown (where forests or HCV areas are, for example). For the OPDAG, this is the best way to ensure that smallholders can get certified, especially the outgrowers. It lowers the costs of entry and makes the landscape more legible.

5.1.4. Liberia

Oil palm grows all over Liberia as a wild crop, primarily of the *Dura* variety. These wild groves, tended to by 220,000 smallholder farmers, have been estimated to account for half of all oil palm production in country (approximately 35,000ha in 2010) (Small 2014). This small-scale production model is low-yielding, with little use of agronomic techniques or inputs, and in one framing is described as “wasteful” – less than 50% of the crop is harvested, and about 35% is lost in processing (Republic of Liberia 2014). Smallholders, however, are the primary growers of oil palm in Liberia, due to the legacy of the civil war (land conflict, disruption) and the failures of the current, large-scale concession model. In another framing, the small, local and regional (cross-border) markets are the most important part of the oil palm economy. Palm oil is a staple food, not just in Liberia, but also in the entire region. The production and trade of palm oil from the very small scale up to 100ha or so makes a large, informal network very unlike the global supply chains of SE Asia. 50-70% of every village in Liberia grows oil palm, and this ubiquity is the basis of a variegated market with diverse value chain needs.⁴⁶

The Government of Liberia initially established medium and large-scale plantations (called concessions) in the northern part of the country during the 1970s and 1980s to produce crude palm oil (CPO) for export. These plantations were set up under varying forms of land tenure (some government owned, some community owned and cooperatively managed, and some held under community trusteeship), but have been neglected or abandoned since the war, and are past peak productivity levels (Small 2014). The Liberian Civil War (1989-2003) effectively halted export production and disrupted the development of the oil palm sector in country. Any redevelopment of these areas will have to address the contentious legal status of land ownership and access.

From 2008-2012, the government’s oil palm strategy focused on negotiating contracts with large, private oil palm companies to develop the coastal region of Liberia. These companies were told that their land concessions were free from “encumbrances,” but the reality on the ground has shown otherwise (Mukpo 2017). The major plantations, including Sime Darby and

⁴⁵ August 26, 2020 interview with a representative of the Oil Palm Development Association of Ghana.

⁴⁶ August 27, 2020 interview with an independent consultant.

Golden Veroleum, have been met with resistance by local activists and their international supporters who have illuminated significant human rights violations resulting from land theft/encroachment and poor working conditions. They have also pointed out that the concession model drives environmental destruction and deforestation in what is the largest remaining tract of the Upper Guinean Forest (Mukpo 2017). Sime Darby recently completed its divestment from its Liberian operation and sold all shares to Mano Palm Oil Industries, Ltd, a 'local' company. Golden Veroleum was sanctioned in 2018 by RSPO for human rights and environmental abuses (beginning in 2012), and has tried to leave the organization.⁴⁷ As it has become clear that the traditional concession model is not working in Liberia, the focus has shifted to outgrower schemes that keep land management in the hands of local communities. The passage of the Land Rights Act in 2018 has been hailed as a victory for the future of oil palm development schemes, but it is not retroactive – meaning those who lost their land in the initial wave of private concessions have not seen justice (O'Mahony 2019).

According to Small (2014), Liberia's oil palm policy (which focuses on the need to increase smallholder productivity as the engine for national development) faces the following challenges:⁴⁸

1. The identification of successful smallholder models is difficult due to the long-term impacts of civil war;
2. Liberia has unresolved land tenure conflicts, limited access to markets, primarily rural economies, and little success with foreign investment;
3. Smallholders must have support from non-state entities to even attempt equitable outcomes in commodity production; and
4. Liberia cannot follow East Asian model, rather it must account for local *Dura* market.

Grower Profiles

According to Solidaridad, there are three sizes of growers (*note acre/hectare distinction):⁴⁹

1. *Large plantations* (called "concessions"). The major plantations are Sime Darby, Golden Veroleum, Equatorial Palm Oil (EPO), and Maryland Oil. These plantations were each given a lease for 220,000 ha to develop, but have succeeded in developing only a fraction of that so far, due to conflict.⁵⁰

⁴⁷ August 27, 2020 interview with an independent consultant.

⁴⁸ This is the case for both Liberia and Sierra Leone.

⁴⁹ August 21, 2020 interview with a representative from Solidaridad-Liberia.

⁵⁰ In 2010, Golden Veroleum was given 220,000 ha of land in five counties, plus 40,000 ha for an outgrower scheme, and an additional 100 ha to build a port on adjacent land. In 2009, Sime Darby signed a lease for 220,000 ha over four counties, which reallocated 120,000 ha from an old rubber concession and included 100,000 ha for a commitment to build and operate a vegetable oil refinery in Liberia. Sime Darby also received an additional 44,000 ha for an outgrower scheme (Lomax 2012).

2. *Medium-size growers* (up to 400-600 acres). These are also involved in processing/have mills.⁵¹
3. *Smallholders*, including:
 - a. Those who serve as outgrowers (from 4-5 acres typically, but could have up to 10 acres). This is the dominant category of grower, but dependent on the outgrower schemes of the large plantations. They adopt the varieties the companies want them to grow, and the concessions buy from them. They are located around the plantations.
 - b. Those who are independent growers. They have maybe 1-3 acres of land, but can also have up to 10 acres. They are not tied to a mill and can sell to whomever they want to.

A representative of the Sustainable Development Institute (SDI) in Liberia provides an alternative grower characterization that shows some ambiguity as to what a “medium-scale grower” might be⁵²:

1. *Individual smallholder farmers*. These growers are assisted by family members, and have around 150-200 trees (though they can have anywhere from 50-300 trees). They grow the local variety (*Dura*) that the government promoted before the war. They are scattered/dispersed (not concentrated) and they produce both crude oil and some value added products (like soap) for local markets. They are typically found around villages, not in the heavily forested regions. They have a low impact (both socially and environmentally), judged to be “less than 10% of the impact of concessions.”
2. *Supported or structured farmers*. These are categorized as “medium-sized farms” and supported by NGOs (like Solidaridad) who organize them into teams to teach best management practices. They can have up to 2,000-5,000 trees on maybe 100ha. They might have plantation connections, but are not supported by plantations. They grow the high yield variety used by the plantations.
3. *Large-scale individual farms*. These are owned by “people of influence,” often politicians with connections to the surrounding community. Former President Ellen Johnson Sirleaf, for example, owns a huge farm, as do many senators (SDI 2019). They grow the high yield variety and sell to the concessions. They do not have their own mills. They recruit and hire labor. Sime Darby (now called Mano Palm Oil Industries Limited) has about 10-15 of these farms around it, providing fruit.
4. *Concessions/plantations*. These are the large-scale, consolidated land areas with strict, formalized rules. They grow the high yielding variety for export. These companies started around 2009 and were given land from the government. They are all at some

⁵¹ See alternative characterization below.

⁵² These definitions come from an August 17, 2020 interview with a representative from the Sustainable Development Institute (SDI) in Liberia, and show some confusion as to what a “medium-scale grower” might be (compared to Solidaridad’s characterization).

stage in the process of RSPO certification (although which stages are unclear). There was some effort by the World Bank to incorporate smallholder farmers into these concessions by supporting “revitalization” plans for older farms. This failed. Plantations do not use independent smallholder farmers in Liberia.⁵³

Smallholder Support

This passage from Small (2014) attempts to delineate smallholder groups and emphasize the criteria of “support” as a distinguishing feature:

“In the context of new oil palm development the distinction between independent and supported smallholder is important. Independent smallholders are defined as self-organized and self-financed groups that have the freedom to choose how they use their land, which crops to cultivate, and are not bound by any particular mill or association. Supported smallholders are defined as entities that are structurally bound by contract, credit agreement, or planning to a particular mill and are often not free to choose which crop to grow (Pesqueira & Glasbergen, 2013). In the context of the recent Liberian contracts between the government and palm oil plantation companies, Supported Smallholders are referred to as Outgrowers.

All recently signed oil palm concession agreements require companies to support the development of Outgrower schemes and combined these could cover an area of up to 100,000 ha. However the specific form which these take is yet to be decided and could range from supported schemes that include written contracts guaranteeing sales and price, through to a collective land scheme by which communities (identified by the state) receive a share of profits based on the equity value of land that has been rented to a plantation company.”

Per Solidaridad, there are several tenure or land use arrangements for outgrowers:⁵⁴

1. Outgrowers can own and work their own land in rural areas;
2. They can use concession land to grow, and profit is determined after an overhead is removed from the sale of the harvest; and
3. They can use concession land to grow and employ locals for labor (in order to farm more land).

The SDI interview confirmed that the main criteria for profiling growers should be the level of support, specifically financial support or where the investment is coming from. Other criteria would be land area (or number of trees) and location. Smallholders are typically located around villages and do not have concentrated land holdings. Solidaridad used similar criteria – both “farm size” and “support.” They also added “mill access.” According to them, with the 50-hectare limit, a simplified RSPO standard would be helping farmers who already have potential,

⁵³ This is qualified in the next section on outgrowers, as the exact nature of the relationship to plantations is still under development.

⁵⁴ August 21, 2020 interview with a representative from Solidaridad-Liberia.

rather than those growing their potential. This should be looked at by country or region, and 50 ha is huge in Liberia. The land size of a typical smallholder is from 1 to 5 or 10 *acres*.

Most sources agree that smallholders receive little help at the national level, and there is little collaboration between them.⁵⁵ Solidaridad is attempting to change this by grouping them into farmer groups for demonstration sites in order to learn “best practices” for independent farming. But this is not like a cooperative. Growers can buy improved seedlings, but are not provided them as part of the group’s support. Post-conflict, it seems the majority of support to smallholders has been through donor-funded projects, as opposed to schemes from either the state or private sector.⁵⁶ There was a USAID funded project from 2012-2017 called the SHOPS project, which supported independent smallholders by linking them to processing equipment (oil expellers and kernel crackers).⁵⁷ And there is currently a small, local company called J-Palm attempting to do the same.⁵⁸

Solidaridad works with both small and medium-size growers, but focuses on smallholders because they are the most integral to the industry.⁵⁹ They need to be “lifted to another level” for the industry to succeed. Their work with medium-size growers is to improve their mills so they can buy from smallholders as well (via a co-financing arrangement). Oil palm is seen as one of the major cash crops, and as a strategy for improving national development. Thus, Solidaridad’s focus on best management practices to intensify smallholder production.

Medium-Scale Growers

Using the data above, it seems there is a question as to what a medium-scale grower might look like. In one framing, there are farms of 400-600 acres (150-250 ha) who have their own mills or processing capabilities, and constitute a middle category between small-scale farms (supported or not) and large concessions. In SDI’s framing, there are structured farmers with up to 100 ha who are put into groups by NGOs like Solidaridad. They may have plantation connections, but are not formally supported by the plantations. These groups need to be distinguished from the large, privately owned farms that have high levels of access to resources and should be treated

⁵⁵ According to the August 27, 2020 interview with an independent consultant: “As far as I know, there are no attached smallholders. The big mills only went online in 2017-2018, so maybe now the demonstration effect has taken place and there are supported smallholders. But while I was there, none of the promises materialized. The concession projects promised outgrower schemes to the government when signing the agreements, and those have failed. That has been the conversation since 2010. I think the real conversation is about the informal economy.”

⁵⁶ Most support to concession outgrowers is in inputs and technical support. This means the plantations provide the high yielding varieties, and then guide growers through the harvest. While these arrangements are negotiated, they are not necessarily a contract. And the support is limited (Small 2014).

⁵⁷ See: <https://2012-2017.usaid.gov/liberia/fact-sheets/smallholders-oil-palm-project-support-shops-ii>.

⁵⁸ See: <https://kernelfreshpremium.com/pages/our-story>.

⁵⁹ August 21, 2020 interview with a representative from Solidaridad-Liberia.

at the same level as concessions. According to Proforest, there are no medium-scale growers in Liberia.⁶⁰

Market and Mill Characterization

The majority of palm oil produced by smallholders is consumed in rural areas. But there is also “clear evidence that ICBT (international cross-border trade) is currently the most important market for the Liberian smallholder (*Dura*) value chain. Red oil also goes out of Liberia via Foya into Sierra Leone and into Côte d’Ivoire out of border markets in Nimba” (Republic of Liberia 2014, p. 20). A second value chain, separate from this informal “red oil” chain, is dominated by the concessions and produces industrial CPO.

Smallholders without an arrangement can either process their own fruits via Freedom Mills or the traditional pit system, or they can find a mill to sell to. These situations are seen as a struggle, as finding a market can be difficult with no previous arrangement. Solidaridad is working to build four new medium-size mills (1 ton capacity), which would complement the three medium-sized mills already in existence.

Certification Challenges

According to SDI, one of the major challenges with certification is the possibility of exploitation.⁶¹ The forestry law that gave users private rights to the land, timber, etc., ended up increasing forest destruction. Likewise, if there were cash or other financial incentives to receive RSPO certification then Liberia could see greater land clearing. Certification would become a big business in itself. But if there were monetary incentives embedded in the certification scheme (i.e. checkpoints along the pathway), then perhaps there would be greater compliance. The small family farms should have a simplified standard. These are individuals who have farms close to their homes, only use family labor, and have little impact on the environment. The medium-sized farms (those supported by NGOs or otherwise) should be able to follow a regular standard (like the P&C). The large-scale (elite) farms and the concessions should be treated the same, with the elite farms perhaps having an even more vigorous/rigorous process. The large elite-owned farms are classic land grab situations. Because there is often no formal process of land documentation, they use past relationships to convince local communities (or the government) to give them land.

According to Solidaridad, the greatest challenge for smallholders is that they don’t have the affiliations to enable certification.⁶² This is in terms of awareness of what certification means, and the capacity to undergo the process. The National Interpretation will help them move toward certification. Medium-scale mills are not certified yet either, though dialogue is happening. They don’t understand what it means to be a certified body. They don’t appreciate

⁶⁰ September 2, 2020 interview with a representative of Proforest.

⁶¹ August 17, 2020 interview with a representative of the Sustainable Development Institute.

⁶² August 21, 2020 interview with a representative from Solidaridad-Liberia.

it, and don't see the benefit/value. Education around certification is necessary here. There is now a National Platform in Liberia, but the information has not reached the growers (not decentralized).

A representative from the National Oil Palm Platform suggested that a main impediment was the lack of coordination between RSPO and the Government of Liberia.⁶³ The government is in conversation right now about how to define smallholder farmers in the oil palm context, what a medium farmer might look like, and how to get all farmers certified under RSPO. One of the main ways forward is in the development of a National Standard, not an imposed standard through RSPO. The government also wants to develop a regulatory framework to make the sector work for all Liberians. As oil palm contributes 37% of the GDP of Liberia, the government sees this is an issue of national development, not just satisfying an international market.

According to the Republic of Liberia (2014), there are several integrated challenges (one of which is future RSPO certification) to accomplishing the structural change necessary to making oil palm a strategic development sector:

1. Increased organization among producer groups (cooperatives);
2. Improved training and education;
3. Development of a domestic inputs supply chain;
4. Development of extension services;
5. Streamlined border/customs processes;
6. Adopt best practices in terms of land and general management;
7. Include women and youth in value-added sector; and
8. Aim for RSPO certification in the long term.

5.1.5. Nigeria

Due to its location (as a center of origin of oil palm) and colonial relationship with Britain, Nigeria was the leading exporter of oil palm products in the latter half of the 19th century.⁶⁴ It retained its position as leading producer and exporter until the 1960s, when it was eclipsed by the rapid growth in Malaysia and Indonesia. Domestically, the Nigerian Civil War (1967-1970) greatly disrupted production capabilities, and the discovery of crude oil shifted the commercial focus to the oil industry, where it has remained ever since.

Nigeria is currently the world's fifth largest palm oil producer and has the highest percentage of smallholder farmers growing oil palm. They make up 90% of the labor force (4 million growers) and produce 80% of all oil palm (Ayodele et al. 2015). Despite this, Nigeria is a net importer of

⁶³ August 26, 2020 interview.

⁶⁴ This was mainly due to the need to provide a wide variety of products to the surging industrial labor force. By 1900, oil palm accounted for 89% of all exports (Ayodele 2015).

palm oil and has no export value chain to speak of. Like most of West Africa, Nigerian smallholders harvest wild groves that have low yields and require lower levels of input and labor. The primary market for these smallholders is domestic consumption. Nigeria does have large-scale plantations, but they are not especially productive, or seeing the same levels of investment for expansion as other West African or SE Asian countries. According to Ayodele et al (2015), Nigeria is unique in this regard. The oil palm industry is well established, with over 2.5 million ha planted (in place since the 1960s)⁶⁵ and an overall awareness of its benefits. However, it suffers from land tenure issues⁶⁶, high costs due to poor transport infrastructure, and a reputation as being a high-risk site for private investment. The government's lack of coordination and enforcement capacity has made environmental management (protecting forests) and social policy (free, prior, and informed consent) difficult to pursue.

Over the years, the government has passed various agricultural development policies with little success. In 2002, the Presidential Initiative for Vegetable Oil Development (VODEP) set out to replant and/or rehabilitate over 1.125 million ha of plantations in order to boost national yields (Ayodele et al. 2015). Less than 3% of the projected cost was allocated in the first two years of the program. The government has also used export taxes and import bans to attempt to boost domestic productivity via market incentives for local production. While leading to domestic investments and production increases, the ban of palm oil imports in 2001 was lifted in 2008. According to one interview, a driving factor was the need for certified palm oil for domestic industrial use.⁶⁷

Nigeria is also the second largest target of oil palm sector projects by the World Bank, with six from 1975 to 2009 (PIND 2011, p. 1). All but one of these projects has gone bankrupt. Though the history of both public and private investment in oil palm in Nigeria appears to be unsuccessful, recent productivity improvements in the small-size grower and milling sectors shows that it is possible (PIND 2011). Additionally, the failure of large government-backed plantations provides the opportunity to invest in land that has already been cleared for oil palm, removing the threat of deforestation from development plans.

According to PIND (2011, p. xi), the "major challenges facing the palm oil sector affecting its competitiveness and potential for growth include":

1. The dominant presence of the wild grove in the production system, comprised of low yielding (both in terms of FFB/tree and in oil content) *Dura* variety;
2. The ownership structure of the wild groves does not incentivize any investment in their maintenance and upgrading;
3. Very inefficient processing technologies that are extracting 25-50% of the oil content

⁶⁵ As of 2004, wild groves accounted for 2.3 million ha, estates about 97,000 ha, and other smallholders 118,000 ha (Ayodele 2015).

⁶⁶ The most common land tenure system (over 80%) in Nigeria is informal and customary.

⁶⁷ September 2, 2020 interview with a representative from Proforest.

(i.e. this is equivalent to 50% of the oil is being thrown away) for half of all processed palm fruit;

4. Serious management challenges around most of the large estates that were created by the government, leading to their inefficient operation, bankruptcy, aging of the trees, etc.;
5. The highly fragmented relations between the actors at each functional level of channel one which provides half of all oil; and
6. Serious challenges in coordination between the actors in the value chain in channels 2 and 3 to incentivize more efficient interaction and investment.

Grower Profiles

According to PIND (2011), one can break down oil palm growers in Nigeria into the following categories:

1. *Wild groves* are scattered areas of oil palm that consist of the *Dura* variety. Land-owners can lease trees for other individuals to harvest, and there is no investment in the crop. Yields are low, estimated at 1.5 tons/ha.
2. *Farmers*: These include the following sub-categories:
 - a. Small-scale: land area between 1 – 10 ha of planted palm, mostly *Tenera* variety, yield estimate 3 tons/ha;
 - b. Medium-scale: land area between 10 – 25 ha using manual production, yield estimate 3 tons/ha; and
 - c. Large-scale: land area between 25 – 100 ha with some mechanization and herbicide application, yield estimate 5 tons/ha.
3. *Estate plantations*: These include the following sub-categories:
 - a. Small: land area under cultivation between 100 – 1000 ha and usually owned by individuals and cooperatives, yield estimate 5 tons/ha;⁶⁸
 - b. Medium: land area under cultivation between 1000 – 5000 ha, owned by corporations or state governments, those owned by corporations linked to a medium-sized mill, yield estimate 5 tons/ha;⁶⁹ and
 - c. Large: land area under cultivation greater than 5000 ha and some are integrated into large-scale processing, mostly owned by state governments and private investors, yield estimate 5 tons/ha.⁷⁰

⁶⁸ Examples include: Okada Wonderland, Satum Farms, Iyare Oil, and Obotme Oil Palm.

⁶⁹ Examples include: A & Hartman, Aden Rivers, Ore-Irele Oil Palm Plc, and Investment Holding Araromi.

⁷⁰ Examples include: Okitipupa Oil Palm Plantation (OOPP), Okomu Oil, and PRESCO.

Smallholder Characterization

There are two kinds of smallholders in the oil palm sector, independent and supported. Collective smallholders (per Vermeulen and Goade 2006, cited in Proforest 2014) do not exist in Nigeria. Effectively, there are two separate domestic markets (Ayodele et al. 2015). The primary market is supplied by independent smallholders growing fruit for household oil consumption. These consumers prefer TPO (technical palm oil) because of its flavor profile (PIND 2011). There is no real connection between independent smallholders and larger commercial firms. The second market is supplied by supported smallholders (outgrowers) who have “conventional” relationships with private companies, meaning they receive planting materials and technical support, while providing the land and labor (Ayodele et al. 2015, p. 30). The companies provide the market and deduct loans from the FFB prices. This is for the production of SPO (special palm oil) that is the high quality oil used for industrial purposes. Nigerian palm oil is not competitive on global markets (PIND 2011).

There are virtually no scheme smallholders in Nigeria. The ones that did exist have collapsed. An executive at Okomu Oil has been looking into setting up a scheme on his estate and has found that most growers do not understand the concept of selling their crop to one mill.⁷¹ There are outgrowers, but not with binding agreements. They can choose to sell to anyone. Some outgrowers do have “relationships” with companies and have gotten bank loans through that company, so are obligated to sell to there. For him, the main criteria to distinguish growers would be land size and level of sophistication.

A lead author on the PIND report is particularly concerned with how to define smallholders in terms of their ability to comply with RSPO standards (along with the size of plantation and level of technology).⁷² The current definition (based on the National Interpretation) is basically farmer who farms less than 50 ha and uses family labor. This does not take into consideration the ideas of transparency and accountability (what he called “principle one”). He focused on the myriad difficulties of compliance, especially in terms of legality. Tax payments, for example, are typically irregular in Nigeria (due to lack of perceived benefits from government). This does not bode well for thinking about other forms of accountability and adherence to an agreement. Also, and importantly, most growers do not have the formal land titles required by RSPO. They could have inherited land, are leasing it, or they recognize customary tenure over legal tenure. Documentation of different forms of ownership is a serious issue.

Another problem with categorization is the diversity of land and livelihood situations resulting from oil palm. The country is very mixed in terms of crop variety, land size, housing, labor, technology/equipment, processing facilities, farming methods, and the like. The instinct to categorize by varietal, for example, runs into this problem. Though the “wild groves” are mostly

⁷¹ August 27, 2020 interview with a representative from Okomu Oil.

⁷² August 27, 2020 interview.

Dura, some people have large planted *Dura* farms. And some small farms plant *Tenera*. Clear divides are hard to come by at the small and medium scale.⁷³

Medium-Scale Growers

According to an executive at Okomu Oil, medium-scale farmers are those who tend to have better mills, hire labor, and provide some housing.⁷⁴ The medium-sized groups are relatively better educated and have higher incomes. They are able to maximize the benefits of secure land tenure. They have better planting material. They have a level of sophistication in terms of farming practices. They look after their farms better. They may have *Dura* in their crop, but mostly *Tenera*, and they know the provenance of their variety.

Certification Challenges

RSPO certification is relatively new to Nigeria. Both Siat Nigeria Limited (SNL) and Okomu Oil are presently certified. One of the main challenges in thinking about RSPO certification in Nigeria is the nature of the domestic market.⁷⁵ Because oil palm is a staple food and there is high demand domestically, there is no incentive to consider RSPO. Nigeria produces 1.2 million tons of palm oil, but consumes 2 million tons, making the local/domestic market a priority. Nigeria is unique in this sense because they are not concerned even with regional export. Interviewees suggested that it would require the state to take up the cause for RSPO to work. Why does a Nigerian farmer need someone else telling them what to do when they have a ready local market? The only real benefit to growers would be intensifying/improving yield, but it depends on how much a farmer cares. Not all growers are invested and/or aware of production, distribution, and consumption models. Some do not even know the difference between *Dura* and *Tenera*. In effect, RSPO certification standards are not well matched to the Nigerian reality. In addition to the market issue, interviewees pointed out that not everyone obeys the law, not everyone cares about the environment, and best management practices are not common.

When it comes to commitment to transparency, neither of these groups can commit to undertaking social or environmental assessments before planting. Medium-scale farmers do keep records, but smallholders do not. Smallholders engage in minimum agronomic practices while medium-holders engage in “best management practices,” though neither group has good environmental practices. They both release waste into the environment at mills and on farms. Smallholders responsibility to their “employees” lies in food security – whether to their family or to the casual paid labor. Medium-holders have paid labor, but do not have health insurance or feel much responsibility beyond payment. Both groups do have a desire to improve yield, and there are examples of smallholders expanding and eventually moving into the medium grower category.

⁷³ August 27, 2020 interview with a lead author on the PIND report.

⁷⁴ August 27, 2020 interview with a representative from Okomu Oil.

⁷⁵ August 27, 2020 interview with a lead author on the PIND report.

All data points to the idea that the only way for smallholders to comply with RSPO standards would be in clusters. Individuals have no hope. Both PIND and Solidaridad are attempting to form these clusters (sometimes referred to as a farmer cooperative or association, but it is unclear what levels of support these entail). All interviewees agreed that the smallholder farmer is key to revolutionizing the oil palm industry in Nigeria.⁷⁶

5.1.6. Sierra Leone

Oil palm grows all over the country of Sierra Leone and is a main source of cooking oil for households. Historically, production occurs in wild groves (*Dura* variety) and is harvested for subsistence or local trade. Beginning in the 1960s and continuing through the 1980s, the government established thirteen oil palm processing mills and began to develop the comparative advantage West Africa has in terms of oil palm – an ideal climate by virtue of being the center of origin. In the decade before the war (which occurred from 1991-2000), Sierra Leone exported palm oil to both the US and Europe (Small 2014). Production was effectively halted during the war, and the privatization of agricultural industry that many countries saw under Structural Adjustment Programs in the 1990s did not materialize (Schneider 2020). According to Small (2014) none of the original thirteen mills are active, and the estates planted with high yielding varieties (*Tenera*) in the 1970s are not functional – whether the land has reverted back to its original owners or the planting material is too old to be productive.

Sierra Leone is a net importer of palm oil (25% of its needs), mainly from SE Asia (EC 2019). This is industrial grade oil called *masanke* (from the *Tenera* variety), primarily for soap-making. This value chain is an important cash generator and necessary as foreign exchange to combat inflation.⁷⁷ The *Dura* produced in country is mostly processed into “red” cooking oil via local, artisanal (read: labor intensive) mills. This can be sold on local markets, or aggregated by intermediaries.

Oil palm is seen as a way to provide much needed development in rural economies via “inclusive collaboration” with smallholder farmers (Kamara and van Wijnbergen 2019). In 2009, the government launched its Country Compact under CAADP, which outlined a vision for socio-economic growth and development through commercial agriculture. The primary vehicle for this is the Smallholder Commercialization Programme (SCP), with an eye toward promoting “farming as a business” in Sierra Leone (Baxter 2013, p. 13). Agriculture is also a target growth sector in the National Export Strategy (2010-2015), specifically via the Sierra Leone Investment and Export Promotion Agency (SLIEPA). According to Solidaridad (2018), there is an ongoing

⁷⁶ August 27, 2020 interview with a lead author on the PIND report.

⁷⁷ According to a value chain report commissioned by the European Union (2019, p. 6): “The soap sub-chain represents an adaptation to favour local work due to foreign demand, and it plays a major role in the injection of liquidities into the rural economy whilst remaining informal and partly under control of foreign actors. Any attempt to regulate or modify it should be extremely careful.”

attempt to provide smallholder farmers with technical and financial support, including improved infrastructure, appropriate regulatory frameworks, and better markets. The nature of this support (investigated below) is fragmented and limited.

According to the Government of Sierra Leone (Small 2014), the commercialization of the oil palm industry is hampered by: (i) the low quality and standardization of farmers' products; (ii) rare formal contracts between farmers/FBO and the private sector, (iii) scarce technical and economic support to farmers/FBOs; and, (iv) poor Infrastructure such as storage and roads (Government of Sierra Leone, 2011). Solidaridad (2018) finds the greatest challenge to lie in smallholder productivity, as 80% of all planting stock is considered old or unproductive. The highest priority for a successful oil palm industry rests in replanting fields with improved seedlings. There is also a need for new and improved mills. 80% of oil palm is processed in small to medium-sized mills that have poor extraction rates (10% and below) and high fatty acid content (Solidaridad 2018). Industrial mills typically get twice the price for their oil compared to small mills.

After the economic crisis of 2008, when investors flocked to West Africa to invest in large-scale agricultural schemes, Sierra Leone jumped at the chance to attract foreign investors, sometimes without considering the implications for land and livelihoods. In 2011, the government signed the first of a series of agreements with SOCFIN (Société Financière des Caoutchoucs), a transnational company based out of Luxembourg, which runs the largest mill in Sierra Leone. According to Yengoh and Armah (2016), communities in areas affected by the SOCFIN concessions believe that the company is trying to squeeze them out by constraining resource use on the surrounding lands and by preventing livelihood strategies outside of company oil palm. In the Sahn Malen Chiefdom, locals have argued that customary land tenure agreements were violated, as was the total land amount that SOCFIN appropriated (Schneider 2020). This dispute is ongoing. In the Port Loko District, a ten-year legal struggle to stop an oil palm development deal has resulted in a local victory and land returned to the community (World Rainforest Movement 2018). However, there are also reports that Golden Veroleum, the company embroiled in land disputes in Liberia, is planning to invest up to \$1.6 billion in the South and Eastern Regions (Awoko 2013).

According to Small (2014), Sierra Leone's oil palm policy faces the following challenges:⁷⁸

1. The identification of successful smallholder models is difficult due to the long-term impacts of civil war;
2. Sierra Leone has unresolved land tenure conflicts, limited access to markets, primarily rural economies, and little success with foreign investment;
3. Smallholders must have support from non-state entities to even attempt equitable outcomes in commodity production; and

⁷⁸ This is the case for both Liberia and Sierra Leone.

4. Sierra Leone cannot follow East Asian model, rather it must account for local *Dura* market.

Grower Profiles

There are two primary types of smallholders in Sierra Leone according to Solidaridad:⁷⁹

1. Independent smallholders – 80% of growers; and
2. Outgrowers.

According to all interviews, the 50-hectare designation for smallholder farmers outlined by the RSPO is too big to accurately represent smallholders in Sierra Leone. Independent smallholders will most often have below 20 ha (this is total land in palm oil production), though if one aggregates disparate plots, they could have up to 30 ha (this is rare). Anyone having 50 ha would have to have significant access to landholdings (i.e. a chief), and this land would most likely not be contiguous.

Outgrowers will have less land than independent smallholders, often below 5 ha. Outgrowers can either be supported or not by industrial mills. Regardless, services provided to any smallholder in Sierra Leone are limited. This can include small loans and access to seedlings, but most often it does not. There are also minimum extension services, but these are ad hoc (not structured). The primary vehicle of support from industrial mills comes from their purchase of smallholder fruit. The agreements between farmers and mills are based on the desire for certification, not support services (and are nowhere near the level of a formal contract).

In terms of labor, independent smallholders and outgrowers have similar structures. They use family/individual labor and only hire outside labor when they need something specific done (due to age or other capability constraints). The majority of smallholder farmers grow the *Dura* variety, but they are moving toward a mix (a shift toward *Tenera*, first introduced in the 1970s) with the increased international support.

Independent smallholders account for 80% of total production, and the remaining 20% is divided between the plantations and the outgrowers. However, outgrowers are hard to measure (and probably a small percentage). There is no medium-scale growing system in Sierra Leone at present and no evidence of medium-scale mills. Perhaps with increased farmer organization and grouping, this will be possible in the future.

There are three industrial producers/mills in Sierra Leone:

1. *SOCFIN Agricultural Company* is a typical nucleus estate model with no outgrowers and approximately 12,300ha in production. Mill capacity is 30 tons (with potential for 60).

