

# **Exploitative Labor Practices in the Global Palm Oil Industry**

*Prepared by Accenture for Humanity United*

## Introduction

Palm oil is the world's most popular vegetable oil, accounting for 34 percent of global vegetable oil consumption. It is found in one of two products sold in Western supermarkets, ranging from Dove soap to Ben & Jerry's ice cream. Labeling regulations in the United States permit palm oil to be listed simply as vegetable oil, leaving many consumers unaware of its nearly ubiquitous presence in everyday products. The opposite is true in Asia and other developing regions, where consumers have long used palm oil as a primary source of cooking oil. Regardless of whether people consume knowingly or not, over the past 40 years, global consumption of palm oil has increased at a rate of 7.8 percent.

The vast majority of the world's palm oil supply, nearly 85 percent, is grown in Indonesia and Malaysia. The palm oil industry is very significant to the economies of both countries. It is the largest agricultural export from both countries and in 2010 accounted for 4.3 percent of Malaysia's GDP and 1.4 percent of Indonesia's. The palm oil industry also an important employer in both countries, employing as many as 3.5 million workers across Malaysia and Indonesia.

However, to meet the growing global demand for cheaply produced palm oil, some producers are relying on forced labor and other forms of modern slavery. In 2012 the International Labour Organization (ILO) estimated that nearly 21 million individuals across the globe were living and working under conditions of slavery, including debt bondage, forced labor, child labor, human trafficking, and sex trafficking<sup>1</sup>. Like many other extractive and agricultural industries, the palm oil industry contributes to these abuses.

In 2012 Accenture partnered with Humanity United to analyze the factors contributing to modern-day slavery in the global palm oil industry. The purpose of the project was to help Humanity United and its partners better understand the global palm oil market, the most prominent actors at each step of the supply chain, where and how forced labor enters the supply chain, and steps that can be taken to eliminate abusive labor practices. An Accenture team based in Kuala Lumpur worked with stakeholders in the global industry to further analyze the findings of the desk research and to refine the recommendations to address the factors that allow slavery to persist in the global supply chain.

The upstream analysis focuses primarily on Indonesia and Malaysia. In addition to those countries' significance to global production, the palm oil industry in both countries has been cited by the U.S. Department of Labor and other sources for various forms of labor exploitation, including forced and child labor. Due to limitations in publicly available data about consumption in developing economies, namely China and India, the downstream analysis focuses primarily on large companies based in Europe and North America.

The report begins with **The Global Palm Oil Market**, detailing the importance of palm oil to the global economy. The analysis demonstrates the increasing importance of palm oil to consumers around the world and establishes the interconnectedness between consuming and producing countries.

The second section, **The Global Palm Oil Supply Chain**, outlines the key steps in the supply chain and identifies the primary actors in the production, trade, and marketing of palm oil.

The third section, **Exploitative Labor Practices in Palm Oil Production**, describes various examples of labor exploitation in Malaysia and Indonesia. This section also explains some of the context that allows slavery to persist in the palm oil supply chain.

The fourth section, **The Roundtable on Sustainable Palm Oil (RSPO)**, describes the work of the RSPO as the principal initiative seeking to address sustainability issues in the global palm oil industry. This

---

<sup>1</sup> ILO, 2012, page 13

section also identifies the main challenges that the RSPO faces in order to deliver scaled, sustainable, and ethically produced palm oil.

Finally, the last section of the report identifies **Recommended Interventions** for key stakeholder groups, namely governments and corporations, to eliminate the industry's dependency on and exposure to slavery.

# Table of Contents

<b>INTRODUCTION .....</b>	<b>2</b>
<b>DEFINITION OF TERMS.....</b>	<b>5</b>
<b>THE GLOBAL PALM OIL MARKET .....</b>	<b>6</b>
GLOBAL DEMAND FOR VEGETABLE OILS IS INCREASING RAPIDLY .....	6
SUPPLY OF VEGETABLE OILS IS CHALLENGED TO KEEP PACE WITH DEMAND .....	7
SUPPLY OF PALM OIL IS CRITICAL TO MEETING DEMAND FOR VEGETABLE OILS .....	9
HISTORY OF PALM OIL PRODUCTION IN MALAYSIA AND INDONESIA .....	11
ECONOMIC SIGNIFICANCE OF PALM OIL IN MALAYSIA AND INDONESIA .....	12
SUMMARY ANALYSIS OF THE GLOBAL PALM OIL MARKET .....	14
<b>THE GLOBAL PALM OIL SUPPLY CHAIN .....</b>	<b>15</b>
OVERVIEW .....	15
UPSTREAM PRODUCTION .....	15
MIDSTREAM PROCESSING .....	26
DOWNSTREAM MARKETING .....	29
SUMMARY ANALYSIS OF THE PALM OIL SUPPLY CHAIN .....	32
<b>EXPLOITATIVE LABOR PRACTICES IN PALM OIL PRODUCTION .....</b>	<b>33</b>
MIGRANT LABORERS ARE FREQUENTLY TARGETS OF HUMAN TRAFFICKING INTO BONDED LABOR AND OTHER FORMS OF EXPLOITATION.....	33
MANAGEMENT OF IMMIGRATION IS LUCRATIVE BUSINESS IN MALAYSIA .....	34
MIGRANT WORKERS IN MALAYSIA ARE ABUSED BY GOVERNMENT-ASSOCIATED POLICING GROUPS .....	36
COMMERCIAL ESTATES MAY EXPLOIT SMALLHOLDER PLANTATION OWNERS.....	37
CHILD LABOR IS EMPLOYED ON OIL PALM PLANTATIONS, SPECIFICALLY SMALLHOLDER ESTATES .....	37
SUMMARY OF EXPLOITATIVE LABOR PRACTICES .....	38
<b>THE ROUNDTABLE ON SUSTAINABLE PALM OIL (RSPO).....</b>	<b>39</b>
OVERVIEW OF THE RSPO MODEL.....	39
RSPO CHALLENGES .....	42
COMPETITION FROM INDONESIAN SUSTAINABLE PALM OIL (ISPO) INITIATIVE .....	45
SUMMARY OF THE RSPO.....	46
<b>RECOMMENDED INTERVENTIONS.....</b>	<b>47</b>
GOVERNMENT INITIATIVES .....	47
COMPANY INITIATIVES.....	50
THE RSPO .....	52
<b>REFERENCES .....</b>	<b>54</b>

## Definition of Terms

CAMSA	Coalition to Abolish Modern-day Slavery in Asia
CPKO	Crude palm kernel oil
CPO	Crude palm oil
CSPKO	Certified sustainable palm kernel oil
CSPO	Certified sustainable palm oil
DEFRA	U.K. Department for Environment, Food and Rural Affairs
FELCRA	Federal Land Consolidation and Rehabilitation Authority (of Malaysia)
FELDA	Federal Land Development Authority (of Malaysia)
FFB	Fresh fruit bunches
FPIC	Free, prior, informed consent
GAPKI	Indonesian Palm Oil Board (Gabungan Pengusaha Kelapa Sawit Indonesia)
GDP	Gross domestic product
ha	Hectares
ILO	International Labour Organization
IOI	IOI Group
ISPO	Indonesia Sustainable Palm Oil
MPOA	Malaysian Palm Oil Association
MPOB	Malaysian Palm Oil Board
MT	Metric tons
P&Cs	Principles and criteria for sustainable palm oil production
PK	Palm kernel
RELA	Volunteers of Malaysian People (Ikatan Relawan Rakyat Malaysia)
RISDA	Rubber Industry Smallholders' Development Authority (of Malaysia)
RSPO	Roundtable on Sustainable Palm Oil
WWF	World Wildlife Fund

# The Global Palm Oil Market

*This section provides an introduction to the global palm oil market and its role in the broader market for edible vegetable oils. Key factors driving supply and demand for palm oil are also identified.*

## Global demand for vegetable oils is increasing rapidly

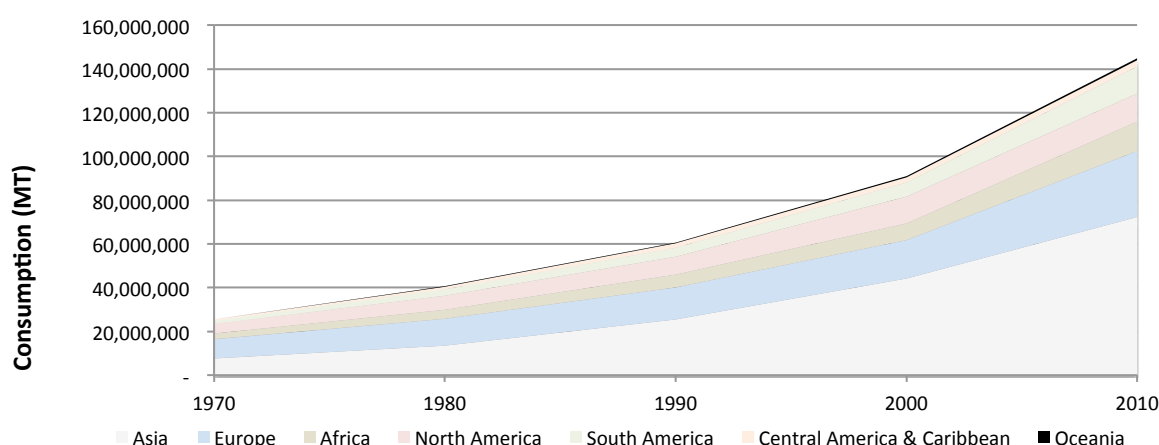
Vegetable oils are a critical element of the human diet and have been used for millennia as a source of nutrition and as a medium for cooking and preparing food. As civilization has developed and as our comprehension of nutrition and cuisine has increased, so has the consumption of vegetable oils. Individuals consume more vegetable oil per capita today than at any point in history.

Oils are primarily used for food purposes as cooking oil for frying and baking. In many cultures, vegetable oil serves as the base for salad dressings, margarine, and shortening; and as an ingredient in confections, baked goods, and processed foods. They serve as stabilizers, emulsifiers, and shelf-stable substitutes for dairy and animal fats. Vegetable oils are also frequently additives in pet foods.

Modern commerce and industry have identified a number of new practical applications for vegetable oils. This expansion of the use of vegetable oils has resulted in greater and more complex demand. Vegetable oils are now used for a variety of commercial and industrial purposes outside of food: as the bases for common household goods such as soaps, cosmetics, toiletries, candles, paints, and even biodiesel fuels.

Today the companies whose products line our pantries and medicine cabinets are all buying vegetable oils. Without necessarily realizing it, consumers around the world have come to rely on a cheap and readily available supply of vegetable oil.

In 2010 global demand for vegetable oils totaled 144.76 million metric tons (MT), a significant increase from just 25.57 million MT in 1970 (see Figure 1). The growth in demand is attributable both to growing global populations and to an increase in per capita use of vegetable oils.



**Figure 1 - Consumption of Vegetable Oil (MT), 1970-2010 (FAOSTAT, 2010)<sup>2</sup>**

The most significant increase in vegetable oil consumption has occurred in Asia and South America (see Table 1), where the use of oils has historically been low<sup>3</sup>. As incomes have risen in recent decades,

<sup>2</sup> Calculated from FAOSTAT, 2010a; FAOSTAT, 2010c

<sup>3</sup> Calculated from FAOSTAT, 2010a; World Bank, 2012b, Population, total

households with previously constrained food budgets are able to afford cooking oil and thus consume vegetable oil more regularly. This rise in incomes, coupled with the proliferation of cheaper options such as palm oil, has allowed these countries to participate in the global vegetable oil market.

Region	1970	1980	1990	2000	2010	<i>Compound Annual Growth Rate</i>
Africa	6.7	8.4	9.2	9.5	13.4	1.7%
Asia	3.6	5.2	8.1	12.1	17.8	4.1%
Central America & Caribbean	15.5	22.2	32.9	33.3	39.2	2.4%
Europe	13.0	16.8	18.8	22.3	36.7	2.6%
North America	15.9	19.8	23.0	29.2	27.6	1.4%
Oceania	7.1	10.2	19.1	23.7	24.1	3.1%
South America	7.4	12.8	13.5	18.3	31.2	3.7%
World	7.0	9.2	11.5	14.9	21.1	2.8%

**Table 1 - Oil Consumption by Region (MT per 1,000 people), 1970-2010 (FAOSTAT, World Bank)**

Per capita consumption of vegetable oils is also increasing in the developed regions of the world. Here consumption is largely attributable to consumers' higher use of processed foods and manufactured, nonfood household items. These products represent some of the fastest-growing categories in the retail sector.