⁷⁹ Data for this section comes primarily from the August 18, 2020 interview with representatives from Solidaridad-Sierra Leone.

2. *Goldtree Limited* is a private (certified organic) company that tries to support growers, but does not have a formal/structured support system in place for outgrowers. There are no scheme or contract farmers. Goldtree has 2,022 ha under oil palm in its nucleus estate and about 15,000 ha in production with smallholders. It is preparing for an RSPO audit in September. Their smallholders average 3-5 ha per plot. Mill capacity is 20 tons.
3. *NedOil* is a sister company to Goldtree that is also certified organic and working on RSPO certification. It also provides limited services to growers outside of buying/selling arrangement. Approximately 1,000ha under cultivation with 2,299 smallholders. Mill capacity is 1-5 tons.

Solidaridad is in the process of organizing farmers into groups so that they may benefit from structural support. The primary concern is with promoting best management practices (BMP) for yield intensification. Though this is not technically support toward RSPO certification, it is seen as a step in the right direction. Solidaridad, working in collaboration with its SWAPP partners, Goldtree and the KITOPFCO (Kissi Tongi Oil Palm Farmers' Cooperative), has established 304 oil palm BMP farmer groups made up of between 15-17 members per group. These groups are 2-3 years old, so are still in the process of growing. Solidaridad is also constructing a 1-ton mill for these farmers to be incorporated.

According to a recent report by Solidaridad (2018), there are some growers grouped into cooperatives and registered through the Department of Cooperatives. This status gives them the ability to receive "soft" funding from the government and from NGOs to improve their farming operations and increase yields. There are 378 of these cooperatives as of 2018. There are also FBOs (farmer-based organizations) who are groups of individual oil palm growers relatively less privileged in terms of education and access to inputs.

Certification Challenges

According to Solidaridad, social issues are the priority, as they drive environmental issues. These mainly have to do with regimes of support. One big issue is poor working conditions for independent smallholders, with mill conditions being only marginally better and having their own challenges. It was also noted that child labor was a problem. Beyond the general living conditions in Sierra Leone, specific problems around land and water rights, gender equality, and food/nutrition security were also identified. In terms of the environment, industrial processes rely heavily on synthetic fertilizer and produce methane emissions. Emissions are also a problem in artisanal mills and via transportation routes, as most palm oil goes through or to Freetown. Waste/degradation is also a problem due to lack of good storage infrastructure/practices.

Solidaridad sees the lack of organization into groups as a major threat to farmers. These groupings allow for the production of social capital through access to support. This is Solidaridad's main work in the industry, begun in Sierra Leone under the Sustainable West African Palm Oil Program (SWAPP). Their key strategy for building these cooperatives (and

sustaining their interventions) is to engage the private sector. This separates them from other NGOs working in the same arena. Solidaridad partners with private companies to provide “best management practices” to smallholder groups in order to intensify their production. Solidaridad puts up 50% of donor grant money, and the companies put up the other half.

If large-scale mills incorporated smallholders into their plantations (gave support), then they would have to use the generic standard, treating growers as scheme growers. A simplified tool will push big mills to help organize independent smallholder groups into bodies quickly so they can buy certified fruits from already certified under RSPO. This means they would not have to incorporate them. This is seen as good for sustainability because Solidaridad defines sustainability by the ability to promote inclusion. The only risk of certification is perhaps a push by the mills for smallholders to expand their land, again wanting to take advantage of the simplified standard. Auditors will need to be very stringent here in terms of identifying these loopholes. Otherwise, the simplified tool is a tool for expansion.

According to Solidaridad, smallholder farmers do not really need certification. Their primary model is to produce red palm oil and sell locally or to Guinea. There is no incentive yet for certification, except to have a buyer. And demand is high, so this is more a situation of appropriate price. The key to addressing this is to increase awareness of the benefits of certification. If smallholders know how it can help them, they will be more amenable to attempting certification. The problem is organizing them in to groups.

*Goldtree Case Study*⁸⁰

Goldtree works with over 9,000 smallholders, all of whom are independent. They are currently working to certify 7,500 of their already certified organic smallholders through RSPO. While these smallholders already receive an organic premium by selling to Goldtree, the idea is for them to be certified under both standards to receive a double premium. This is what Goldtree’s buyers in Europe want. This would make them the first independent smallholders that are RSPO certified in Africa, and put them on the map in terms of receiving recognition and support (both from the government and from the international market).

The problem with this support scheme is that there are no contracts, and therefore, no assurances that these smallholders will sell to Goldtree once they are certified. Goldtree incurs all expenses related to the certification (with the support of the RSSF), but must remain in a competitive market. As the largest mill in the region, it has not yet lost many growers/sellers to SOCFIN, but it has to keep its premium price competitive to remain viable.

The RSPO standards are a major impediment to incorporating independent smallholders because they do not accurately represent the situation in Sierra Leone. Sierra Leone does not yet have a National Interpretation for RSPO, the money provided by the RSSF does not cover all costs (certainly not the upfront ones), and there is not enough guidance on how to implement

⁸⁰ Data for this section comes from an August 27, 2020 interview with a representative from Goldtree.

these standards in a local context. As examples, consider how the following requirements from the simplified standard might be satisfied in Sierra Leone:

1. Sierra Leone does not have a binding or secure minimum wage system in effect, and certainly not one that would apply to hired labor in a smallholder context;
2. First-aid kits are not available or accessible;
3. Most villages do not have secure access to housing, water, or sanitation;
4. Financial business plans are not easily understandable to those without experience;
5. Documentation/paper and other resources necessary for becoming a legal entity, forming groups, having leadership structures, etc. are not available;
6. Contracts are not a way of life. Most agreements are informal and/or reciprocal.

In addition, the primary benefit of certification, the pricing premium, is difficult to explain, yet necessary in order to convince farmers to begin the process. It is difficult to motivate farmers to participate in the farmer trainings, and once they do, they can become overwhelmed by all of the requirements. They just want to sell to the easiest buyer. The organic certification is a bit easier as it focuses on personal protective equipment (PPE), no chemicals, and having good agricultural practices.

5.2 Asia-Pacific

5.2.1. Asia-Pacific Regional Overview

The Asia-Pacific region is home to the top three palm oil producers in the world, in terms of both production area and CPO volumes: Indonesia, Malaysia and Thailand (Table 5). Indonesia and Malaysia in particular have extensive histories with industrial palm oil production, giving them a chance not only to gain experience with different production models, but also to gain experiences that have been subsequently carried to other countries and world regions by some of the largest and most successful firms. Yet the region is also home to producer countries with a more recent history with oil palm production, which have adopted practices from neighboring countries with a longer history of experimenting with different business models, while also having to adapt them as they have come into contact with unique land tenure systems and cultural norms (for the case of Papua New Guinea) or in response to civil strife (in Solomon Islands). Thailand is also an outlier, given the persistence of policy frameworks favoring family farms over industrial-scale production and the resulting dominance of small-scale producers in the oil palm sector.

Table 5. Production area and volumes in Asia-Pacific countries

Country	2018 Production Area (hectares)⁸¹	2020 CPO Production (metric tons)⁸²	Proportion of Global Production (%)
Indonesia	6,777,498	43,500,000	58.3
Malaysia	5,235,581	19,300,000	25.9
Thailand	710,103	3,100,000	4.2
Papua New Guinea	183,084	561,000	0.7
Solomon Islands	21,000	<i>unknown</i>	<i>unknown</i>

It is also worth commenting on the sustainability dynamics of the oil palm sector in the different countries. While infringement on indigenous land rights and land loss through land markets have long been features of the oil palm industry in Indonesia (FoE et al. 2008; Obidzinski et al. 2011), until recently, circumstances in Thailand, Papua New Guinea and the Solomon Islands have mitigated such concerns to a large extent. Policies favorable to the smallholder sector in Thailand have concentrated growth in this sector, mitigating the land rights violations seen in other countries. Land use and investment dynamics in the Solomon Islands and Papua New Guinea were entirely different. The first oil palm plantation in the Solomon Islands, Solomon Islands Plantations Limited (SIPL), attracted nearly 10,000 settlers from other islands to the northern plains of Guadalcanal between the start of operations in the mid-1970s and the late 1990s. Tensions between SIPL-related settlers and indigenes were a key catalyst to the Isatabu uprising in 1999, causing production to cease. The experience gained by customary landowners during this early phase enabled them to negotiate far better terms of engagement when operations were re-started under Guadalcanal Plains Palm Oil Ltd (GGPOL) in 2005. While the early phases of the oil palm industry in Papua New Guinea also involved the resettlement of workers through Land Settlement Schemes (LSS), it was carried out in a nucleus estate-smallholder model involving both resettled LSS smallholders and neighboring customary landowners living on their village lands. The limited land available for expansion in the LSS has meant that demand for land has spilled over into village land. Yet conflict surrounding these early plantations has largely been mitigated through the efforts of researchers from Curtin University in Australia to work with customary landowners and New Britain Palm Oil (NBPO) to foster land use arrangements of mutual benefit and find creative ways to reconcile oil palm cultivation with food security. This has begun to change in recent years, with corruption surrounding Special Agricultural and Business Leases (SABLs) and new investors bringing “a host of very disturbing issues” in terms of human rights, land clearance without proper consent from land owners, logging companies masquerading as oil palm companies, among others. Malaysia occupies somewhat of a middle ground. While legislation has progressively curtailed customary

⁸¹ Available at: <http://www.fao.org/faostat/en/#data/QC> (retrieved Sept 5, 2020).

⁸² Available at: <http://www.worldagriculturalproduction.com/crops/palmoil.aspx> (retrieved Sept 9, 2020).

rights, court cases have largely upheld these rights and much of the expansion in Sarawak has occurred on areas of secondary regrowth (formerly used for shifting cultivation) and on land that can only be held by customary rights holders – inducing a host of formal and informal partnerships with customary landowners.

Grower Profiles

The unique histories described above have conditioned highly differentiated grower profiles in each of the countries, in terms of both the presence and the defining characteristics of growers of different scales. While government schemes have had a defining influence on business models and the prevalence and forms of engagement of smallholders, those countries with a deeper history of oil palm production (e.g. Indonesia and Malaysia) have largely moved away from these formal schemes – contributing to a diversification of growers that defy efforts to classify. Thus, in Solomon Islands and PNG, there are relatively simple typologies of large-scale, industrial plantations with formalized relations with small-scale growers in the nucleus estate-outgrower model. In Indonesia and Malaysia, similar arrangements characterized the sector at one point in time, but both companies and smallholders have moved away from these formal arrangements as the initial contracts expired, growers have gained experience with the crop, and transactions on the open market are deemed more advantageous than formal contractual relations. The oil palm industry in Thailand grew more from government policies promoting alternative energy than the role of large firms (and in a context of agricultural policies favoring family farms), contributing to a sector dominated by small- and medium-scale growers.

The actual characteristics of growers has grown in complexity as well, in ways that often defy stereotypes of what a “small-scale grower” or “medium-scale grower” might mean. In Malaysia, for example, most small-scale growers draw heavily on hired (often migrant) labor rather than family labor. There is also a tendency in Indonesia and Malaysia to engage smallholder land in ways that are difficult to distinguish from large-scale plantations – with all agronomic operations carried out by the nucleus estate or by urban entrepreneurs, smallholders receiving land rents and/or a percentage of proceeds, and often living elsewhere. Unless they have garden plots elsewhere, they are hardly recognizable as smallholders or family farmers. The prototypical smallholder with a few hectares of land, managing food crops or diversified farming systems in addition to oil palm, employing mostly family labor (typically with the exception of oil palm harvesting), and living on customary land of varying degrees of formality does apply in Papua New Guinea, the Solomon Islands, Thailand and Kalimantan, but is becoming increasingly rare in Sumatra (where smallholders are increasingly specializing in oil palm, with a strong commercial orientation, to the exclusion of other crops) and parts of Malaysia. There are also novel independent grower arrangements, with high schools and vocational training schools operating as independent outgrowers in the Solomon Islands.

Smallholders with formal relationships with larger firms continue to exist in Papua New Guinea and the Solomon Islands, and to a declining extent in Indonesia and Malaysia, although these arrangements vary considerably. In PNG, they are migrants on 6-ha plots of state leasehold and in the Solomon Islands, they are outgrowers on 2-ha plots on customary land. In both cases,

they grow oil palm alongside other crops with both the support and partial control of NBPO (for purposes of RSPO compliance). In Indonesia, these now fall under what are called *kemitraan* or partnership arrangements, negotiated on a piecemeal basis between smallholders and large estates. These include the so-called *pola akuan* or fourth-generation schemes, where smallholder land is held and managed by the company and participating families receive a passive income. With responsibility for local engagement processes left to the individual plantations themselves rather than government policy, arrangements are likely to be variable. In Malaysia, an important distinction must be drawn between “scheme smallholders” and “supported smallholders,” the latter referring to variable forms of collaborative or contractual arrangements with outside actors (e.g. urban Dayak professionals, ethnic Chinese entrepreneurs) that are not organized by the government or part of a formally recognized scheme. Smallholders may be organized as individuals or groups and may deploy predominantly family or hired labor; and land may remain in the hands of the customary owners, be sold to the entrepreneur (if Dayak), or be leased to entrepreneurs in exchange for fixed rent.

Whether medium-scale growers exist, and how to define them, was highly variable not just by context, but by source. In Malaysia, for example, some interviewees used the RSPO definition as the lower cut-off for medium-scale growers (50 ha) but extended this designation to companies with 20,000 acres or more – as long as the acreage is scattered, and they do not meet the specifications required for establishing a mill. Another interviewee suggested that anything above 20 to 30 acres should no longer be considered a smallholder, because at that scale you live comfortably and are able to certify yourself. In Thailand, there are a large number of growers in the 8 to 48-hectare range that might qualify as medium-scale, yet these specific area cut-offs are an artefact of the methodology employed to measure the size distribution of landholdings rather than any natural division. In Indonesia, state laws condition realities on the ground for most growers – with 25 hectares the cut-off between individual smallholders and businesses. The medium-scale grower is said to include mostly politically connected individuals who managed to acquire larger areas of land without the business designation. In the Solomon Islands, the only possible growers that could qualify are clan or tribal outgrowers associated as a group (Village Oil Palm), yet for whom there is little other than their unique form of organization to differentiate them from independent smallholders. The net area for these groups ranges from 16 to 503 hectares, but ownership is shared and productivity is limited by group dynamics. A similar situation holds in Papua New Guinea, where medium-scale growers were characterized as family businesses among clan members that operate on customary land. Yet views on their other defining attributes varied, with one interviewee stating they range in size from 15 and 50 ha and number around 35 in one district (Local Level Government) alone; and another interviewee suggesting they typically have from 100 or 200 ha under oil palm and number around a dozen operations in the whole country. The two characteristics that differentiate them from smallholders were that they transport their own FBB to the mill, and draw on (exclusively clan) labor from both within and outside the village. These operations were also said to have very low yields, likely differentiating them from medium-scale growers elsewhere that are run more like a business.

Interviewees in both Indonesia and Malaysia emphasized the arbitrariness of definitions and of cut-offs between small- and medium-scale producers, given the absence of any natural cut-offs in the field that can clearly be mapped onto such categories. In the words of one interviewee talking about the case in Indonesia, “It depends on what your definition of smallholder is. It’s a continuum. Even at 4 ha, it may not even be a farmer. If hundreds of hectares, it’s a wealthy investor. If you go to the field, there’s a lot of variation. Do people have the ability to manage the land themselves? Even that is tricky because smallholders may bring in labor. If you are a schoolteacher with 4 hectares hiring labor, are you a farmer?” For the Malaysian case, one interviewee states, “This is a thorny subject, as we’ve had our own assumptions challenged over time as the nature of the smallholder changes.” This individual pushed back repeatedly on attempts to name and characterize, suggesting that any typology would be a construct imposed by the observer rather than a reflection of any natural discontinuities on the ground. This seems to be particularly true for countries in which government schemes that did inscribe neat boundaries on reality have dissipated as contracts governing relationships between growers and firms have expired, and reality has become increasingly messy.

Certification Challenges

In Thailand, total farm labor emerged from the literature as a constraint on adoption due to the affiliation of harvesting teams with collection centers that do not require the RSPO certificate. Age of the plantation and access to information, extension and support services were also found to be highly correlated with certification, with the reduced productivity of older plantations reducing incentives to invest in certification. In Indonesia, prohibitive cost barriers to certifying and net losses in the first year following certification alongside a low price premium serve as a powerful disincentive to certifying. Land conflicts and land rights documentation; reluctance to join smallholder organizations given negative experiences with corruption in cooperatives in the past; meeting good agricultural and management practices; and the transaction costs, organization, record keeping and technical skills required of smallholders are also at play – with the success of certification hinging very strongly on access to outside financial and technical support. In Malaysia, key challenges for medium-scale growers are land title and the cut-off date, and – for the smaller medium-scale growers – cost. Challenges for small-scale growers under 15 acres were said to include cost; the procedural complexity of meeting environmental and safety standards; and land title. The lower price of hiring illegal labor also undermines the financial incentives of certification for small and medium-scale growers alike.

In several of the focal countries (Papua New Guinea, Solomon Islands), all smallholders are certified through their relationship to mills and the question had to be reframed as either “nonconformance challenges” or “participation challenges.” With access to only one buyer that requires growers to meet RSPO principles and criteria, compliance or opting out of oil palm are the only options. Since smallholders do not have much of a say in how to grow oil palm, constraints to their livelihoods posed by RSPO compliance emerges as a concern. In such circumstances, efforts to creatively understand and address the very real trade-offs between oil palm cultivation and other livelihood activities – as is being done through partnerships with

social scientists with a deep engagement with place (and local languages and people) in Papua New Guinea – are likely to go a long way in mitigating the costs of certification. In Papua New Guinea, the primary compliance issue was identified as proof of land ownership. Ironically, smallholders on clan land face less of a challenge than LSS smallholders on state leasehold, where many have lost their title. A second challenge for medium-scale growers are the labor standards they must comply with. In the Solomon Islands, eligibility and compliance constraints include land access (negotiating with their own clans to access land, and resolving disputes between adjacent clans over land use authority); outgrower understanding of RSPO Principles and Criteria; and the practice of involving children in family farming and the oil palm harvest.

Other Considerations

In an effort to reach out to an industry representative in Thailand, growers were consulted on the TOR for this study and their responses shared back with me. The growers expressed concern over RSPO plans to develop separate standards for independent smallholders and medium-scale growers. Concerns included: (a) questionable contribution to the industry’s sustainability or RSPO uptake; (b) implications for the sustainability credentials of RSPO and RSPO standing among growers and consumers; (c) the decision to invest in another study about growers rather than market research to enhance the sale of existing CSPO, which is already produced in excess of demand; (d) addressing the key sustainability concerns of the sector; and (e) the questionable utility of the study for “structuring something that will be implementable and practical in its operation and administration.” They also indicated that if differentiated standards are to be pursued, the independent smallholder standards will need to be country-specific and adapted to local realities through national interpretations.

Interviewees from several countries also questioned the benefits to both farmer livelihoods and sustainability of bringing additional smallholders under RSPO certification. This included concerns that a more lenient standard might compromise smallholder productivity and returns; that certification does not address smallholders’ primary needs or concerns; and that it may pose a huge burden on smallholders without achieving any strategic policy goals in contexts where small-scale production has limited environmental impacts. There are also concerns that the legality requirements of certification might be driving the displacement of smallholder into the forest estate in Indonesia, and that smallholder organizations could become politicized in Malaysia. One comment that echoed across interviews, the literature and input volunteered from growers is the need to adapt any new standards or profiling systems to local realities by engaging with and consulting growers of all types. With significant *in-country* differences in grower profiles and sector sustainability dynamics, some interviewees suggested the need for strategies to be adapted to the provincial level.

5.2.2. Indonesia

Indonesia is the world’s largest producer of palm oil, and involves more than 2.3 million smallholders (Hutabarat et al. 2019). Oil palm was brought to Indonesia in the 1850s on a trial basis, but it was not until 1911 that the first commercial oil palm plantation was developed in

Sumatra (Jelsma et al. 2009). Most early oil palm development took place in North Sumatra by Dutch entrepreneurs. While the total plantation area increased to about 92,000 ha by World War II (Corley and Tinker 2003), many estates were abandoned during Japanese occupation and Indonesia's struggle for independence. With limited interest of the newly independent government in plantation agriculture and the outer islands, the oil palm industry stagnated until the late 1960s (Jelsma et al. 2009).

The Indonesian government began developing palm plantations in the late 1960s under Suharto's New Order regime. Early plantations were established on government-owned estates and were part of rural development projects linking smallholders to state-led companies with the support of the World Bank (Zen et al. 2006; Jelsma et al. 2017). These *Perkebunan Inti Rakyat* (PIR) or Nucleus Estate Smallholder schemes typically involved the establishment of a large-scale plantation with a central oil palm processing mill (the "nucleus estate") held by a state-owned company, and smallholder plantations ("plasma") involving local landowners from whom fresh fruit bunches were sourced. The nucleus estate developed these plantations and provided inputs, technical assistance and finance; farmers debts were repaid from the revenue of each harvest; and smallholders sold exclusively to the nucleus estate (Hutabarat et al. 2019). In the 1980s, under pressure to liberalize the economy, the Indonesian government began to look to foreign investment to achieve growth in the oil palm sector (McCarthy and Cramb 2009). It began to withdraw its support to PIR schemes and shift responsibilities for plasma establishment to the private sector – supported by a mandated 70:30 split between the area under nucleus estate and plasma (Hutabarat et al. 2019; McCarthy and Cramb 2009; Zen et al., 2016). In 1986 a new scheme called PIR-Trans was launched through joint government–private sector initiative involving transmigrants resettled from Java and other areas to oil palm frontiers in the outer islands (McCarthy 2010). Plantation companies developed the nucleus estate on 20 to 40% of the land, while the state and partner banks provided capital for the development of plasma on 60 to 80% of the land area (McCarthy and Cramb 2009). Farmers were given two hectares of land for palm and another 0.5 to 1 ha for their housing and food crops, and land titles were transferred to smallholders once the cost of plasma establishment was repaid. Other schemes were subsequently developed by local governments to address the social conflict brought on by transmigration, and involve PIR schemes between the state-owned company and local customary land users (called "PIR-Lokal"). These early experiences initiated a period of exponential growth in the sector that has continued to today (Jelsma et al. 2009).

The PIR component of the plantation boom in the 1990s shifted, and in 1996 a new scheme was launched called KKPA (*Kredit Koperasi Primer untuk Anggota*, or basic cooperative credit). These schemes engaged local residents, not transmigrants, and required them to join cooperatives to manage the land and receive credit (McCarthy 2016). Under such schemes, landowners allocate plots of land for the company to develop and receive a portion of the developed land back for their own use. In such schemes, control over smallholder agronomics is concentrated with the nucleus estate; smallholder organizations are heavily supervised and controlled by the estate; and farmers become passive actors receiving a share of proceeds (Jelsma et al. 2009). "KKPA smallholder schemes therefore appear to be extensions of company activities" (Ibid: 40).

With the end of the New Order regime in the late 1990s, state subsidies (e.g. in the form of concessionary credit) to these schemes dried up, investments declined and the mandated split was reduced to 20:80 to reinvigorate the sector. In 1999, the Ministry of Agriculture established a new policy allowing for various partnership models (*pola kemitraan*) between private investors and smallholders in order to free up smallholder land for oil palm. Borrowing from Malaysian experiences, landowners would obtain a degree of ownership in the cooperative managing the smallholder area or dividends according to the amount of land provided. Many new plasmas involve land owned by “smallholders” but fully managed by plantation companies (Gillespie 2011; McCarthy et al. 2012).

As the industry has matured and smallholders engaged in PIR schemes have paid off their loans, many smallholders have chosen to remove themselves from these contractual relations with nucleus estates and – particularly in older oil palm frontiers in Sumatra – develop new plantations independently (Belcher et al. 2004; Feintrenie et al. 2010). By 2016, the majority of the 4.76 million ha cultivated by government-designated smallholders were likely independent growers (Jelsma et al. 2017). Those smallholders entering the sector with limited external support tend to be much less productive than commercial estates and PIR smallholders (Euler et al. 2016; Molenaar et al. 2013) and harder to monitor through existing traceability systems (Jelsma et al. 2017). Yet they retain freedom of choice of what to grow and to whom to sell.

Grower Profiles

The Directorate of Estate Crops and Indonesian Bureau of Statistics divide oil palm into three categories: smallholders, state-owned companies and private companies. The plantation permitting process of the Ministry of Agriculture further differentiates between producers based on land area, with 25 hectares being the cut-off between Plantation Registration Certificates (STD-B) and Plantation Business Licenses (IUP-B) (Jelsma et al. 2017). Yet reality on the ground is more nuanced, with grower types a reflection of the above history.

Smallholder Characterization

In Indonesia, there are somewhere between 2.3 and 2.7 million smallholders managing an estimated 40 to 41 percent of the oil palm plantation area in the country – roughly 5.8 million hectares (DJP 2015, referenced by Jelsma et al. 2017)⁸³ One interviewee and much of the literature on oil palm classify smallholders into two to three main groups depending on whether they are formally affiliated with a nucleus estate (“PIR”).

1. *PIR Smallholders*. This is a general category of smallholders linked under contract to a nucleus estate. These nucleus estate-smallholder schemes may be further differentiated as follows:

⁸³ See also: <https://news.mongabay.com/2020/04/indonesia-aims-for-sustainability-certification-for-oil-palm-smallholders/>.

- a. *PIR-Lokal* – Customary land users under contractual relations with the (typically state-owned) company running the nucleus estate.
 - b. *PIR-Trans* – Smallholders who began oil palm cultivation in the late 1980s under the transmigration scheme in contractual relations with the (typically privately owned) nucleus estate and extensive support from the state and private banks.
 - c. *PIR-KKPA* – Smallholders under contract with private companies, whose plantations are fully managed by the company and smallholders live elsewhere.
2. *Kemitraan Smallholders*. These are smallholders that have entered into contractual relations with estates that do not involve a separate area of plasma, but rather a shareholding arrangement negotiated on a case-by-case basis in which ownership shares or dividends depend on the amount of land allocated to the company.
 3. *Independent Smallholders*. These are independent growers who start up surrounding nucleus estates, are under no contract and are free to sell to any mill or intermediary, and are free to choose the cultivation system and planting materials. Most independent smallholders operate in North Sumatra and West Kalimantan, areas with a long history of oil palm cultivation on large-scale estates (Jelsma et al. 2009).

These farmers may be further characterized according to the features in Table 6.

Table 6. Characterization of small-scale palm oil producers in Indonesia

Grower Category	Oil Palm Area	Land Tenure	Labor	Food Crops
Independent Smallholders	0.3 ha to 10 ha	Village statement or SHM ^a	Family or locally hired	Yes, but most common in Kalimantan
PIR-Trans (scheme)	2 ha	Acquired SHM through the scheme, but few have the paperwork	Family or locally hired	Yes (typically 0.5 to 0.75 ha)
PIR-Lokal (scheme)	2 ha	Acquired SHM through the scheme, but few have the paperwork	Family or locally hired	Yes (Dayak all have; many others do not)
PIR-KKPA (scheme)	2 ha	SHM (a requirement for participation)	100% hired (by estate)	Only if elsewhere (100% land on scheme is planted to palm)
Kemitraan		SHM (if former PIR participant)	100% hired (by estate)	

^a SHM refers to *Sertifikat HakMilik* or land ownership certificate (roughly equivalent to freehold title). One interviewee estimated only 20 to 30% of households have SHM due to the high cost. This reportedly varies considerably by district in Kalimantan, with up to 60% of smallholders having SHM in some districts and as low as 1% in others (INOBU and EII 2016).

Yet according to John McCarthy, a professor at Australian National University with extensive fieldwork experience in oil palm areas of Kalimantan and Sumatra, the above typology is outdated. Most of the PIR arrangements have disintegrated following the end of the initial contractual arrangements, with both smallholders and companies preferring informal arrangements on the open market (smallholders for concerns related to fairness, and companies for concerns related to side-selling). In Sumatra, all contractual arrangements have lapsed and most smallholders now grow independently, but there is the possibility of entering into a new contractual relationship with a company in order to replant. In Kalimantan, estates have retained control over land under a benefit sharing arrangement (*kemitraan*) rather than returning land to smallholders. These are negotiated on a piecemeal basis between smallholders and estates, and include the so-called *pola akuan* or fourth-generation schemes, where smallholder land is held and managed by the company and participating families receive a passive income (Gillespie 2012). With responsibility for local engagement processes left to the individual plantations themselves rather than government policy (Gillespie, 2011), practices are likely to be highly variable. Given these changes, traditional outgrower contracts have “virtually disappeared.” This has led to a far simpler typology of actually existing growers in each region, which roughly corresponds to the following categories in each region:

Sumatra

1. *Independent smallholders specializing in oil palm.* Given the progressive enclosure of rubber and swidden land, these farmers have adopted a strong commercial orientation and typically no longer practice diversified farming. This group may be further differentiated as follows:
 - a. Small family farms with less than 2 to 3 hectares of oil palm, with households struggling to get by.
 - b. Small family farms with 2 to 3 hectares of oil palm, high quality seedlings and good productivity who are doing OK. Some labor is external.
 - c. “Progressive” smallholders with proper training, high quality seedlings, hired labor and who are progressively expanding their area under palm (from 4 ha to 30 ha or more).
2. *Kemitraan arrangements* linking smallholders or their land under variable contractual arrangements to mills (for which there is significant variability, and limited information in the scholarly literature).

Kalimantan

1. *Independent smallholders with mixed farming systems* involving oil palm, swidden and rubber agroforestry. Seedling quality is very poor and oil palm yields are low. In Central Kalimantan, independent smallholders rarely sell FFB directly to the mill, but rather to traders who may or may not have an agreement with the mill, and who may provide fertilizers and loans to growers (INOBU and EII 2016).

2. *Kemitraan arrangements* linking smallholders or their land under variable contractual arrangements to mills.

It is important to point out that even these categories suggest an internal coherence that is often lacking. A paper by Jelsma et al. (2017), for example, involving a cluster analysis of independent growers in Rokan Hulu District, Riau Province, found a high diversity of growers in this category based on area of oil palm land owned; primary place of residence; origin of plot owner; and land ownership status. While the clusters are not necessarily categories reflecting natural groupings as they are driven by the specific indicators chosen for analysis, they do provide some insight into the variability in the independent grower category for this particular location. Those with the smallest land area averaged 1.2 ha of oil palm and accounted for 7% of the smallholder oil palm area and 37.8% of smallholders, whereas those with the largest plantations averaged 49.6 ha of oil palm and occupied the largest proportion of the smallholder land area at 30.9% (yet only 2.2% of smallholders). The first group both originates from and resides in the sub-district where their plantations are located; reside outside the forestry domain within more populous areas; and have longstanding claims to land. The last group was located almost exclusively on peatland soils, predominantly in state forestlands; neither reside in nor originate from the area; and operate more like companies than smallholders. Yet there are also smaller-scale farmers in the peatlands (mostly migrants with average plot sizes of 3.5 ha, and many but not all absentee). The average percentage of household income from palm did not vary much between clusters, ranging from 48 percent (associated with the first category) to 54.2% (for this last category), or as high as 70.2 percent (corresponding with large resident landowners holding multiple plots of oil palm, some of it within state forestland).

Medium-Scale Growers

By Indonesian law, individual smallholders may own a maximum of 25 hectares. If you own more than this, you are classified as a company. According to one interviewee, this classification and the history of oil palm development described above have contributed to a bifurcated ownership structure involving smallholders and large plantations with mills. However, there are those politically connected families who manage to acquire larger plots due to their relationship to the government. By this account, any medium-scale growers are likely to be these “elites.” A concern was raised about the implications of this for a new standard for medium-scale growers. “If you develop a medium-scale standard, you are accepting elites into certification.”⁸⁴

Another interviewee emphasized the arbitrariness of the “small” vs. “medium”-scale distinction, and that there is no natural cut-off in the field that can clearly be mapped onto such categories⁸⁵. In his words, “It depends on what your definition of smallholder is. It’s a continuum. Even at 4 ha, it may not even be a farmer. If 100s of hectares, it’s a wealthy

⁸⁴ August 17, 2020 interview with a representative of an Indonesian CSO working with oil palm smallholders.

⁸⁵ August 25 interview with John McCarthy, Associate Professor at the Crawford School of Public Policy, Australian National University.

investor. If you go to the field, there's a lot of variation. Do people have the ability to manage the land themselves? Even that is tricky because smallholders may bring in labor. If you are a schoolteacher with 4 hectares hiring labor, are you a farmer?"

Certification Challenges

There are three certification pathways in Indonesia: RSPO, Indonesian Sustainable Palm Oil (ISPO), and International Sustainability and Carbon Certification (Brandt et al. 2013). ISPO is an obligatory public standard developed by the Indonesian government in 2009, and aiming to certify all growers by 2014. RSPO and ISCC are both independent standards approved for verifying compliance with the European Union's Renewable Energy Directive (Brandt et al. 2013; German and Schoneveld 2012). According to one interviewee with experience supporting independent smallholders to obtain certification, most of the certified small-scale growers have obtained certification through RSPO or ISPO, so we focus the analysis on these two schemes.²

RSPO

Since the initiation of RSPO certification for smallholders, fewer than 3,500 farmers in three farmer groups have been certified in Indonesia (0.13 to 0.15%) – with a few other groups in the process of certifying (Hutabarat et al. 2019). It is important to understand the reasons behind these low rates of certification.

One of our interviewees with extensive experience supporting independent smallholders to obtain certification indicated that RSPO presents fewer challenges to small-scale growers than other standards because of the finance provided through the RSPO Smallholder Support Fund (RSSF)². Yet an analysis of costs and benefits of certification for a smallholder association in Ukui District found certification to cost 86 Euros per ha on average, and to create up to an 8% loss of net income per ha in the first year of certification (Hutabarat et al. 2018). Furthermore, the Indonesian Palm Oil Association (GAPKI) has criticized the RSPO for its prohibitive cost barriers for small- and medium-sized *companies* (Brandt et al. 2013). Thus, cost (and cost/benefit) emerges as a key barrier to certification for small and medium-scale growers, and the success of certification seems to hinge on access to outside financial and technical support. Other groups initiated the process but were unable to apply because of land conflicts.

Additional challenges associated with smallholder certification under the RSPO were identified by Rietberg and Slingerland (2016). These include the following:

1. Lack of smallholder organization and the costs and skills needed to meet RSPO's organizational demands.
2. Proving compliance with laws and regulation (principle 2). Where smallholders do not possess the necessary legal documents, obtaining those is costly and time-consuming, and can be impossible when land use is contested.

3. Most uncertified independent smallholders do not use appropriate best practices or keep records (principle 4). Adoption of best practices proved both crucial and challenging for smallholder certification projects. These challenges are linked to smallholders' motivation and to wider agronomic and institutional constraints.
4. Smallholders lack the skills and knowledge to conduct HCV assessments and digital mapping, and little is known about conservation of wildlife and HCV areas by certified smallholders (principle 5).
5. Requirements about conditions that cannot easily be changed, notably prior land use and availability of legal documents, led to exclusion of an estimated 5-10% of farmers from certified groups. Larger numbers of smallholders are expected to be excluded when the whole smallholder population is considered.
6. Meeting RSPO requirements requires organizational and technical support, while funding and capacity to provide this support is limited.
7. Low CSPO uptake and low price premiums limit smallholder motivation to certify, particularly in light of the time and financial investments involved.

Looking into which aspects of certification are most challenging for smaller growers, one study of certified smallholders found noncompliance to be greatest with Principles 2 (legality); 4 (environment); and 6 (employees and communities) (Rietberg and Slingerland 2016b), pointing to the challenges faced by smallholders in meeting the criteria therein. A study from Riau Province (Hutabarat et al. 2019) provides unique insights into how constraints to certification may be differentiated between different types of smallholders. They studied the gap between smallholders' current practices and the RSPO standard for the 8 principles and 35 criteria. Among uncertified farmers, they found PIR-Trans smallholders to have the highest compliance score, followed by PIR-KKPA – with independent smallholders having the largest gap. Disaggregated by Principle, noncertified PIR-Trans and PIR-KKPA smallholders were found to have high scores on Principles 2 and 3 (legality, economic and financial viability) due to their relationship to a nucleus estate. However, these two grower categories were found to have low compliance on Principles 6 (employees and affected communities), 7 (new plantings) and 8 (continuous improvement). Noncertified independent smallholders were found to have low scores for every RSPO principle – suggesting that the barriers to their certification are likely to be highest. One major barrier is the RSPO vision of group-based certification, evident in Principles 1, 2, 3, 6, 7 and 8. Lacking access to formal support in terms of finance or agronomics, they were also found to have low compliance in Principles 4 and 5.

The study also looked at whether the different farmer types had different characteristics that affect their ability to shift away from current practices to comply with the RSPO standard, and identified two key characteristics:

1. *Agronomic Practices and Yield.* PIR Trans smallholders have the oldest age of plantations, which reflects in low annual yields (11.8 tons/ha/yr on average). Independent

smallholders follow with average yields of 16.3 tons, followed by KKPA with 20.4 tons on average.

2. *Access to Inputs and Markets.* Certified smallholders were found to have the greatest access to inputs and markets due to the support systems they are enmeshed in, followed by noncertified scheme smallholders and finally independent growers. Yet PIR-Trans smallholders applied less fertilizer on average than independent growers, likely due to the low returns on investment associated with the older plantations.

Additional challenges to certification specific to independent smallholders were also identified in interviews:

1. *Reluctance to join smallholder organizations given negative experiences in the past.* The RSPO Independent Smallholder Standard requires that smallholders establish a legal entity with the organizational capacity to comply with the standard. Yet farmers were said to be traumatized by experiences of corruption and limited transparency in these organizations. This was thought to be in part cultural: with Indonesians having a tendency to be very trusting of others, they were said to take it particularly hard when that trust is violated.⁸⁶ Yet it also echoes the literature on farmers cooperatives globally. Under these circumstances, many farmers were said to prefer to wait it out and first observe the experience of others.
2. *Meeting good agricultural and management practices.* Smallholders face challenges in meeting the good agricultural and management practices required by certification bodies. For example, oil palm requires large amounts of fertilizers throughout its life cycle to achieve good yields, inputs which smallholders must sustain for several years with no return on investment as plantations mature. At the same time, government subsidies for fertilizers targeting small-scale farmers are only approved for food crops, not plantations. Meeting these standards often requires a level of financial and managerial expertise that farmers lack.

ISPO

Only 0.2% of the oil palm area under smallholder cultivation (12,200 hectares) is currently certified under the ISPO. Lack of funding, especially for training and auditing, was said to pose a significant constraint to certification under the ISPO⁸⁷. However, a new regulation signed into law in March 2020 requires smallholders (with farms <25 ha) to obtain ISPO certification within five years' time.⁸⁸ It remains to be seen how this shapes smallholder certification – and inclusion more generally in the future.

⁸⁶ August 17, 2020 interview with a representative of an Indonesian CSO working with oil palm smallholders.

⁸⁷ August 17, 2020 interview with a representative of an Indonesian CSO working with oil palm smallholders.

⁸⁸ In contrast, 557 of 1,500 plantation companies covering 5.25 million hectares have been certified. See: <https://news.mongabay.com/2020/04/indonesia-aims-for-sustainability-certification-for-oil-palm-smallholders/>.

ISPO is reportedly favored by the domestic palm oil industry given their stated aim of keeping certification costs low and connection to government institutions (Brandi et al. 2013⁸⁹). Whether this represents the voice of medium-scale growers is uncertain.

Other Considerations

One interviewee questioned the value of certification to smallholders. “Where there’s a scheme and money and incentives, they will go and certify. But outside of that, it’s not clear that it speaks to their most immediate issues. What would they gain from being certified? You just don’t find people talking about certification outside these little enclaves where the NGOs are [promoting it] ... I don’t think the issues facing smallholders are going to be addressed through certification: they want technical assistance, good quality seedlings, land to be protected, livelihoods secured. It’s not clear that certification is addressing those critical issues.”

Interviewees identified several unanticipated consequences of certification. One interviewee expressed a disturbing trend of smallholders being pushed onto the forest estate. Deforestation in Indonesia is determined by the de jure status of the area – whether areas designated as state forest or as land for development (*Area Penggunaan Lain/APL*, or land for other uses). Oil palm may only be legally grown in APL. In a bid to comply with environmental and legality requirements, most companies target APL lands where smallholder reside, often displacing them. “Most times the company goes into the area for development, and goes wild with the size of the landholding. So the communities are kicked out from there, and are forced into the forest.”⁹⁰ He tells of one company in Sulawesi that developed an oil palm plantation and located the plasma portion in the forest estate, undermining the legality of smallholder landholdings since by Indonesian law SHA cannot be issued within the forest estate. Whether this is driven by self-regulatory commitments, market-based certification (RSPO), mandatory state certification (ISPO) or all of the above is not entirely clear. Yet with Indonesia’s National Interpretation and the RSPO ISS requiring smallholder plots to be located outside of areas classified as protection forests and evidence of land rights (Republic of Indonesia 2008; RSPO 2019), and growing attention to smallholder-based deforestation (Cacho et al. 2014; Cadman et al. 2018; Jelsma et al. 2017), this trend is worrisome. A report from two districts of Central Kalimantan found independent smallholders in production and conversion forest, but none in conservation forest (INOBU and EII 2016). To ensure that certification does not inadvertently drive smallholder deforestation through displacement, it is therefore important to verify the indirect land use change dynamics associated with smallholder-driven forest conversion – including whether it is pushed by companies seeking to certify, and whether those smallholders are scheme smallholders formally affiliated with these companies.

⁸⁹ See also: Suharto, R. (2010) ‘Why Indonesia needs ISPO,’ *The Jakarta Post*, 2 Dec. Available at: <http://www.thejakartapost.com/news/2010/12/02/why-indonesia-needs-ispo.html>.

⁹⁰ August 17, 2020 interview with a representative of an Indonesian CSO working with oil palm smallholders.

5.2.3. Malaysia

Malaysia was the leader in global palm oil production until recently, when Indonesia surpassed Malaysia. Histories of land occupation, land ownership and public policy have had an important bearing on the oil palm industry and the nature of palm oil producers in Malaysia. The oil palm frontier in the country advanced from peninsular Malaysia to Sabah and Sarawak. It has also proceeded from mineral soils to peat swamp (concentrated along the coast) in the 1990s and 2000s with growing land scarcity (Miettinen et al. 2012). Since cultivation of oil palm in peat swamp requires mechanization, operations on peatland tend to be large-scale industrial plantations.

Oil palm expansion in Sabah followed a period of rampant deforestation driven in large part by a logging industry characterized by over-harvesting and the absence of forest rehabilitation (Toh and Grace 2006). Sabah then transitioned to a cash-crop estate economy under the management of powerful state associations granted powers to allocate land and control trade in timber and palm oil (Dayang Norwana et al. 2011). In the 1980s, extensive areas of degraded forests were degazetted and cleared for oil palm (Jomo et al. 2004), making Sabah the biggest palm oil producer in Malaysia. The Sabah Land Ordinance protects Native Customary Rights and recognizes customary rights in the absence of a title. However, these rights are eroded in practice through a host of mechanisms, from limited enforcement to the inability to claim fallow land as NCR; the need to register NCR in settlement areas to avoid expropriation; and the need to declare interested in gazette forests to preserve usufruct rights (Colchester and Fay 2007; Dayang Norwana et al. 2011). Yet the geography of Sabah has helped mitigate the negative impacts on customary rights holders, with a greater spatial separation between the major oil palm belt (in the sparsely populated east) and areas of smallholder cultivation (in the mountainous areas on the West coast) than is true for Sarawak. Smallholders in Sabah have engaged in oil palm cultivation through their own initiative (with plantings dating back to the early 1980s), and through joint venture schemes initiated by the Sabah Land Development Board (Cooke 2011; Dayang Norwana et al. 2011).

Trajectories of oil palm in Sarawak have also been driven by policy priorities in support of large-scale private plantation agriculture (Jon 1982, cited by Cramb 2011), and a dualistic conception of development designed to ‘unlock’ land under customary tenure while modernizing the smallholder sector (Cramb 2011). A joint venture model was thus advanced by the state government to marry “modern sector dynamism (especially its capital and know-how) with the land and labor of the traditional sector” (Ibid: 279). The problem of labor scarcity was solved by importing low-wage male Indonesian workers on two-year contracts. The land problem was more challenging, with Native Area Land and areas of Interior Area Land subject to native customary rights excluded from dealings with non-natives (Cramb 2011)⁹¹. This dates back to

⁹¹ The 1958 Land Code of Sarawak identifies five categories of landholding: (1) Mixed Zone Land, in which there are no restrictions on who can acquire title; (2) Native Area Land, in which only ‘natives’ of Sarawak can hold a title; (3) Native Customary Land, land not held under title but subject to customary rights; (4) Reserved Land, held

early colonial land law, which used ethnicity as the basis for land classifications, dividing land into customary land (Native Customary Rights, or NCR) to recognize and delimit land held by Dayak shifting cultivators; and Mixed Zone Land, in which there are no restrictions on who can acquire land. The “land problem” was first addressed through the Land Custody and Development Authority (LCDA), established in 1982 to consolidate land held under customary tenure into extensive ‘land banks’ suitable for plantation development; initiate joint ventures between customary landholders and private developers; and resettle scattered rural communities into large townships (Cramb 2011).

While LCDA made little progress early on due to Dayak resistance, joint ventures were reinvigorated in the mid-1990s under a state-wide campaign called *Konsep Baru* (New Concept) in which extensive changes to the Land Code were made to further restrict customary rights. This has rapidly transformed the agricultural sector and oil palm industry from one dominated by smallholders to one dominated by private estates (Cramb 2011). Conflict over land targeted for oil palm has continued as efforts to progressively restrict the definition of customary land through legislation have been met by court cases that have largely upheld customary claims. Companies given leases as “state land” have had their claims overturned in the courts – raising concerns about what “legality” may mean for customary land rights. Despite these dynamics, smallholders continue to participate in the industry through both formal (state-induced) schemes and a diverse array of production arrangements that may be better defined as informal than independent (as they often involve other forms of collaborative arrangements). The overlap of land suitable for oil palm with customary land has induced a host of formal and informal mechanisms to link Dayak smallholders to oil palm investors (from educated Dayak professionals and ethnic Chinese entrepreneurs⁹² to large agribusiness firms).⁹³ With the exception of joint venture schemes (deemed “a disaster” for customary landowners), these arrangements were largely welcomed by customary rights holders and their environmental effects were limited given that the land cover was largely secondary regrowth.

Grower Profiles

While the government recognizes only two categories of growers (“smallholders” under 100 acres and large-scale growers), actual distinctions between growers are more nuanced, and a direct reflection of the above history. Growers may be roughly divided into independent smallholders, supported smallholders (customary landowners entering into various collaborative arrangements with outsiders to grow oil palm), scheme smallholders and plantations, with significant variability in both scale and production arrangements therein.⁹⁴

by the government primarily as forest reserves; and (5) Interior Area Land, a residual category that accounts for the bulk of land in the state (Cramb and Dixon 1988; Porter 1967, referenced in Cramb 2011).

⁹² According to Rob Cramb (personal communication), this has involved diverse arrangements, from the provision of capital to Dayak smallholders to various rental arrangements.

⁹³ August 19, 2020 interview with Dr. Rob Cramb, Honorary Professor in the School of Agriculture and Food Sciences, University of Queensland.

⁹⁴ August 19, 2020 interview with Rob Cramb; August 13, 2020 interview with the Sustainable Palm Oil Team of WWF-Malaysia; Cramb (2011).

Independent Smallholders

The category of independent smallholders includes the prototypical situation of a smallholder that has taken up oil palm with minimal assistance in an area near an established plantation with a mill. They typically grow from 2 to 4 ha of oil palm, and also have land under other crops (e.g. rubber, paddy) and/or some off-farm income. Oil palm is but one component of a diversified livelihood portfolio.

In similar contexts, you often find so-called “progressive” farmers with more capital or who began growing oil palm early on and who have a bit more labor in household, who may be cultivating up to 20 - 30 ha (in Sarawak) or 50 acres (in Sabah) of their own land⁹⁵. They remain family farms working their own land, but are more successful than others. They often need to hire labor either from within the village or Indonesian migrants. Apart from the larger area of oil palm and higher proportion of hired labor, there is little to distinguish them from the typical smallholder. In Sabah, many such farmers intercrop oil palm with food crops; depend primarily on family labor; and have title to their land.⁹⁶

Supported Smallholders

The supported smallholders are those entering into variable forms of collaborative or contractual arrangements with outside actors that are not organized by the government or part of a formally recognized scheme. These may be further broken down into roughly three categories based on their distinctive organizational arrangements:

1. *Group Smallholding*. This is a situation in which 20 to 30 households contribute 2 to 4 hectares of land each, reaching up to several hundred hectares in total. Typically, an educated Dayak professional returns to their home village and persuades households to contribute land; organizes the land preparation and acquisition of seedlings; and establishes a plantation for which the proceeds are shared. Such arrangements typically start out with local labor, but draw on migrant labor once the oil palm matures given the higher labor demands and the labor shortage typical of rural villages with aging populations. These are smallholders who are still working on their own land, but have been organized into groups and benefit from an outside influx of capital and expertise. The degree of hired labor varies considerably among households.
2. The second arrangement involves the acquisition of land by urban Dayak professionals who may not have suitable land in a suitable location (close to town and to a mill), but who are otherwise from the village in question and are able to acquire native customary land because they are a native by law. The land acquired is often land under secondary forest that was formerly used for shifting cultivation and has been freed up from other

⁹⁵ Interviews with Drs. Fadzilah Majid Cooke and Rob Cramb.

⁹⁶ August 18, 2020 interview with Dr. Fazilah Majid Cooke, retired Professor of Sociology, University of Malaysia.

uses due to outmigration. Rights to the land are not in dispute; it is officially recognized as native customary land, but landholders are keen to have it utilized in some way. A typical landholding may vary between 20 to 50 hectares, and it may remain in the hands of the customary owners or be sold to the entrepreneur. The entrepreneur typically employs a relative as a manager, who then contracts hired labor from the local village or other villages nearby. Production is not heavily mechanized or capitalized, clearing is often done manually and wages are often attractive. These are medium-sized holdings, but land is recently acquired and the owner and manager are from the village.

3. *Land rental arrangements.* In a third arrangement, entrepreneurs of Chinese descent approach customary landowners to use their land in exchange for a fixed rent that increases as the oil palm matures. Land remains in the hands of the customary landowners, but the plantation is run by the entrepreneur. These plantations may reach several 100 ha by aggregating small 2- to 3-hectare lots. Labor may be provided by the landowner.

Independent and supported smallholders tend to have similar marketing arrangements, in which contractors (including smallholders from the same villages) transport their own and their neighbors' FFB to local mills. Monopsony does not appear to pose much of a problem, with prices competitively determined and the price transmitted down to smallholders. According to Cramb, "There's enough of a network of mills that farmers would move further if they felt a mill was exploiting them. So not in a mill's interest to threaten their supply."

Scheme Smallholders

Scheme smallholders were said to include the following categories:

1. *"Managed smallholders" or SALCRA.* Under this arrangement, a government agency (the Sarawak Land Consolidation and Rehabilitation Authority, or SALCRA) negotiates with contiguous Dayak villages holding customary rights to land that are not contested (being found in villages occupying this land for centuries); encourages farmers to pool land (typically up to a third of a village's land); develops a plantation on that land and divides it up into individual blocks; and constructs a mill. Family members might be employed initially as the plantation matures, and eventually receive dividends from the net proceeds or FFB sales. Once their debts are paid off, they are given perpetual title to the land. Early on, plots were worked by the smallholder families themselves, producing highly variable outcomes depending on the labor allocated to oil palm.

Over time, given the outmigration of labor, SALCRA schemes have evolved into something indistinguishable from a plantation, in which SALCRA manages the whole block as a plantation without regard to individual blocks; employs migrant labor for harvesting and often local labor (organized into groups or "gangs") for weeding and other tasks; and landholder receive regular payment in exchange for the use of their land. Many families continue to maintain food gardens or rubber plantations elsewhere, while receiving a regular check from SALCRA. As of 2011, SALCRA was operating 18 oil palm estates and

four mills on 48,644 hectares of land under Native Customary Rights in southern Sarawak (Cooke et al. 2011). As of 2009, SALCRA schemes had 21,578 participants (Ibid).

2. *Joint Venture Schemes*. These include the New Concept model in Sarawak and those run by the Sabah Land Development Board (SLDB) in Sabah. New Concept schemes had a very different start than SALCRA, starting with the premise that “you can’t be fooling around with smallholders; you must do it in a commercial way.”⁹⁷ A dozen villages or longhouses would pool 5,000 to 10,000 hectares of land, in return for which they receive a share in the joint venture (30% equity share). Under this arrangement, there are no prospects of receiving a title; they simply hand over their land for 60 years.⁹⁸ SLDB schemes have variable profit-sharing arrangements (e.g. from anywhere from 30 to 60% of shares going to customary landowners), and do result in a land title at the end of the project (Cooke 2011).

Medium-Scale Growers

Opinions varied considerably among interviewees on whether medium-scale growers exist, and how they may be defined. An interview with the WWF-Malaysia Sustainable Palm Oil Team, there was some debate surrounding categories that are meaningful on the ground, with opinions differing between a medium-scale grower corresponding to plantations below 8,000 ha that may have a mill but “lack the capacity to go forward”; plantations of any size without a mill; and the irrelevance of sharp cut-offs in land area in determining which category a given grower falls into. They suggested in the end a typology of four larger grower types, as follows:

1. *Medium-Scale Group A*. Plantations under 500 acres in size (a cut-off point which was settled on because it reportedly does not provide economy of scale in management), that are constituted by consolidating land from individual plots within settlement schemes. There is likely significant overlap between this category and the “supported smallholders” described above.
2. *Medium-Scale Group B*. Industrial-scale outgrowers with no mill. This group is also diverse internally, with some operations being 2,000 acres of contiguous oil palm and others multiple estates of variable size (from 500 to 20,000 acres or more, but scattered and therefore not meeting the specifications required to apply for a mill permit).

It is important to note that another interviewee suggested the official definition of smallholders as under 50 acres was too large, and above 20 to 30 acres should no longer be considered a smallholder because at that scale “you can live comfortably” and are able to certify yourself.⁹⁹

⁹⁷ August 19, 2020 interview with Rob Cramb.

⁹⁸ According to Cramb, these schemes were a disaster for smallholder families. Profits were concentrated in partner companies not formally part of the arrangement, thereby minimizing pay-outs to landholding shareholders and cheating both landowners and the government in the process.

⁹⁹ August 18, 2020 interview with Dr. Fazilah Majid Cooke.

This cut-off would presumably not apply to supported smallholders involved in schemes whose collective area exceeds 30 acres, since their share in these ventures is smaller.

Large-Scale Plantations

Large-scale plantations are 20,000 acres or above of contiguous land that meet the requirements for the establishment of a mill. While all such plantations have mills, only some have a refinery that processes CPO from 6 to 8 mills under the same ownership. So there is an internal subdivision to this category, as well.

These growers may be further characterized according to the features in Table 7.

Certification Challenges

There are three certification pathways in Malaysia: RSPO; Malaysian Sustainable Palm Oil (MSPO); and International Sustainability and Carbon Certification. MSPO is an obligatory public standard developed by the Malaysian government and aiming to certify all growers by the end of 2019.¹⁰⁰ RSPO and ISCC are both independent standards approved for verifying compliance with the European Union's Renewable Energy Directive (Brandi et al. 2013; German and Schoneveld 2012), but in Malaysia, the ISCC primarily certifies larger companies with mills.¹⁰¹ As such, the report focuses on RSPI and MSPO.

MSPO

About 62,009 independent smallholders covering 243,666 hectares of oil palm plantations and 231,576 organized smallholders with 670,010 hectares of oil palm have obtained the MSPO certification. The Malaysian Palm Oil Board hopes to certify 492,000 smallholders nationwide by the end of 2020.¹⁰² This suggests that smallholders have all the support or inducements they need to certify. And the Sustainable Palm Oil Team at WWF-Malaysia indicated that smallholders with 100 acres or less receive support from the Malaysian Palm Oil Board, helping them overcome constraints. MSPO also has no cut-off date, making it a standard that is easier to comply with for many.¹⁰³

¹⁰⁰ See: <https://certifications.controlunion.com/en/certification-programs/certification-programs/mspo-malaysia-sustainable-palm-oil> (accessed Aug 26 2020).

¹⁰¹ August 13, 2020 interview with the Sustainable Palm Oil Team of WWF-Malaysia. The team indicated that most medium-scale growers planted after 2005.

¹⁰² See: <https://themalaysianreserve.com/2020/07/10/492000-smallholders-to-obtain-mspo-certification-by-year-end/> (accessed Aug 26 2020).

¹⁰³ August 13, 2020 interview with the Sustainable Palm Oil Team of WWF-Malaysia.

Table 7. Characterization of small- and medium-scale palm oil producers in Malaysia

Grower Category	Plantation Area	Land Tenure	Labor	Food Crops
<i>Independent Smallholders</i>				
a) "Typical" smallholders	2-4 ha	Native Customary Land (untitled)	Family	Yes (rubber, paddy), but declining particularly in Sabah
b) "Successful" smallholders	20-30 ha	Native Customary Land (untitled)	Mixed (family and hired)	Yes
<i>Supported Smallholders</i>				
a) Group smallholding	2-4 ha / family; several hundred ha overall	Native Customary Land (untitled)	Family, with variable use of hired labor	Yes
b) Customary entrepreneur	20-50 ha	Native Customary Land (untitled), but recently acquired	Hired	No
c) Land rental arrangement	Several hundred ha	Native Customary Land (untitled)	Family or hired	Yes (landowner only)
<i>Scheme Smallholders</i>				
a) SALCRA	1,000s of ha	Titled	Hired	Yes, but not on scheme
b) Joint Venture	5,000 to 10,000 (SALCRA); often less in SLDB	Native Customary Land (untitled) in SALCRA; titled or untitled in SLDB	Hired	Yes, but not on scheme
<i>Medium-Scale Outgrowers</i>				
Group A	<500 acres	<i>unknown</i>	Hired	No
Group B	Variable (500 acres contiguous to >20,000 dispersed)	<i>unknown</i>	Hired	No
<i>Large-Scale Estates</i>				
Large plantation with mill	>20,000 acres contiguous	<i>unknown</i>	Hired	No

RSPO

In Sabah, only 26% of the 1.55 million ha of oil palm is certified. It is mostly the larger companies like Wilmar who are certified, and there are many large companies with mills who are not certified. The biggest hurdles are reportedly the land title and the cut-off date for forest conversion.

For medium-scale growers, the key challenges also include land title and the cut-off date, and for the smaller medium-scale growers, also cost.¹⁰⁴ They indicated that if the new standard for medium-scale growers has gradual certification in stages, as with the Independent Smallholder Standard, it would give them an incentive to achieve RSPO certification. These growers need an incentive to strive for RSPO certification, which might be in the form of marketing assistance and/or gradual compliance.

For smallholders with smaller parcels (e.g. <15 acres), cost and compliance with RSPO safety and environmental Principles and Criteria are the biggest constraints. RSPO also requires a lot of documentation and costly procedural steps to meet environmental standards, which discourages many growers and even mills from getting certified. “The premium is an advantage, but the cost is too great.”¹⁰⁵ Smallholders require extensive external support to form smallholder associations and achieve certification, support which non-governmental organizations like WWF and Wild Asia are providing. According to Cramb, the average independent smallholder is highly unlikely to pursue it or be able to attain it, but certification might be successfully supported through the fertilizer buyers’ groups supervised by the Malaysia Palm Oil Board with some of the costs absorbed by the government. Fazilah Majid Cooke also indicated that the needs of farmers in peninsular and East Malaysia are very different, and approaches to supporting them need to be tailored to context.¹⁰⁶ It is also important to note that few independent smallholders have land title in either Sabah or Sarawak.¹⁰⁷

The WWF-Malaysia team also indicated that labor costs have now exceeded the cost of fertilizer in Malaysian oil palm. With illegal labor being cheaper, medium and small-scale producers may be hiring illegal workers. To certify, they would presumably have to pay more for hired labor – suggesting there may be a financial disincentive to certify.

It should also be noted that MSPO is seen as a stepping stone to RSPO, minimizing the cost of compliance by raising the bar through a mandatory standard if they are not disqualified by other factors (e.g. title, cut-off date). Yet for small and medium-scale growers, that hinges on awareness of the RSPO – which has historically been lacking.¹⁰⁸

¹⁰⁴ August 13, 2020 interview with the Sustainable Palm Oil Team of WWF-Malaysia.

¹⁰⁵ August 13, 2020 interview with the Sustainable Palm Oil Team of WWF-Malaysia.

¹⁰⁶ August 18, 2020 interview with Dr. Fazilah Majid Cooke, retired Professor of Sociology, University of Malaysia.

¹⁰⁷ Interviews with Drs. Fazilah Majid Cooke and Rob Cramb.

¹⁰⁸ August 13, 2020 interview with the Sustainable Palm Oil Team of WWF-Malaysia.

Other Considerations

Given the land use history of Malaysia, in which customary land “by definition” was used in the past for shifting agriculture and cultivation of perennials (fruit trees, rubber), all land under customary ownership and use is secondary growth. According to Rob Cramb of University of Queensland, this means that where you have customary land, communities have been there for 100 years or more and you don’t have smallholders encroaching on primary forest. So unless there is a clear price benefit for them, from a public policy point of view there may not be a reason to try to certify smallholders as it poses a huge burden without achieving much.¹⁰⁹

Cramb also indicated that those interested in certification are those who are not clearing HCV. The Sarawak-based companies transitioning from timber to oil palm who have “knocked over forest all the way to the border” are not interested in RSPO for themselves or affiliated smallholders, and are instead targeting markets in India and China. Both observations suggest that the value of certification in addressing the country’s key sustainability challenges is therefore limited.

Another interviewee mentioned that farmers’ organizations in Malaysia are often political, and support to smallholders could easily become politicized.

5.2.4. Papua New Guinea

Commercial oil palm cultivation in PNG dates back to the 1960s on the north coast of West New Britain Province (Koczberski et al. 2012a). This was a move by the then Australian administration, in the lead-up to independence, to initiate a large rural industry to facilitate the country’s economic independence.¹¹⁰ They partnered with a Malayan company to form New Britain Palm Oil (NBPOL) and developed a plantation and mill under the nucleus estate-smallholder model. The administration wanted smallholders to have a roughly 50% share in the scheme, which was achieved through a land settlement scheme. The state acquired land from customary owners and converted it to state agricultural leases for the establishment of land settlement schemes (LSS) and plantation estates (Koczberski et al. 2012a). Families, largely from mainland PNG, were voluntarily resettled on the schemes at Hoskins and Biella, and allocated individual 99-year state agricultural leases over landholdings of 6.0 to 6.5 ha (Ibid). Public investment also went into roads, community centers, agricultural extension, and health centers. Similar schemes were implemented in Oro Province in 1976 through Higaturu Higaturu Oil Palms Pty Ltd., a joint venture by the newly independent PNG Government and the British Commonwealth Development Corporation.¹¹¹ In each case, following the establishment of the oil palm LSS, neighboring customary landowners living on their village lands began planting oil palm and participating in the smallholder supply base to mills.

¹⁰⁹ August 19, 2020 interview with Rob Cramb.

¹¹⁰ August 11, 2020 interview with Ian Orrell, Head of Sustainability and Quality Management at NBPOL.

¹¹¹ See: <https://www.destinationpng.com/section-3/higaturu-oil-palms/> (accessed Aug 12, 2020).

By 2012, the oil palm area had expanded to five provinces (West New Britain, Oro, Milne Bay, New Ireland and Morobe), with all oil palm growing areas operated on a nucleus estate–smallholder model in which smallholders supply oil palm fruit to mills operated by the nucleus estate company (Curry and Koczberski 2009).¹¹² At that time, there were 144,183 ha of commercial oil palm in PNG and 19,777 smallholders (60% and 40% of the area, respectively) (PNG- POC 2013, cited by Nelson et al. 2013). NBPOL and Higaturu dominated the sector up until this time, supplying palm oil to mostly European buyers and therefore operating within the RSPO framework.¹¹³ According to Gina Koczberski, “No matter where it came from in the country, it could be certified palm oil.”