To a lesser extent, increased consumption of vegetable oils can be attributed to the consumption of biodiesel fuel. European governments especially, but also those in other developed countries, have committed to increasing national investment in green fuels to replace harmful petrochemicals. The use of biodiesels is still relatively small, but it is quickly growing. For example, between 2000 and 2010, the use of biodiesel in Europe grew by a compound annual growth rate of 38.4 percent<sup>4</sup>. As scientific innovations continue to identify efficiencies in the production and consumption of biodiesels, this industry's demand for vegetable oils will likely increase dramatically.

## **Supply of vegetable oils is challenged to keep pace with demand**

The drivers of vegetable oil demand are all growing and will continue to contribute to a higher global demand for vegetable oils. The global appetite for vegetable oils is placing pressure on the global economy to produce a supply to keep pace with this growth.

When the supply of vegetable oils does not meet demand, the consequences are dramatic. During the twelve-month period from June 2007 until June 2008, the price of vegetable oils doubled.<sup>5</sup> Government interventions, such as trade quotas and moratoriums on biodiesel production, were required to artificially lower the global demand for vegetable oils and settle the price of oils back to pre-crisis levels. While vegetable oil prices have not experienced the same dramatic spikes in recent years, they continue to rise due to the structural growth in demand and constrained supply. In December 2011, the 12-month rolling average price of vegetable oils actually surpassed the record levels of 2008.<sup>6,7</sup>

<sup>4</sup> OECD, 2012

<sup>5</sup> Calculated using historical prices (1982-2012) for the four major vegetable oils: palm oil, soybean oil, sunflower oil, and rapeseed oil ; World Bank, 2012a

<sup>6</sup> Calculated using 12-month average prices for the four major vegetable oils: palm oil, soybean oil, sunflower oil, and rapeseed oil

One method to increase the supply of vegetable oils is to increase the amount of land planted with oil crops. Reflecting the importance of these crops and the oils they produce, countries have expanded the area planted with oil palm at a compound annual growth rate of 2.2 percent<sup>8</sup> (see Figure 2). While this is a significant allocation of land to the supply of vegetable oils, increasing planted land will grow supply by only half of the rate of demand<sup>9</sup>. The finite supply of land will become increasingly constrained, so it is clear that another approach to increasing oil production must be identified to meet the required supply of vegetable oils.

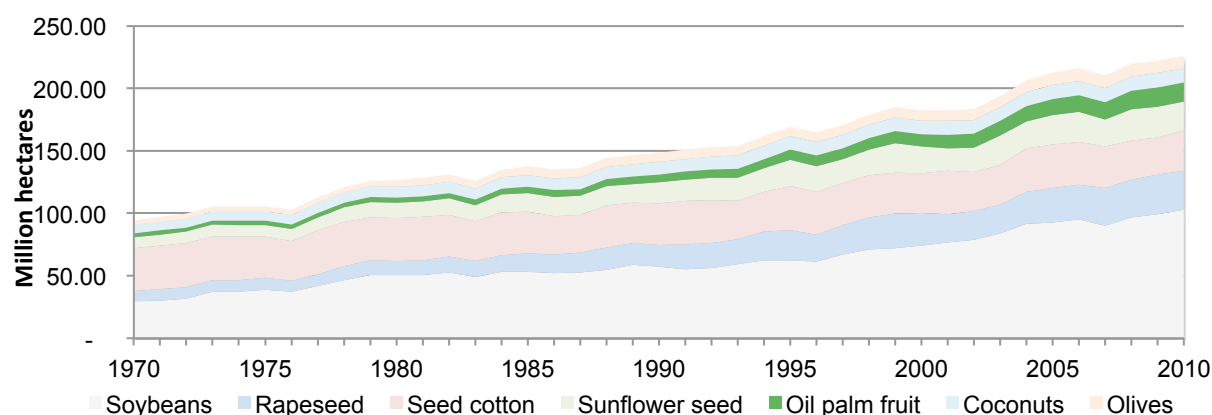


Figure 2 – Land Planted With Oil Crops (million ha), 1970–2010 (FAOSTAT)<sup>10</sup>

One such approach is identifying innovative ways to increase the yield of existing plantations, through science and better management. While considerable investment is made in agricultural research, with the objective of identifying practices that deliver greater productivity, the yields of most oil crops have increased only marginally (see Figure 3). However, an alternative strategy is available: switching to higher-yield crops. This has led to expansion in the planting of palm oil crops.

<sup>7</sup> World Bank, 2012a

<sup>8</sup> FAOSTAT, 2010a

<sup>9</sup> Calculated from FAOSTAT, 2010a; FAOSTAT, 2010c; World Bank, 2012b, Population, total

<sup>10</sup> FAOSTAT, 2010a



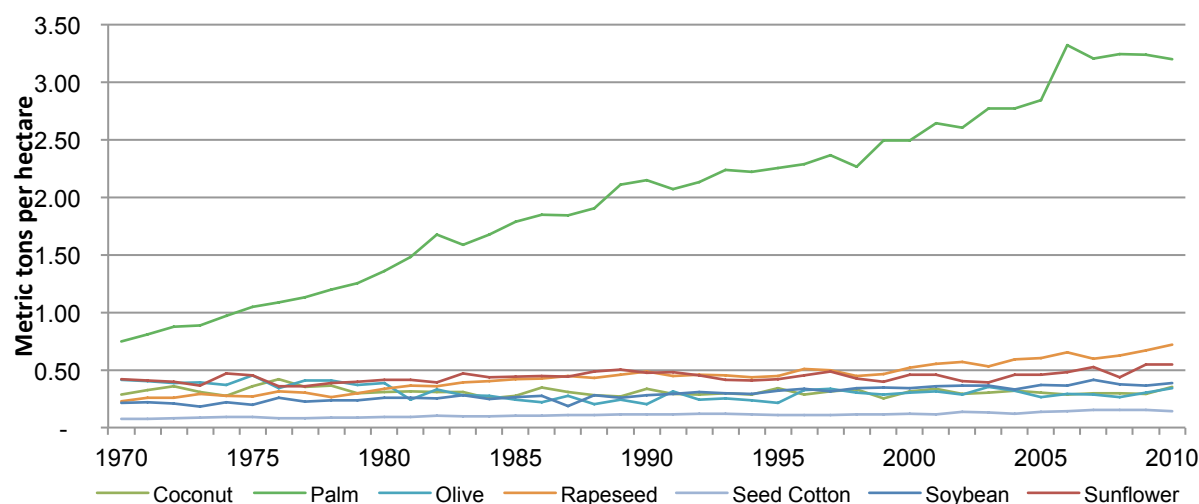


Figure 3 – Yield of Prominent Oil Crops (MT/ha), 1970-2010 (FAOSTAT)<sup>11</sup>

### Supply of palm oil is critical to meeting demand for vegetable oils

The oil palm grows in tropical climates near the equator and produces bunches of oily palm fruit called fresh fruit bunches (FFB). Palm oil is processed from the fruit of the oil palm tree and is an increasingly important global oil crop, a category that also includes soybeans, rapeseed, sunflowers, cotton, groundnuts, and olives.

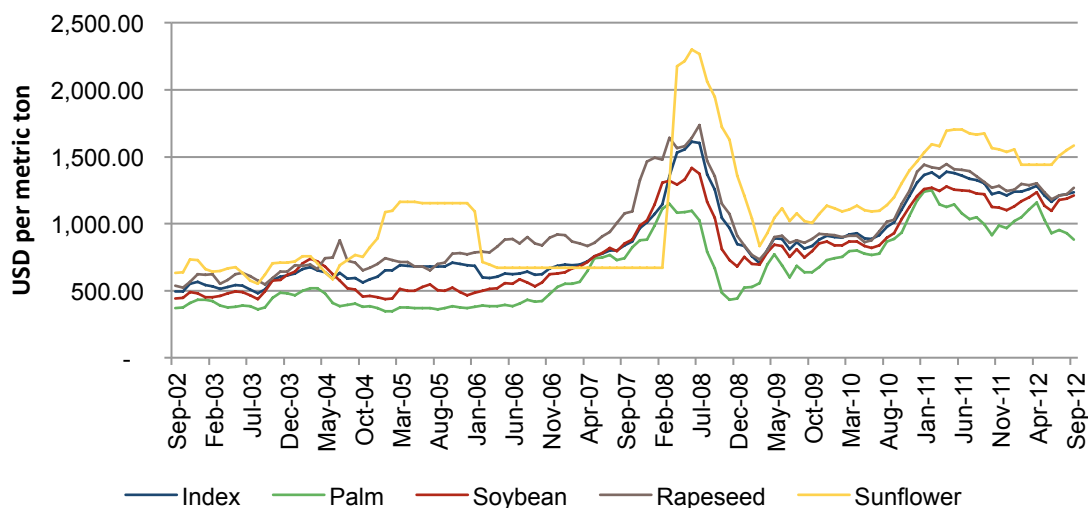
Compared to these other oil crops, the oil palm is the most prolific producer of oils. Unlike alternatives, the oil palm produces fruit year round, with each tree typically yielding three or four annual harvests. The fruits also contain more oil than typical feedstock, because two distinct and marketable forms of oil can be processed from each fruit: palm oil from the flesh of the fruit and palm kernel oil from the fruit's core. These characteristics result in the oil palm producing 3.2 MT of oil per hectare per year — nearly 4.5 times more oil than rapeseed, the next most productive oil crop.<sup>12</sup>

In addition to their natural productivity, oil palms require less maintenance and care than alternative oil crops. Oil palms mature after 3 years and fruit consistently for roughly 20 years before their yield begins to deteriorate and the tree must be replanted. The high productivity and low maintenance requirements of oil palm result in relatively low production costs for palm oil.

This high productivity and low production cost allow palm oil to be marketed profitably at a lower price than other oils. Consistently over the past 30 years, palm oil has been the lowest-cost alternative among vegetable oils (see Figure 4). As the low-cost alternative, palm oil has become the preferred oil of global buyers and suppliers who are largely indifferent to the subtle differences between major vegetable oils that are by and large considered commodity goods. As a result, the production and consumption of palm oil has proliferated.

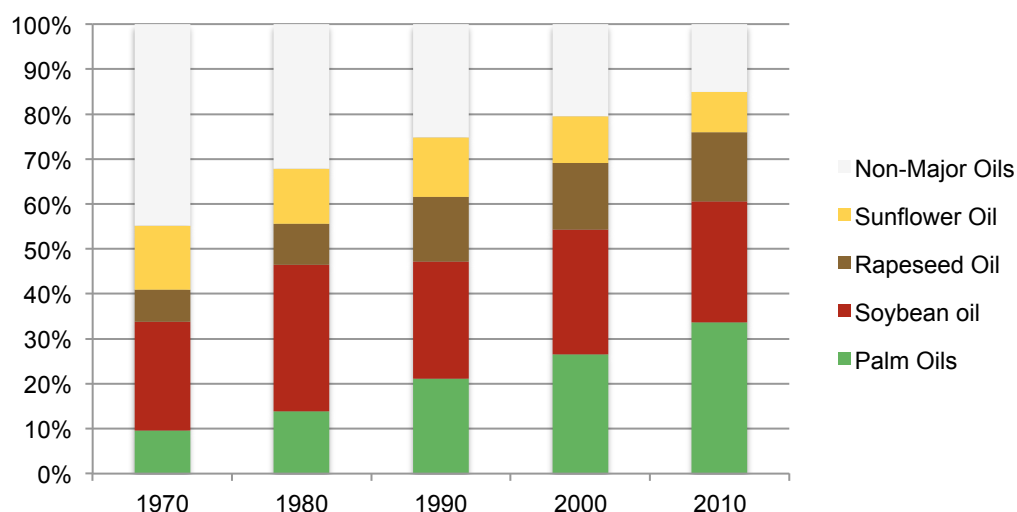
<sup>11</sup> FAOSTAT, 2010a

<sup>12</sup> FAOSTAT, 2010a



**Figure 4 - Prices of Common Vegetable Oils (USD/MT), 2002-2012 (World Bank)<sup>13</sup>**

The consumption of palm oil has increased at a compound annual growth rate of 7.8 percent between 1970 and 2010.<sup>14</sup> In 2012, 53.89 million MT of palm oil was consumed globally.<sup>15</sup> In relative terms, palm oil accounted for only 9.6 percent of total global vegetable oil consumed in 1970. By 2010, palm oil accounted for 33.7 percent of the total global vegetable oil consumed — more than any other vegetable oil (see Figure 5).