Yet according to Koczberski, in recent years all of this has changed, with corruption and shady dealings surrounding what are called Special Agricultural and Business Leases (SABLs). Companies moving into East New Britain (Pomio District), for example, have brought “a host of very disturbing issues in terms of human rights, land clearance without proper consent from land owners, ... [and] Malaysian logging companies dressed up as oil palm companies.” While these dynamics are very pertinent to sustainable palm oil, many of the new ventures never resulted in plantations or mills (Nelson et al. 2013) and none has engaged small or medium-scale producers. As such, this analysis focuses on the smallholder and medium-scale growers affiliated with the earlier wave of oil palm expansion.

Grower Profiles

Smallholders

Both interviewees divide smallholder growers in PNG into 3 main groups:

1. LSS smallholders. These are the voluntary migrants mentioned above who were involved in the early establishment of the oil palm industry in the 1960s and 1970s. They occupy 6-ha plots on state leasehold.
2. Village Oil Palm (VOP). These are oil palm plantations that have emerged on customary land surrounding the LSS schemes, in which customary landowners have established their own oil palm plantations. Land is allotted through the village planning system (more recently, through Clan Land Usage Agreements), and oil palm plantations are limited to roughly 2 hectares.
3. Customary Rights Purchase Blocks (CRPB). This is the newest category of smallholder growers, emerging in the last 10 years under modified Clan Land Usage Agreements (CLUAs) designed to address the growing population pressures on the fixed 6-ha LSS blocks and the resulting land conflict. Under customary norms, clan leaders allocate usage rights to clan members (an individual or family) for a particular parcel of land yet the

¹¹² According to Ian Orrell, operations established by the CDC in Milne Bay and New Ireland Provinces have no LSS smallholders.

¹¹³ August 9, 2002 interview with Gina Koczberski, Associate Professor at Curtin University.

agreement is undocumented and access is limited to clan members. Under the modified CLUA, access is extended to non-clan members in exchange for a fee and the agreement is documented.¹¹⁴ Despite the added clarity these formalized agreements provide, this group of smallholders is deemed by Koczberski to be in the most insecure position of all smallholders. These plantations are also limited to around 2 hectares each.

Each of these smallholder groups relies almost exclusively on family labor (within the extended family). The primary difference between these three groups, according to Koczberski, is land tenure. “That’s very important, because 97% of land is under customary land ownership and people are very assertive with their land rights.”¹¹⁵ According to Orrell, these rights are backed by the Constitution and the 3% balance – state land alienated from the customary domain prior to independence – has reportedly never grown.¹¹⁶

Whether these smallholders are best aligned with the “scheme” or “independent” designation is a bit unclear. Smallholders operate under a situation of monopsony, in which there is only one mill where they can sell their produce and there is no risk of side-selling. While interviewees emphasized that this has obviated the need for formal contracts,¹¹⁷ all smallholders are certified as part of the NBPOL supply base and if they wish to grow oil palm, they must comply with RSPO Principles and Criteria. LSS smallholders also operate on farm blocks affiliated with the nucleus estate. What this means is that whether you call them “scheme smallholders” or “independent smallholders” depends on how you define those terms – whether the presence of a formal contract (or a particular type of contract), organization of smallholders into farms blocks, exclusive sales to the nucleus estate, or control by the parent company over whether or how palm oil is. NBPOL views on this are clear: “RSPO keeps wanting to call them scheme smallholders, but they’re not... Our smallholders are independent, but they are certified as part of our supply base.”¹¹⁸ But they are “totally free in terms of land use and livelihood strategies” (Ibid). If we employ the definitions of “scheme smallholders” from the RSPO Principles and Criteria, they would not qualify. Yet neither are they independent. Here, the term “supported” is a better fit – provided one acknowledges that support can also mean partial control over oil palm production practices.

A brief review of the literature on LSS smallholders provides some insights into livelihood characteristics that may be of use to an RSPO profiling system.

¹¹⁴ August 11, 2020 interview with Ian Orrell, Head of Sustainability and Quality Management with NBPOL.

¹¹⁵ August 9, 2020 interview with Gina Koczberski, Associate Professor at Curtin University.

¹¹⁶ August 11, 2020 interview with Ian Orrell, Head of Sustainability and Quality Management with NBPOL.

¹¹⁷ This view was expressed by both Gina Koczberski and Ian Orrell.

¹¹⁸ August 11, 2020 interview with Ian Orrell, Head of Sustainability and Quality Management with NBPOL.

LSS Smallholders

A 2010 study of an oil palm land settlement scheme (LSS) in West New Britain Province initiated in the 1970s shows the changing nature of household landholdings, land use and labor allocation for smallholder families over time (Koczberski et al. 2012b). Over 3500 settler families were recruited from other provinces of PNG and granted individual state agricultural leases over blocks of 6.0 to 6.5 ha (Hulme, 1984). Households were encouraged to cultivate 4 ha in oil palm and reserve 2 ha for their household food needs, and families established diversified garden plots for both household consumption and sale. By the early 1990s, however, growers began planting the full 6 ha to oil palm (>90% of blocks by the time of study). This shift was said to be driven by population growth, which doubled from 7.24 to 14.72 people per block from 1975 to 2010. Households have coped with this land pressure in several ways: intensification of land use; intercropping immature oil palm with food crops (for the first two years after replanting); and seeking access to land beyond the oil palm block. Intensification has involved shorter fallow periods, extended cultivation periods, greater reliance on short-maturing food crops tolerant of less fertile soils, increased use of agrochemicals, and cultivation on land formerly considered unsuitable. While intercropping of oil palm and food crops has also played a role in alleviating land pressure, this is limited given that the oil palm rotation was found to be 22 years and intercropping to be viable only during the first two years. Families have also found land for food crop production on other blocks – illustrating the importance of social networks for accessing land, and suggesting that people may be extending the time during which intercropping is possible by staggering the replanting oil palm and sharing intercropped land between households.

Beyond the scheme, families have either cultivated on state land adjacent to the scheme (some of which was reportedly on environmentally sensitive areas), or by entering into informal arrangements with neighboring customary landowners. While 40% of the total garden area was found to be off-block in 2010, tenure security was found to be limited, whether due to illegality (state land), limitations to rights granted (customary land¹¹⁹) or theft of produce (both). While most of the land acquired in customary areas is typically for the cultivation of food crops for household consumption only, some second-generation settlers have acquired two-hectare blocks of customary land for the cultivation of oil palm (providing access to land for food gardening and residence). Over 3000 ha of customary land in the Hoskins area was found to have been allocated to people from outside the customary landowning group, but it was not clear how many of these blocks had been established by former residents of the LSS. While this was shown to increase per capita income on the LSS block, it was seen as a high-risk strategy that was indicative of the long-term vulnerability of the settler population.

These dynamics have changed the characteristics of scheme smallholders over time (Table 8).

¹¹⁹ Rights granted to settlers were said to be neither permanent nor exclusive.

Table 8. Characteristics of LSS smallholders over time

Indicator	1975	2010
Size of leasehold block	6.07	6.07
Persons per block	7.24	14.72
Area of leasehold block planted to oil palm (ha)	3.24	6.00
Garden land available on block	2.83	0.61
Intercropping	Non-existent	35% of all food gardens
Time allocated to oil palm	Unknown	65% (male blockholders); 24% (spouse)
Time allocated to gardens	Unknown	35% (male blockholders); 76% (spouse)
Percentage of meals consisting entirely of garden foods	77% (2000)	43%

The proportion of household labor allocated to oil palm and gardens also fluctuates due to the price of palm oil. Yet despite the dynamic nature of LSS smallholder livelihoods, several characteristics remain constant - providing insights on what might characterize a LSS smallholder. First, irrespective of the challenges faced in finding adequate land for garden plots, households see food production on garden plots as a livelihood necessity – for food security, cash income and for buffering the risks of fluctuating oil palm prices. Women, in particular, depend disproportionately on garden plots for their income. Secondly, both women and men allocate some of their labor to garden plots and some labor to oil palm, with no mention of any hired labor.

Medium-Scale Growers

Interviews were our primary source of information on medium-scale growers. Both interviewees indicated that while there are medium-scale growers, they are few in number. They were characterized as family businesses among clan members that operate on customary land. Yet views on their other defining attributes differed. Koczberski characterized them as groups of clan members forming “independent estates” of between 15 and 50 ha on customary land; numbering around 35 (in Bialla alone); and having very low yields. Orrell instead indicated they typically have from 100 or 200 ha under oil palm (“certainly not getting up to 500 ha”); and include perhaps a dozen operations in the whole country. These differences appeared to be a question of familiarity; the group likely includes a wide range of landholdings varying from 15 to 200 ha. Two key characteristics were said to differentiate them from smallholders: they transport their own FBB to the mill; and the extent to which they draw labor from outside the village. It is important to note that “outside the village” does not mean open market

transactions; due to cultural norms, “there’s no way people would employ people from outside the clan”¹²⁰. They are also differentiated from large-scale producers in two key respects: they have no processing facilities of their own (they are outgrowers supplying FBB to someone else’s mill); and they operate on customary land rather than state leasehold. While it wasn’t mentioned by interviewees, the size of landholdings is clearly another factor differentiating medium-scale from large-scale producers.

Certification Challenges

The two certification pathways in the country are RSPO and The Rainforest Alliance’s Green Frog certification. According to Ian Orrell, the two standards align reasonably well, but the approach is different. RSPO auditors focus most on documentation, which is supplemented by field visits, whereas Rainforest Alliance certifiers are most interested in seeing things on the ground, and only follow up with documentation for proof.

The primary challenge related to smallholder certification, mentioned by both interviewees, is proof of land ownership. From its inception, and particularly over the last 30 years, the two major oil palm provinces (West New Britain and Oro) experienced high rates of in-migration by diverse ethnic groups from mainland PNG and the emergence of an array of formal and informal land tenure regimes on customary land (Curry and Koczberski 2009). Yet the problem is particularly acute for LSS smallholders, many of whom have lost the title awarded to them back in the 1960s and 70s. According to Koczberski, palm oil companies have spent a lot of time trying to get the original copies, but it is a mess. NBPO has an agreement with the government to expunge historical land titles and start again, and has been working on issue of deceased estates. Despite the challenges involved, there is a sense that as long as they are working to address it, they will stay in good standing with the RSPO. Ironically, smallholders on clan land face less of a challenge than LSS smallholders on state leasehold. For both VOP and CRPB smallholders, land tenure concerns are resolved through a Clan Land Usage Agreement. According again to Orrell, “Within the bounds of the customary arrangements is a lot easier, because it’s not legalistic and involving the government.” A second factor, relevant only to medium-scale growers, is the labor standards they must comply with.¹²¹

Yet it’s important to note that given the unique history of oil palm development in the country, and the fact that all estates whose supply base involves smallholders are certified (and certify those smallholders), the question of barriers to entry does not really apply. It is a question of nonconformances. These include things like Personal Protective Equipment (e.g. footwear, due to its cost); use of fire (common for customary agricultural and hunting practices); restricting their desire to expand; and for the case of medium-scale farms, labor practices.¹²² From the smallholder perspective, it is more a question of the constraints on their livelihoods posed by RSPO compliance. If they do not comply with the rigorous Principles and Criteria, their only

¹²⁰ August 11, 2020 interview with Ian Orrell, Head of Sustainability and Quality Management with NBPOL.

¹²¹ August 11, 2020 interview with Ian Orrell, Head of Sustainability and Quality Management with NBPOL.

¹²² August 11, 2020 interview with Ian Orrell, Head of Sustainability and Quality Management with NBPOL.

market dries up as NBPOL will cease to buy from them. So their choices are limited to complying with the RSPO, or shifting to other livelihood activities. There is no option, at the moment, of growing oil palm that does not meet RSPO (and, increasingly for NBPOL, Rainforest Alliance) criteria.

5.2.5. Solomon Islands

Commercial oil palm cultivation in the Solomon Islands dates to 1973, with the establishment of Solomon Islands Plantations Limited (SIPL) on the northern plains of Guadalcanal – the largest contiguous area of arable land in the country (Fraenkel et al. 2010). SIPL was co-owned by the Solomon Islands Government (30%), the Commonwealth Development Corporation (68%) and local landowners (2%). Formerly alienated land that had been converted to government ownership was leased to SIPL for 75 years, with perpetual title reverting to landowners and trustees obtaining SI\$100 in annual rents per hectare in addition to a one-off SE\$500 premium for new areas brought under oil palm. While SIPL was initially envisaged as a nucleus estate-outgrower scheme, the smallholder component was never realized (Scheffler and Larmour 1987). By the end of the 1980s, palm oil became the most valuable agricultural export. By 1998, SIPL had 6,300 ha under oil palm on two estates; employed 1,800 people; and contributed SI \$94.2 million in export earnings (Ibid). Including their dependents, 8 to 10,000 migrant settlers from other islands (65% of these from Malaita) were living on the northern plains, many of them supplementing their incomes through food and cash crop production on customary land under informal arrangements with local landowners (Kama 1979, cited by Fraenkel et al. 2010). Tensions between SIPL-related settlers and indigenes were a key catalyst to the Isatabu uprising in 1999 – when a truck carrying FFB to the mill was stoned, sparking a reaction from workers who demanded compensation and burnt down houses in a local village when this was not forthcoming. This was followed by an arson attempt at the mill, and by the forced eviction of settlers by the Isatabu Freedom Movement. SIPL subsequently shut down its operations and evacuated the remaining workers to Honiara. Oil palm plantations were subsequently damaged as people re-appropriated lands for gardens. The “tension,” as it is called locally, only subsided with the arrival of the Regional Assistance Mission to the Solomon Islands and imprisonment of militants in 2003.

In 2004, PNG-based New Britain Palm Oil reached an agreement with landowners to restart operations and rehabilitate the mill, thereby establishing Guadalcanal Plains Palm Oil Ltd (GGPOL) and re-starting operations by 2005. SIPL leases were cancelled and landowners leased blocks to GPPOL on 50-year terms with options of renewal. A series of elections re-established trustees of the 58 parcels leased to the plantations, strengthening local support to GPPOL. Rent remained at SI\$100/ha, but the landowner share increased to 20%; a royalty payment of 10% of the farm gate price was included; and preferential employment policies enacted giving first priority to local landowners, followed by other people from Guadalcanal Province. Drawing on their experiences with a nucleus estate-outgrower model in PNG, an agreement was also made for a 503-hectare portion of the original plantation area to be operated as an outgrower block. Smaller blocks scattered around the nucleus estate have subsequently been added, bringing the outgrower total to 817 ha by the end of the 2000s (Fraenkel et al. 2010). These consisted of 176

blocks ranging in size from less than one hectare to 22.2 hectares, with an average of 4.6 ha. The total area of outgrower production has increased to roughly 1,200 ha today.¹²³

Grower Profiles

Whether there are “independent” growers in the Solomon Islands is dependent on how “independent” is defined. According to the Sustainability Manager of GGPOL’s, outgrowers have “a document saying they are outgrowers, but no contract.”¹²⁴ The distinction is thus a rather gray area in which the independent or contractual status of growers depends on how you define these terms. According to a second interviewee, with only one mill in the Solomon Islands, “there is no way to be independent, or the benefits of independence wouldn’t apply.”¹²⁵ Furthermore, the “Outgrower Approval Agreement” with GGPOL referenced by GGPOL specifies the terms of agreement between them – from their entitlement to interest-free loans (for seeds, fertilizers, harvesting tools and at times mechanized clearing) and technical assistance (oriented towards RSPO compliance), to the terms of loan repayment¹²⁶. Thus, while these growers are more likely to be classified as “scheme smallholders” than independent growers, interviewees preferred the term “outgrower” to emphasize their simple affiliation with and production for a nucleus estate. The resulting grower typology is as follows¹²⁷:

1. Nucleus Estate. With the country having only one nucleus estate, its features are clear: a large private company with 7,023 hectares under oil palm production and a single mill on leased customary land.
2. Outgrowers. These are plantations of varying size and ownership arrangements that sell to the nucleus estate. They may be further subdivided into the following categories:
 - a) *Individual outgrowers*. These are individual families who grow anywhere from 0.6 ha and 38 ha of oil palm (4 to 6 ha on average). Most are on unregistered customary land. All of these growers make use of family labor, but around 90% of them also hire laborers from both the extended family and beyond (e.g. employees from the company during their off days, and even workers from other islands or from urban centers) – especially during harvesting. They have their own gardens for food crops, cocoa and copra, varying from less than one to several hectares in size.
 - b) *Village Oil Palm (VOP)*. These are clan or tribal outgrowers organized into associations, in which all members are related to one another. These range from 16 ha (run by multiple clans) to 503 ha (Binu Outgrower Scheme, run by a single clan). Similar to individual outgrowers, most VOP associations are on unregistered

¹²³ August 19, 2020 interview with Lincy Pende, doctoral candidate at Australian National University.

¹²⁴ August 18, 2020 interview with Regina Pokana, Sustainability Manager of GGPOL.

¹²⁵ August 19, 2020 interview with Lincy Pende.

¹²⁶ Interviews with Lincy Pende and Regina Pokana.

¹²⁷ August 19, 2020 interview with Lincy Pende.

customary land and rely on laborers from within the clan as well as hired labor from outside the clan (primarily for harvesting, weeding and herbicide application). Families within the clan also have their garden plots of about the same size as individual growers.

- c) *Institutional outgrowers*. These include boarding schools (high schools and vocational training schools) on freehold land, in which students form the bulk of the labor force. These are established primarily as revenue generators to assist in the development of the school. These schools also have gardens where food is grown for student consumption.

In exploring whether there are any medium-scale growers, one interviewee said that clan or tribal outgrowers (VOP) might be considered medium-scale, but in reality there is very little other than their formation into associations that differentiates them from individual outgrowers. This may be seen most clearly in Table 9, where they share many of the same characteristics. Furthermore, one interviewee mentioned the internal political dynamics of these associations which hinder them from getting ahead in ways that might differentiate them from individual growers. “Since they are organized as a group, one would think they would have much more power to manage, but in practice they face the same challenges. This has to do with the internal power play and politics ..., which undermines the cohesiveness of the group as a whole. Trustees are supposed to be representing the individual members, but there are often conflicts between trustees and members in terms of how the benefits are to be managed.” This suggests that all of the above categories of outgrowers might be considered “small-scale”.

Table 9. Characterization of oil palm growers in the Solomon Islands

Grower Category	Plantation Area	Land Tenure	Labor	Food Crops
Individual Outgrower	0.6 to 38 ha	Mostly unregistered customary land	Family or locally hired	Yes (staples, copra, cocoa)
Village Oil Palm	16 to 503 ha	Mostly unregistered customary land	Clan or locally hired	Yes (staples, copra, cocoa)
Institutional Outgrower	6 to 10 ha	Freehold	Students	Yes (staples)
Nucleus estate	7,023 ha	Leased customary land	100% hired (mostly from local villages and Guadalcanal Province)	N/A

Certification Challenges

The primary certification pathway in the Solomon Islands is the RSPO.¹²⁸ With GGPOL certified with the RSPO and all outgrowers supplying to GGPOL, all outgrowers are also certified. So while the decision of whether to grow oil palm is voluntary, growers must comply with RSPO terms in order to become outgrowers.

According to one interviewee, most of the RSPO guidelines on environmental impacts are properly adhered to by both the nucleus estate and outgrowers.¹²⁹ Yet individual growers and associations face a common set of challenges related to both certification and production.¹³⁰

Key certification constraints include the following:

1. *Negotiating within their own clan to access land.* Given that most oil palm production is carried out on clan land, growing oil palm requires approval of the clan leader.¹³¹ With oil palm historically competing with food crops and other cash crops (cocoa, copra), the interests of oil palm growers must be balanced with the interests of other clan members.
2. *Disputes between adjacent clans over land use authority.* There are often disputes over who has the authority to make decisions over land allocation to clan members and the company. These disputes are typically resolved through the sharing of income from the sale of FFB, which eases the tension and helps to provide a stable environment.
3. *Outgrower understanding of what is required of them.* Growers may jump into oil palm without a full understanding of what is required, and later come to discover that they do not meet the requirements, and their plots are abandoned as they are not recognized by the company. Such cases have reportedly reduced since the early years of GGPOL.
4. *Meeting labor requirements.* During harvesting, children are also engaged in harvesting, in line with customary practices – posing a potential noncompliance with RSPO standards.

Key production constraints include the following:

1. *Timely transport of harvested FFB to the mill.* Outgrowers often face challenges in transporting FFB from various outgrower blocks to the mill, and FFB can be left for days or even weeks before processing. This results in significant reductions in oil yield and profits, and demotivates growers.

¹²⁸ Lincy Pende also indicated that labor practices must also adhere to ILO guidelines, which are enshrined in the Labor Act.

¹²⁹ August 19, 2020 interview with Lincy Pende.

¹³⁰ August 19, 2020 interview with Lincy Pende.

¹³¹ According to Allen (2012), this is being done through a ‘smallholder land use approval’ system modelled after PNG’s Clan Land Usage Agreements.

2. *Fluctuation in oil palm prices.* Farmers are also demotivated when they experience a drop in the price of palm oil, as it affects their ability to buy fertilizers and pay for laborers – affecting future returns from oil palm.

Institutional outgrowers face a different set of dynamics, with turnover in administrations often undermining commitment to plantations and the economic sustainability of these operations.

Other Considerations

One concern with respect to the Simplified Smallholder Standard is the consequences of a more lenient standard for smallholder productivity and returns. The design of any new standards should be designed with, “proper thinking through with the company and the outgrowers, rather than just pushing it down from the top. They need to be properly informed what it is, how they are anticipated to engage, and all of this.”¹³²

5.2.6. Thailand

Thailand is the third producer globally, producing 3.1 million metric tons and accounting for roughly 3% of global output.¹³³ The industry has witnessed exponential growth in the last three decades (Dallinger 2011), with area under oil palm tripling in size from 1998 to 2017 due, in part, to national policies promoting palm oil-based biodiesel production (Saswattecha et al. 2016).¹³⁴ Unlike other leading biodiesel producers, the country has developed its biodiesel sector almost exclusively around smallholder production on established agricultural lands (Naylor and Higgins 2017). This reflects a national agricultural policy that until recently¹³⁵ had consistently favored smallholder production systems, for example through bans on primary forest clearing, constraints on large-scale land acquisition and the prohibition of foreign ownership of farmland (Ibid).

As of 2018, Thailand had 710,000 hectares under oil palm.¹³⁶ Over 80% of plantations lie in the southern region (OAE 2017), mostly in Surat Thani, Krabi and Chumphon Provinces (Dallinger 2011; Rodthong et al. 2020). Unlike other countries in the Asia-Pacific region, and in line with the orientation of the agricultural sector at large, production in Thailand is dominated by smallholders – with approximately 70% of the country’s oil palm managed by smallholders in

¹³² August 19, 2020 interview with Lincy Pende, doctoral candidate at Australian National University.

¹³³ Available at: <http://www.worldagriculturalproduction.com/crops/palmoil.aspx> (retrieved Sept 5, 2020).

¹³⁴ In 2012, the Renewable and Alternative Energy Development Plan was passed and B7 blending mandate was set. While this was subsequently reduced to B5 due to a shortage of palm oil, by 2015 the country was producing 1.2 billion liters of biodiesel – 4% of the world’s total, and achieved a blending rate of 5.8% (Naylor and Higgins 2017).

¹³⁵ The recent clearing of peatland for oil palm plantations and efforts to reclaim encroached peat forest from smallholders suggest this might be changing. See: <https://news.mongabay.com/2017/03/as-thailand-ramps-up-its-palm-oil-sector-peat-forests-feel-the-pressure/> (retrieved Sept 7 2020).

¹³⁶ FAOSTAT (retrieved Sept 5, 2020).

2015. The balance is composed of medium and large-scale operations.¹³⁷ Operating independently from the more than 60 crushing mills and collectively producing less than the capacity of these mills, it is a seller's market (Dallinger 2011). Yet productivity is low, given the more informal nature of the industry and smallholder support and its effects on seed quality, plantation management (fertilizer use, etc.), harvesting practices and plantation establishment in areas of low rainfall (Dallinger 2011; Rodthong et al. 2020; Termmahawong 2014).

Grower Profiles

According to a 2011 report, the oil palm sector is dominated by some 120,000 small- and medium-scale growers, with farmers owning less than 50 hectares managing approximately 70% of the total planted area (Dallinger 2011).¹³⁸ In most cases, farmers “act completely independently from the oil palm crushing mills and are not linked to mills by contracts or any other formal arrangements” (Dallinger 2011: 27-28). The delivery of FFB to the crushing mills is organized by intermediaries who collect and combine the harvests of numerous smallholders. A few farmer cooperatives have managed to establish cooperative mills with government support. Members own their own oil palm plots, which tend to be indistinguishable from other independent smallholders.¹³⁹ The closest thing to a medium-scale grower are the few wealthy families who own a “large area” (50 to 100 ha in size) but have no mill.¹⁴⁰ Nucleus estate-outgrower type arrangements are absent, and the largest plantation owned by a single company consisted of 7,120 ha of consolidated area (UPOIC 2011, cited by Dallinger 2011). Expansion of large-scale plantations is reportedly constrained by the limited availability of large plots for purchase and skyrocketing land prices (Dallinger 2011).

Dallinger's report establishes two primary categories – companies and independent farmers, with the average size of landholdings in 2007 for companies 796 ha and independent smallholders 3.89 ha¹⁴¹ (Dallinger 2011). It further divides independent farmers into cooperatives and personally owned estates, but does not provide disaggregated figures on land area for each. Another source also divides growers into three categories, but cites the size of oil palm plantations as what marks the boundaries between them: smallholder farmers, most of whom are thought to hold between 1.6 and 3.2 ha of oil palm; cooperatives and self-help land settlement members, which are thought to typically hold around 4.8 ha of oil palm¹⁴²; and commercial companies with plantations that exceed this size (Termmahawong 2014). Other sources suggest that the oil palm plots of smallholders vary from 1 to 10 ha (Rodthong et al. 2020); or average 7.18 ha, with the vast majority (80%) owning less than 8 ha and only 6%

¹³⁷ Sept 14 2020 interview with Kanokwan Saswattecha, Project Manager with GIZ's Sustainable and Climate-Friendly Palm Oil Production and Procurement Project.

¹³⁸ A 2014 report places the *total* number of growers at 188,226 (Termmahawong n.d.).

¹³⁹ Sept 14 2020 interview with Kanokwan Saswattecha.

¹⁴⁰ Sept 14 2020 interview with Kanokwan Saswattecha.

¹⁴¹ Thongrak puts the latter figure at 10.7 ha.

¹⁴² The report does not specify whether this is per member or overall, and one interviewee very familiar with the sector had never heard of such entities, so these are left out of the analysis.

owning more than 16 ha (Thongrak et al. 2011). Dallinger breaks down the planted area by land size further, as illustrated in Figure 1. This actual size distribution of oil palm plantations suggests more of a gradation, as well as some medium-scale growers between Dallinger’s two grower categories (companies, independent smallholders). While the graph suggests more about the methodology than the presence of actual farmer groupings, together with the literature cited, it does seem to suggest a category of an independent smallholders holding under 10 ha (or max 16 ha) of oil palm and accounting for the vast majority of growers. In consulting Kanokwan Saswattecha about this graph and the land area that best represents the upper limit for smallholders, she suggested smallholders in Thailand typically hold between 3 and 8 ha of land and the vast majority of growers in the 8 to 48 ha category are likely to fall in the 8 to 10 ha range of area allocated to oil palm. With 4 hectares considered the minimum area needed to make a profit and plots exceeding 10 ha extremely rare, this is already a sizeable area for a smallholder¹⁴³.

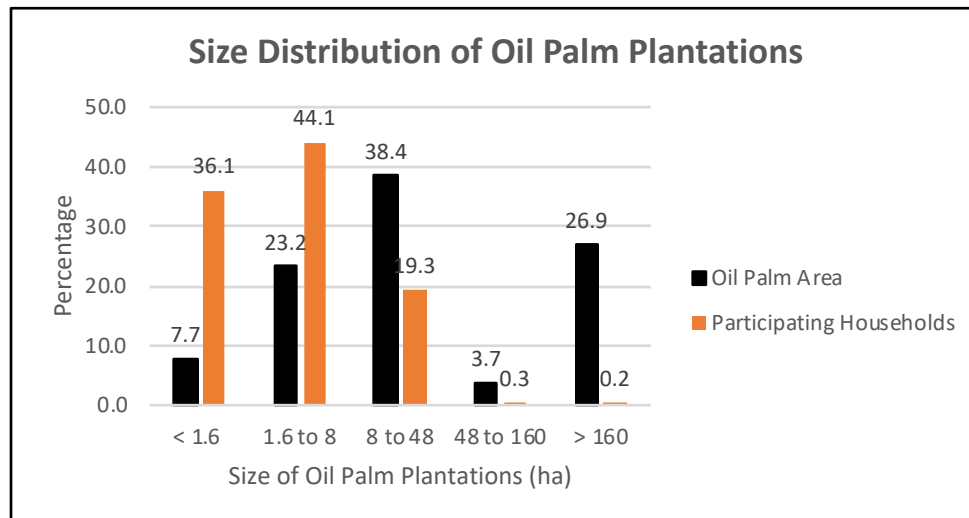


Figure 1. Size distribution of Thai oil palm plantations (reproduced from Dallinger 2011)

The vast majority of smallholder growers surveyed by Dallinger (2011) and Thongrak et al. (2011) were found to have a legal land certificate for their oil palm area – with estimates ranging from 92-93%. Thongrak et al. (2011) found that 79.3% of interviewed smallholders managed most of the oil palm activities using family labor, with the remainder using mainly hired labor. Yet with 93% of respondents reporting the use of family labor and 80.5% the use of hired labor, the vast majority (> 70%) clearly depend on both (Thongrak et al. 2011). Most families (82.4%) rely on outside labor for harvesting (Thongrak et al. 2011). Harvesting is often done by harvesting teams (typically organized by intermediaries, with 90% working independently from the ramp and mill), and their services include additional farm management activities such as pruning or weeding and, at times, transportation (Dallinger 2011; Thongrak et al. 2011). These laborers include migrants from other provinces and neighboring countries (e.g. Cambodia and Myanmar). According to one interviewee, smallholders do not have the means

¹⁴³ Sept 14 2020 interview with Kanokwan Saswattecha.

to hire permanent workers with paid benefits and most instead rely on service providers (who themselves employ workers and provide services to many small-scale growers).¹⁴⁴ The vast majority of Thai growers are free to choose which crops they want to grow. A 2011 study by Thongrak et al. found oil palm to be the predominant occupation for 79% of smallholders, constituting 60.2% of household income on average. Yet with only 22.5% of independent farmers relying on oil palm as the sole source of income, farms are also diversified. Other sources of income included farming (livestock, vegetables, fruit trees, rubber); trade; and formal sector employment. Independent growers sell their FFB directly to the mill or to independent or cooperative ramps, a decision which rests on proximity, membership in cooperatives and price. Yet while all the literature refers to these farmers as “independent”, Thongrak et al. (2011) identified a host of services received from mills and ramps, which at the time of the study included credit, access to inexpensive fertilizer, technical assistance, harvesting and transport. A majority of those receiving assistance, however, received it through ramps (36.8% of interviewees) rather than mills (5.8%).

The above suggests that Thai growers may be roughly classified into three main categories (Table 10).

Table 10. Characterization of oil palm growers in Thailand

Grower Category	Average Farm Size	Average Oil Palm Area	Land Tenure	Labor	Food Crops
Independent Smallholder (with / without share in mill)	3.89 ha (3 to 8 ha)	1.6 to 3.2 ha (or 60% of landholding)	92-93% titled (land certificate)	Family & hired (service providers)	Often no (but they diversity with rubber)
Medium-Scale Grower (independent)	unknown	30 to 100 ha	Titled	Hired ^a	No
Company	796 ha	796 ha	Titled	Hired	No

^a Whether this implied permanent employees, service providers or both is uncertain.

Certification Challenges

The primary certification pathways for palm oil in the Thailand are the RSPO and the Good Agricultural Practices standard (Thai GAP). Thai GAP is a national initiative of the Ministry of Agriculture and Cooperatives started in 2010 and for which participation is voluntary. It covers the safe use of pesticides, water and fertilizer application, and compliance is controlled by the Department of Agriculture. The Principles and Criteria of the RSPO were used as a reference during the standard’s development (Dallinger 2011).

¹⁴⁴ Sept 14 2020 interview with Kanokwan Saswattecha. While she was unfamiliar with medium-scale growers, she thought the size of landholdings would justify hiring permanent employees in the Thai context.