**Figure 5 – Relative Consumption of Major Vegetable Oils (Percent of Total Vegetable Oils), 1970-2010 (FAOSTAT)<sup>16</sup>**

Given the tremendous land resources required to produce vegetable oils, few countries produce more oil than they consume. However, due to the tremendous productivity of oil palm trees, palm oil is widely traded globally. From 2011 to 2012, palm oil accounted for 67.5 percent of the vegetable oil traded in the

<sup>13</sup> World Bank, 2012a

<sup>14</sup> FAOSTAT, 2010a; FAOSTAT, 2010c

<sup>15</sup> USDA, 2011

<sup>16</sup> Calculated from FAOSTAT, 2010a, and FAOSTAT, 2010c

open international market (see Figure 6). During the same period, 75 percent of palm oil produced was traded internationally.<sup>17</sup> The vast majority of this traded oil is produced in two countries, Malaysia and Indonesia.

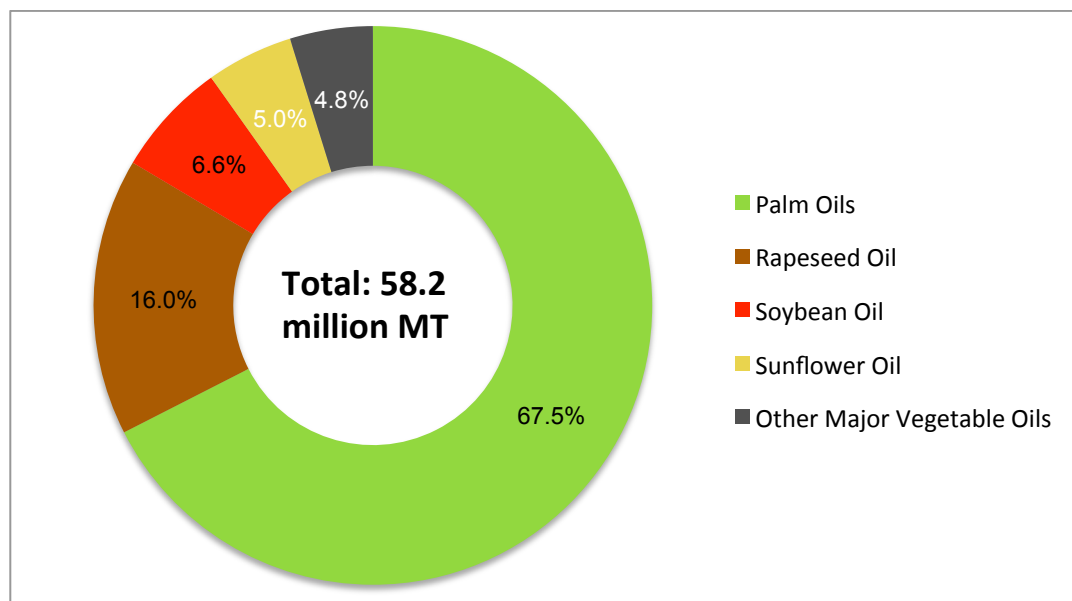


Figure 6 – Global Exports of Vegetable Oil, 2011-2012 (USDA)<sup>18</sup>

### History of palm oil production in Malaysia and Indonesia

Commercial planting of oil palm began in the early 20th century, when British industrialists and commodities traders recognized that the Malaysian climate and soil was ideally suited to the native west African oil palm. Landholders reallocated fields previously planted for rubber and other agricultural commodities in order to grow oil palm trees. During the 1960s, the area under oil palm cultivation in Malaysia soared, with an annual growth of 21.1 percent.<sup>19</sup>

Within this period, Malaysia gained independence from Britain. The new government of Malaysia oversaw the repatriation of major foreign palm-oil producers. Operations previously under foreign ownership were sold to Malaysian buyers. The government also maintained partial ownership of many companies. The growing demand for vegetable oils and the support of the Malaysian government led to the growth of domestic private investment in oil palm plantations. During the 25-year period between 1961 and 1986, palm oil production in Malaysia grew at an astounding average annual rate of 180.8 percent.<sup>20</sup>

In the 1980s, Indonesia recognized the potential of the palm oil industry and opened its borders and lands to investment from Malaysian and Indonesian palm oil companies. Throughout the decade, these companies contributed to drive annual growth in the harvested area of oil palms in Indonesia of 18.9 percent. This rapid growth of oil palm plantations came at the expense of natural forests, peat lands, and less efficient plantations, which were replaced by commercial oil palm plantations. This expansion of land use for palm oil production in Indonesia has continued, given the wealth of land available for agriculture.

<sup>17</sup> USDA, 2011

<sup>18</sup> USDA, 2011

<sup>19</sup> FAOSTAT, 2010a

<sup>20</sup> FAOSTAT, 2010a

In 2005, Indonesia overcame Malaysia to become both the largest cultivator of oil palm by area and the largest producer of palm oil in the world by volume.<sup>21</sup>

In 2010, Indonesia and Malaysia collectively produced 83.5 percent of the world's palm oil and 87.9 percent of the palm oil that is traded globally. Outside of these two countries, only twelve countries are net exporters of palm oil and collectively produce 8.8 percent of the world's palm oil and account for only 5.3 percent of that which is traded (see Figure 7).

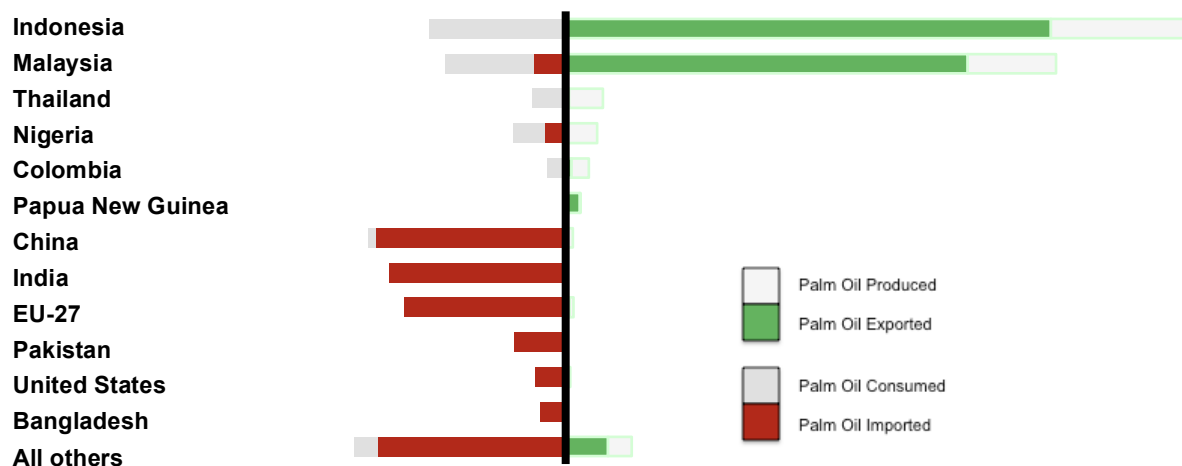


Figure 7 - Production, Trade, and Consumption of Palm Oil, 2010 (FAOSTAT)<sup>22</sup>

On the other hand, 180 countries imported palm oils in 2010. Excluding Malaysia and Indonesia, seven of the top ten consumers of palm oil are significantly dependent on imports from Malaysia and Indonesia to meet domestic demand for palm oil: Europe, China, India, Pakistan, Egypt, the United States, and Bangladesh.<sup>23,24</sup>

### Economic significance of palm oil in Malaysia and Indonesia

The commitment of limited land resources to the palm oil industry is the most evident indicator of the importance that Malaysia and Indonesia place on the palm oil industry. You cannot travel in either of these countries without being overwhelmed by the number of oil palm plantations dotting roads and rural communities. Malaysia is 15.2 percent covered with oil palm trees, including 63.4 percent of its agricultural land.<sup>25</sup> In Indonesia oil palms cover 4.4 percent of the land, including 15 percent of that used for agriculture. This commitment is owed to the tremendous wealth created by the palm oil industry.

Palm oil is Malaysia's largest agricultural export and was responsible for USD 18.6 billion in 2010<sup>26</sup> — 4.3 percent of GDP (see Table 2). Palm oil is also Indonesia's largest agricultural export and accounted for USD 15.2 billion in 2010<sup>27</sup> — 1.4 percent of GDP.

<sup>21</sup> FAOSTAT, 2010a

<sup>22</sup> Calculated from FAOSTAT, 2010a, and FAOSTAT, 2010c

<sup>23</sup> Countries with a ratio of imports-to-consumption greater than 0.95 considered dependent on imports to meet domestic demand

<sup>24</sup> FAOSTAT, 2010c

<sup>25</sup> World Bank, 2012b

<sup>26</sup> MPOB, 2011

<sup>27</sup> FAOSTAT, 2010c

Country	Palm Oil Exports (1) (USD mil.)	Agricultural Exports (2) (USD mil.)	(1) / (2) (percent)	Foreign Exports (3) (USD mil.)	(2) / (3) (percent)	GDP (4) (USD mil.)	(3) / (4) (percent)	(1) / (4) (percent)
Malaysia	18.6	25.9	51.1	199.0	13.0	430.9	46.2	4.3
Indonesia	15.2	30.7	49.5	158.1	19.4	1,070.4	14.8	1.4

**Table 2 – Economic Contribution of Palm Oil Industry in Malaysia and Indonesia, 2010 (FAOSTAT, CIA World Fact Book, MPOB)<sup>28</sup>**

The economic potential of the palm oil industry has been an opportunity to engage low-income citizens in modern industry and commerce and to drive broad economic development. Historically, the Malaysian government embraced the palm oil industry as a driver of economic growth and as a potential source of income for impoverished Malaysians. The government founded inclusive programs like the Federal Land Development Authority (FELDA), the Federal Land Consolidation and Rehabilitation Authority (FELCRA), and the Rubber Industry Smallholders' Development Authority (RISDA), which provided land and title to poor native Malaysians under smallholder farming agreements. However, it is unclear to what extent the industry has improved livelihoods for Malaysians, as the majority of the workers are international migrants.

The government of Indonesia is similarly embracing palm oil as an engine for economic development that brings industry to remote regions of the country — often for the first time — and is anticipating increased job opportunities for subsistence communities previously at or near the poverty line.

While the palm oil industry has been viewed as a driver of broad economic development, it has also given rise to some of the largest companies in Malaysia and Indonesia and has made a small group of executives of these firms extremely wealthy.

Four of Malaysia's largest listed companies, by market capitalization, have significant interests in the palm oil industry<sup>29</sup>:

- Sime Darby Berhad (#3)
- Genting Group (#5)
- IOI Group (#7)
- Kuala Lumpur Kepong Berhad (#12)

Other major palm oil companies in Malaysia include Kulim Malaysia, Ta Ann Group, Tsh Resources, Hap Seng Plantations Holdings, and IJM Plantations Bhd.

On an individual basis, many of Malaysia's richest people owe their fortunes to the palm oil industry<sup>30</sup>. It is estimated that six individuals with high stakes in the palm oil industry collectively held net income of USD 19.6 billion in 2012, including:

- #1: Robert Kuok, the founder of Singapore-based Wilmar International
- #4: Lee Shin Cheng, the CEO of IOI Group
- #11: Lee Oii Hian and Lee Hau Hian, the joint largest shareholders of Kuala Lumpur Kepong Berhad
- #20: Lau Cho Kun, the largest shareholder of Hap Seng Holdings Berhad
- #26: Chan Fong Ann, the retired director and a major shareholder of IOI Group

<sup>28</sup> FAOSTAT 2010, CIA World Fact Book 2010, MPOB 2010

<sup>29</sup> Bursa Malaysia, 2011

<sup>30</sup> Forbes, 2012a

In Indonesia, some of the largest companies listed publically operate in the palm oil industry, including Golden Agri Resources (GAR), Royal Golden Eagle, Salim Ivomas Pratama PT, PT Bakrie Sumatera Plantations Terbuka, PT London Sumatra Indonesia, and First Resources Limited.