RSPO certification is expected to bring financial benefits to producers through training on good agricultural practices, and raising what are deemed low yields and oil extraction rates (attributed to the harvest of unripe fruit and improper handling) (Dallinger 2011; Rodthong et al. 2020).¹⁴⁵ With current levels of outside support and training surprisingly low (33% and 25.8% of households, respectively, receiving support) (Thongrak et al. 2011), this seems plausible. Yet with Thailand part of a wider trend in decreasing numbers of independent smallholders being certified – experiencing a 25% decrease from 2016 to 2017 (RSPO 2017), it is important to understand the reasons behind farmer decision-making with respect to certification.

While the literature has much to say on the challenges to certification, it is worth starting with the challenges identified by an interviewee closely involved in supporting smallholders to achieve RSPO certification. She highlights three main constraints: cost (e.g. for audits and training, which are expensive in Thailand); knowledge gaps (given the limited number of support providers who have sufficient knowledge of the RSPO); and documentation (farmers struggle to maintain records). GIZ is helping farmers overcome these constraints (including, for example, experimentation with digital record-keeping to mitigate the third constraint). Yet these farmers still face marketing constraints of a low and decreasing price premium for certified palm oil, as the market demand is not keeping up with growth in the RSPO market share.

While these findings are likely the key challenges faced by growers, some studies provide further nuance. One study compares the characteristics of smallholder farmers' who have applied for RSPO membership and adopted the RSPO practices required to qualify for certification as part of a pilot project of the Ministry of Agriculture and Cooperatives in southern Thailand, with the characteristics of non-participants (Rodthong et al. 2020). They found adopters to have more years of formal schooling, greater household incomes and larger oil palm plots (5.5 ha on average, as compared to 3.0 ha), and to employ more outside labor on their farms. They were also found to have significantly more experience cultivating oil palm and higher rates of tenure formality, although both groups had greater than 17 years of experience on average and 93% of non-adopters also held legal land certificates – suggesting these may not be constraints per se. The study also found those with longer periods of certification to have higher compliance rates. Results of a regression analysis of factors influencing adoption decisions and adoption intensity of RSPO practices found 10 variables (of the 17 analyzed) to affect adoption decisions. Farmers who applied more farm labor, cultivated a larger area, possessed a legal land certificate, had been trained on RSPO practices, and with current access to extension services were more likely to adopt. Women too were also found to be more likely to adopt. Households with the most alternative income (whether other crops or off-farm) or the greatest debt, and households having to hire farm labor, were found to be less likely to adopt. In terms of intensity of adoption, farmers with more on-farm workers; a larger cultivated area; prior training on RSPO practices; and better access to information, extension

¹⁴⁵ Kanokwan Saswattecha attributes this to service providers rather than farmers, as they alone control when their services are available to farmers. Whether RSPO certification would have any influence on these practices is therefore uncertain.

services and support services were more likely to adopt a larger number of the RSPO practices on their plantation. In contrast, farmers with older and less productive trees tended to adopt fewer of the RSPO practices.

While these relationships were all found to be statistically significant, a few stand out in terms of the strength of the relationship (and thus, presumably, their influence on farmer decision-making). Farm labor was one such variable. Interestingly, while an increase in *total* farm labor increased the probability of adoption by 12.4%, an increase in *hired* labor by one unit resulted in decreased probability of farmers' adoption of RSPO practices by a full 37.5%. Availability of family labor thus appears as a significant fixed constraint on adoption. Yet here, the use of harvesting teams employed by mills and collecting centers as the hired labor seems to have discouraged adoption, causing farmers to channel their sales to mills and local collection centers that did not require the RSPO certificate rather than through RSPO-certified cooperatives. Oil palm age was another highly influential factor shaping RSPO adoption, with the lower returns to older plantations deemed not worth the additional effort associated with certification (especially for those farmers intending to convert to other crops). A third set of variables that were highly significant included access to information, extension services and support services (each evaluated independently) – and, to a lesser degree, the number of training sessions. Support services consisted of support received through non-governmental channels, in this case credit services, market access (including preferential access during the peak season), provision of inputs at fair prices and tailor-made fertilizer available through Land Settlement Cooperatives. In addition to formal channels (mills, input suppliers, government agencies), information sharing occurred among farmers from the same village via social media (Line and Facebook), enabling them to share practical advice and troubleshoot as challenges emerged.

Other Considerations

In an effort to reach out to an industry representative in Thailand, growers were consulted on the TOR for this study and their responses shared back with me. The growers expressed concern over RSPO plans to develop separate standards for independent smallholders and medium-scale growers, and over RSPO's financial investment in this consultancy. I include a sampling of views expressed by these growers, whose details (identity, scale, etc.) were not shared with me:

“RSPO requires just one standard of Principles and Criteria applying to all growers. In my view, any further segregation is just muddying the waters without making any significant improvement to sustainability or to the reputation of RSPO certified palm oil... I think it is a damaging waste of time for RSPO to arbitrarily segregate growers into small, medium and large. That is not going to enhance our sustainability credentials. Nor will it address the more important problems currently facing our organisation... I share [the] view that the MGTF is a mistake which will not enhance the industry's sustainability, nor will it promote wider acceptance of the RSPO brand.”

“I would question the need for RSPO to undertake another study about growers. What is the motivation and potential for implementable outcomes? I would prefer to see this effort go into market research studies to identify solutions to the sale of existing CSPO.”

“I have always opposed the creation of a lower set of standards for different grower groups. If we want consumers worldwide to respect the RSPO brand and what it means then there must be a common standard backing this up. If the standards are impractical, then it's time to simplify the standards not to make them more complex. Over time, once the standards have become common practice, that is the time to start lifting the bar.”

“This has certainly been a time-consuming project for RSPO and I dare say it will not be concluded any time soon. Once again driven by groups who know little about structuring something that will be implementable and practical in its operation and administration...I think if they are going to go down this road they will need to be country specific and formulate a National Interpretation for their smallholder segregation.”

“RSPO sustainability standards should not be divided into small, medium or large grower standards. RSPO's primary function is to get people around the world to accept certified sustainable palm oil instead of opposing it. Currently CSPO production is much in excess of demand. RSPO should focus on marketing studies, such as study surveys of palm oil users in different regions, how much they know about CSPO or the certification brand, and how to make it better known and acceptable. Sustainable RSPO organization will likely come from increasing CSPO consumption in addition to increasing membership numbers, especially from growers. Both small or medium growers who have landed in the forest or destroyed the forest will not become RSPO members anyway.”

“It is no surprise to me that the RSPO's recently simplified standard for independent smallholders (RISS) has led to a realisation that there are of course many kinds of smallholder growers. But rather than concentrate on the key sustainability issues, RSPO now seems to be intent on further segregation of growers and further fragmentation of sustainability criteria... I doubt very much that yet another segregation of RSPO growers will either (a) influence the rate of deforestation or (b) attract a new target audience of growers, as is confidently predicted in the TOR. I believe we already have a robust and credible system for certification of any grower, large or small, and I doubt that further segregation will be at all effective in promoting RSPO as a credible and sought-after sustainability brand, either by growers or consumers.”

One industry representative questioned the benefits of separate standards for addressing the social and environmental sustainability of the sector, claiming that the current practices of different types of growers are not that different in terms of sustainability performance. “The broad assumption being that independent smallholders are generally good because they do the work themselves. But 'medium sized growers' are likely to be bad because they may employ illegal migrants, don't pay them a living wage and generally abuse their human rights. I don't think this is the case in Thailand where migrant workers are licensed, and minimum wages generally applied, etc. ... I am assuming that the environmental sustainability challenges referred to are deforestation, habitat destruction, environmental pollution etc. Again, the broad assumption being that smallholders are generally good because they stick to their traditional family farms. But 'medium sized growers' are bad because they tend to encroach into forest reserves, plant land for which they have no title, and generally ignore the law. I don't think this is the case in Thailand where environmental laws are generally well enforced. But

assuming that there will be transgressions everywhere in the world, I don't believe there is any difference between small and medium growers in this respect. But, even if such abuses existed, those growers, be they large, medium or small, could never become certified RSPO growers. It would be impossible for them to achieve the P & C standards. They would not ever think of becoming RSPO members.”¹⁴⁶

Yet another interviewee working to support smallholders to gain certification welcomed the Independent Smallholder Standard as very good for the Thai context, given that smallholders dominate the industry.¹⁴⁷ In particular, she welcomed RSPO financial assistance with the technical assessments (e.g. land use change, HCV) and the tools available for smallholders to carry out preliminary assessments on their own. Yet in reflecting further on the benefits and costs of certification, she speculated on the possibility of separating good practices (RSPO Principles and Criteria) from certification, indicating that the costs of certifying are high but that farmers will earn a lot of money if they simply adopt good practices. Further effort is needed to minimize the costs of certifying those practices (and of auditing in particular), so the benefits of good practices can go to the farmer.

5.3 Latin America

5.3.1. Latin America Regional Overview

Palm oil or “African palm” arrived in Latin American as a cash crop in the 1940s and started to be cultivated at scale in the 1960s, with the sector expanding more rapidly over the last 20 years (Furumo et al. 2020). The region has become a net exporter of palm oil, accounting for approximately 6.5% of the global market¹⁴⁸. Production statistics for the five focal countries are summarized in Table 11. Compared to other world regions, domestic consumption is relatively limited, although the use of palm oil is on the rise in some countries both as a cooking oil (e.g. Mexico, Venezuela, Brazil, etc.) and as a fuel (e.g., Brazil, Colombia, Mexico) (GRAIN 2014).

Large commercial farms dominate the production landscape in the region, especially in Guatemala and Brazil, and to a lesser degree in Colombia, where a large portion of smallholders are affiliated with “nucleus estates”. Large commercial oil palm operations tend to be operated by national companies owned by wealthy landowning families, with some transnational corporations (often with domestic corporate partners) also involved in the sector (GRAIN 2014). However, two notable exceptions are Honduras and Mexico, where smallholder farmers account for over 75% of the palm oil grown, in a sector that is highly bifurcated between the majority of smaller-scale, low-mechanization farming operations and a few powerful highly industrialized commercial growers on very large estates.

¹⁴⁶ August 2020 email exchange with an industry representative.

¹⁴⁷ September 14, 2020 interview with Kanokwan Saswattecha.

¹⁴⁸ Available at: <http://www.worldagriculturalproduction.com/crops/palmoil.aspx> (retrieved Sept. 10, 2020).

Table 11. Estimated palm oil production area and volumes in Latin American countries

Country	2018 Production Area (hectares)	2020 CPO Production (metric tons) ¹⁴⁹	Proportion of Global Production (%)
Colombia	500,000 ¹⁵⁰	1,670,000	2.2
Guatemala	177,000 ¹⁵¹	852,000	1.1
Honduras	190,000 ¹⁵²	580,000	0.8
Brazil	220,000 ¹⁵³	540,000	0.7
Mexico	96,000 ¹⁵⁴	140,000	0.2

Across the region, land tenure is a major driving feature of the way the sector incorporates and impacts smallholders. Many rural communities in Latin America, which often include indigenous and other minority groups (e.g. *quilombola* in Brazil), have a mix of communal and individual land tenure systems. These are very rarely fully recognized or formally titled by the state, so competing land claims are common. As a result, dispossession and land conflicts have been prominent features of the sector. Although the RSPO standards can help to mitigate some of the land claim issues, several interviewees recognized that the scope of the tenure challenge and other socio-political contexts that shape the sector may be beyond the RSPO's range of influence. The mix of tenure systems, especially communal landholdings, also complicates grower profiling characteristics such as the amount of land "owned" and "cultivated", since smallholders often trade labor, or collectively manage and work large or small parcels of land.

For each country profiled for this region, environmental and social concerns, especially water contamination and overuse, have also been major sources of conflict for the sector. Unsurprisingly, this has been most pronounced in countries where state oversight is lacking or absent (e.g. Guatemala, Honduras), and is less significant where robust social and environmental regulations are in place (e.g. Brazil). The same tends to be true for labor and human rights violations, which are closely linked to historical and institutional contexts surrounding the agricultural sector in each respective country. For example, since coca plantations tend to occur in agricultural zones where oil palm is grown, some palm growers across the region have been negatively affected by periods of violence associated with narco-trafficking and other illegal activity. Despite these challenges, many growers (especially smallholders) enter the sector due to the higher premiums afforded by palm oil than many other crops. Deforestation, while still an important feature related to the sustainability of the commodity, is less prominent in the region compared to Asia, due to the preference for

¹⁴⁹ Available at: <http://www.worldagriculturalproduction.com/crops/palmoil.aspx> (retrieved Sept. 10, 2020).

¹⁵⁰ From Furumo et al. (2020). Also at <http://web.fedepalma.org/internacional/colombia/> (retrieved Oct. 22, 2020).

¹⁵¹ Available at: <http://www.fao.org/faostat/en/#data/QC> (retrieved Sept. 10, 2020). This is likely undercounted.

¹⁵² Available at: <http://www.fao.org/faostat/en/#data/QC> (retrieved Sept. 10, 2020). This is likely undercounted.

¹⁵³ September 3, 2020 interview with Tulio Dias, Director of Sustainability at Agropalma; although Brandão & Schoneveld (2015) used satellite imagery in 2014 to estimate that number to be closer to 255,530 ha.

¹⁵⁴ Available at: <http://www.femexpalma.com.mx/palma-de-aceite> (retrieved October 20, 2020).

growing oil palm on previously cleared land, and especially former cattle ranches and agricultural fields, where roads are more likely to exist. Trade organizations also point out the higher yields of oil per unit land area of palm oil compared to other oil crops like soy, canola, and sunflower¹⁵⁵. Some smallholders have even noted the potential ecological benefits (including increased wildlife presence and regulation of hydrological cycles) that can arise from small scale oil palm replacing previously deforested lands, or where oil palm is included in diversified agroforestry systems (Isaac-Márquez et al. 2016). These potential benefits are lost, however, with large-scale plantings and intensive management regimes.

Across Latin America, the role of intermediaries which transport FFB from smallholders to mills differs greatly between countries but can have a heavy bearing on smallholder incomes and opportunities in the sector. These intermediaries are important where smallholders do not have the capacity to transport FFB to mills due to distance, cost, or other factors, but their relationships to smallholders are highly variable, ranging from more supportive (e.g. providing technical assistance, loans, transport, etc.) to contentious¹⁵⁶. For example, in Ecuador, intermediaries are rare and highly regulated,¹⁵⁷ while in Mexico and Honduras they have much more influence on the sector and may undercut smallholder profits. The impact of intermediaries in the sector is a current topic of discussion in the negotiations of the National Interpretations of the RSPO for Guatemala and Honduras. Similarly, in Mexico mills have retained a disproportionately large share of the profits of smallholder palm production, due largely to a lack of transparency in weighing and extraction rates. Thus, it is important to evaluate the roles and relationships of multiple actors along the value chain when considering the challenges and opportunities faced by different types of palm oil producers in the region.

Grower Profiles

In Latin America, palm oil growers participate in a wide variety of arrangements with mills, with other producers, and with additional industry actors (government agencies, financial organizations, technicians, NGOs, etc.). In countries like Brazil, where the industry is more centralized, regulated, and dominated by large commercial growers, the distinctions between different types of growers tends to be more pronounced. However, where the industry is highly unregulated, has little to no centralized support structures, and where smallholders dominate the market (e.g. Honduras and Mexico), categories are indistinct and overlapping. Despite this, three primary arrangements emerged from the five countries surveyed:

1. *Independent Growers* – These growers typically do not have a contract with a single mill, although many still have some form of written or verbal agreement or contract to sell to a particular processor. These growers tend to have more freedom to make decisions about on farm activities and where (and for how much) to sell FFB. Where the producers

¹⁵⁵ See for example: <https://www.grepalma.org/en/uses-of-palm-oil/global-demand-and-yields/> (retrieved: October 20,2020).

¹⁵⁶ According to an anonymous member of the RSPO Medium Grower Task Force (October 13, 2020).

¹⁵⁷ August 31, 2020 interview with Jorge Coronel, Sustainability Manager at Oleopalma.

are located far from a mill, or produce in quantities that are too low to warrant paying for transportation, they may sell to intermediaries to transport FFB to the mill.

2. *Contract, Scheme or Outgrower* – These producers are typically involved in a contractual relationship with another company, either a large commercial producer or a mill. The type and nature of the contracts (verbal, written, legal) vary considerably. Producers are usually able to negotiate the terms of the contract but are obligated to sell only to that entity for the time frame specified. These arrangements may have requirements about the amount of land to cultivate or yield to produce. If the relationship is with a large commercial grower, the smaller producer typically receives agronomical and technical support of some kind (e.g. coordination of input purchases, trainings, some initial seedlings, transportation of FFB, etc.), but this varies greatly. This is sometimes also true for contractual relationships with mills.
3. *Farmers Association, Organization, or Cooperative* – In these growing arrangements, groups of farmers (usually smallholders) form associations to enhance their production activities and/or coordinate labor. These organizations vary widely in their size, types and degree of support, internal cohesion, and relationships to other industry actors. For example, a farmers’ association may involve 10 farmers or 200. It may provide to its members technical support, transportation of FFB, provisioning of inputs and seedlings, or no services at all. An association may or may not be involved in a contractual agreement to supply FFB to a large commercial grower or mill, or it may collectively own and operate its own “social mill” or processing facility. These associations are common in Honduras and Mexico, and to a lesser degree in Colombia, and are often the result of government policies. These kinds of arrangements do not fit clearly into the RSPO’s current division of “independent” versus “scheme” growers, making certification especially challenging for these groups.

Farmers of different scales of production may participate in each of the above growing arrangements, although this varies somewhat by country. For example, in Guatemala, smallholders are typically involved in contract arrangements while medium and large-scale producers are more likely to be independent, with greater financial capital and technical capacity. However, in Mexico, most smallholders are associated and some are independent (although these categories are not always easily distinguishable from each other), while medium and large-scale growers are more likely to participate in contract or outgrower arrangements with large companies because of the desire for higher traceability and centralization within their supply chains.

Even more than growing arrangements, grower sizes were difficult to distinguish, with many overlapping and asynchronous characteristics, no clear dividing lines, and numerous subcategories and gray areas. Notably, in Honduras and Mexico, where smallholders predominate in the industry, size classes overall skewed much smaller than in countries like Brazil and Guatemala, where very large commercial plantations have the greatest market share.

The most important characteristics for distinguishing between “small” and “medium” growers was not land area (which can be difficult to quantify with communal land tenure arrangements), but operational characteristics such as degree of mechanization, use of technology, and labor or employment characteristics (e.g. number of permanent, regular, or informal workers, reliance on family or exchanged labor, etc.). Similarly, interviewees frequently noted characteristics about the property owner, such as whether they are involved in day-to-day operations, lived near the property, or have multiple revenue streams, (especially as a distinguishing characteristic for medium-scale commercial operations). Any effort to develop a common grower typology for the region will necessarily be skewed towards the features of either Honduras and Mexico, or Brazil, Colombia and Guatemala. Table 12 represents one such effort. By virtue of collapsing down the characteristics of all five countries, however, this table does not reflect the categories that interviewees proposed for Mexico and Honduras, which were much smaller than those of other countries where larger commercial operations are more prevalent.

Certification Challenges

A number of certification challenges for small and medium scale growers were identified for the region. These are summarized by type:

1. *Financial* – Perhaps the most cross-cutting issue identified by interviews and the literature was the cost of certification for growers of all types, especially when global fluctuations in palm oil commodity prices and issues like crop diseases already put some growers in a precarious financial position. Many growers do not consider certification useful without a financial incentive and are only compelled to certify their operations if the investment leads to higher price premiums, or at the behest of their buyer. Many smallholders have limited access to financial credit, which may be needed to update their farms in order to meet eligibility or legal requirements of certification. Similarly, medium growers have a lot of difficulty affording the costs of assessments like the High Conservation Value study and annual audits. As a result, certification has mostly been limited to growers who are affiliated with a larger commercial entity that can afford to support the smaller growers in their supply chain with the process. Among independent growers, certification rates are very low and remain largely out of reach.
2. *Technical* -- Limited technical capacity poses a major barrier for certification, especially related to the degree of documentation and reporting that is required. For smallholders, simply having materials like paper, computers, or internet is a barrier. This is also true for medium-scale growers, who may not have the personnel to dedicate to meeting all of the certification requirements. Several interviewees also brought up the RSPO’s grievance mechanism, which similarly demands a degree of technological capacity (access to a computer and internet, ability to read and write in English, ability to engage in a multi-year dispute resolution process) that most community members, workers, or even companies, are not able to meet.

Table 12. Characterization of grower types for the Latin American region based on size (Independent, supported, and managed growers exist across size classes)

Grower Category	Area of Oil Palm (ha)	Labor	Management & Mechanization	Other Income	Land Tenure	Other Features
Smallholders, Or "Family Farmers"	0-10	Primarily rely on family labor, with no permanent formal employees.	Low levels of mechanization.	Often grows other crops and some small livestock for both subsistence and income.	Highly variable.	Owner often lives near or adjacent to land.
	10-20	May informally hire temporary workers for specific tasks (usually friends, family, or other smallholders).	Variable levels of inputs, usually depending on degree of external support.	Typically, the farm is the primary source of household income.	More likely to involve communal land or participate in settled land schemes.	
Grey area	20-50	May trade labor.	Head of household is often actively involved in farm management and operational decisions.	Often reliant on external funding or loans.	Full legal title is rare and expensive.	
	50-75					
Medium Commercial Growers	75-150	Regular payed labor.	Run as a business, instead of a personal farm.	Does not usually grow crops for subsistence.	Highly variable.	Owner typically does not live on or near the property, but in a city. Owner may or may not be involved in the daily operations. Owner is typically a citizen of the country.
	150-300	At least one (semi) permanent employee to manage operations.	Moderate levels of mechanization.	Owner often has other income streams (employment, investments, etc.).	More likely to involve private land or rented land.	
	300-500	Likely also hires temporary workers for certain activities (e.g. harvesting, crop maintenance) according to typical industry standards of the nation.	Often has a management plan for inputs, soil tests, etc.	May have additional properties (adjacent or disconnected) with cattle ranching or other commercial crops.		
Grey area	500-750		Often hires someone to manage finances.			
	750-1500 ¹⁵⁸					
	1500-3000					

¹⁵⁸ According to one anonymous member of the RSPO Medium Grower Task Force, 1000 ha and above is considered a large commercial grower in many countries in Latin America. However, because this was not universal, it is placed in a grey area.

Large Commercial Growers	3000-6000	Have a team of regular employees, including some (semi) permanent positions.	High levels of mechanization, and coordination of inputs.	May own a mill or a PO processing facility.	Somewhat variable, depending on national context.	Often a subsidiary of a large conglomerate.
	6000-10,000	Regular salary workers are hired through formal processes according to national labor laws.	Able to access and implement industry best practices.	May contract with small and/or medium-sized outgrowers to provide additional FFB, and provide varying degrees of support or management.	More likely to have legal title for at least part of land.	May have international investors (usually with national partners) or be based nationally.
	10,000-20,000	Likely also hires temporary workers for certain activities (e.g. harvesting, crop maintenance) according to typical industry standards of the nation.	Heavy reliance on technology.		May rent some land (via long-term land rental or partnership agreements)	
	20,000+		Often has internet available to employees. Often has an in-house team to manage finances.			

3. *Educational* – Small and medium-scale growers sometimes face constraints around their ability to understand the requirements, which can be written in opaque language and technical jargon. In Latin America, some smallholders, especially those that belong to indigenous communities, may not be fluent in the national language. Illiteracy and lower levels of education can also be a barrier to certification.
4. *Lifestyle Conflicts* – Some growers may experience uneasiness with having to adopt many unfamiliar practices and terms related to certification. For others, some common agricultural practices might conflict with certification requirements. These might include practices like a reliance on family labor, which may include children helping to tend the crop, or informally hired or exchanged labor which may conflict with national labor laws.
5. *Administrative* - Finally, several interviewees mentioned that the RSPO only has one full-time staff person dedicated to the entire Latin American region. They believe that a larger team of people might be able to better meet the various kinds of needs that different types of growers have in the region.

5.3.2. Brazil

Brazil has experienced two waves of palm oil expansion. The first began in 1968 when the crop was introduced to the country, and a second more rapid period of growth has occurred since the mid-2000s, followed by a recent slow-down (circa 2015) due to political and market instability and drought (Brandão & Schoneveld 2015; Brandão et al. 2019). According to company and government data, by 2016, Brazil had at least 207,000 ha under palm oil cultivation, although remote sensing data puts the area at approximately 255,530 ha in 2014 (Brandão & Schoneveld 2015). Around 88% of Brazil's palm oil is grown in the Amazonian state of Pará. The industry is dominated by 9 large companies (4 of which have over 10,000 ha plantations), with plantations comprising around 81% of the cultivated land. Smallholders, by comparison remain relatively few, numbering around 1508 families in 2016 on roughly 7% of the total land area under production, with each cultivating an average of 10 ha of land. One hundred and eighty-one medium and large-scale outgrowers, in contrast, manage around 13% of the area (on an average land area of 143 ha) (Brandão et al. 2019). There are less than 15 mills in the country.¹⁵⁹

The most recent growth of the sector can be attributed in part to national policy incentives like the 2004 National Biodiesel Program and the 2010 National Sustainable Palm Oil Production Program (SPOPP). The former was created to systematically increase the ratio of biodiesel in national fuel stores, to reduce foreign fuel dependencies and to provide a development pathway for smallholder farmers (Backhouse & Lehmann 2020). The negotiation of this law established social standards which have been important to the sector, such as requirements that companies provide technical assistance to their growers, allow smallholders to grow food

¹⁵⁹ September 3, 2020 interview with Tulio Dias, Director of Sustainability at Agropalma.

crops alongside commodities, promote farmer participation in decision-making processes, and get contracts approved by farmer organizations (Miccolis et al. 2019).

However, the palm oil investments in the country were not devoid of controversy, usually around land acquisition, water contamination, disruption of social infrastructure from an influx of migrant workers, and threats to food security. Large companies acquired land for plantations either through direct purchases or lease agreements with medium and large landholders (mostly cattle ranchers). Although no controversy around leasing arrangements was reported, there were issues with the land purchases in some areas, especially when smallholder land was bought via intermediaries. In response, several groups of smallholders organized against the land acquisitions in 2009, claiming territorial rights related to their traditional *quilombola* identity, and leading the national government to stop land acquisitions in other regions as well. Public policy prohibits palm oil from being grown on communal Indigenous or *quilombola* lands (Brandão et al. 2019).

The SPOPP, similar to the National Biodiesel Program, was created in 2010 to diversify fuel sources for changing national biofuel requirements and to increase “inclusive” economic development in the region while preventing loss of primary forest, through investments in research, technical assistance, and low-interest financing for palm oil growers. The program seems to have been moderately successful at incorporating smallholders into the sector without major deforestation. A historical analysis of forest cover between 2006 to 2014 revealed that the deforestation rate related to palm oil dropped from around 4% to less than 1% after the creation of the SPOPP, with most oil palm being installed on former pasture and agricultural lands. However, palm oil plantations tend to be located close to intact forests, at times indirectly leading to forest loss due to their conversion into pasture and crops, which then in turn may become sites of expanding palm oil. Decreasing deforestation rates could also be related to the slower growth in the sector in recent years. Compared to other palm oil producing countries, Brazil’s lower rate of primary forest loss due to palm oil may prove advantageous in the global market, where demands for deforestation-free palm oil are growing (Benami et al. 2018). While palm oil in Brazil is sometimes promoted as a climate-friendly fuel source (Backhouse & Lehmann 2020), an analysis of Brazil’s palm oil value chain found that heavy fertilization, open waste water silos, and fuel use during extraction and transportation are each significant sources of emissions, calling into question the crop’s potential in climate-mitigation schemes (Munasinghe et al. 2019). The sector was also linked to fairly high rates of deforestation in the 1970s and 1980s, prior to the adoption of some of Brazil’s stricter environmental laws (Brandão & Schoneveld 2015).

Currently in Brazil only a few palm oil producers are RSPO certified, the largest of which is Agropalma, which has 39,000 ha under cultivation.¹⁶⁰ However, more companies are beginning the certification process due to pressure from buyers. As of now there is not an RSPO National Interpretation for the country, so companies are required to follow the international

¹⁶⁰ See: <https://www.agropalma.com.br/en/about-us/agropalma> (accessed September 1, 2020).

guidelines.¹⁶¹ Because Brazil's environmental and labor laws are often stricter than the RSPO standards, the costs of certification disincentivizes companies to participate in the RSPO, since they have to compete in the global market against CPO that does not have to meet such high standards. Those that do become RSPO certified are often targeting niche markets for premium quality palm oil (many which have additional certifications like Organic alongside the RSPO), while companies that produce for the national biodiesel market have to keep costs lower to compete with soy and other oil crops.¹⁶²

As the palm oil market has contracted in the last 5 years or so, the SPOPP has had mixed impacts on smallholder farmers. In areas afflicted by water shortages, or where there are regular delays in the delivery of inputs and technical assistance, many smallholders have faced rising debts, although other areas that have not experienced these challenges have seen comparatively low levels of loan default. Another result of the restructuring of the sector in recent years has been a bifurcation in the power and financial capacity of rural unions into rural workers unions and smallholder farmer organizations, leading to a consequential reduction in smallholder representation in municipal and state governance spaces (Brandão et al. 2019).

Grower Profiles

The most common structure for the palm oil sector in Brazil is a “nucleus-outgrower” arrangement, which involves a large commercial producer that manages one or more plantations, and which may also have contractual relationships with one or more medium and large outgrowers and a number of contracted or outgrower smallholders (Brandão & Schoneveld 2015; Brandão et al. 2019). Only one company (Palmasa) relies exclusively on outgrowers without its own company-managed plantations (Brandão & Schoneveld 2015).

Smallholder or “Family Farmer” Outgrowers

In Brazil, smallholder production is often called “family farming” although the two terms are not entirely synonymous. The Family Farm Law of 2006 (Law 11.326) clarifies the definition of a family farm based on: the farm being primarily operated by the family, using non-wage family labor, and being the family's primary source of income, on a maximum area of land that is defined at the regional level¹⁶³ (for example, ranging from up to 20 ha to up to 320 ha depending on the size and population density of the municipality¹⁶⁴).

Among small-scale palm oil growers in Pará, most have plots of land averaging 45 ha in total, with 10 ha of oil palm. The remaining land is typically either left as forest or is cultivated in other crops, including both commodity and subsistence crops (Brandão et al. 2019). These

¹⁶¹ September 3, 2020 interview with Tulio Dias, Director of Sustainability at Agropalma.

¹⁶² September 11, 2020 interview with Frederico Brandão, researcher at the World Agroforestry Center (ICRAF) and Center for International Forestry Research (CIFOR).

¹⁶³ See: <http://www.fondation-farm.org/zoe.php?s=blogfarm&w=wt&idt=1705> (accessed September 1, 2020).

¹⁶⁴ September 11, 2020 interview with Frederico Brandão, researcher at ICRAF and CIFOR.

small-scale palm oil farmers are predominantly men (91% in Pará), an average of 48 years old, and either have rights to use the land themselves (85%) or through their family members (15%). Labor tends to be paid or traded on a variable basis rather than as regular or salaried employment. Factors such as plot size and agronomical capacity are asynchronous, meaning that some farmers with high agronomical knowledge and an entrepreneurial mindset may operate smaller farms (e.g., 20 ha) while others that have less technical capacity and which are primarily focused on subsistence may manage larger farms (e.g., 100 ha).¹⁶⁵

According to both interviewees, in Brazil, virtually all smallholder palm oil growers are part of a contract (or “scheme”) with a large commercial company. This means that they are obliged to sell their crop exclusively to that company and they retain less decision-making power over the management of their palm oil plots outside of the negotiation of their contract than an “independent” grower would.¹⁶⁶ However, these farmers typically receive a high degree of technical support in return, such as help with transportation of FFB, coordination of input purchases and delivery, provisioning of PPE, and (for companies that are certified) trainings on agronomical best practices.¹⁶⁷ Contracted growers may work on individual plots on property that is adjacent to company land or they may be located on their own properties further away from the company (Brandão & Schoneveld 2015). Farmers that tend to be satisfied with their contract arrangements have cited the consistent income due to regular harvest cycles, access to technical assistance, and guaranteed markets as benefits, while unsatisfied farmers have complained of debts related to annual loan payments, high transportation costs, delays in receiving agricultural inputs, and increasing workloads that do not result in higher returns (Da Mota et al. 2019).

In Brazil, land tenure arrangements, while highly relevant to the sector, are complicated by a long history of land occupations, overlapping or contested land claims, and multiple waves of agrarian reform. Many small-scale farmers participating in palm oil outgrower schemes have been settled on federal or state land through the Brazilian Agency for Agrarian Reform (INCRA) or the State Land Agency of Pará (ITERPA) respectively (Brandão & Schoneveld 2015). In these models, the government either retains the title or partners with a community association as an intermediary to grant concessions (usually for 25 years) to families to farm the land. A few family farmers grow on their own private land (e.g., five out of 195 total for Agropalma)¹⁶⁸. In general, few smallholders possess full legal title, but instead may provide other forms of ownership, such as a title of possession, or a receipt for purchasing the land. This differs to a degree for medium and large commercial growers, which tend to either hold legal title to portions of the land that they grow on, or participate in long-term leases with individuals or companies, either through partnership arrangements (where profits and losses are shared) or fixed land rents. Some companies, especially those that acquired land in the 1970s and 1980s before stricter laws around land acquisition were in place, have not been able to obtain legal

¹⁶⁵ September 11, 2020 interview with Frederico Brandão, researcher at ICRAF and CIFOR.

¹⁶⁶ September 3, 2020 interview with Tulio Dias, Director of Sustainability at Agropalma.

¹⁶⁷ September 3, 2020 interview with Tulio Dias, Director of Sustainability at Agropalma.

¹⁶⁸ September 3, 2020 interview with Tulio Dias, Director of Sustainability at Agropalma.

title due to unresolved conflicts from overlapping land claims. However, even some newer companies have sizeable portions of undocumented or illegally titled land, often acquired through intermediaries that used fraudulent titles or dispossessed communities living on that land (Brandão & Schoneveld 2015).

Medium and Large Outgrowers (or “Non-Family Farmers”)

Like most smallholders in Brazil, the majority of mid-tier growers are part of contracted outgrower arrangements with large commercial companies. These involve farms that are too large to be legally considered “family farms”, typically ranging from 30 to 700 ha in size, and averaging 140 ha. Of the 49 outgrowers who grow for Agropalma—which has the largest outgrowers in its supply chain—six have more than 500 ha and one has 2,049 ha (Brandão & Schoneveld 2015).

Farms of this size require more personnel, including at least one employee to run the operations and two to three people to help with the machinery, as well as more mechanization than family farms. Generally, these growers are more financially independent and less reliant on government funding or loans. The owners typically have more crop management experience and financing skills, and usually engage more as an employer than a farmer. Some may have other investments beyond oil palm, or larger properties with cattle ranching or additional farming arrangements. The tenure arrangement is almost exclusively on private lands¹⁶⁹.

Large Commercial Growers

Of the nine major palm oil companies in Brazil, each of them manages over 1000 ha of land and either presently operate or have plans to build their own extraction plants. Six of these companies manages between 2,000 and 16,000 ha of land, while three manage between 40,000 and 63,000 ha. Many of these companies are subsidiaries of a larger diversified parent company or conglomerate.

Upper tier commercial growers tend to be more involved with the processing side of production, although lower tier companies are beginning to invest in processing plants as well (refineries, biodiesel plants, etc.) because this end of the supply chain is more profitable in Brazil than production alone (Brandão & Schoneveld 2015).

Certification Challenges

Because of the centralization of the oil palm sector in Brazil around large “nucleus” palm oil companies (to use the language of the RSPO), certification is almost exclusively initiated by large companies, which then take steps to promote compliance among their affiliated outgrowers.

¹⁶⁹ September 3, 2020 interview with Tulio Dias, Director of Sustainability at Agropalma.

Barriers for Smallholders

The main barrier to participating in RSPO certification among smallholders in Brazil is thus related to the barriers to participating in outgrower programs with certified commercial growers. In this regard, several studies have helped to shed light on potential challenges and opportunities for smallholder integration into the sector. In order for smallholders to participate in outgrower schemes, they must meet a number of state and company eligibility criteria which shape their likelihood of inclusion. The criteria that have a high impact on inclusion are: meeting minimum land area requirements, number of people contributing to the household (i.e., labor requirements), access to financial credit (or no history of loan defaults), education level, and participation in a community association (Brandão et al. 2018). High levels of smallholder indebtedness and loan defaults associated with the sector means that outgrower schemes should not be expanded until they have been proven to be economical viable for their contracted parties (Brandão & Schoneveld 2015). Opportunities that might enable broader participation for land and labor-constrained households could be allowing smallholders to cultivate palm oil on smaller plantations, permitting intercropping, and reducing barriers that prevent smallholders from hiring external laborers (Brandão et al. 2018).

Studies on smallholder motivations and perceptions of risks also indicate some potential opportunities and constraints for inclusion. Smallholders in Brazil tend to be motivated to grow palm oil due to a desire for higher earnings, secure opportunities to support their farming lifestyle, and a hope for easier access to rural credit, which can be difficult to obtain (Da Mota et al. 2019). In contrast, these farmers see the long-term investment and semi-permanent nature of this crop, especially in light of fluctuating prices, as a risk, alongside potential soil and water contamination, disruption of social infrastructure from an influx of migrant workers (especially on healthcare and education services), and threats to food security (Brandão et al. 2019). While research has shown that food security has not been significantly impacted by palm oil cultivation in Brazil (due to laws previously mentioned), other factors such as low commodity prices and the need for stronger social infrastructure and law enforcement to mitigate the issues surrounding increased migrant labor (Brandão & Schoneveld 2015) tend to fall beyond the scope of certifications to address.

There are also particular aspects of the standards that can be challenging for smallholders to meet. Smallholders in Brazil have less access to social infrastructure like education, healthcare, and financial credit, which can pose numerous barriers for certification (Backhouse & Lehmann 2020; Munasinghe et al. 2019). RSPO criteria around labor rights are especially challenging because the process for formally hiring workers is quite technical and beyond the capacity for many smallholders¹⁷⁰. It is also hard for smallholders to comply with Brazil's detailed labor laws (to illustrate, meals cannot legally be served unless there is a table which can be sanitized beneath a permanent shelter, with running water available for hand washing). The high levels of documentation required in the certification process are also challenging for smallholders. To help overcome this barrier, Agropama put together a team of employees to develop a version

¹⁷⁰ September 11, 2020 interview with Frederico Brandão, researcher at ICRAF and CIFOR.

of the standards that are easier for their contracted smallholders to understand, written in plain language with illustrations¹⁷¹.

For medium growers of 100-500 ha, Tulio Dias of Agropalma believes that they are more similar to a family farm than to a very large company, because they are constrained when it comes to managing complexities like legal compliance, administrative processes, and large expenses related to certification. Unlike a large company, which can draw on different lines of expertise, there are numerous technical limitations for medium-scale businesses. In particular, the High Conservation Value (HCV) study is extremely cost prohibitive. The business must find and hire an independent auditor (which is a team of people), the website is in English, and the wording of the procedures are hard to understand. The high degree of documentation and the level of specificity of the HCV study is at times beyond the scope of the small to medium scale growers. Other studies, like the Historical Land Use assessment, are similarly challenging. When the key point of the study is to assess whether deforestation or human rights and labor violations have occurred, Mr. Dias suggests that simpler and less costly forms of investigation like comparing satellite imagery over time, or conducting interviews with the workers and surrounding community may be better suited to addressing these concerns.

Barriers for Commercial Growers

Because Brazil's labor and environmental standards are often higher than the RSPO's standards, the cost of production is comparatively higher than other major global exporters. In this regard, the standards themselves are easy enough for companies to meet, but the costs of attaining the certification are unlikely to result in high enough returns to make the investment worthwhile for most companies. Certification is also less appealing to companies that produce for mostly national markets, highlighting the fact that companies are primarily compelled to certify only if their buyers are interested. One interviewee suggested creating a higher tier of standards (e.g., "RSPO+") which could apply to companies that want to differentiate themselves on the global market.

For some commercial growers that have considered RSPO certification, their main barriers were requirements that prohibited deforestation and which required full land titles¹⁷². Another interviewee noted that large scale growers often have an issue with transparency, because many companies do not openly report on their social and environmental problems. RSPO certification may provide an opportunity to overcome those sectoral issues by providing mechanisms to improve transparency, communication, a process for addressing complaints and grievances, and an open channel with communities¹⁷³.

¹⁷¹ September 3, 2020 interview with Tulio Dias, Director of Sustainability at Agropalma..

¹⁷² September 11, 2020 interview with Frederico Brandão, researcher at ICRAF and CIFOR.

¹⁷³ September 3, 2020 interview with Tulio Dias, Director of Sustainability at Agropalma..

4.3.3. Colombia

Oil palm was first planted in Colombia by the United Fruit Company in 1945. The area under cultivation began a rapid expansion in the 1980s and has nearly doubled in the last decade (Furumo et al. 2020). It has since become the largest producer of palm oil in Latin America and fourth largest globally, producing approximately 1.67 million metric tons of crude palm oil, or 2.2 percent of the global market in 2020¹⁷⁴, on over 500,000 ha of cultivated land¹⁷⁵ (Furumo et al. 2020). Presently, there are 61 mills that are associated in five markets (biofuels, food, feedstock, oil-chemical, and exports) in the country¹⁷⁶. Three primary production zones are located in the northern and central regions of the country, known as the North, Central, and East Zones (Furumo et al. 2020). Unlike most other countries in Latin America (except Brazil and Mexico), over half¹⁷⁷ of the production is used domestically for foods, biodiesel, and other industrial applications (Furumo 2019). As of 2017, around 14% of Colombia's palm oil was RSPO certified (Calderón & Pérez 2019), primarily coming from the Northern Zone, where it is more easily exported from ports along the Caribbean coast (Furumo 2019).

The Colombian agricultural landscape has been affected by more than 50 years of armed conflict in which guerrillas, paramilitaries, and drug traffickers have been responsible for the displacement of millions of people together with the extortion and threats to rural communities, smallholder farmers, and legal agribusinesses (Abdala et al. 2015). Since the 1990s, national and international policy incentives (including a US-funded program to replace coca plantations), and mandates for biofuel production have helped to promote the expansion of the palm oil industry in Colombia. The rapid growth of the sector has been linked to a number of social and environmental issues in the country (Abdala et al. 2015). In the Chocó region, for example, this expansion of the sector was implicated in widespread land grabbing and several murders, which culminated in the Prosecutor General's Office charging 19 palm oil businesses with crimes including conspiracy, forced displacement, and invasion of ecologically sensitive lands. Three of those companies were convicted (GRAIN 2014). In the central and eastern regions of the country, where palm has been primarily planted on former pasture and agricultural land, coercive land accumulation and the involvement of paramilitary groups have been associated with the growth of the sector, and some civil society groups have found drug cartels to have used palm oil plantations to launder money (GRAIN 2014; Abdala et al. 2015). Overlapping land claims and land dispossession continue to be problems for the industry, as do cases of human rights violations such as threats of violence, and labor abuses such as low wages, payment delays, failure to provide PPE, and inadequate access to healthcare, water, and nutrition for workers (EIA 2019). Despite these challenges, Alejandra Rueda of NesNaturaleza

¹⁷⁴ See: <http://www.worldagriculturalproduction.com/crops/palmoil.aspx> (accessed September 10, 2020).

¹⁷⁵ This estimate is much greater than the official numbers reported to the FAO, which for 2018 were estimated at 288,545 ha of land in active production. The discrepancy may be due to underreporting or the time lag between planted area and active production of FFB. <http://www.fao.org/faostat/en/#data/QC> (retrieved Sept. 10, 2020).

¹⁷⁶ August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

¹⁷⁷ See Fedepalma's 2018 export information: <http://web.fedepalma.org/international/wp-content/uploads/2020/02/INFOGRAFIAS-FEDEPALMA-ANUGA-Ingles-06.pdf> (retrieved: October 20, 2020).

highlights the numerous longstanding traditional palm growers who have been active in these regions since the 1970s which are not affiliated with the illegal actors mentioned above. As with other countries, she emphasizes that Colombian palm oil should not be generalized by the illegal activities of a few actors, which she estimates to be around 2% of the sector.

Other persistent sources of conflict for the sector in Colombia are water contamination and overuse. Pollution and wetland damage are closely linked to aerial spraying of agrochemicals. Complicating the issue is the fact that water contamination and overuse can be quite difficult for some communities to document, often requiring water samples to be sent abroad for analysis in specialized laboratories¹⁷⁸. There have also been numerous conflicts related to palm oil production limiting the access of communities and some surrounding smallholders to water supplies. This was true for the RSPO certified company Poligrow, for example (EIA 2019), whom an RSPO investigation found to be in breach of numerous social and environmental standards (RSPO 2017b).

According to one interviewee, deforestation also continues to be a problem for the sector, despite some studies commissioned by the Federation of Oil Palm Growers (Fedepalma) which indicate otherwise. This has been documented in the tropical dry forests in the north (Montes de María region) and Chocó region near the Pacific coast, and in the Altillanura of the eastern lowlands, especially in the riparian areas along river corridors¹⁷⁹. However, the deforestation rate in Colombia, like the rest of the Latin American region, tends to be considerably lower than in Southeast Asia, due mainly to the preference for installing oil palm on previously cleared land that has better road access (Furumo 2019).

Finally, the crop disease bud rot (*Phytophthora palmivora*) was introduced to Colombia in 2006, causing significant problems for palm oil producers in the country. By 2008, 58% of the country's crop was estimated to have been infected (Calderón & Pérez 2019). This has caused widespread devastation of the crop in the years since. This issue was especially challenging for smallholders, who have less financial capital to replant lost crops (Potter 2015). Financial support from the Ministry of Agriculture and technical support from Fedepalma and Cordeagropaz helped to mitigate the impact of the disease for growers by subsidizing eradication costs and funding programs to provide credit to farmers to replace their damaged crop with resistant hybrids (Calderón & Pérez 2019).

Grower Profiles

As with many other countries where the production landscape is more established, a variety of growing arrangements exist in Colombia, including estates or plantations, independent growers, contractual arrangements, and smallholder alliances (Potter 2015). According to Colombia's palm oil trade organization, Fedepalma, roughly sixty-eight "nucleus estate"

¹⁷⁸ September 11, 2020 interview with a representative from an international NGO that works in Colombia.

¹⁷⁹ September 11, 2020 interview with a representative from an international NGO that works in Colombia. See also: Abdala et al. (2015).

companies work with approximately 6,000 palm growers in the country, around 85% of which are smallholders growing on less than 50 ha.¹⁸⁰.

Growers of all sizes may be independent, or they may have varying degrees of support or management through affiliation with a mill or participation in a “nucleus-outgrower” arrangement. Yields tend to range from around 23 to 30 tons per year for large growers, 15 to 23 tons per year for medium growers, and 8 to 15 for smallholders, due in large part to variations in mechanization and use of inputs¹⁸¹.

Smallholder Growers

Furumo et al. (2020) characterizes smallholders in Colombia as family-run operations on 2 to 55 ha of land, in which the owners are the primary decision-makers regarding on-farm activities. Labor arrangements tend to be very informal, and often involve friends or family who might trade labor or work for non-monetary compensation¹⁸². While most smallholders grow on their own individual property, around 13% grow on communal lands (Potter 2015). Many smallholders grow other food crops or raise livestock on their land – an issue that has been raised as key to reducing food insecurity, especially where oil palm has replaced staple crops (Potter 2015). Small-scale farmers can be involved in a variety of growing arrangements, such as:

1. *Production Alliances* - In 2002, the Colombian government instituted policies, credit lines, and technical support institutions to promote smallholder cooperatives, called “production alliances”, to plant palm oil and affiliate with mills in order to increase processing rates (Furumo 2019). Companies were also incentivized to participate in these relationships by being granted access to credit through the Rural Capitalization Incentive. Participating companies agreed to purchase FFB at a pre-defined price, in exchange for providing technical advice and seeds to smallholder farmers, which were to be repaid as the crop became productive (Potter 2015). Although these incentive programs stopped around a decade ago, they have shaped the production landscape of the country¹⁸³, which now has around 124 active production alliances involved in the industry (Furumo 2019). A comprehensive study conducted in 2009 by Fedepalma found that around 61% of smallholders were engaged in this kind of relationship, which seemed to be most favorable for smallholders. Although rare, some production alliances hold collective ownership of a mill as well (Potter 2015).
2. *Independent Growers* – A 2009 Fedepalma study of smallholder palm producers found that around 35% of smallholders in Colombia were involved in an independent grower arrangement (Potter 2015). Of these independent smallholders, approximately 70% rely

¹⁸⁰ See: <http://web.fedepalma.org/international/colombia/> (retrieved October 20, 2020); August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

¹⁸¹ August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

¹⁸² August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

¹⁸³ August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

heavily on intermediaries to purchase and transport their FFB to mills. This reliance is not as strong for independent growers of larger sizes, which typically have a more direct relationship to the mills they supply and their own way to transport FFB to the mills¹⁸⁴.

3. *Contracted Growers* – This type of arrangement refers to individual smallholders that either have a direct relationship with a mill or are part of an outgrower scheme with a large commercial grower. These relationships vary widely, with differing degrees of formal or informal (written or verbal) contracts, with or without various forms of support (technical advice, seeds, etc.) provided by the mill or company¹⁸⁵. In 2009, approximately 4% of smallholders were found to be involved in these kinds of arrangements (Potter 2015), although this percentage has likely grown in recent years as certified palm oil has become more prevalent, since most certified smallholders are involved in outgrower schemes with “anchor” companies (Furumo 2019).

Medium-Scale Growers

Like smallholders, medium-scale growers may be independent or involved in a wide variety of contractual relationships with mills or larger growers. Interviewees hesitated to identify boundaries between small, medium, and large-scale growers, noting that characteristics exist on a spectrum with numerous subcategories (50-150, 150-300, 300-500 ha) which each have a distinct way of organizing their growing practices, accountability structures, and finances¹⁸⁶. Furumo et al. (2020) characterizes medium scale growers as having plantations of at least 55 ha, in which managers or supervisors are the primary decision makers. Operations of this level tend to have an established plan for fertilization and pest management. They tend to have at least one permanent employee, and more stability in their staff and labor arrangements. In Colombia, most medium scale growers engage in cattle ranching as well¹⁸⁷.

Land tenure is not a relevant criterion for distinguishing growers of different scales in this country. As with many countries in Latin America, the land tenure situation in Colombia is complex and riddled with competing land claims, complicated by violent conflict—which resurged in the early 2000s—between paramilitary groups and *campesino* (smallholder) organizations that were settled via land reform in the 1960s (Potter 2015). The legality of land holdings that were acquired during the civil war remains an issue for some large companies. Compliance with land tenure documentation is therefore difficult and expensive to achieve for all sizes of producers. National land databases (supported by the RSPO) have helped with these efforts, but many gaps and overlapping land claims remain¹⁸⁸.

¹⁸⁴ August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

¹⁸⁵ August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

¹⁸⁶ August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

¹⁸⁷ August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

¹⁸⁸ September 11, 2020 interview with a representative from an international NGO that works in Colombia.

Certification Challenges

Colombia adapted the RPSO's Principles and Criteria into its National Interpretation in 2010 and 2013, with a revision that was recently initiated to account for the 2018 updates to the international standard (Furumo et al. 2020). The recent round of negotiations for Colombia's National Interpretation have become more balanced than previously, with representation of various kinds of stakeholders beyond major industry players. While one interviewee noted that this process has helped to create some importance guidance for members and auditors¹⁸⁹, another interviewee acknowledged that the frequent changes can be challenging for growers to relearn and adapt to new standards¹⁹⁰. Despite these developments, some major challenges to certification for small and medium scale growers remain.

For growers of all sizes, a few major cross-cutting issues affect their ability to certify. The primary challenge is related to diminishing price premiums which have resulted from an oversupply of certified palm oil in the global market. This is significant as higher prices are the main motivation for many smallholders to certify (Furumo 2019). Another issue that has been raised in numerous places is the auditing process. Some organizations have repeatedly found evidence of auditors who turn a blind eye to breaches of the standards, especially related to social safeguards (EIA 2015; 2019). And, as one interviewee described, the auditors do not have a common knowledge for the requirements, so they tend to focus on the areas with which they are more experienced. This means that different auditors may raise different concerns each year, leading to inconsistent and costly recommendations for growers to reach compliance. The cost of the audits is especially difficult for medium-scale growers, which do not have the same financial and technical capacity as large producers but are held to the same standards. This might be mitigated if they were able to provide different evidence for the same requirements (such as hand-written records versus computer reports). Similarly, the cost of the land use change and other required studies (e.g. HCS, HCV, ESIA), and the limited number of people who are trained to conduct these studies makes this requirement very challenging for small and medium scale growers to conduct¹⁹¹.

Certification Challenges for Smallholders

In Colombia, certification is usually initiated by large companies or mills, which then support their affiliated growers with the process (Furumo 2019). Most certified smallholders tend to have contracts with mills (primarily as part of a "scheme" or outgrower growing arrangement), while independent smallholders are far less likely to become certified.

A study by Furumo et al. (2020) finds that most smallholder farmers are motivated to become certified by the mill and by the higher price premiums, while some also cite environmental conservation and improved agronomic practices. Unanticipated benefits reported by growers

¹⁸⁹ September 11, 2020 interview with a representative from an international NGO that works in Colombia.

¹⁹⁰ August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

¹⁹¹ August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

are workers' well-being, having a guaranteed buyer for their crop, and better farm organization. Their main challenges are the prohibition against synthetic fertilizers (due to high overlap between RSPO and Organic certifications in Colombia), lower production, having to adhere to company procedures, higher production costs, and the prohibition of cattle grazing on their property.

Factors which are positively correlated to certification are access to past credit, younger trees, and membership in farmers associations. In contrast, the largest barrier for non-certified smallholders seems to be a lack of information about certification or guidance on how to participate, with a few farmers citing loyalty to their non-certified mill and costs as additional barriers (Furumo et al. 2020). Other potential barriers identified by Furumo et al. (2020) include: education, which can help farmers navigate the standards; secure tenure, which makes investments seem more worthwhile; access to credit, which makes administrative and implementation costs more achievable; and better technical and institutional support, which can influence their willingness to participate. This study also revealed no significant differences in water management or record keeping practices between certified and non-certified growers, with neither group providing PPE to workers – highlighting additional issues that might pose difficult for small growers to comply with.

Finally, the informality of the sector, which can lead to poor record keeping and an unwillingness to follow safety protocols, has been raised as a potential barrier for certification. This may result from a view among farmers that meticulous record keeping is a burden that has no direct benefit, as well as the temporary and inconsistent labor structure with high worker turnover in the sector as a whole (Furumo 2019). These structural issues likewise make it challenging for smallholders to comply with national labor laws, especially mandatory deductions for social benefits like Social Security for their employees—posing a financial and technical barrier that is difficult for many smallholders to overcome¹⁹². In some cases, these observations may be related to wider issues of the national governance system, for which the RSPO might have limited impact. For example, Alejandra Rueda of NesNaturaleza noted that public health care access tends to be limited in remote areas of Colombia, citing a preference among companies for private health care instead. These findings also raise the issue of a lack of compliance (Furumo 2019), or limitations in the ability to verify compliance, among some RSPO certified growers.

Despite these challenges, and the need to ensure robust verification systems alongside support structures for growers of high need, interviewees acknowledged that the RSPO certification has an important role to play, especially in its capacity to educate major producers about international standards for human rights.

¹⁹² August 31, 2020 interview with Alejandra Rueda, founder of NesNaturaleza.

5.3.4. Guatemala

Guatemala's palm oil sector has increased rapidly over the last decade, leading it to become the third largest exporter of crude palm oil in Latin America and seventh globally. As of 2019, it is estimated to have approximately 171,000 ha under cultivation and to have produced a volume of roughly 863,252 metric tons of crude oil, for an almost exclusively international market exported primarily to Mexico, Spain, and the Netherlands¹⁹³. In 2019 nearly 44% of the palm oil produced in Guatemala was RSPO certified, with approximately 39% of the land area under palm oil certified by either the RSPO or the International Sustainability and Carbon Certification¹⁹⁴. However, of the seven companies with RSPO certifications, many have only certified a portion of their land holdings. Companies that do not wish to comply with the RSPO's standards are able to export to Mexico, where many processors have less stringent standards compared to the EU, thus complicating and heightening the social and environmental impacts of palm oil production in Guatemala.¹⁹⁵

Oil palm was first cultivated in the southern part of the country along the Pacific coast (San Marcos, Quetzaltenango, Retalhuleu, Suchitepéquez and Escuintla) (Alonso-Fradejas et al. 2011), a region that today accounts for approximately 21% of plantations. Now oil palm is primarily grown in the Northern Lowlands in southern Petén, northern Alta Verapaz, and northeastern Quiché (approximately 59%), and is also present in the Northeast in the Motagua and Polochic river valleys of Izabal and Alta Verapaz (20%).¹⁹⁶ The rapid expansion of large-scale palm oil plantations, primarily in the north, has been facilitated by government subsidies and land titling programs (Dürr 2017), a high-interest banking system which has exacerbated indebtedness among small landholders (Alonso-Fradejas 2012), and a state apparatus that is broadly lacking in regulatory oversight. This has had the effect of heightening historical tensions and provoking conflict between business-owners and local communities, particularly around the issues of water use and contamination, land dispossession, and labor and human rights violations. For example, the massive contamination event of the Río La Pasión by effluent from the company REPSA led to a 146 km dead zone which endangered the livelihoods of at least 20 surrounding Maya Q'eqchi' communities who depend on fishing for food and income. When some state actors blocked a court mandated investigation, conflict broke out, followed by incidents of intimidation, violence, and the murder of a community leader (Zepeda 2017).

Land conversion and concentration has also been highlighted in interviews and the literature as leading to numerous social and environmental challenges for the sector, some of which are better addressed by certification standards than others. In the Northern Lowlands, land

¹⁹³ See: https://www.grepalma.org/wp-content/uploads/2020/04/Anuario_estadistico_2018_2019.pdf (accessed October 21, 2020).

¹⁹⁴ See: https://www.grepalma.org/wp-content/uploads/2020/04/Anuario_estadistico_2018_2019.pdf (accessed October 21, 2020).

¹⁹⁵ August 14, 2020 interview with two representatives from an NGO working in Guatemala.

¹⁹⁶ See: https://www.grepalma.org/en/history/for_locations (accessed August 20, 2020) and https://www.grepalma.org/wp-content/uploads/2020/04/Anuario_estadistico_2018_2019.pdf for current distribution (accessed Oct 21 2020).

grabbing has been especially pronounced, often facilitated by deception (e.g., paying considerably less than fair market value for land), coercion (through enclosure, cutting off key transportation routes, etc.), and intimidation, often by using intermediaries to shield companies from oversight (Zepeda 2017; Sánchez 2020). Hervas (2017) notes that coercive land grabbing is not solely an issue for large plantations but has also been seen among small and medium scale producers as well. While conversion of cattle pastureland to oil palm tends to increase local wages and employment opportunities, conversion of crop lands has the reverse effect, exporting wealth outside of the regional economy into metropolitan areas, increasing food insecurity in the region (Alonso-Fradejas et al. 2011), and precipitating encroachment into protected areas (Dürr 2017). These challenges, which are particularly pronounced in Guatemala due to its historical, legal, and institutional context, reiterate the importance of the mechanisms in the RSPO standard to prevent land and control grabbing, for the benefit of the sector and surrounding populations. Finally, labor and human rights violations such as failing to provide adequate water and sanitation for workers, avoiding paying benefits or a minimum wage, preventing workers from organizing, and intimidating human rights defenders are further issues that incite conflict in Guatemala's palm oil sector. One interviewee believes that the greatest potential for the RSPO standards lies in their ability help alleviate some of the tensions within the industry by creating the norm that companies must consider the labor and human rights aspects of their business models, and requiring companies to allow their workers to organize or form unions to negotiate collective benefits.¹⁹⁷

Grower Profiles

The palm oil landscape in Guatemala is dominated by high-yielding commercial plantations, and the country's average yield of 28.1 FFB per ha is the highest production rate in the region. According to Grepalma, the trade organization that represents much of the sector, Guatemala had only 235 registered palm growers in the country from 2018 to 2019. Of these, 129 (55%) were smallholders managing less than 50 ha of oil palm, 77 (33%) owned between 51 and 500 ha, and 29 (12%) had landholdings greater than 500 ha. Among large land-holders, just eight families control much of the total palm oil production in the nation (GRAIN 2014).

Generally, smallholders in Guatemala do not receive national assistance (financial or technical),¹⁹⁸ although there have been a few programs in recent decades to enroll smallholders into the sector. In 2007, for instance, the *ProPalma* program was started in the north for smallholders of less than 24.5 ha. This program gave approximately one year of seed capital, seedlings and fertilizer, in exchange for them to associate with a buyer (Palmas de Ixcán) for a 25 year purchasing contract. The program did not, however, provide any price guarantees, so all of the risks of growing (poor yields, etc.) were assumed by the grower. After only one year, the program was cancelled due to government restructuring. In the two to three year lag between planting and their first harvest, many of these farmers incurred sizeable debts due to the lack of anticipated support, causing many of those to have to sell their land (Hervas 2017).

¹⁹⁷ August 12, 2020 interview with an individual who works for an NGO working in Guatemala.

¹⁹⁸ September 2, 2020 interview with two individuals who work with smallholders in Guatemala.

Similarly, in 2009, the government of Guatemala launched its Oil Palm Program to enroll smallholders into contract growing schemes, granting them a \$528/ha credit to form associations with palm oil agribusinesses in exchange for seedlings, transport and agronomic services (Alfonso-Fradejas 2012). Today, most of the technical support for smallholders comes from international NGOs and growers' associations.¹⁹⁹

The boundaries between different types and sizes of growers are somewhat fluid, meaning that official categories at times do not cleanly match existing experiences or practices. For example, from a land tenure perspective, less than 10 ha are categorized as subsistence farms, 10-40 ha are considered "medium producers", and 40+ are considered "large", but when applied to the palm oil sector (where some companies manage thousands of ha) these categories are not compatible.²⁰⁰

Smallholders

Guatemala has a long legacy of smallholder agriculture, primarily consisting of families growing staple crops on less than 10 ha of land. For smallholder palm oil producers, the average parcel of land is 19 ha (in the RSPO standard the cutoff is 50 ha), although most smallholders palm oil growers also grow staple crops for subsistence. One interviewee thus highlighted that it is important to distinguish between land that is owned (individually or communally), land that is cultivated in other crops, and land that is used to grow palm oil.²⁰¹

Smallholder farms can be most clearly distinguished by their comparatively small size (although there is no clear boundary based on size alone), and by the labor arrangement primarily consisting of the property owner and their family. As the size of the property grows, additional labor will be hired as needed,²⁰² usually on a short-term basis. In addition to participating in the physical upkeep of their own farms, smallholders tend to also take on an active role in the management of the those they hire (Hervas 2017). Because there is less mechanization than industrial-scale farms, the labor requirements on smallholder properties tend to be higher per unit of land (Alfonso-Fradejas 2012). Smallholders usually prefer to work for other smallholders that they know over commercial farms, because the workday is usually shorter, enabling them to spend more time working on their own farms (reducing household food costs) or within their community, and lunch is often provided (Alfonso-Fradejas 2012). Most smallholders in Guatemala tend to live near their farms in the village, and are usually more integrated into the community than growers with a more commercial orientation (Hervas 2017).

Smallholders in Guatemala can be classified as:

¹⁹⁹ September 2, 2020 interview with two individuals who work with smallholders in Guatemala.

²⁰⁰ August 14, 2020 interview with two representatives from an NGO working in Guatemala.

²⁰¹ August 12, 2020 interview with an individual who works for an NGO working in Guatemala.

²⁰² September 2, 2020 interview with two individuals who work with smallholders in Guatemala.