Many of Indonesia's richest people have significant stakes in these large organizations and owe their fortunes to the palm oil industry. It is estimated that five of Indonesia's 40 wealthiest individuals have significant interests in the palm oil industry and have amassed a collective net income of USD 18.3 billion<sup>31</sup>, including:

- #3: Eka Tjipta Widjaja, the largest shareholder of Golden Agri Resources
- #5: Anthoni Salim, the head of Salim Ivomas Pratama
- #6: Sukanto Tanoto, the owner of Royal Golden Eagle
- #7: Martua Sitorus, the COO of Wilmar International
- #20: Ciliandra Fangiono, the head of First Resources Limited

### **Summary analysis of the global palm oil market**

Palm oil is an incredibly important, globalized commodity that will continue to be the key component of the world's supply of vegetable oil. The broad global demand for palm oil will continue to rely heavily on Malaysia and Indonesia, which are the major producers and exporters of the world's palm oil. The rise of the palm oil industry in these countries has generated tremendous wealth for the national economies of Malaysia and Indonesia and serves as one of the principal sources of foreign revenues through export. This industry has given rise to some of the largest and most influential organizations in each country.

In the next section, the national industries of Malaysia and Indonesia will be examined more closely. In particular, this section will analyze how major segments of the palm oil supply chain, and the companies that operate within these segments impact the industry.

---

<sup>31</sup> Forbes, 2012b

# The Global Palm Oil Supply Chain

*This section outlines the principal activities associated with the production and marketing of palm oil. An overview of each segment of the supply chain is provided, with an analysis of critical inputs and outputs in Malaysia and Indonesia. The major organizations that operate in each segment are identified, with the major drivers of their performance that explain their impact on the industry.*

## Overview

Palm oil is largely produced in Malaysia and Indonesia and then traded to countries around the world to be used for a number of consumer and commercial purposes. Before it reaches consumers, palm oil moves through a series of production activities, each of which adds value to palm oil. These activities can be grouped into segments: upstream production, midstream processing, and downstream commerce (see Figure 8).

**Upstream production** is largely concentrated in Malaysia and Indonesia and covers the series of activities that produce crude palm oils from primary inputs.

**Midstream processing** involves the processing of marketable forms of palm oil from intermediary inputs, primarily crude palm oils.

**Downstream commerce** is highly decentralized and distributed globally where palm oil is sold. This segment involves the manufacturing and marketing of goods from intermediary palm oil inputs.

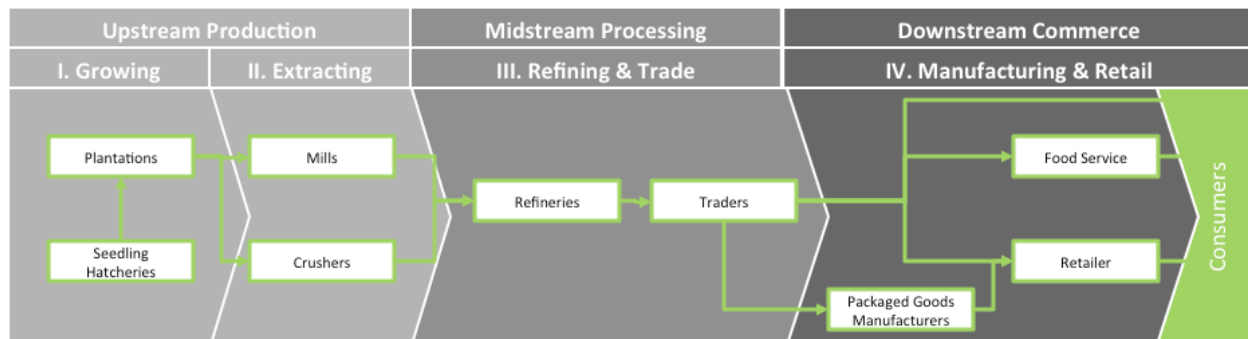


Figure 8 - Palm Oil Supply Chain Schematic

## Upstream production

### Growing

Growing is the first major activity in the palm oil supply chain and involves the production of fresh fruit bunches (FFB) from oil palm trees. FFB are the primary feedstock of palm oil and are cultivated and harvested by commercial growers with the primary inputs of (1) tropical, agricultural planted land and (2) plantation-based labor.

Historically, oil palm cultivation has been considered a key economic activity in both Malaysia and Indonesia, a critical source of employment and wealth generation. In both countries, governments have encouraged this industry by supporting land acquisitions by commercial growers, and by developing favorable conditions for growers to recruit unskilled labor for plantation-based work.

## Growing Input: Planted Land

Land is the most important input for growing oil palm trees, and is also one of the most contentious issues in the palm oil industry. Oil palms are tropical plants that prosper in a tropical climate. The land that is cleared for oil palm plantations is often tropical forest or peat land rich in biodiversity, which indigenous communities have traditionally depended on for their livelihoods. These lands also serve a crucial role in reversing the consequences of global greenhouse gas emissions. Historically, the availability of good agricultural land suitable for planting oil palm is one of the key reasons that the industry has proliferated in Malaysia and Indonesia. Today land allocation is significantly more regulated and subject to complex land ownership debates, primarily with indigenous peoples and other communities that have historical claims to land ownership.

The land in Malaysia and Indonesia falls into three major categories: (1) agricultural land that is used for crops and pasture, (2) arable land, and (3) forested land (see Figure 9). Both Malaysia and Indonesia have drawn considerable criticism for designating environmentally important natural forests for commercial agriculture. In Malaysia, deforestation depletes 0.4 percent of the country's natural forests annually.<sup>32</sup> Since 1980, however, oil palm plantations have largely grown neutral to forests. Expansion of oil palm plantations has been achieved by replacing other croplands, although it is unclear if this trend will continue with the potential for new expansion of palm oil plantations in the provinces of Sabah and Sarawak (see Table 3). At present, it is clear that in Malaysia, land for palm oil is approaching a ceiling.

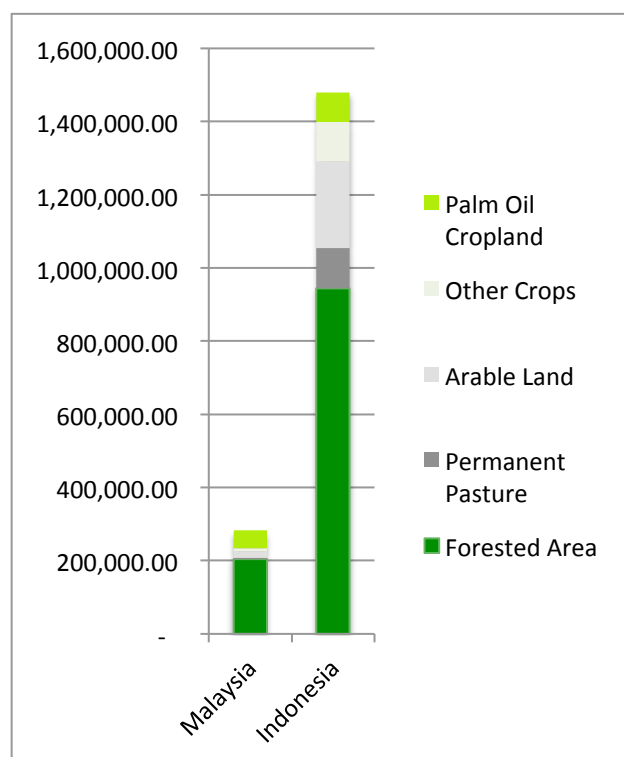


Figure 9 – Distribution of Land (ha)

Region	Area (Ha)	Palm Plantation Area (Ha)	Area Planted with Oil Palm (percent)
Peninsular Malaysia	13,233,900	2,546,760	19.2
Sabah	7,336,100	1,431,762	19.5
Sarawak	12,445,000	1,021,587	8.2
Total	33,015,000	5,000,109	15.1

<sup>32</sup> World Bank, 2010b



**Table 3: Malaysian Palm Plantations by Region, 2011 (MPOB)<sup>33</sup>**

Indonesia is a different story. Forested land is increasingly razed for commercial purposes, including palm oil. In Indonesia, deforestation is occurring at a rate of 0.6 percent annually.<sup>34</sup> This is a troubling sign for the future of deforestation in Indonesia. It is already occurring at a rate 50 percent greater than deforestation in Malaysia. While palm oil plantation expansion in Malaysia is declining, in Indonesia, growth in new plantations is still extremely high and has likely not yet reached its peak (see Table 4). Indonesia is planning to invest heavily in new oil palm plantations in the provinces of Kalimantan and is projected to double its area planted with oil palm by 2020.<sup>35</sup>

Province	Area (Ha)	Palm Plantation Area (Ha)	Area Planted with Oil Palm (percent)
Riau	8,702,300	1,801,210	20.7
Central Kalimantan	15,356,400	1,085,158	7.1
Sumatera Utara	7,298,100	1,057,769	14.5
Sumatera Selatan	9,159,200	737,191	8.0
West Kalimantan	14,730,700	545,805	3.7
East Kalimantan	20,453,400	494,983	2.4
Jambi	5,005,800	494,078	9.9
Others	100,451,100	1,820,238	1.8
Total	181,157,000	8,036,432	4.4

**Table 4: Indonesian Palm Plantations by Province, 2010 (PWC)<sup>36</sup>**

## Growing Operating Models

There are three principal types of plantation that apply different approaches to optimize the productivity and efficiency of growing oil palm trees. These schemes are: (1) private estates, (2) smallholder estates, and (3) government estates. These models differ critically in the practices applied on plantations, and the ownership and key beneficiaries of operations.

**Private estates** are plantations operated by a single, typically commercial, owner. The private estate model has been adopted by most commercial growing operations, and most of the land planted with oil palm is operated under this model. Private estates produce palm oil through an industrial agriculture approach that aims to apply best agricultural and management practices in order to maximize the production of palm oil feedstock. To maximize output, private estate plantations are scaled operations that typically cover thousands of hectares of land. These hectares are densely and uniformly planted with oil palm trees to facilitate the harvesting of FFB. Practices often applied by private states include:

- Selective breeding of seedling oil palms in co-located nurseries to optimize the characteristics of trees for greater yields
- Management of replanting schedules to ensure plantations are consistently planted with an optimal distribution of mature and immature oil palm trees
- Application of fertilizers and pesticides (or other forms of fertilization and pest management) to ensure trees remain healthy and highly productive

<sup>33</sup> MPOB, 2012

<sup>34</sup> World Bank, 2012b

<sup>35</sup> AFP, 2009

<sup>36</sup> PWC, 2010

- Labor recruitment through manpower organizations and labor brokers
- Integration with downstream operations, specifically extraction operations

Growing palm oil under the private estate model typically produces the highest yields and profitability, because large companies can afford to buy agricultural chemicals such as pesticides and fertilizers, tend to have better seedlings and crops to select from, and produce on more fertile land. Commercial growers therefore prefer private estates. However, this model requires large plots of desirable land, an input that is a potential constraint to growing operations, due to cost and limited availability. Commercial growers are increasingly turning to purchasing FFB from smallholders to secure critical FFB feedstock.

**Smallholder estates** are plantations that cultivate less than 50 hectares of land. In Malaysia, smallholder operations account for 32.9 percent of cultivated land.<sup>37</sup> In Indonesia, smallholder operations are even more significant, accounting for 38 percent of cultivated land.<sup>38</sup> Smallholder estate models are intended to be systems for distributing wealth to lower-income households and are supported by both Malaysian and Indonesian governments. Smallholder estates can be separated into two groups, dependent smallholders and independent smallholders.

**Dependent smallholders** are plantations whose land is owned by individuals, not corporations, but there is a contracted or noncontracted dependency on large, corporate private estates. Many dependent smallholder schemes involve the management of many small plantations under decentralized family ownership around a central private estate. Under these schemes, individual smallholders maintain ownership of the land but remain highly integrated with private estates. Through this relationship, private estates can encourage and support the application of many practices commonly used on their own land — essentially expanding the planted areas of oil palm without making the investment in land themselves. Under these schemes, dependent smallholder estates are typically bound to sell FFB to the central private estate at a predetermined, nonmarket price.<sup>39</sup>

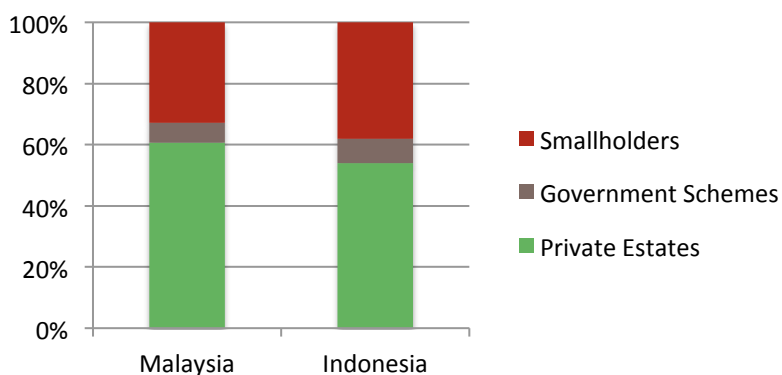


Figure 10 - Distribution of Land by Production Model, 2011 (MPOB, 2012; IFC, 2011)<sup>40</sup>

**Independent smallholder estates** are small estates that are not formally tied to a private estate. Independent estates may be small, family-operated plantations or may be larger estates operated by a hired management team and labor force. Without ties to a corporate private estate, these plantations are typically less capital-intensive, and sophisticated operations and specific practices vary significantly based on the capital and experience of the estate's owner or manager. Independent estates sell FFB on the open market and so are highly exposed to the fluctuating price of FFB. Given the prompt degradation

<sup>37</sup> MPOB, 2012

<sup>38</sup> MPOB, 2012

<sup>39</sup> Teoh, 2002

<sup>40</sup> MPOB, 2012

of FFB once harvested, these estates are frequently highly exposed to the influence of downstream processors of FFB.

**Government schemes** are initiatives operated by the governments of producer countries to encourage the widespread growth of oil palm cultivation, as well as the distribution of wealth to lower-income citizens. Malaysia in particular has many active government schemes. Government schemes operate similarly to dependent smallholder schemes, where the associated central estates are government-owned organizations or estates owned collectively by participating smallholders. This is the model applied by FELDA, the first and most notable government scheme in Malaysia. Under FELDA, smallholders operate estates under a mortgage-like arrangement wherein they contribute scheduled payments to the scheme before taking full possession of the land.<sup>41</sup> Other similar schemes have been developed both at the federal and state levels.

### **Growing Input: Labor**

Growing is a very labor-intensive activity and accounts for much of the job creation associated with the palm industry. While there are significant differences in the practices applied in different types of plantation operations, production nevertheless involves the same key activities of planting, cultivating, and harvesting oil palms. Despite the many management processes that have been developed to improve production, plantations continue to be highly labor-intensive operations relying on unskilled labor for the following key activities:

- Clearing and preparing the land for plantations, which may include removing previous cultivated and wild plants; removing aged oil trees; tilling; and irrigation
- Planting seedling crops
- Fertilizing planted crops, which typically involves spraying crops with petrochemical-based fertilizers
- Managing pests and diseases, which typically involves spraying crops with chemical pesticides, namely paraquat
- Harvesting FFB from mature oil palm, which is typically performed using long sickles to slice FFB away, collecting the felled FFB, and collecting any loose fruitlets that may have become separated from the FFB when it hits the plantation floor
- Delivering FFB to palm oil mills for further processing

While the amount of time required to complete these activities fluctuates across plantations, the labor-to-land ratio (number of workers for each hectare of land) is commonly one worker for every 10 hectares of land.<sup>42</sup>

Smallholder plantations, such as those on dependent estates and government schemes, are typically quite small, between 2 and 10 hectares of land. Owners of smallholder estates are typically capable of meeting their own labor requirements, supported during peak harvest season by temporary workers. Smallholder estates have only marginal exposure to the market for laborers. Larger estates, however, such as private estates and larger independent smallholders, must hire workers. The majority of workers in the palm oil industry work on large estates.

Securing reliable labor is one of the key challenges for plantations, which are typically located in remote, rural communities far away from labor markets. Rural communities often lack the basic infrastructure that is required to support worker communities, such as housing, markets, schools, hospitals, commercial businesses, utilities, and security. It therefore often falls to plantations to create worker communities, providing the entire infrastructure.

---

<sup>41</sup> Edge, 2012d

<sup>42</sup> Abdullah, 2010, page 1

In both Indonesia and Malaysia, palm oil growers are compelled to recruit unskilled labor from distant markets to work and live on their estates. In Malaysia, working in the palm oil sector is not highly desirable to local populations, given that it is dangerous, difficult, and relatively low-paying in comparison to service-based work. Even in rural communities, there is often little supply of local labor. Malaysian palm oil growers typically look to foreign labor markets to recruit workers. Roughly 70 percent of laborers on oil palm plantations are foreign migrants, most commonly from neighboring Indonesia, which has a large, low-income population and workforce.<sup>43</sup> Workers also commonly migrate from Bangladesh, India, Cambodia, and Thailand.<sup>44</sup> While this cross-border labor market has many positive economic functions for growers and migrant workers, it is also a source of significant concern and potential labor exploitation.

Oil growing is an equally significant source of jobs in Indonesia, where plantations employ as many as 800,000 laborers and indirectly account for as many as 3 million jobs in downstream activities.<sup>45</sup> In Indonesia, workers are often recruited to work on plantations far from their homes.<sup>46</sup>

### Growing Output: FFB Volume

The primary output of growing is the FFB that are later processed into palm oil. In 2010 the global output of FFB was 210 million MT, with each hectare of oil palms yielding on average 14.06 MT.<sup>47</sup>

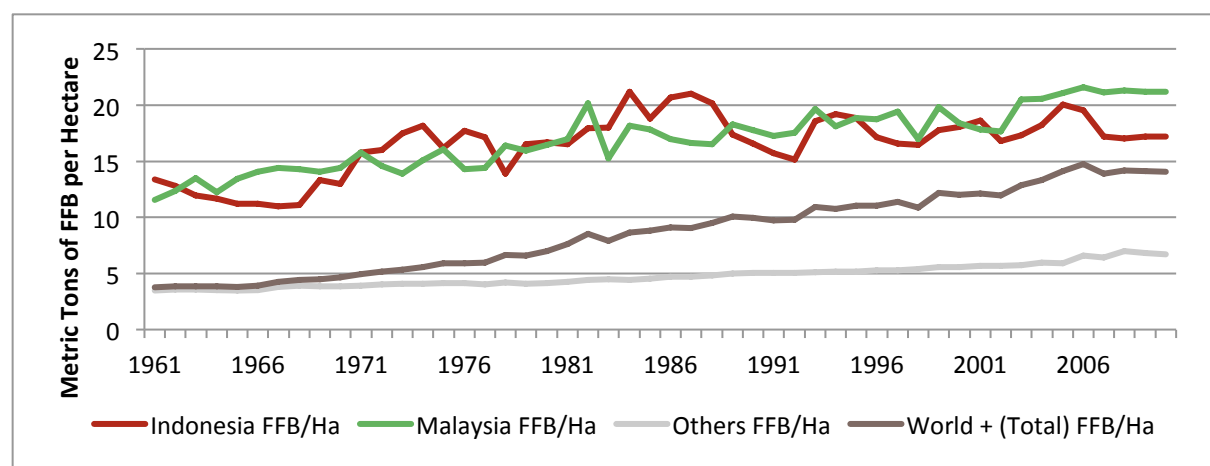


Figure 11: Plantation Yield (MT of FFB per ha), 1961-2010 (FAO, 2010a)

In 2010 Indonesia produced 40.8 percent of the global output of FFB, 86 million MT. Indonesian plantations dramatically outperformed the global average yield, producing 17.2 MT of FFB per hectare of planted land.<sup>48</sup>

In 2010 Malaysia produced 40.2 percent of the global output of FFB, 84.8 million MT. Malaysian plantations are the most productive plantations globally, yielding on average 21.2 MT per hectare of planted land.

Both countries outperform other countries, as few others have mature plantation models that allow significant volumes of FFB to be produced per hectare of land.

### Major Growing Organizations

<sup>43</sup> Robertson, 2008

<sup>44</sup> Robertson, 2008

<sup>45</sup> IFC, 2010

<sup>46</sup> Jiwan, 2011

<sup>47</sup> FAOSTAT, 2010a

<sup>48</sup> FAOSTAT, 2010a

The most influential organizations involved in the growing of oil palm are those large, listed companies that own and operate private estate plantations in both Malaysia and Indonesia. Many of these organizations are integrated into multiple sectors of the palm oil industry, and many are true conglomerates operating divisions in industries completely separate from palm oil and agricultural commodities. Several of these organizations were among the earliest entrants to the respective Malaysian and Indonesian industries. With the phenomenal growth of the industry, these companies have also grown and are some of the largest, most influential, most profitable businesses in Southeast Asia (see Table 5).

Several of the Malaysian-owned businesses in particular are highly influential due to their ties to the national government. During the 1970s, the Malaysian government purchased British-owned palm companies and repatriated these businesses to Malaysian ownership. This process often left the government with partial ownership or otherwise significant interests in the success of the palm oil industry. Today, these companies have significant power due to their history, size, ownership, and economic importance. These characteristics mean that palm oil conglomerates often work closely with a government also responsible for regulating the major inputs to the palm oil industry, land, and labor.

In Indonesia many of the earliest entrants in the palm oil industry have grown to become the largest conglomerates in the country. Today their owners are some of the wealthiest, most influential businesspeople in the country. This influence has led to significant ties between the palm oil industry and the government. As a result, many conglomerates are rumored to be influential in setting national policies impacting the palm industry.

Sime Darby Berhad is Malaysia's largest conglomerate, with annual revenues of USD 13.9 billion in 2011.<sup>49</sup> During the 1970s it was repatriated under Malaysian ownership by the national government. It is one of the largest single growers in the world, with over 633,000 hectares of cultivated land in Malaysia and Indonesia, most of which is used to grow oil palm. In 2011, Sime Darby's plantation business accounted for roughly USD 9.7 billion in revenue. In addition to growing oil palm, the company has significant interests in the downstream activities of extracting and refining.<sup>50</sup>

Wilmar is a Singaporean palm oil conglomerate, partially owned by American commodities giant Archer-Daniels-Midland, and it is the largest agribusiness in Asia, by revenue. Wilmar operates 244,965 hectares of its own plantations in Indonesia and Malaysia to supply its extensive refining and consumer oil businesses, and it earned an astounding USD 30.4 billion in 2011.<sup>51</sup>

Kuala Lumpur Kepong is another large, Malaysian, integrated palm-oil conglomerate, with revenues of USD 7.2 billion in 2011. The company operates 187,084 hectares of land for oil palm plantations that feed its downstream extracting, refining, and manufacturing operations.<sup>52</sup>

The Sinar Mas Group/Golden Agri Resources (GAR) is a large, Indonesian-Singaporean, integrated palm-oil conglomerate with annual revenues of USD 3.5 billion. Sinar Mas and its associated subsidiaries run growing operations with a total of 442,470 hectares of cultivated land. In addition, Sinar Mas operates extracting, refining, and consumer-goods businesses.<sup>53</sup>

The IOI Group is a Malaysian, integrated palm-oil conglomerate that operates 155,779 hectares of plantations in Malaysia and Indonesia. IOI's plantations feed its downstream, international refining operations. Altogether IOI earned USD 5.2 billion in revenue in 2011.<sup>54</sup>

---

<sup>49</sup> Sime Darby, 2011

<sup>50</sup> Sime Darby, 2011

<sup>51</sup> Wilmar, 2011

<sup>52</sup> KLK, 2011

<sup>53</sup> GAR, 2011

<sup>54</sup> IOI, 2011

FELDA is the largest oil-palm landholder in the world, operating both commercial private estates and smallholder plantations that collectively earned USD 11.8 billion in 2009. In addition to its plantation activities, FELDA operates a diversified line of businesses that include extracting, refining, trading, and marketing consumer goods, as well as many unrelated businesses in disparate industries.<sup>55</sup>

These top integrated palm-oil companies are some of the largest holders of land under oil palm cultivation and feature prominently among the top 25 plantation landholders by area (see Table 5). Combined, these 25 companies represent 4.47 million hectares of planted land or 32.6 percent of the global total land planted with palm oil. They account for an estimated 120.41 million MT of FFB or 50.1 percent of the total global volume. This entails a moderate level of concentration at the grower level, but also means that ownership of much of the growing operations in Malaysia and Indonesia is fragmented.