1. *Scheme or Contract Smallholders*: Most of the smallholders in the country have contracts with a particular processing company or mill, either through their involvement in a growers' association, or on an individual basis. The company provides them with a degree of technical assistance but retains some of the decision-making power regarding the growth and maintenance of the crop (for example, whether to participate in a certification).
2. *Independent Smallholders*: These growers retain more decision-making capacity over their land and operations and can decide which mill they prefer to sell their crop to. Typically, these growers have more capital and capacity to operate their farm. Property size seems to be more fluid, making the line between an independent smallholder and an independent medium grower difficult to define.²⁰³

Medium-Scale Growers

The term medium-scale grower is ambiguous in the context of Guatemala. Usually when speaking about this scale of production, scholars and practitioners tend to refer to small and medium sized *agribusinesses*, in contrast to farmers working their own plots of land. The owners of these farms tend to live further away in cities, may have other investments or landholdings (e.g. for cattle ranching, which is common in the north), and are more likely to hire employees to work and manage their land.²⁰⁴

One interviewee who works for an NGO in Guatemala acknowledged that a 50 (or 49) ha plot that is cultivated exclusively in palm oil and managed in this way is not equivalent to a smallholder farm that is run with mostly family labor on a mixed-crop plot by someone who lives locally. This person also highlighted that medium-sized palm oil operations are implicated in a higher degree of coercive land accumulation strategies in the north than other sizes, and cautioned against creating a substantially relaxed standard that could amplify the land and labor challenges of the sector which have resulted from the precarious tenure situation and weak governance structures of the country.²⁰⁵

For another interviewee who works closely with smallholders, over 75 ha of palm oil was considered enough production to be economically competitive from a business standpoint. A colleague of theirs likewise personally categorized medium scale farmers as 75-200 ha of land. This suggests that a middle zone or "grey area" between small and medium land holders (of 25 to 75 ha, for example) in which other factors mentioned above (number and type of employees, proximity of residence to farm, sources of income, total land size, etc.) might be beneficial for determining the kinds of standards and support that are most appropriate for the grower in question.

²⁰³ September 2, 2020 interview with two individuals who work with smallholders in Guatemala.

²⁰⁴ August 12, 2020 interview with an individual who works for an NGO working in Guatemala.

²⁰⁵ August 12, 2020 interview with an individual who works for an NGO working in Guatemala.

Palm oil producers of all sizes tend to hire casual workers on short-term contracts, usually 15 days, due in large part to the nature of the crop (Hervas 2017). Many of the labor contracts on medium and large palm oil agribusinesses demand higher time and mobility than work for smallholders (Alfonso-Fradejas 2012). For companies that are large enough to hire multiple employees, less laborious roles like supervisory or security positions may be more permanent. Distinguishing between medium and large-scale production is even more challenging than between small and medium scales. Output is relatively consistent between scales (ranging from around 20 tons per ha for small-scale, to 30 tons per ha for large). The amount of technology used on the farm and the number of workers (especially permanent positions) are more demonstrative characteristics that can help distinguish between medium and large-scale producers, although these too exist on a gradient.²⁰⁶

Certification Challenges

Financial constraints are cross-cutting issues for growers of all sizes, which were identified in both the interviews and the literature. This mostly stems from the fluctuating price of palm oil which is tied to global commodity markets, and especially to the price of petroleum. For small and medium-sized growers, small profit margins mean that hiring or retaining workers can be financially challenging. This is especially true in relation to social benefits like the agricultural minimum wage and social security, or the cost of items like personal protective equipment (PPE), which many small-scale producers cannot afford (Hervas 2017). Small profit margins also create constraints around investments in infrastructure or technologies to aid in production, as well as more basic necessities like fertilizers, especially when commodity prices drop.²⁰⁷ Companies that are able to produce in higher volumes tend to be better shielded from insolvency due to price fluctuations (Hervas 2017).

Because of the numerous and varied expenses related to certification, many growers find it to be cost-prohibitive to join the RSPO. For example, some interviewees raised the issue of the cost of compliance with certain national laws, such as water sampling and analysis, as difficult for smallholders to afford, while another interviewee brought up the cost of audits as a financial burden for medium growers. An article in the popular press echoed this, describing a company, Las Palmas, that was reported to have paid \$17,000 per year for audits related to the RSPO certification. When the company raised the costs of their product to make up for these expenses, their two main purchasers, Walmart and Mars, canceled their contracts (Abadi & Ball 2020).

Challenges for Smallholders

Some challenges are more specific to smallholders. These farmers tend to be more limited in their technical capacity and training. Many do not have an education beyond the elementary or middle school level, which can make the reporting and documentation requirements of

²⁰⁶ September 2, 2020 interview with two individuals who work with smallholders in Guatemala.

²⁰⁷ September 2, 2020 interview with two individuals who work with smallholders in Guatemala.

certification difficult, especially for those who do not know how to read or write. Some farmers may be uneasy about the number of new standards they have to adopt and weary of unfamiliar practices²⁰⁸. Occasionally, some farmers might experience language barriers if they are not fluent in Spanish. And, because many smallholders rely on their families to help maintain their farms, standards which prohibit child labor (although important) can pose a unique challenge to smallholders.²⁰⁹ One interviewee explained that there are elements of the RSPO smallholder standards that do not quite fit with the Latin American context but are more relevant to Indonesia and Malaysia. For example, in Latin America, most palm oil is grown on private lands where land title is held by the company, so standards related to concessions do not readily apply. However, Guatemala is currently in the process of creating a National Interpretation with the participation of multiple sectors and the inclusion of small, medium and larger growers to help mitigate these challenges and adapt the RSPO standards to the Guatemalan context.²¹⁰

Challenges Related to the RSPO Structure and Mechanisms

One NGO representative who was interviewed for this project highlighted the issue of objectivity in auditing process, noting that because businesses pay auditors directly, this opens the potential for companies to pay off auditors for a more positive evaluation.²¹¹ It seems widely known that companies will look into the backgrounds of their auditors to try to find someone who is most compatible with their goals (Sánchez, 2020) – a sentiment that was echoed in an interview with an employee of a large palm oil company based in Mexico. Another interviewee from an NGO who works in Guatemala explained that the mechanism for filing complaints, although very important, is quite limited in practice.²¹² This mechanism requires complaints to be filed online in English – two major constraints for farmers with less technical resources at their disposal – and can take up to two years before a response is submitted. Companies which are found to be out of compliance with the standards are asked to create an improvement plan, but stronger sanctions for breaches of protocol are lacking (Sánchez, 2020).

Finally, several interviewees explained that the challenges of certification might be better mitigated if there was a larger team within the RSPO working in Latin America, because currently there is a high demand on the time and resources of a single person who oversees the whole region. As such, this individual does not have the capacity to address grievances and must spend most of their time providing technical support to companies, with less time dedicated to smallholders or community complaints.

²⁰⁸ September 2, 2020 interview with two individuals who work with smallholders in Guatemala.

²⁰⁹ August 12, 2020 interview with an individual who works for an NGO working in Guatemala, and August 14, 2020 interview with two representatives from an NGO working in Guatemala.

²¹⁰ September 2, 2020 interview with two individuals who work with smallholders in Guatemala.

²¹¹ August 12, 2020 interview with an individual who works for an NGO working in Guatemala.

²¹² August 14, 2020 interview with two representatives from an NGO working in Guatemala.

Despite some of these challenges, one interviewee also raised the benefits that the RSPO can offer smallholders, such as providing a process for improving their agronomic practices (which can have attendant benefits to other crops as well) and for providing a platform to teach growers how to reduce environmental impacts through a more targeted and efficient use of agrochemicals, energy, and water.

5.3.5. Honduras

Honduras currently ranks as the world's eighth largest producer of palm oil and fourth in Latin America. In 2020, it produced around 580,000 metric tons of palm oil²¹³ from approximately 190,000 ha of land²¹⁴. The crop is primarily grown in the northern part of the country in the Aguán and Sula valleys, and in the Atlántida region along the Caribbean coast.

The context of the agricultural sector in Honduras, like many countries in Latin America, is shaped by the historical legacy of colonialism and contemporary forms of neocolonialism. This has led to a fractional percent of landowners holding a large portion of the country's land in massive estates, while large numbers of rural farmers and indigenous communities live off small parcels of land, or have been dispossessed (Kerssen 2013).

In the 1970s, government land reform programs incentivized smallholders to form farming cooperatives and grow palm oil in the Aguán region (Blaskey & Chapman 2013; GRAIN 2014). These organizations emerged from the well-coordinated farmers movement in the country—which arose as a reaction to poor working conditions in the banana industry—and the National Agrarian Institute (INA) as a way to improve the financial security and quality of life among rural farmers (Cohn Berger & Palacios 2019). With the expansion of “anti-communist” militarization of the countryside in the 1980s and the adoption of Structural Adjustment policies in the 1990s, state power and resources shifted from a political-economic system previously dominated by US multinational interests (such as the United Fruit Company) to one in which a few wealthy Honduran elites amassed greater power in the private and public sectors, primarily through manufacturing, palm oil, and coastal tourism (Kerssen 2013). During this period, wealthy landowners like Miguel Facussé of the palm oil company Dinant, is alleged to have leveraged state and paramilitary actors and international financing to grab land for palm plantations, often using violence (including allegations of threats, coercion, incarceration, torture, kidnappings, and murder) (Kerssen 2013). Neither Dinant nor its employees have been formally prosecuted.²¹⁵

The land grabs and violence associated with the sector mobilized a countermovement of *campesinos* (smallholder farmers) in response, eventually leading then-President Manuel Zedaya to cave to their pressure and begin instating policy reforms in the late 2000s such as raising the minimum wage and negotiating a land policy that would enable *campesinos* to buy

²¹³ See: <http://www.worldagriculturalproduction.com/crops/palmoil.aspx> (retrieved Sept. 10, 2020).

²¹⁴ Area under cultivation for 2018 from: <http://www.fao.org/faostat/en/#data/QC> (retrieved Sept. 10, 2020).

²¹⁵ Anonymous member of the RSPO Medium Grower Task Force (October 13, 2020).

back the land that had been forcefully taken from them in the 1990s (Blaskey & Chapman 2013). Those negotiations sparked a military coup in 2009 led by the Honduran oligarchy and their military allies (some of whom were trained by the US CIA), further solidifying the rising power of the Honduran agricultural elites, fracturing smallholder cooperatives, and consolidating even more lands for palm plantations (Blaskey & Chapman 2013; Kerksen 2013). Some large palm oil companies, including Dinant, have been implicated with connections to drug trafficking (Blaskey & Chapman 2013; Yukhananov 2014)—an allegation which extends to the current president of Honduras, Juan Orlando Hernández (Loewenstein 2019). Dinant is seeking certification by the RSPO and has received international climate financing from the Clean Development Mechanism, and multiple loans from the World Bank—inciting criticism for each of these institutions from civil society organizations (Blaskey & Chapman 2013). Land conflicts and violence against human rights defenders, including smallholder palm oil producers mobilizing for the right to their lands, continues to be a prevailing issue for the sector in the country (GRAIN 2014; Loewenstein 2019).

Grower Profiles

During the last two decades, the fastest growth has occurred among small and medium sized growers in the country, many of whom have begun to organize themselves and build their own mills. At least 3000 small and medium growers and six mills are estimated to have been consolidated due to these developments²¹⁶.

A National Interpretation for the RSPO is currently being negotiated for Honduras,²¹⁷ a process which is said to include small, medium, and large growers and multiple sectors.²¹⁸ As part of this process, a report was written in 2013 by the Honduran Technical Committee of the RSPO, detailing distinctions between RSPO definitions and the predominant production models seen in Honduras. This report described the following categories of producers:

1. Social-sector enterprises such as farmers associations and cooperatives typically provide support services for their members and have a communal farming structure²¹⁹.
2. Individual producers have individual title to their lands and do not grow as part of a company.
3. Private sector enterprises are legally incorporated as corporations or LLCs according to the Commercial Code of Honduras.

²¹⁶ Anonymous member of the RSPO Medium Grower Task Force (October 13, 2020). See also: http://reddccadgiz.org/documentos/doc_944259193.pdf (retrieved October 23, 2020).

²¹⁷ See: <https://en.mapa-solidaridad.org/interpretacion-nacional-rspo-hondur>.

²¹⁸ Anonymous member of the RSPO Medium Grower Task Force (October 13, 2020).

²¹⁹ The largest of these is Hondupalma, an organization of 31 associated groups and hundreds of independent producers. It operates one mill and numerous kinds of processing plants (refining, fractioning, chum, almond) as well as a broiler for power generation and a biodiesel processor (Cohn Berger & Palacios 2019).

Similarly, Flavio Linares of Solidaridad noted that approximately 25% of growers are what the RSPO calls “independent” and around 75% are involved in some kind of collective (what the RSPO calls a “scheme”—although the relevance of this classification to Honduras is questionable, since both private contractual relationships and collective farmers organizations fall under this category, but have very different operational and support structures). Independent growers have more choice over what mill they would like to sell to and where to get financial and technical assistance (e.g. from professional services like a fertilizer provider). Other growers, whether members of social-sector or private sector enterprises, have contracts with the mills (including social or private mills). In these arrangements, mills sometimes provide fertilizer, equipment, or technical assistance to growers. Growers that are contracted with mills typically retain a high level of decision-making capacity over their farms and are not directly managed or required to grow certain crops. As a result, growers of various arrangements may also grow other subsistence or commercial crops or engage in small scale livestock production.²²⁰

Oil palm production in Honduras is dominated by smallholders. Because of this, the categories of “small”, “medium”, and “large” tend to skew much smaller for Honduras than other Latin American countries. Two interviewees who work with smallholders through the organization Solidaridad explained that palm growers in the country tend to be categorized as:

1. Small-scale: 0.5 – 10 ha. Government entities classify smallholders as growing less than 10 ha of oil palm per household. According to a study conducted by the Ministry of Agriculture in 2011, this accounts for approximately 90% of the roughly 19,000 palm oil producers in Honduras. Likewise, the major trade organization for palm growers in the country, the *Asociación Industrial de Productores de Aceite de Honduras* (AIPAH), also classifies smallholders as 10 ha or less of palm.²²¹ While some organizations have shifted towards the RSPO cut-off of under 50 ha following the introduction of the RSPO in 2002, this 10-hectare cut-off is more reflective of realities on the ground.
2. Medium-scale: 10 – 100 ha. This is the range used by the trade organization, AIPAH.²²² Approximately eight to ten percent, or up to 1500 producers, fall into this category, with most of these falling in the 10 to 50 ha range.
3. Large-scale: 100+ ha. Around 109 producers have over 100 ha of palm oil. AIPAH distinguishes two categories of large growers: 100 to 1000 ha, and over 1000 ha of palm.²²³

The communal tenure system, which is often lacking formal title, complicates the categorization of producers on the basis of size. Because many smallholders farm on communal lands, total

²²⁰ September 11, 2020 interview with Flavio Linares, Technical Head of Programs for the Central American, Mexico and Caribbean Region for Solidaridad and Dubail Rosa, Program Official, for Solidaridad Honduras.

²²¹ See: http://reddccadgiz.org/documentos/doc_944259193.pdf (accessed October 23, 2020).

²²² See: http://reddccadgiz.org/documentos/doc_944259193.pdf (accessed October 23, 2020).

²²³ See: http://reddccadgiz.org/documentos/doc_944259193.pdf (accessed October 23, 2020).

land area “owned” may seem larger than the land area actually farmed by individual households.

Technical and financial support for palm growers in Honduras is generally lacking, with occasional support from NGOs, from contracts with mills, or through their own collective organizations. Despite the prevalence of farmers’ organizations in the country, many growers still do not have access to credit or operate their farms as a business with a structure for increasing capacities. Low productivity is common for the sector and is often related to infrastructure issues like poor drainage in the rainy season. Low yields and limited access to transportation means that many growers rely on intermediaries to transport their FFB to mills, which can undercut the profits that growers receive for their crop. Of the fifteen mills in the country, most of them are “social mills” that are collectively owned by associated groups of growers. These tend to provide greater support to growers than private mills. The general lack of support for small scale agriculture broadly and oil palm in general has led to high levels of out-migration (to cities and abroad) and an aging population of farmers. Volatility in global palm oil prices further exacerbates precarious conditions for oil palm growers in the country.²²⁴

Certification Challenges

In Honduras, many growers face similar challenges to certification as observed in other countries such as a lack of technical support and funding to help them with the certification process. Educational barriers and illiteracy likewise pose a barrier to understanding complicated RSPO documents and requirements, and the aging population of growers (exacerbated by out-migration to the US and Mexico) means that some are not interested in adopting new practices.²²⁵ And, because the RSPO classifies both private and collective growing arrangements as “schemes”, even when farmers associations are comprised entirely of smallholders, many of these grower collectives are unable to afford the high costs of certification without additional support. For growers of all sizes, certification tends to be initiated by the mills, because the costs of certification (especially the required studies like the HCV, HCS and ESIA, the national permits, and costs of acquiring formal land title) are too high and the investment too risky for many growers – especially small and medium scale – to adopt on their own.²²⁶

However, since 2012, the organization Solidaridad, with the help of the Government of the Netherlands and the consumer goods company, Henkel, have been engaging in programs to promote and support smallholders in Honduras with RSPO certification. Initial challenges included the widespread use of noncompliant agricultural practices, a lack of technical support for independent producers, and communication breakdowns and distrust among various actors the supply chain. Since then, Solidaridad has helped to increase technical capacity by holding

²²⁴ September 11, 2020 interview with Flavio Linares, Technical Head of Programs for the Central American, Mexico and Caribbean Region for Solidaridad and Dubail Rosa, Program Official, for Solidaridad Honduras.

²²⁵ Anonymous member of the RSPO Medium Grower Task Force (October 13, 2020).

²²⁶ September 11, 2020 interview with Flavio Linares, Technical Head of Programs for the Central American, Mexico and Caribbean Region for Solidaridad, and Dubail Rosa, Program Official for Solidaridad Honduras.

trainings, building partnerships with governmental and academic agencies, and creating national and regional programs (e.g. the Sustainable Palm Oil Project in Honduras and the Mesoamerican Palm Oil Alliance) to facilitate dialogue between stakeholders (Cohn Berger & Palacios 2019). Although these efforts have gone a long way towards supporting small scale palm growers in the country, there is much more still to be done.

5.3.6. Mexico

Oil palm was introduced to Mexico in 1948, with the first large plantations established in 1978 (Hernández-Rojas et al. 2018). Today the crop is primarily grown in the Chiapas (42%), Campeche (27%), Tabasco (25%), and Veracruz (6%) regions in the southern part of the country (Castro 2009). While Mexico currently ranks eighteenth in terms of global production and eighth in the region, it is the top consumer of palm oil in Latin America.²²⁷ Specifically, in 2019 the country produced approximately 140 thousand metric tons of crude palm oil, while it imported over four times as much, or 530 thousand metric tons²²⁸, mostly from Guatemala, Costa Rica, and Colombia (Hernández-Rojas et al. 2018).

Mexico's agricultural sector experienced dramatic restructuring in the 1980s and 1990s due to structural adjustment and trade policies like the North American Free Trade Agreement (NAFTA). By increasing imports of cheap staple crops from the US, these policies decreased the competitiveness of locally produced foods, leading to increasing precarity and urban (and international) migrations among smallholders, alongside greater concentration of land and capital among wealthy producers who were able to invest in technologies to keep their production systems competitive in global and national markets. However, some municipalities have retained a diversity of agricultural production systems, including numerous diversified and intercropped smallholder farms, which often produce for local, regional, or domestic markets. The bifurcation of the agricultural sector as a result of these policies in terms of financial capital and market influence remains a key feature structuring relations—and tensions— between small producers and wealthier agribusinesses in the palm oil industry (Fletes et al. 2013).

The period between the early-2000s to the mid-2010s saw the introduction of a suite of policies to diversify the fuel market with more renewable fuel sources. These policies prioritized planting biofuel crops such as palm oil on “marginal lands” (Fletes et al. 2013)—an ambiguous term, which included abandoned property, pasture, or even active agricultural fields. Some of these policies targeted *ejidos* for conversion to palm oil. An *ejido* is a traditional communal land tenure system in which the Mexican government grants use rights to groups of smallholder farmers, but typically prohibits the sale or rental of the land²²⁹ (Isaac-Márquez et al. 2016).

²²⁷ See: <http://www.worldagriculturalproduction.com/crops/palmoil.aspx> (accessed August 28, 2020).

²²⁸ See: <https://www.indexmundi.com/agriculture/?country=mx&commodity=palm-oil&graph=imports> (accessed: August 20, 2020).

²²⁹ However, according to Flavio Linares of Solidaridad, this has been changing in the last five years, with some recent sales of portions of *ejido* property and increasing pressure from investors on *ejidatarios* to sell their land for potential palm oil development.

These policy programs would subsidize the cost of conversion to palm oil and provide seedlings to *ejidatorios* who agreed to participate in farmers' associations and palm growers unions (Isaac-Márquez et al. 2016), such as "Rural Production Societies" (SPRs), "Social Solidarity Societies" (SSSs), or "Agricultural Associations of Palm Producers and Rural Production Sectors" (Castro 2009). These organizations provide varying forms of support to smallholders, such as collection, transportation, and marketing of FFB, operation of seedling nurseries, coordination of input deliveries, or dispersion of credit to participating growers. Some associations also collectively own and manage one or more mills (these are called "social mills"). While low productivity and low profitability has led many *ejidatorios* to abandon the oil palm projects starting in 2006, the government resumed its promotion efforts in 2012, prompting a rapid expansion of the production area in the following years (Isaac-Márquez et al. 2016). This lasted until the new government administration recently reduced subsidies and support for palm oil production, shifting its focus to fruit trees, and leading many smallholder palm growers to cut their palms when the market prices dropped.²³⁰

Civil society organizations and academic researchers have raised concerns about the social and environmental impacts of the oil palm sector in Mexico, including deforestation, pollution, and increased food insecurity (Castro 2009; Fletes et al. 2013; Hernández-Rojas et al. 2018). Like other countries in Latin America, oil palm tends to be planted on agricultural lands²³¹, making its deforestation rate much lower compared to Southeast Asia. However, the rate of primary forest loss for palm oil varies considerably based on municipality, meaning that deforestation continues to be a major concern for the sector in some regions, especially Campeche. Pollution from agrochemical runoff has also caused problems for the sector, especially for damage caused to terrestrial and aquatic habitats in protected areas like the Encrucijada Biosphere in Chiapas. And, much of the oil palm in the country has replaced staple crops like corn, sorghum, rice, and fruit trees, drawing attention to the risks for increasing food insecurity among smallholder growers (Hernández-Rojas et al. 2018). Inequality in value capture between producers and processors also remains a major challenge for the sector (Castro 2009; Fletes et al. 2013).

Grower Profiles

Of the roughly 8,000 palm oil producers in Mexico, smallholders are estimated to account for between 75%²³² to approximately 90% (Sherman 2020) to 95% of palm growers,²³³ depending on the source and size categorization. There are 16 mills located throughout the country²³⁴.

²³⁰ September 11, 2020 interview with Flavio Linares, Technical Head of Programs for the Central America, Mexico, and Caribbean Region for Solidaridad Network.

²³¹ A study of land use change by Hernández-Rojas et al. (2018) found that 72% of current palm oil lands were converted from primary forest prior to 1980, although the rate and timing of deforestation varies greatly at the municipal level.

²³² According to FEMEXPALMA, the national trade organization of palm growers in the country. See: <http://www.femexpalma.com.mx/palma-de-aceite> (retrieved October 23, 2020).

²³³ September 11, 2020 interview with Flavio Linares of Solidaridad Network.

²³⁴ See FEMEXPALMA: <http://www.femexpalma.com.mx/palma-de-aceite> (retrieved October 23, 2020).

Associated Smallholders

Smallholder palm growers in Mexico, like other parts of Latin America, tend to depend on agriculture as their primary source of revenue, live on or near their farms, and utilize mostly family, traded, or informal labor²³⁵, with minimal mechanization or reliance on technologies²³⁶. Many oil palm growers also work as temporary laborers on palm plantations, mostly in harvesting (Isaac-Márquez et al. 2016).

Land tenure dynamics in the country make categorizing grower types based on land area difficult, with interviewees hesitating to create boundaries between levels. This is primarily due to the prevalence of *ejidos* in some parts of the country. Because of this, many smallholders own, manage, and work land collectively, often with certain portions set aside for conservation or cultivation of various kinds of subsistence and cash crops and small units of livestock²³⁷. For example, a survey of 50 palm growers in Campeche found that each work an average of 43.8 ha of land, but individual household plots average around 20 ha, with each cultivating an average of 6.5 ha of oil palm (Isaac-Márquez et al. 2016)²³⁸. Flavio Linares of Solidaridad similarly noted that the majority of smallholders in Mexico manage less than 10 ha each of oil palm, while Jorge Coronel of Oleopalma suggested 75 ha as the upper limit to a smallholder category. This highlights how complicated land size is as a marker of grower types for the country and the region as a whole, when individuals may collectively own hundreds of acres of land, but have a completely different management structure than a medium or large commercial operation with a similar sized land holding.

As a result of the prevalence of the *ejidos* and decades of government incentives to organize smallholders into various kinds of collectives or organizations, most smallholder growers participate in some form of smallholder association. The size, degree of support, and internal cohesion of these associations varies considerably, ranging from a handful to hundreds of households, and from loose affiliations, to highly coordinated collective management of palm oil plantations and mills.

Because of these highly variable arrangements, RSPO categories of “independent” and “scheme” growers have little relevance to smallholder production in Mexico. This is further complicated by the fraught relationships between many smallholders and mills in the country (Fletes et al. 2013). Mills in Mexico pay by far the lowest prices to growers for FFB compared to any other country in Latin America, with an average extraction rate of 14.5% (Colombia, by comparison, averages closer to 18%). There is also a rampant lack of transparency regarding the current value of crude palm oil, and the scales that are used to weigh FFB are typically not

²³⁵ August 31, 2020 interview with Jorge Coronel, Sustainability Manager at Oleopalma.

²³⁶ A survey of 50 smallholder palm growers in Campeche found that 86% do not have machinery, and many do not even have specialized tools for harvesting like a *chuza* or Malay knife. Around 44% had access to vehicles for transportation, while 16% did not have road access to their palm plantations (Isaac-Márquez et al. 2016).

²³⁷ September 11, 2020 interview with Flavio Linares of Solidaridad Network.

²³⁸ Flavio Linares described the vast majority of smallholders in Mexico as growing less than 10 ha of oil palm.

visible to growers, leading to prevalent suspicions that they are routinely underpaid for their crop²³⁹. Consequently, many smallholders do not have strong relationships to mills, whether or not they have a formal or informal contract with the mill or participate in a smallholder association. Many smallholders also rely on intermediaries to transport their FFB to mills, further undercutting their profits²⁴⁰. These features, coupled with the fact that most government subsidies for palm oil production have been captured by mills instead of growers, has led some smallholder associations to create their own collectively managed “social mills”, where they can capture a greater share of the production profits²⁴¹.

A survey of smallholder producers participating in an *ejido* in Campeche illuminates some of the motivations and challenges faced by these growers in Mexico. *Ejidatarios* are motivated to grow oil palm for the income and employment opportunities, which are more profitable and safer than livestock, where disease issues and thievery have become common problems in recent years. However, many smallholders struggle with investment costs, especially fertilizers, which are key to maintaining the productivity of the crop. Some smallholders have aversions to working in the palm oil sector because of the labor-intensive harvesting cycles and risk involved, especially due to the frequency of wounds caused by the plants’ spiny leaves. They find that there are not many spillover benefits to the local economy, but do consider there to be positive ecological benefits, with palm acting as a step towards reforestation of their lands, which is seen to attract more wildlife and help regulate rain patterns that have been disrupted due to deforestation. Another benefit observed by growers is a reduction of the practice of agricultural burning, which has led to fewer uncontrolled fires (Isaac-Márquez et al. 2016).

Medium Commercial Growers

Compared to smallholders, medium-scale growers tend to perform more as agribusinesses rather than as farms, and often hire regular employees to manage operations²⁴². These are typically started either by cattle ranchers converting portions of their land to oil palm²⁴³, or as investments from professionals who have additional revenue streams (such as a medical or legal practice). While former or current cattle ranchers may live near their plantations, other investors typically live in cities, or may split their time between the locations²⁴⁴. Compared to smallholders, medium growers are more likely to have formal land title and a plan for managing the company’s finances, in which they weigh investment costs (for things like certification) against potential financial returns.

²³⁹ September 11, 2020 interview with Flavio Linares of Solidaridad Network.

²⁴⁰ According to Flavio Linares, however, a benefit of using intermediaries is that they usually pay in cash.

²⁴¹ Flavio Linares estimates that around 4 mills in Mexico are “social mills” while around 10 are privately owned.

²⁴² August 31, 2020 interview with Jorge Coronel, Sustainability Manager at Oleopalma.

²⁴³ Flavio Linares of Solidaridad has observed medium-scale plantations from converted cattle ranches to be the fastest growing part of the sector.

²⁴⁴ This was described by both interviewees (Flavio Linares of Solidaridad Network and Jorge Coronel of Oleopalma).

Large Commercial Growers

While both interviewees hesitated to categorize growers based on land area, Jorge Coronel of Oleopalma considers 150 ha to be an approximate dividing line between medium and large growers, while emphasizing the need for gray areas and subcategories. Flavio Linares, by comparison, noted that three of Mexico's newest large palm oil businesses grow over 5,000 ha of oil palm. This scale of operation is more likely to involve foreign capital, such as from Colombia or Guatemala, and run contracted outgrower schemes with medium and large growers (and potentially some smallholders) to supply their mills.

Certification Challenges

In 2020, Mexico approved a National Interpretation for the RSPO's Principles and Criteria, but has yet to develop a Smallholder Local Interpretation²⁴⁵. The first and only company to become RSPO certified in Mexico was Oleopalma in 2020, with plans to certify its remaining three mills, plantations, and five affiliated smallholder associations by 2023. Five other producers in Mexico have begun the certification process, while a few other downstream industry actors are exploring Supply Chain Certification (Sherman 2020).

Challenges for Smallholders

In Mexico, a number of challenges makes certification particularly difficult for smallholders to achieve. The primary issue identified in interviews is a lack of technical capacity and assistance, since smallholders do not receive broad national support outside of their own collective organizational structures, some NGOs, and occasionally through contractual relationships with a company. Social companies and social mills (i.e. smallholders which have collective ownership of a mill) are more likely to provide direct support to smallholder growers, but these organizations face major financial and technical barriers to meeting the more stringent RSPO "scheme" certification requirements than large commercial enterprises. Low financial capacity among smallholders is related to low productivity and yields, as well as low extraction rates paid by mills for FFB. Currently, these issues coupled with volatile global prices has meant that smallholder palm growers are an aging and diminishing population in Mexico²⁴⁶. This could be mitigated with higher price premiums and lower price volatility to incentivize investment in certification, and better training programs for smallholders²⁴⁷. Other constraints include a lower level of education among some smallholders, which can make record keeping difficult²⁴⁸, and some resistance to external interventions in their livelihoods, due to the historical context (Fletes et al. 2013).

²⁴⁵ See: https://rspo.org/library/lib_files/preview/1327 (accessed October 23, 2020).

²⁴⁶ According to Isaac-Márquez et al. (2016), the average age among a group of 50 smallholders was 53.6 years, and average yields fell around 5 to 6.2 tons per ha of FFB.

²⁴⁷ September 11, 2020 interview with Flavio Linares of Solidaridad Network.

²⁴⁸ August 31, 2020 interview with Jorge Coronel, Sustainability Manager at Oleopalma.

Challenges for Medium-Scale Growers

Medium scale growers face some similar challenges to certification as smallholders. The primary barrier is financial, as many of these growers do not have the same technical capacity or team of specialists at their disposal as large commercial growers. For these growers, even basic infrastructure and amenities like internet can be a large investment. Certification can be especially challenging when they are held to the same standards as large companies but require more guidance and support to achieve the standards. Certain studies like the High Conservation Value and High Carbon Stock assessments can be extremely costly and are easily outweighed by necessities like fertilizer or employee wages. In this regard, the needs and capacities of a 150 ha, 1,500 ha, and 150,000 ha operation are not comparable²⁴⁹.

6 IMPLICATIONS FOR AN RSPO PRODUCER PROFILING SYSTEM

To draw out implications from the country case studies for an RSPO profiling system, we begin with a summary of lessons learnt from a cross-country comparison of findings in Section 6.1. Since the implications of these lessons depend on the strategic goals of the RSPO as well as on their interpretation, we did not feel that putting forward a single profiling system did justice to the lessons learnt. Instead, we chose a scenario analysis to highlight choices on the table and the likely implications of each in Section 6.2.

6.1 Lessons Learnt from Country-Level and Regional Analyses

In this section, we summarize lessons learnt across the 15 focal countries on the two themes of this study: grower profiles, and certification challenges.