Organization	Planted Land (ha)	% Global Planted Land	FFB (mt)
1 FELDA	850,000	6.3%	7,660,000
2 Sime Darby	529,706	4.0%	10,111,041
3 Golden Agri Resources	448,900	3.3%	7,560,485
4 Wilmar	279,095	2.1%	3,300,000
5 KL Kepong	220,118	1.6%	3,176,106
6 Astra Agro	207,059	1.5%	4,203,298
7 Indofood	205,064	1.5%	3,670,646
8 Asian Agri	160,000	1.2%	2,864,000
9 IOI Group	157,045	1.2%	3,295,473
10 Darmex Agro	155,000	1.2%	2,774,500
11 FELCRA	147,005	1.1%	2,631,395
12 Musim Mas	126,000	0.9%	2,255,400
13 First Resources	120,830	0.9%	2,162,857
14 Lonsim	112,372	0.8%	1,170,398
15 Bakrie & Brothers	99,844	0.7%	1,727,301
16 Goodhope Asia	97,823	0.7%	1,751,032
17 Genting Plantations	89,075	0.7%	1,201,200
18 New Britain Oils	69,139	0.5%	1,434,393
19 Sarawak Oil Palms	55,317	0.4%	990,174
20 Anglo Eastern Plantations	52,000	0.4%	930,800
21 United Plantations	45,494	0.3%	814,343
22 Hap Seng Plantations	39,803	0.3%	672,768
23 SIPEF	36,810	0.3%	658,899
24 Cargill	36,591	0.3%	1,360,476
25 Kulim Malaysia	34,413	0.3%	551,226

Table 5: Top 25 Oil Palm Plantation Landholders, 2011<sup>56</sup>

## Extracting

Extraction is the second major activity in the palm oil supply chain and involves the extraction of crude palm oil (CPO) and crude palm kernel oil (CPKO) from FFB. Extraction includes two major processes:

<sup>55</sup> FELDA, 2011

<sup>56</sup> Calculated from Hardman, 2011; Sime Darby, 2011; GAR, 2011; Wilmar, 2011; KLK, 2011; Astra, 2011; First Resources, 2011; Lonsim, 2010; Bakrie & Brothers, 2010; Hap Seng, 2011; Kulim, 2011

milling and crushing (see Table 6). Milling is the processing of the FFB to extract CPO from the fruit's mesocarp. This process also releases the palm kernel from the fruit. Crushing is the processing of palm kernels into CPKO.

Once harvested by growers, the oil molecules in FFB begin to break down, causing an overall deterioration to the quality of the CPO that will be extracted. Thus, it is crucial that FFB are milled within 48 hours of harvesting. This requirement means growers must work collaboratively and closely with milling organizations and facilities. Mills are therefore located on or extremely close to oil palm plantations. Typically, mills are owned and operated by individual growers or grower collectives.

Milling is a highly automated process. Typically FFB are delivered to the mill by growing staff. The FFB are loaded onto a conveyor belt and move through a series of automated steps:

- First, FFB are sterilized by steam in large, pressurized containers. Sterilization stops the breakdown of oils in the fruit and kills any bacteria on the FFB.
- Once sterilized, individual fruits are removed from bunches in large threshing drums. Empty fruit bunches are removed as a by-product of this process. While empty fruit bunches were once considered refuse, these are now typically used as fuel for the milling process.
- Individual fruits are moved to press digesters, which use steam and physical stirring to break down the fleshy mesocarp and to loosen this mass from the palm nut. This creates a mash that is physically extracted using a screw press. Pressing separates the fruit oil from the fruit solids, which are called the press cake and are redistributed to specialist facilities for crushing.
- The oil is conveyed to tanks, where it is diluted, clarified, purified, and eventually dried, at which point it is considered crude palm oil. Oily sludge is created as a by-product of this process and is further processed to recover any remaining oil. The by-product is called palm oil mill effluent and is disposed of at specialized facilities called effluent treatment plants.
- Crushing is a highly automated process performed at separate, specialized facilities. The press cake recovered from the milling process is administered to a specialized tool, where the palm nut is recovered and separated from the fibrous cake, which is used as fuel for the crushing process.
- Once separated, the palm nut is cracked and the palm kernel is recovered and separated from its shell by a winnowing system. The remaining shell is discarded.

<b>Palm Oil Component</b>	<b>Percent of Total Biomass</b>
Empty Fruit Bunches	23.5
<b>Crude Palm Oil</b>	<b>22.5</b>
Palm Oil Mill Effluent	20.0
Palm Oil Cake	18.0
Palm Kernel Shell	9.0
<b>Palm Kernel</b>	<b>7.0</b>

Table 6 - Breakdown of FFB Biomass by Palm Oil Component (MPOB, 2012)<sup>57</sup>

### Extracting Input: Capital

As of 2011, there were 426 mills in Malaysia, with a total capacity of 99.4 million MT of FFB.<sup>58</sup> These mills are distributed across Malaysia, with 56.1 percent of capacity in peninsular Malaysia, 31.9 percent in Sabah, and 12 percent in Sarawak.<sup>59</sup> Mills in Malaysia are operated in a highly efficient manner where

<sup>57</sup> MPOB, 2012

<sup>58</sup> MPOB, 2012

<sup>59</sup> MPOB, 2012

mills operate 24 hours each day, seven days a week. In 2011 Malaysian mills operated at 93.4 percent of capacity.<sup>60</sup>

In Malaysia there are 43 crushing facilities, with total capacity of 6.7 million MT of palm kernel cake.<sup>61</sup> Crushing facilities are also distributed across Malaysia, with 57 percent of capacity in peninsular Malaysia, 34.3 percent in Sabah, and 8.6 percent in Sarawak.<sup>62</sup> The utilization rate of crushing facilities was relatively low in 2011, with these facilities operating at only 68.2 percent of capacity.<sup>63</sup>

While specific information is not available about the number and distribution of milling and crushing facilities in Indonesia, the output of CPO and CPKO suggest that Indonesia likely has more than 500 milling facilities and 50 crushing facilities.

### Extracting Output: Crude Palm Oil

The primary output of milling is the crude palm oil that is distributed for further processing. In 2010 the global output of CPO was 45.1 million MT, with 21.4 MT of oil recovered from each 100 MT of processed FFB.

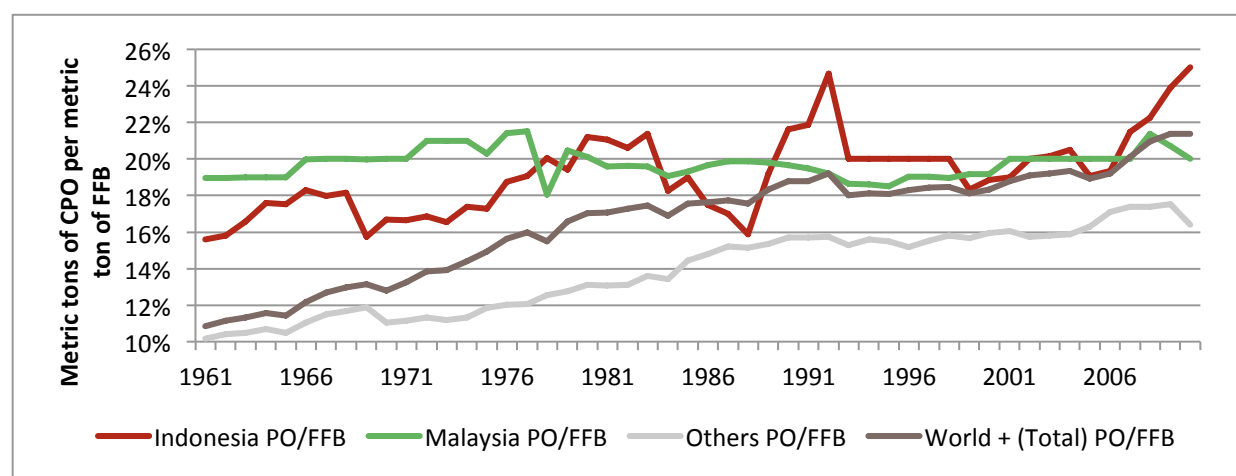


Figure 12: Oil Extraction Rate (MT of CPO per MT of FFB), 1961-2010 (FAOSTAT)<sup>64</sup>

In 2010 Indonesia produced 47.7 percent of the global output of CPO, 21.5 million MT. Indonesian milling facilities recovered 25 MT of CPO from each 100 MT of FFB processed, which was the highest oil-extraction rate in the world.<sup>65</sup>

In 2010 Malaysia produced 37.7 percent of the global output of CPO, 17 million MT. Malaysian milling facilities recovered 20 MT of CPO from each 100 MT of FFB processed.<sup>66</sup>

### Extracting Output: Palm Kernels

The primary output of crushing is the palm kernel (PK) that is distributed for further processing into crude palm kernel oil (CPKO). In 2010 the global output of PK was 12.1 million MT, with 5.7 MT of kernels recovered from each 100 MT of processed FFB (see Figure 13).<sup>67</sup>

<sup>60</sup> MPOB, 2012

<sup>61</sup> MPOB, 2012

<sup>62</sup> MPOB, 2012

<sup>63</sup> MPOB, 2012

<sup>64</sup> FAOSTAT, 2010a

<sup>65</sup> FAOSTAT, 2010b

<sup>66</sup> FAOSTAT, 2010b



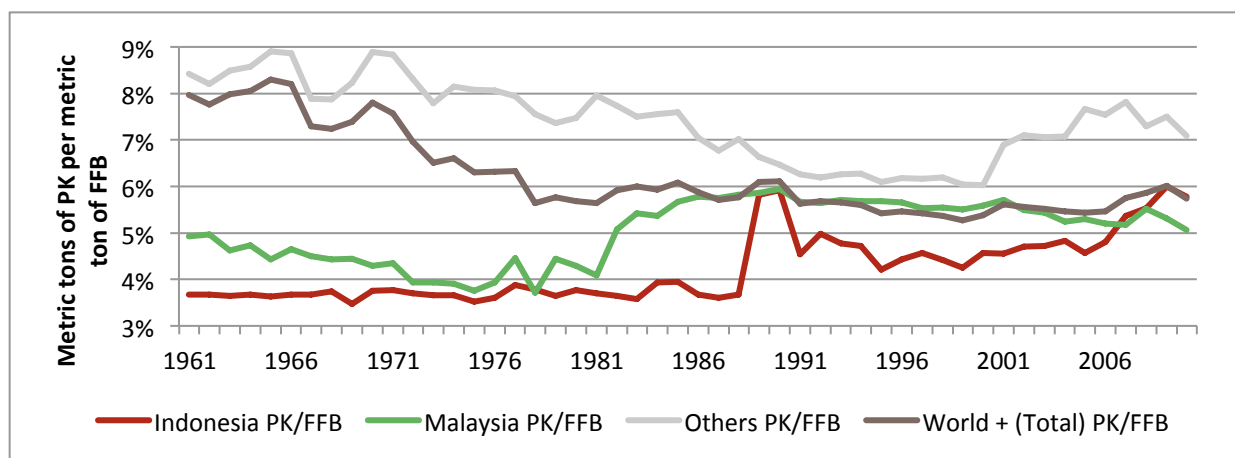


Figure 13: Kernel Extraction Rate (MT of PK per MT of FFB), 1961 - 2010 (FAO 2010b)<sup>68</sup>

In 2010 Indonesia produced 41.1 percent of the global output of PK, 5 million MT. Indonesian crushing facilities recovered 5.8 MT of PK from each 100 MT of FFB processed, which was on a par with the global kernel-extraction rate.<sup>69</sup>

In 2010 Malaysia produced 35.5 percent of the global output of PK, 4.3 million MT. Malaysian crushing facilities recovered 5.1 MT of PK from each 100 MT of FFB processed.<sup>70</sup>

Because capital utilization rates are an important driver of profit, many growers buy additional FFB from smallholders or other growers to refine with their own FFB, to improve their utilization rates and to maximize profits.

Milling and crushing activities are less actively reported publicly, and many large organizations do not report their production details. However, public information does indicate that the top 17 identified extracting organizations accounted for milling an estimated 13.46 million MT of palm oil, or 26.9 percent of the global total at 279 mills (see Table 7).<sup>71</sup> Large growers that operate milling facilities as part of an integrated plantation business model dominate the sector.

<sup>67</sup> FAOSTAT, 2010b

<sup>68</sup> FAOSTAT, 2010b

<sup>69</sup> FAOSTAT, 2010b

<sup>70</sup> FAOSTAT, 2010b

<sup>71</sup> Calculated from Hardman, 2011; Sime Darby, 2011; GAR, 2011; Wilmar, 2011; KLK, 2011; Astra, 2011; First Resources, 2011; Lonsun, 2010; Bakrie & Brothers, 2010; Hap Seng, 2011; Kulim, 2011

Organization	CPO (MT)	Mills (#)	CPKO (MT)	Crushers (#)
FELDA	3,110,000	70	810,000	0
Sime Darby	2,446,693	64	550,325	8
Golden Agri	1,849,879	36	549,000	0
Asian Agri	1,000,000	19	*	0
KL Kepong	821,816	21	*	2
Genting Plantations	795,600	6	*	0
IOI Group	721,326	*	175,641	*
New Britain Oils	444,421	12	100,655	*
Musim Mas	300,000	*	*	*
Wilmar	726,000	*	*	*

**Table 7: Top 10 Extracting Organizations, by CPO, 2010<sup>72</sup>**

Note: Many of the top extracting companies that are identified on this list do not publically report the number and capacity of the extracting facilities they operate, nor the CPO and CPKO outputs.

## Midstream processing

### Refining

The CPO and CPKO produced by the extracting activities and traded globally are not yet suitable for consumption as edible oils. Refining is the process of turning CPO and CPKO into refined and edible palm and palm-kernel oils that meet industry and international standards. Once refined, oils can be used as cooking oils, in other cooking products, and in other household goods. There are two major approaches to refining palm oil: physical processing and chemical processing.

Physical processing is the most common process for refining palm oil, as it is less complex, less capital-intensive, less polluting, and more efficient. During physical refining, oils are degummed using acids, bleached, and deodorized. The outputs of this process are refined, bleached, and deodorized palm oil and palm kernel oil, as well as palm fatty-acid distillates.

During chemical processing, oils are treated with alkaline sodium hydroxide to neutralize the oils before they are bleached and deodorized. The outputs of this process are neutralized, bleached, and deodorized palm oil and palm kernel oil and soap stock.

Oil can be further processed into separate subcomponents with different physical characteristics, called fractions. The two major fractions of palm oils are stearin and olein. Palm stearin is a solid at room temperature and is used as a substitute for animal and dairy fats such as lard and butter. Olein is liquid at room temperature and is used largely for cooking oils.

Within the refining segment of processing, organizations concentrate on optimizing the spread from palm oil product sales. Refiners look to spread the high overhead costs of refining from expensive capital over the greatest volume possible of refined palm oil outputs. The key driver for this capital efficiency is the utilization of refining capital. Refiners also seek to minimize the direct costs associated with their outputs by minimizing the cost of CPO and CPKO. Finally, refiners seek to maximize revenue. The key driver of revenue is the price of refined palm oil products.

### Refining Input: Capital

Refining and fractionation are highly capital-intensive, industrial processes that take place under strictly regulated conditions at industrial refineries. In Malaysia there are 53 refineries in operation, with overall

<sup>72</sup> Calculated from Hardman, 2011; Sime Darby, 2011; GAR, 2011; Wilmar, 2011; KLK, 2011; Astra, 2011; First Resources, 2011; Lonsun, 2010; Bakrie & Brothers, 2010; Hap Seng, 2011; Kulim, 2011

capacity to process 47.5 million MT of palm oils each year.<sup>73</sup> Refineries are primarily located in peninsular Malaysia, close to the major international ports, and total capacity in peninsular Malaysia accounts for 63.5 percent of capacity.<sup>74</sup> Refineries in Sabah account for 27.1 percent of national capacity, and in Sarawak accounted for just 9.4 percent. An additional 17 facilities purposed for refining oil into oleochemicals have a capacity of 2.6 million MT, and all are located in peninsular Malaysia.<sup>75</sup>

In Indonesia there are 57 refineries that have been identified, and an additional seven oleochemical facilities; however, the location and capacity of these refineries are not reported.<sup>76</sup>

### **Refining Output: Refined Palm Oils and Palm Oil Fractions**

In 2011 Malaysian refineries produced 3.48 million MT of CPO and 14.5 million MT of further processed palm oils, such as palm oil stearin and olein.<sup>77</sup> In addition to these outputs, refineries produced 0.9 million MT of CPKO; 5.2 million MT of further processed palm kernel oils, including palm kernel stearin and olein; and 2.1 million MT of oleochemicals.<sup>78</sup> Collectively from these products, Malaysian refineries produced 24.3 million MT of palm oil products to be consumed domestically and traded globally, valued at an estimated USD 25.8 billion.<sup>79</sup>

Refiners in Indonesia do not publically release the details of their specific outputs; however, the Indonesian industry is estimated to produce 19.7 million MT of palm and palm kernel oils valued at USD 20.5 billion.<sup>80</sup>

### **Trading**

Palm oil is a globally demanded commodity, imported by 180 countries in 2010. Malaysia and Indonesia account for over 85 percent of global exports. This global demand makes palm oil the most traded vegetable oil, accounting for 67.5 percent of global trade in vegetable oils.<sup>81</sup> Palm oils are actively traded in the following forms:

1. CPO and CPKO to be further refined in the importing countries
2. Refined palm oils to be further processed in the importing countries
3. Manufactured goods to be marketed to the imported countries

Traditionally, palm oil traders have imported commoditized CPO and CPKO to their own refineries, located strategically in major markets. This approach ensured that traders were largely responsible for the refining process and benefited from these margins. Increasingly, however, Malaysia and Indonesia are building out their refining capacity to ensure that locally owned firms maintain ownership of refining and benefit from the additional revenues of this value-added activity.

Malaysia has been quicker than Indonesia to secure these activities, and a great deal of the CPO and CPKO produced by Malaysian-owned firms in Indonesia has been refined in Malaysia. In 2012 the government of Indonesia restructured taxes to make the trade in refined palm oils from Indonesia comparatively less expensive than trade in unrefined CPO and CPKO.<sup>82</sup> This attempt to encourage investment in Indonesian refineries has led some major Malaysian refiners, including Kuala Lumpur Kepong, to open new refining capacity in Indonesia.

---

<sup>73</sup> MPOB, 2012

<sup>74</sup> MPOB, 2012

<sup>75</sup> MPOB, 2012

<sup>76</sup> PWC, 2010

<sup>77</sup> MPOB, 2012

<sup>78</sup> MPOB, 2012

<sup>79</sup> MPOB, 2012

<sup>80</sup> PWC, 2010

<sup>81</sup> USDA, 2011

<sup>82</sup> Reuters, 2012

Within the trading segment, organizations seek to maximize profitability by concentrating on the spread and volume of trading activities. The two key drivers of unit spread are: (1) the buying price for palm oil products from the upstream industry, and (2) the selling price of palm products for downstream segments. Traders similarly focus on procuring sufficient palm oil to meet the demand of client organizations and seek to optimize the volume of traded palm oil.

In 2010 the United States imported 0.95 million MT of palm oil and 0.31 million MT of palm kernel oil, with over 90 percent imported from Malaysia.<sup>83</sup> It is likely, though, that a great deal more palm oil enters the United States than international trade and customs data suggests, in the form of completed manufactured goods. Increasingly, companies are optimizing their supply chains by opening offshore manufacturing facilities to benefit from less strict manufacturing legislation and, ultimately, lower costs.

In 2010 Europe imported an estimated 5.4 million MT of palm oil, with 54.4 percent sourced from Indonesia, 32.3 percent from Malaysia, and 9 percent from Papua New Guinea.<sup>84</sup> The majority of this oil is imported into the Netherlands, where it is refined and distributed to other major European palm oil markets across the subcontinent, including the U.K. and Germany. Together, these three countries (Indonesia, Malaysia, and Papua New Guinea) account for approximately 60 percent of the palm oil demand in the EU.<sup>85</sup>

The top nine refining and trading organizations represent an estimated 30.7 million MT of palm oil, or 61.3 percent of the global total.<sup>86</sup> Large multinational corporations that operate integrated growing and extracting operations are the key organizations that make up this group.

Wilmar is the largest refiner of palm oil in the world, refining an estimated 41.5 percent of globally traded CPO — 20.8 million MT — into various processed palm oil products at 102 refineries (15 in Malaysia, 23 in Indonesia, 52 in China, 6 in the EU, and an additional 6 located elsewhere).<sup>87</sup>

IOI Loders Croklaan is the second largest refiner of palm oil, with an estimated volume of 2.4 MT of CPO refined in 2010 at three refineries in Malaysia and one located in Rotterdam in the Netherlands.<sup>88</sup>

Cargill is a large refiner of palm oil with an estimated volume of 2 million MT of CPO refined in 2010 at 17 refineries located internationally.<sup>89</sup>

Other major refiners of CPO include Asian Agri (1.7 million MT)<sup>90</sup>, FELDA (1.5 million MT)<sup>91</sup>, Golden Agri Resources (1.4 million MT)<sup>92</sup>, New Britain Oils (0.4 million MT)<sup>93</sup>, and Kuala Lumpur Kepong (0.4 million MT)<sup>94</sup>.

Refining and trading are highly complementary activities, and the organizations responsible for refining palm oil into marketable products are often also responsible for trading these products to corporations globally.

Customs records indicate that exporting to the U.S. is relatively concentrated, with 90 percent of the palm oil being exported by 25 individual companies — the top 10 exporters account for 79.3 percent.<sup>95</sup>

---

<sup>83</sup> FAOSTAT, 2010d

<sup>84</sup> FAOSTAT, 2010d

<sup>85</sup> FAOSTAT, 2010d

<sup>86</sup> Hardman, 2011

<sup>87</sup> Wilmar, 2011

<sup>88</sup> IOI, 2011

<sup>89</sup> Hardman, 2011

<sup>90</sup> Hardman, 2011

<sup>91</sup> Hardman, 2011

<sup>92</sup> GAR, 2011

<sup>93</sup> Hardman, 2011

<sup>94</sup> KLK, 2011

<sup>95</sup> USCBP, 2012

Importing is even more concentrated in the United States: the top 10 importers account for 86.5 percent of the volume of palm oil (see Table 8).<sup>96</sup>

Exporters	Volume		Importers	Volume	
	<i>MT</i>	<i>Percent</i>		<i>MT</i>	<i>Percent</i>
Cargill Palm Products Sdn Bhd	164,695,611	13.5	Archer Daniels Midland	275,410,052	22.6
IOI Edible Oils Sdn Bhd	153,628,124	12.6	Cargill Inc.	273,346,914	22.4
Sandakan Edible Oils Sdn Bhd	144,916,944	11.9	IOI Group Loders Croklaan	210,791,338	17.3
Bintulu Edible Oils Sdn Bhd	118,862,285	9.8	California Oils Corp.	98,897,190	8.1
Lahad Datu Edible Oils Sdn Bhd	117,527,505	9.6	Fuji Vegetable Oils	92,693,228	7.6
Pan Century Edible Oils Sdn Bhd	114,304,114	9.4	AAK USA	73,496,511	6.0
KL Kepong Edible Oils Sdn Bhd	76,631,755	6.3	Ventura Foods	58,669,808	4.8
IOI Loders Croklaan Oils Sdn Bhd	72,647,796	6.0	Mitsui & Co USA	17,035,327	1.4
Mewah Oils Sdn Bhd	42,123,682	3.5	FELDA Iffco	16,281,022	1.3
Mewaholeo Ind. Sdn Bhd	28,409,239	2.3	Perdue Grain & Oilseed	11,502,277	0.9

**Table 8: Top 10 Exporters to the U.S. and U.S. Importers, 2011**<sup>97</sup>

## Downstream marketing

The final major activity in the palm oil supply chain is the manufacturing and distribution of refined oil products into goods for consumer and industrial uses. Refineries and traders sell refined palm oil and its derivatives to manufacturers or directly to end retailers such as food service operators, grocery stores, and oil vendors. The significant variety in the buyers of palm oil reflects the hundreds of purposes for the practical edible oil, which is sold in thousands of products around the world. With such high fragmentation of consumed palm oil, no initiative has ever successfully demonstrated how the global volume is consumed. At a high level, though, the consumption of palm oil can be segmented into palm oil sold directly to consumers as cooking oil, palm oil marketed in manufactured and processed goods, and palm oil used for biodiesel production.