Grower Profiles

1. Terminology is highly variable across contexts, challenging efforts to standardize what is meant by “scheme”, “independent”, “smallholder”, “medium grower”, “outgrower”, etc. The definition of “scheme” utilized by the RSPO (lack of enforceable decision-making power or freedom to choose how farmers or landowners utilize their land), for example, applies mostly in the Southeast Asian region. In other regions or outside the RSPO sphere, it may instead refer to farmers under contract with larger firms or organized in farm blocks. Furthermore, grower arrangements are more variable than the “scheme” vs. “independent” distinction suggests. We therefore move away from the term “scheme” in favor of terminology that better reflects the observed continuum from full smallholder independence (“independent smallholder”), to smallholders receiving variable forms and level of outside support from any number of actors (“supported smallholders”), and finally smallholder farms fully managed by a larger firm or nucleus estate (“managed smallholder”). Smallholders under “contract” may map onto either supported or managed smallholders, depending on the scope of these agreements. An “outgrower” arrangement is one that maps onto the “supported”

²⁴⁹ August 31, 2020 interview with Jorge Coronel, Sustainability Manager at Oleopalma.

category, provided their oil palm plots are not fully managed by the nucleus estate. Yet there is a gray area between “supported” and “managed,” as seen in Papua New Guinea and the Solomon Islands – where smallholders must comply with RSPO Principles and Criteria to market their FFB and grow oil palm. These farmers are supported; yet while they are neither managed nor constrained in their freedom to choose what to grow, how they grow oil palm is to a large degree “controlled”.

2. Production systems and organizational arrangements exhibit a high degree of variability not just between regions and countries, but within countries. When considering what constitutes a small vs. medium-scale grower, this means that a uniform classification system will lead to a situation in which those included within any given grower category will be highly variable - and not meaningful in terms of challenges faced and levels of support required to achieve certification.
3. In most cases, what emerges from the analysis of the actual characteristics of growers is that there are no discrete groupings, but gradations in most of the variables used to classify growers. Whether you find categories, and who might fit in them, depends on what you measure; if you change your criteria, new categories are likely to emerge. Some interviewees consistently pushed back at efforts to get them to classify growers, given this complexity - suggesting that it would be an artefact of the analysis rather than anything reflecting real distinctions on the ground.
4. One notable exception to Lesson #4 involves early stages of the industry in which governments have played a strong role in structuring schemes in such a way that clear grower categories are established and their characteristics imposed through scheme rules (e.g. 4 to 6 hectares per farmer in resettlement schemes in Indonesia and PNG). Clear grower typologies may be easy to identify early on, but over time as grower contracts expire and they opt out of these centrally organized schemes, there has been a growing diversification under varying grower goals, circumstances and capacities.
5. The long history of household cultivation and consumption of oil palm in West Africa sets this region apart from other world regions, generating sharp differences in terms of whether oil palm is wild or cultivated; the prevalence of local production and processing; and marketing arrangements. This suggests that growers’ motivations to (or not to) certify, and the constraints and priorities they have with respect to oil palm, are likely to be different than other regions. Whether this demands national or regional interpretations of standards for independent smallholder and medium growers remains to be seen, and would benefit from a comprehensive consultation process with smallholders, their organizations and those supporting them in the region.

Certification Dynamics and Challenges

1. Independent smallholders were found to face a host of barriers to certification, including the following:

- a. Proof of land ownership (informality of tenure, negotiating with their own clans/family members to access land, resolving disputes between adjacent clans or traditional authorities over the ability to allocate land);
 - b. Awareness of the RSPO and understanding of RSPO Principles and Criteria;
 - c. Prohibitive cost barriers associated with certification and/or low returns, and their effect on net returns from oil palm;
 - d. The transaction costs, record keeping and technical skills required to certify;
 - e. Compliance with designated agricultural and management practices;
 - f. Compliance with labor laws (paying taxes, social security, benefits; providing PPE);
 - g. Plantation age, with older plantations associated with lower rates of adoption due to low returns;
 - h. Principles and Criteria in contradiction with custom and experience, including labor (the involvement of children in family farming); environmental practices (use of fire near plantations); and the need to form associations (for which many are reluctant, given bad experiences of the past).
2. For grouped smallholders which are organized into farmers' associations or cooperatives that are not supported by a large company or mill (for which there are a few in Honduras and Mexico), the barriers to certification (e.g. the high costs of studies, technical and educational requirements, etc.) are more in line with independent smallholders than with supported smallholders that receive outside technical and financial assistance.
 3. Supported smallholders were also found to face challenges, from proof of land ownership (for the older NES schemes in Indonesia and PNG, many received title but have lost the paperwork over time) to technical and financial constraints, and especially complying with formal labor laws that prohibit informal labor arrangements which are common to the sector and may have significant cost implications. Supported smallholders in West Africa and some Asia-Pacific countries (e.g. Thailand, Malaysia) face the same challenges as independent smallholders, but perhaps to a lesser degree (depending on the nature of support systems). They may receive training in agronomic practices and have better levels of access to planting materials, but this is not always the case and is not necessarily a path to certification.
 4. Medium-scale growers were found to face challenges in complying with labor standards; land title; cut-off dates for forest conversion; and the economic disincentive posed by the legality requirement for hired labor. Constraints for medium-scale growers exist on a spectrum, with smaller growers of this tier facing many of the same constraints as smallholders (and which similarly vary based on degree and type of support), while larger growers in this tier typically have more technical and financial capital to weather these challenges.

5. The constraints identified with each of the identified variables (e.g. labor, land ownership) are highly context-specific, meaning that any effort to address them must be specifically adapted to the dynamics surrounding how these constraints play on the ground. For example, labor constraints and the harvesting of unripe FFB in Thailand have as much to do with sector dynamics beyond the farm as the characteristics of individual growers – and solutions must inevitably be targeted at this level.
6. The effort and costs of certification are very high for independent smallholders and many medium-scale growers, and the benefits may not always warrant pursuing certification. If enrolling greater numbers of independent growers is an aim, expansion should be strategically targeted to areas with minimum risks (e.g. where the trade-offs between oil palm and livelihoods are minimal) and maximum gain (e.g. deforestation from small and medium-scale producers is significant, the productivity gains from certification could significantly raise household incomes).
7. Getting greater numbers of small-scale and medium-scale growers to certify should not be considered an end to itself, but a means of achieving strategic policy goals in the oil palm sector. In some contexts, the latter do not necessarily flow from the former, raising questions of the policy relevance of certification or specific principles and criteria. Examples include the following:
 - a. The vast majority of smallholders in Sarawak grow oil palm on lands formerly used for shifting agriculture, minimizing the environmental costs of oil palm expansion. According to one source, certification would therefore pose significant costs without achieving strategic policy objectives. In West Africa, most smallholders grow oil palm in wild groves, or intercropped with other cash and food crops, limiting the environmental impact. Intensification efforts must take this into consideration to avoid increasing environmental degradation.
 - b. The requirement of a land title in Indonesia may be driving firms to displace smallholders into the forest estate - thereby driving deforestation rather than mitigating it. Additionally, the process of acquiring legal land title in West Africa and parts of Latin America can be a driver of social conflict in itself.
 - c. Tensions between government interests in expanding land access to larger firms and customary land rights in Sarawak may mean that rights sanctioned by the State are actually violating customary rights and judicial interpretations of legality.
 - d. In West Africa, the oil palm smallholder has been identified as an essential target of national development strategies. The primary goal, detailed in National Oil Palm Platforms, is to increase smallholder yields. Though RSPO certification is a goal as well, it is not a method of development. Efforts to certify smallholders impose extra costs that could even hinder this process.

6.2 Implications for an RSPO Profiling System: A Scenario Analysis

Below we present three scenarios that represent alternative ways in which the above findings might be interpreted and made operational, along with their anticipated benefits and drawbacks.

Scenario 1: Standardized Global Profiling System with Fixed Boundaries

Grower Profiles

If RSPO were to settle on a single profiling system that applies globally, the following categories would likely emerge:

1. Independent smallholders: grow oil palm as one of multiple crops (including cash and subsistence); maintain discretionary control over land use; use predominantly family labor; size of oil palm plots is limited by any number of factors (labor, ownership, food security concerns, etc.) to between 0.5 and 20 ha; have autonomy over oil palm management and sales.
2. Grouped smallholders: These are independent smallholders organized together into associations or cooperatives, with variable levels of internal and external support. They include independent smallholders with their own plots of land and oil palm working in association to achieve common goals (e.g. Honduras, Mexico, West Africa); and multiple households grouping together to manage individually or collectively owned plantations on communal land (e.g. Solomon Islands). Reasons for forming groups vary across contexts, but may include managing, harvesting and transporting FFB; collective labor schemes; collective mill ownership; and strengthening their voice (e.g. negotiating a better price with mills, soliciting external support).
3. Supported smallholders: These are farmers who manage their own oil palm plots with some support from any number of outside actors (government, private mill or estate, private businesses, NGOs, individual entrepreneurs), with or without a contract specifying rights and obligations. The outside entity may provide any number of services, from technical assistance (e.g. on agronomics, local institutional strengthening or meeting the RSPO standard) to finance or inputs of seed stock, fertilizer or pesticides.
4. Managed smallholders: These are farmers, whose land is fully managed by a private or government-owned company. Generally, the management activities include land preparation, planting, maintenance and harvesting activities. All production on smallholder lands is typically sold to the company, and the costs of management are generally subtracted from the incomes received by the smallholders. In cases involving plantations or mills as the outside partner, part or all of production is sold to the company.

5. Medium-scale growers: These are farmers with oil palm plantations in excess of 50 ha that depend heavily or fully on hired labor. Mill ownership is not a relevant criterion for defining the boundaries of this category, because of the scale of production at which mills are either viable or legal in different contexts.²⁵⁰ Furthermore, while ownership of a mill²⁵¹ serves as a relevant criterion for marking the boundaries between small- and medium-scale growers in West Africa, but was argued by one source as a feature marking the boundaries between medium- and large-scale growers in Malaysia. Presence of other crops is not a relevant criterion separating smallholders from medium-scale growers because medium-scale growers in the Pacific region are groups of clan members growing oil palm collectively, each of whom has a garden plot. Even land area is problematic for the Latin American context, where the size of individual or collective land may vary widely and are not always aligned with other socio-economic features of commercially-oriented medium-scale growers (for example, some smallholder “family farms” in remote regions of the Brazilian Amazon may legally hold up to 320 ha, but primarily rely on family labor). In Latin America, medium-scale growers are more readily identified by features such as: some reliance on mechanization, greater technical capacity (but without the full suite of available technologies), owners who tend to live in cities rather than near the farm, who are less involved in its day-to-day operation, and who have multiple investments or income sources. This is therefore a highly diverse category that has little internal coherence to it, other than what it is “not” (not smallholder, and not large-scale grower). To illustrate, this category includes entities as diverse as medium-scale outgrowers that are part of a nucleus estate-outgrower model (e.g. Brazil, or Côte d’Ivoire, where *grands planteurs* have land holdings anywhere from 200 to 1000 ha, though in terms of their access to resources and ability to hire labor, they could be considered large-scale); clan-based farmer groups growing oil palm on up to 500 hectares of unregistered clan land (whose members also have garden plots) in the Solomon Islands; plantations as small as 15 ha (PNG and Thailand) and as large as thousands of hectares (Malaysia), with the latter still qualifying as medium-scale because they do not own mills; elites who exceed the official 25-hectare limit on independent small-scale growers in Indonesia due to their political connections; plantations in Ghana and Nigeria whose land holdings range from 100 to 5,000 ha who have their own mills and outgrowers.

Where you place farmers with oil palm plantations in the 20-50 ha range is largely arbitrary, and rests on the ultimate purpose of the classification scheme as well as context (being full-blown businesses or political elites in some contexts, and clan members virtually indistinguishable from independent smallholders in others). There are also important gray areas between “supported” and “managed” smallholders that need to be considered in such a

²⁵⁰ In Malaysia, to qualify for the establishment of a mill, a company needs in excess of 20,000 ha contiguous land area. This means that there are companies with over 20,000 ha of land located in more than one location that do not qualify for mill ownership. In West Africa, medium-scale growers often do have their own mills, but because small-scale processing facilities can be found locally (or growers are attached to a larger mill), this is not always the case.

²⁵¹ Defined here as a mill for industrial-scale production, not traditional a processing facility.

typology. In some cases (e.g. Malaysia), smallholders may be supported to such a degree that individual entrepreneurs provide management oversight for most or all agronomic activities in exchange for land rents and/or dividends – thus approximating “managed smallholders.” In other cases (e.g. Papua New Guinea and Solomon Islands), smallholders are free to make their own land use decisions, but if they choose to grow oil palm, their agronomic choices are heavily controlled by firms under situations of monopsony – to ensure their compliance with RSPO Principles and Criteria.

Likely Benefits and Drawbacks

The benefit of this scenario is simplicity for RSPO. However, it does not cater to the diversity within any of these given categories in terms of the challenges farmers face in certifying. Having a uniform profiling system will privilege growers in some contexts while disadvantaging growers in others. Using these categories may place growers in categories that do not correspond to their need for support, thereby reducing their ability to access that support.

Scenario 2: Profiling System Catered to Regional, Country-Specific or Sub-National Dynamics

Grower Profiles

A. Africa

Any attempt to develop a regional profiling system would have to take into consideration the production model and market based on the *Dura* variety in West Africa. This thick-shelled, lower yielding variety is the dominant form of oil palm grown in wild groves scattered throughout the region. Even smallholders with planted oil palm plots may have *Dura* mixed with their *Tenera* (high yielding variety) systems. The prevalence of this variety is due to its indigeneity, a valuable flavor profile, and the lower labor required to maintain wild groves. Where the owner of a grove is not also the one harvesting, incentive to improve/manage these systems is limited. The high demand for “red palm oil” for household consumption in West Africa provides a viable market for *Dura* fruit almost everywhere in the region. This can be processed artisanally/locally, in nearby small-scale processing facilities, or even by larger industrial mills. Thus, there are real disincentives to intensification for many smallholders, which raises the very real concern that integration into global palm oil value chains might displace a far more environmentally sustainable and socially valued production system.

Another important consideration in the West African context is the dominance of the independent smallholder as a percentage of growers. While large-scale plantations with scheme smallholders do exist in Ghana, and there is evidence of medium-sized plantations there and elsewhere, most estimates attribute more than 80% of all oil palm production in the region to smallholders. While some of this includes outgrowers receiving varying levels of support, the vast majority of production is lightly supported. Because un- or lightly-supported smallholders do not have the resources to access RSPO certification, this suggests a need for clarifying within the profiling system the outer limit of what a smallholder is (meaning, at what

level of support does a smallholder have the ability to pursue certification), and targeting support to them (e.g. exploring the relevance of RSPO certification to them, and if relevant in addressing their production or sustainability concerns, exploring how best to support their inclusion).

Given these two considerations, a regional profiling system for small and medium-scale growers might look something like this:

1. *Smallholders with a range of obligations and support systems*, including independent smallholders who have complete autonomy over production and selling arrangements and supported growers/outgrowers with a variety of selling agreements and differing levels, sources, and types of support. Independent smallholders might have anywhere from 0.5 to 20 ha (often in scattered plots), with less than 10 ha in oil palm and the rest in other food or cash crops, and use primarily family labor. Supported growers and outgrowers might have up to 50 ha (though in Sierra Leone outgrowers tend to have less land than independent smallholders – often less than 5 ha) and use hired labor and/or receive “management support” (required labor) from a plantation. They may or may not have negotiated agreements with a buyer, and may or may not respect these agreements.
2. *Fully supported/managed smallholders with contractual obligations to a buyer*. In Ghana, they use the term scheme smallholder, and certain companies in Nigeria are looking to revitalize this model in the future. Certain outgrowers might rise to this level of support as well.
3. *Medium growers with strong mill or company connections, or their own mills*. These can be small and medium-sized plantations that range from 50 to 1,000 ha and can be owned by families or cooperatives, not typically under government or corporate control. The larger of these tend to have their own mills. A category of grower exists in Liberia and Côte d’Ivoire that falls within this medium-scale land-holding range, but these are elites with less need of outside support, and should probably not be considered as medium-scale growers for certification purposes.

Again, the vast majority of oil palm production in West Africa comes from smallholder farmers. Of these, the majority are independent smallholders who clearly fall under the Independent Smallholder Standard. Supported smallholders exist on such a range of access to resources and buying agreements that to accurately understand their ability to comply with RSPO standards requires context-specific evaluation. However, the growers on the weak end of support should probably be grouped with independent smallholders. A definition of medium-scale growers might need to be attempted sub-regionally, with Ghana and Nigeria having clear divisions between grower types that make this possible. Sierra Leone and Liberia are very much focused on the effects of large-scale land deals that have not (as yet) integrated smallholders into value chains with much success. Medium-scale growers are not yet very relevant in these countries. And Côte d’Ivoire is a bit of an outlier, having banned small, non-industrial mills in the country, and relying on the AIPH to organize the sector. The only clear cross-cutting theme is that non-

industrial production, which may be beyond the reach of RSPO, plays an outsized role in grower livelihoods and environmental sustainability.

B. Asia-Pacific

In Asia-Pacific, the profile of dominant growers varies considerably across countries, making a regional profile nearly as challenging as a global one. In Thailand, independent smallholders with less than 8 ha under oil palm are by far the predominant growers (accounting for close to 70% of the FFB production and land area and 90% of growers), and the industry largely revolves around them. In Indonesia and Malaysia, larger firms play a far more dominant role in the sector and in shaping industry sustainability performance, and are complemented by a sizeable as well as diverse smallholder sector. In Indonesia, this sector is gradually moving from supported to independent and managed arrangements. In both countries, the small-scale sector involves prototypical smallholders (primarily reliance on family labor, diversified farming systems, smaller plots variable formality of title), as well as a suite of arrangements that depart from this are growing in prominence (larger plots, small and highly capitalized farms, predominantly hired labor, pooled plots, high levels of external management by individual entrepreneurs). In Papua New Guinea and the Solomon Islands, one or more large-scale plantations dominate the sector, complemented by sizeable areas of supported smallholders. These smallholders, while variable in size, management (individual vs. group) and land tenure (customary, leased customary, titled), are largely indistinguishable from the more traditional independent smallholders. This suggests that two primary grower types cater for the bulk of the market share across countries in the region:

1. Industrial-scale estates, with landholdings averaging 800 ha in Thailand but 1,000s of hectares in other countries, typically with mill ownership; and
2. Smallholders on a continuum of external support, with small landholdings ranging from 2 to 10 hectares but otherwise exhibiting a high level of variability in terms of labor relations, land tenure formality and levels of economic/crop diversification, capitalization, productivity and external support/management.

Growers with landholdings between 10 and 500 ha have no natural grouping, and defy categorization into one or more groupings for RSPO purposes. They include highly enterprising independent farmers with landholdings of up to several hundred hectares in PNG (which are low yield, but run as private businesses); up to 30 ha or more in Indonesia (with proper training, high quality seedlings, hired labor and who are progressively expanding their plantation area); and small numbers of independent growers of up to 100 ha in Thailand. In Malaysia, they include “progressive” independent smallholders on up to 30 ha relying on family labor; and medium-sized plantations on land recently acquired through purchase (20-50 ha) or rental (up to several hundred ha). While these might be called “medium-scale growers”, their characteristics (plantation area, labor, agronomics, yield) vary widely. This group also includes growers organized into groups, yet their characteristics are again highly variable. They include large group-based production by clan members on clan land in the Solomon Islands (which span

16 to 500 ha, but otherwise resemble prototypical smallholdings in all other respects); supported smallholders on customary land in which small landholdings are bundled and managed as a contiguous plantation by entrepreneurs in Malaysia; and Thai independent smallholders organized into groups for purposes of mill ownership. With the reasons for grouping being highly diverse (mill ownership, collective cultivation, land amalgamation to achieve economies of scale) and the entities who might benefit from external support including both individual entrepreneurs and smallholder collectives, this group also exhibits little internal coherence.

Given the above, and with the vast majority of non-industrial growers represented by smallholders lying somewhere on the continuum from independent to supported, it would seem that RSPO efforts might be targeted to them (and possibly those organized into groups whose other features align with the smallholder typology). Yet with interviewees in some contexts raising questions about the relevance of certification to these farmers or their relevance for achieving strategic policy goals in the sector, it would seem that a more nuanced, context-specific strategy would be needed to effectively target certification where it can enhance the benefits to farmers and sector sustainability. If there is an interest in a standard for medium-scale growers, it would seem that it would need to be adapted to the particular circumstances of each country. In the absence of a standard adapted to the national context, a choice will need to be made between defining medium-scale in line with the Malaysian context - where the “large plantations without mills” definition would align it more with large-scale grower category; with the Thai context - where even 10 ha and above is already a successful commercial-scale grower; or with the diverse set of “progressive,” “enterprising” or merely “grouped” farmers in the 20 to 500 ha range with highly variable features and constraints.

C. Latin America

In Latin America, large commercial plantations dominate the palm oil production landscape, because the crop is primarily grown as a commodity for international export markets and some domestic markets (e.g. Brazil where it is used for domestic biofuel production, and Colombia and Mexico which have comparatively high domestic use for food, fuel, and other products). Of the five countries analyzed, the exceptions are Honduras and Mexico, where much of the oil palm in the country is produced by numerous associated groups of smallholders (see “Grouped Smallholders” in Section 6.2 above), as well as Colombia, where many independent and some contracted and associated smallholders grow a sizeable portion of oil palm.

Most small and medium sized producers across the region are involved in contractual relationships of varying forms with large commercial companies or with mills, although independent growers of all sizes exist (excluding Brazil, where the sector is more regulated and centralized around large commercial growers). The degree of top-down management and amount of support provided in these contractual relationships varies considerably, blurring the line between “independent” and “scheme” (or “independent”, “supported”, and “managed”, as described above).

Similarly, there are no clear distinctions between producers of various sizes, with most defining characteristics of “small”, “medium”, and “large” producers existing on a gradient. Consequently, most individuals from the region who were interviewed for this project hesitated to group producers on the basis of production area alone, instead preferring to create sub-categories and gray areas, where certain features may or may not overlap. Some interviewees even questioned the relevance of a separate standard for medium-scale growers in their countries because few to none of them are “independent” and they are therefore only compelled to get certified if the large companies with which they are affiliated require it (e.g. Brazil). Others noted that medium-scale growers face considerably higher financial and technical constraints than larger commercial growers, which would make many of the requirements of certification impossible to achieve (for example the High Conservation Value and Historic Land Use studies) (e.g. Mexico, Colombia). Because medium-scale growers are equally if not more likely to be involved in land, environmental, and labor disputes as large companies, several interviewees also cautioned against creating a set of standards that are too relaxed as to contradict the very purpose of the RSPO standard in the first place (e.g. Guatemala, Colombia).

Despite these highly variable and indiscrete categories (and numerous sub-categories within them), most interviewees identified some basic characteristics between producers of different sizes, focusing more on labor arrangements, degree of mechanization, and variations in management structure and support than land area. These include:

1. *Smallholders* (or “Family Farms” in Brazil) that rely primarily on family labor, have no permanent workers but instead rely on informal temporary or exchanged labor, have low levels of mechanization, and often grow other crops (or raise small numbers of livestock) for either subsistence or sale. These farms average around 10 ha under palm oil (e.g. Brazil) but range considerably in size (most interviewees placed them at less than 20 ha of oil palm but could be much greater, especially in communal farming arrangements). These farms may be:
 - a. Independent;
 - b. Supported in various forms and capacities through governments, companies, NGOs, or farmers’ associations; or
 - c. Involved in contracts of various kinds with large commercial growers or mills.
2. *Medium-Scale Commercial Growers* that run their operations more as an agribusiness rather than a farm. These typically have at least one semi-permanent formal employee to manage operations, and usually have a few regular employees in addition to informal temporary labor for specific tasks like harvesting. These operations have moderate levels of mechanization and technical capacity. The owners typically have additional investments or employment, and rarely live near the property or participate in day-to-day operations. Most interviewees placed plantations of 75 to 500 ha in this category, with an average around 150 ha (e.g. Brazil) but also including much smaller or larger plantations. As with smallholders, these may be:

- a. Independent;
 - b. Supported in various forms and capacities through governments, companies, NGOs, or farmers' associations; or
 - c. Involved in contracts of various kinds with large commercial growers or mills.
3. *Large Commercial Growers* that typically have teams of formally hired permanent employees in addition to temporary hired labor. They are usually highly mechanized, rely on technologies of various kinds, and operate large land holdings (3000 ha +), either through direct management of a company plantation, through outgrower arrangements, or a combination of the two. These companies may or may not own one or more mills or processing plants and are likely to be subsidiaries of large conglomerate corporations, based either internationally or domestically.

Likely Benefits and Drawbacks

Potentially greater social inclusion and targeting if the definitions more closely match the actual characteristics of growers and the challenges they face on the ground. If matched with monitoring, there may also be a greater potential to identify and mitigate unanticipated consequences and externalities so as to better align certification with strategic policy goals in the sector. Yet with the high diversity of production systems and realities in some regions (e.g. Asia-Pacific), the profiling system would likely need to be adapted to national or sub-national dynamics for these benefits to materialize.

Scenario 3: Beyond Profiles

From Profiles to Process: Engagement of Stakeholders and Context-Specificities

Given all of the context-specificities and caveats mentioned in this report, it raises the question of whether a grower profiling system will be effective in enabling the RSPO to achieve its ultimate aims with respect to differentiated standards, and whether there are better alternatives. One such alternative would be to move away from profiles towards a process-based instrument: (a) to identify which of the RSPO standards to which any given grower must comply; or, in the case of a single RSPO standard, (b) to identify the level of support a grower will need to achieve certification.

If the aim is simply “to bring more growers into the RSPO” to enhance both the size and equity of the RSPO market share, this might consist of a process of evaluating how far producers have to go to comply with RSPO Principles and Criteria; evaluating their ability to achieve those things on their own; and subsequently determining either what level of support they require (in the case of a single standard), or which standard they must comply with (in the event of differentiated standards). A uniform methodology or set of procedural steps would be needed to help standardize this process. If the aim is to achieve strategic policy goals in the oil palm sector, such as avoided deforestation or respect for human and land rights, this might involve

an effort to target those areas where these rights are most in violation and an effort to develop a multi-stakeholder process at the local level to explore how to bring greater numbers of producers in line with a single or differentiated standard.

Likely Benefits and Drawbacks

The benefits of such an approach would be greater tailoring of the RSPO to local conditions, and potentially greater market share and/or effectiveness in addressing key sustainability issues. The drawbacks are the transaction costs associated with stakeholder engagement, and the potential for process to be manipulated by more powerful actors - a well-established feature of decentralized and participatory process (Bell 1994; Cooke and Kothari 2001; Igoe et al. 2009).

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8 APPENDICES

Appendix I. Task 1 Methodology

To identify existing grower classification systems for the 15 focal countries, we reviewed RSPO National Interpretation documents, academic and media sources, and government websites for defining characteristics of small- and medium-scale growers in each country.

We began by reviewing RSPO's most recent National Interpretation document for each country. RSPO's website features National Interpretations or drafts of National Interpretations that had been updated between 2013 and 2020 for each of the fifteen countries, excluding Brazil.²⁵² Within each document, the "Definitions" sections provided basic definitions of relevant terms including "independent smallholder" and "scheme smallholder."

After reviewing RSPO's National Interpretations, we proceeded by searching the Web of Science, Google Scholar, and Google for both academic and reputable media sources concerning palm oil markets and sustainability standards in each of the fifteen countries. We concluded our searches by investigating government websites based in each country to confirm the details of any sustainability standards or legislation. These sources were primarily located on the websites of each country's Department/Ministry of Agriculture or Environment. Government websites were used to confirm the existence and details of any national sustainability standards or relevant government programs. Where found, national sustainability standards and government agricultural regulations were reviewed to determine how growers are classified by the government; whether there were any formal definitions of small and medium growers; and whether growers of different sizes were certified or licensed in different ways.

The research chose to analyse the classification systems for independent smallholders and scheme smallholders separately, given their separate treatment by the RSPO and within RSPO National Interpretations. The variables used to classify independent and scheme smallholders and medium-scale growers (where relevant) were an emergent feature of the analysis, integrated into the resulting tables as they emerged in the reviewed sources. Any emergent variables were then used to analyze the countries previously reviewed, and previously analyzed documents were reviewed again to determine whether any aspect of that document's smallholder classification could be better codified under the new or revised variable.

²⁵² The only existing document concerning Brazilian Interpretations is listed on RSPO's website as "Brazilian Local Indicators." This document does not include any definitions or classification systems for small or medium growers.

Appendix II. List of Interviewees

Country	Name(s)	Title(s)	Affiliation(s)
Africa			
Regional	Abraham Baffoe	Director, Africa	Proforest
Côte d'Ivoire	Ahmadou Cisse	Country Representative	Solidaridad - Côte d'Ivoire
	Sophiatou Colliee Christian Enokou Charles Baimey	Program Manager - Oil Palm Project Officer Program Officer	Solidaridad - Côte d'Ivoire
	Lazare Kouamé (<i>email correspondence</i>)	Representative	Association Interprofessionnelle de la Filière Palmier à Huile (AIPH)
Ghana	Samuel Avaala	President (OPDAG) Chairman (GNIWG)	Oil Palm Development Association of Ghana Ghana National Interpretation Working Group
	Dr. Samuel Adjei-Nsiah	Professor/Researcher	University of Ghana, Legon
	Dr. Kaysara Khatun	Professor/Researcher	Natural Resources Institute, UK
Liberia	Cyrus Saygbe	Program Manager (SWAPP)	Solidaridad - Liberia
	James Otto	Head of Programs	Sustainable Development Institute
	Galah Toto	Manager	National Oil Palm Platform
	Dr. Philippa Atkinson	Independent Consultant	
Nigeria	Billy Ghansah Dr. Samuel Dare Nezah Obi-Odu	Agricultural Coordinator Facilitator/Consultant Market Development Advisor	Okomu Oil Palm Plantation PIND (Partnership Initiatives in the Niger Delta) PIND
Sierra Leone	Rosine Nsegbe	Sustainability Manager	Goldtree Holdings
	Nicholas Jengre Andrew Morrison*	Country Representative Technical Advisor & Chairman of the National Interpretation Committee	Solidaridad - Sierra Leone
	John Sinah	Program Manager (SWAPP)	

Asia-Pacific			
Indonesia	Dr. Rob McCarthy	Associate Professor	Crawford School of Public Policy, Australian National University
	<i>Confidential</i>	<i>Confidential</i>	Indonesian CSO
Malaysia	Max Dionysius Mohd. Ridzuan Shah Rosly Muhamad Zaim Azfar Nordin Norbert John Stephany Selvister Sumarni Sudirman (Masran Hamzah)	Sustainable Palm Oil Officers (Consultant)	Sustainable Palm Oil Team, WWF- Malaysia
	Dr. Rob Cramb	Honorary Professor	School of Agriculture and Food Sciences, University of Queensland
	Dr. Fadzilah Majid Cooke	Retired Professor of Sociology	University of Malaysia – Sabah
Papua New Guinea	Ian Orrell	Head of Sustainability and Quality Management	New Britain Palm Oil Limited
	Dr. Gina Koczberski	Associate Professor	School of Design and the Built Environment, Curtin University
Solomon Islands	Regina Pokana	Sustainability and Quality Manager	New Britain Palm Oil Limited – Guadalcanal Plains
	Lincy Pende	Doctoral Candidate	Australian National University
Thailand	Kanokwan Saswattecha	Project Manager, Sustainable and Climate-Friendly Palm Oil Production and Procurement Project	GIZ
	John Clendon (<i>email correspondence</i>)	Alternate Member for ROW Growers (Thailand & Philippines)	RSPO Board of Governors

Latin America			
Brazil	Dr. Frederico Brandão	Researcher	World Agroforestry Center/CGIAR
	Tulio Dias	Director of Sustainability	Agropalma
Colombia	Alejandra Rueda	Founder	NesNaturaleza
	<i>Confidential</i>	<i>Confidential</i>	International NGO working in Colombia
Guatemala	José Luis López	Program for Sustainable Palm Oil & Biodiversity	Solidaridad - Guatemala
	<i>Confidential</i>	<i>Confidential</i>	
	<i>Confidential</i>	<i>Confidential</i>	NGO working in Guatemala
Honduras	Flavio Linares	Technical Head of Programs: Central America, Mexico & Caribbean Region	Solidaridad - Honduras
	Dubail Rosa	Program Official	Solidaridad - Honduras
Mexico	Flavio Linares	Technical Head of Programs: Central America, Mexico & Caribbean Region	Solidaridad - Central America, Mexico & Caribbean
	Jorge Esteban Coronel	Sustainability Manager	Oleopalma