## Consumer Retail

As the cheapest and most plentiful edible vegetable oil, palm oil is highly demanded by developing countries, especially in Asia, where the majority of the world's population lives. Nine countries in the developing world — seven of which are in Asia — consume 62.2 percent of global palm oil (see Table 9).<sup>98</sup> A significant portion of this palm oil is sold in identifiable forms as palm oil or in blended cooking oils.

Country	Palm Oil Consumption ( <i>MT</i> )	Oil from Malaysia (percent)	Oil from Indonesia (percent)
India	7,500,000	74	17
Indonesia	7,226,000	0	100
China	6,190,000	54	34
Malaysia	3,477,000	27	73
Pakistan	2,090,000	15	84
Nigeria	1,285,000	0	0
Thailand	1,120,000	0	1
Egypt	1,095,000	53	46
Bangladesh	1,020,000	0	0

**Table 9: Major Consumers of Palm Oil in the Developing World, 2011**<sup>99</sup>

<sup>96</sup> USCBP, 2012

<sup>97</sup> USCBP, 2012

<sup>98</sup> WWF, 2011

<sup>99</sup> WWF, 2011

In developing countries, palm oil is largely consumed for food purposes, mostly as household cooking oil. An estimated 80 percent of the oils are purchased directly by consumers in the form of bulk, unlabeled cooking oil or as branded consumer goods.<sup>100</sup>

The growth in the use of palm oil for cooking purposes can be attributed to the rising affluence of people in Asia, who are increasingly using processed oils in the preparation of meals. In India and Pakistan, over 90 percent of palm oil is used as cooking oil or as vanaspati (vegetable ghee).<sup>101</sup> In China, nearly half of consumed palm oils are blended with other vegetable oils and sold as cooking oil. In Malaysia and Indonesia, where palm oil is largely produced, palm oil is the most common cooking oil and is marketed as a branded product through grocery stores.

The majority of the remaining volume of palm oil is used in a variety of processed food products, including margarine, mayonnaise, and confections, which are quickly becoming popular in increasingly affluent Asian countries. In China, over 15 percent of palm oil is used to manufacture instant noodles.<sup>102</sup>

Wilmar is the largest producer of palm-based cooking oil in the world, and refines and markets 20.8 million MT of palm oil in cooking oils in China (45 percent market share), India (15 percent), Indonesia (30 percent), Vietnam (50 percent), and Bangladesh (20 percent). Wilmar's significant market share in the refining and marketing of oils mean it controls the largest single volume of palm oil in the industry, roughly equivalent to 45 percent of the total global volume.<sup>103</sup>

At least four other integrated palm oil companies market significant quantities of the total volume of palm oil to consumers in developing countries as cooking oil. These companies are Indofood, Asian Agri, FELDA, and PT SMART.

### **Manufactured and Processed Goods**

Consumption of palm oil is significant in Europe, where per capita edible-oil use is high, and where palm oil has been imported for decades from Malaysia, a former British and Dutch colony. In 2010 the 27 nations comprising the EU consumed approximately 10.2 percent of the global volume of palm oil.<sup>104</sup> An estimated 54 percent of this oil is now imported from Indonesia, and 32 percent is imported from Malaysia.<sup>105</sup>

The United States is a relatively minor consumer of palm oil, given its significant production of soybean and corn oil and its relative proximity to Canada's rapeseed's supply. However, U.S. consumption of palm oil is growing: It has tripled in the last 5 years, partially due to the phasing-out of trans fats as a result of government-mandated labeling requirements<sup>106</sup>. In 2011 the United States consumed approximately 2.2 percent of the global volume of palm oil.<sup>107</sup> The United States imports over 90 percent of its palm oil from Malaysia.<sup>108</sup>

Consumption of oil in these developed economies differs significantly from consumption in the developing world. In developed economies, palm oil is not a recognizable consumer product but primarily an industrial good. While vegetable oil is used frequently as cooking oil in Western countries, consumers use vegetable oils more familiar to them, including sunflower oil, rapeseed oil, and olive oil. In many countries, palm oil is labeled generically as vegetable oil and is not even identified on packaging.

---

<sup>100</sup> WWF, 2011

<sup>101</sup> USDA, 2012b

<sup>102</sup> USDA, 2012c

<sup>103</sup> Wilmar, 2011

<sup>104</sup> FAOSTAT, 2010c

<sup>105</sup> FAOSTAT, 2010d

<sup>106</sup> Pulitzer Center, 2012; Cray

<sup>107</sup> FAOSTAT, 2010c

<sup>108</sup> FAOSTAT, 2010d

In developed countries, palm oil is chiefly a commercial product sold by large, commercial refiners and traders to other large commercial businesses, including consumer packaged-good manufacturers and food-service operators. These producers process palm oil derivatives such as stearin, olein, and oleochemicals into various food and nonfood household products. Few of these companies openly report their use of palm oil. However, the following companies have acknowledged their purchase of palm oil to use in popular consumer products purchased in the United States and Europe:

Unilever is likely the single largest buyer of palm oil in the world<sup>109</sup>, purchasing an estimated 1.5 million MT of palm oil each year<sup>110</sup> for its food products, such as Becel margarine, Hellman's mayonnaise, and Ben & Jerry's ice cream. Unilever also uses palm oil in the production of nonfood household goods, such as its Vaseline line of products and its best-selling line of Dove personal-care products.

Nestlé is estimated to have consumed 320,000 MT of palm oil products in 2010.<sup>111</sup>

Proctor & Gamble is one of the major consumer packaged-goods producers and is estimated to have purchased 300,000 MT of palm oil in 2010 for use in its food and nonfood household products.<sup>112</sup>

Kraft is a significant buyer of palm oil derivative products for use in the production of cookies, crackers, and chocolate products. It is estimated that Kraft purchased 247,464 MT of palm oil products in 2010.<sup>113</sup>

Mars, a consumer packaged-goods company and producer of many confectionery products, consumes an estimated 80,000 MT of palm oil each year.<sup>114</sup>

Johnson & Johnson, a major producer of nonfood household products such as toiletries, pharmaceuticals, and cosmetics, purchases an estimated 75,000 MT of palm oil each year.<sup>115</sup>

Reckitt-Benckiser, a producer of nonfood household goods, purchases an estimated 75,000 MT of palm oil each year.<sup>116</sup>

Ikea is the largest producer of candles in the world, selling millions of tea-light candles that are largely produced from palm oil products. Ikea purchases an estimated 60,000 MT of palm each year.<sup>117</sup>

Kellogg buys an estimated 45,000 MT of palm oil every year for use in its consumer packaged-food products, such as cereals.<sup>118</sup>

The Co-Operative Group, a retailer based in the United Kingdom, purchases an estimated 45,000 MT of palm oil each year.<sup>119</sup>

Cadbury, one of the largest confectionery producers, purchases an estimated 40,000 MT of palm oil each year for its food products.<sup>120</sup>

General Mills, a major consumer packaged-goods company, uses palm oil in the production of its cereals and other food products and purchases an estimated 5,000 MT of palm oil each year.<sup>121</sup>

The Body Shop uses palm oil to produce its soaps and buys 2,000 MT of palm oil each year.<sup>122</sup>

---

<sup>109</sup> Economist, 2010

<sup>110</sup> Guardian, 2012

<sup>111</sup> Economist, 2010

<sup>112</sup> BBC, 2012

<sup>113</sup> Kraft, 2012

<sup>114</sup> Mars, 2012

<sup>115</sup> Johnson & Johnson, 2012

<sup>116</sup> Independent, 2009

<sup>117</sup> Ikea, 2012

<sup>118</sup> Environmental Leader, 2011

<sup>119</sup> Independent, 2009

<sup>120</sup> Independent, 2009

<sup>121</sup> General Mills, 2012

<sup>122</sup> Body Shop, 2012

McDonald's uses palm oil to prepare its fast food, including french fries and chicken-based products such as nuggets and sandwiches. McDonald's does not disclose its purchased palm oil volume and claims that the volume consumed is very modest.

PepsiCo does not reveal its consumption of palm oil but claims that its use in frying chips and in other food products is very marginal.

Colgate-Palmolive, another major consumer packaged-goods company, traditionally used palm products in the production of its leading dish soap, Palmolive. Today, Colgate-Palmolive does not disclose its consumption of palm oil but states that palm oil is not a significant input into any of its products.

### **Biofuels**

Currently, only a fraction of the world's palm oil is used as a biofuel; however, given the high output of oil palms, palm oil is one of the few vegetable oils that is a potentially feasible feedstock for biofuels. Consumption of palm oil for biodiesel is being limited by the high greenhouse-gas emission associated with the production of palm oil, specifically the impact of clearing rainforests and peat lands to establish oil palm plantations. Despite these concerns, governments in the developed economies continue to place an emphasis on adopting biofuels. As continued pressure on petroleum products grows, it is increasingly likely that economies will pilot biofuels initiatives, and palm oil is a primary candidate. The demand for palm oil in the developed world, in particular Europe, could likely increase dramatically.

### **Summary analysis of the palm oil supply chain**

Palm oil is a critical industry for the economies of Malaysia and Indonesia. Many of the largest Malaysian and Indonesian conglomerates run integrated businesses that include growing, refining, and trading palm oil, and even the production of consumer goods. Palm oil is a commodity in high demand by both developed and developing countries, where it can be an ingredient in a variety of products, from cooking oil and processed food to biofuels.



## Exploitative Labor Practices in Palm Oil Production

The production and trade of palm oil is rapidly expanding, given the significant demand for vegetable oils in both developed and developing countries. Large corporate producers in Malaysia and Indonesia are continuing to expand their land holdings and their workforces. The palm oil industry is now one of the most significant employers in Malaysia and Indonesia, employing as many as 3.5 million workers<sup>123</sup>. Many of these workers are victims of serious labor exploitation: Workers are trafficked into bonded labor; forced to work and live under extreme conditions, with limited legal recourse; suffer from abuse or the threat of abuse; or are victims of child labor. These exploitations constitute modern forms of slavery.

Such exploitative labor practices are consistently reported in national newspapers and by nongovernment organizations and civil-rights groups, including organizations such as Tenaganita in Malaysia and Sawit Watch in Indonesia. Human- and worker-rights infringements in both countries are reported internationally by humanitarian organizations such as Amnesty International and Human Rights Watch, and also in government reports on slavery, such as the U.S. State Department's *Trafficking in Persons Report* and the U.S. Department of Labor's *Report on the Worst Forms of Child Labor*. In Indonesia, the National Commission on Child Protection denounced Malaysian palm oil practices, claiming that bonded labor is common at all plantations and that child labor is also a frequent occurrence.

Palm oil has particularly high potential for exploitation due to the isolation of palm oil plantations. The exact prevalence of forced labor in palm oil is unknown, partly because while trafficking to Malaysia is known to be common, figures are not segregated by commodity. Additionally, the island of Borneo, a major production site for palm oil, is divided between three countries, Brunei, Malaysia, and Indonesia, and irregular migration contributes to trafficking.

### **Migrant laborers are frequently targets of human trafficking into bonded labor and other forms of exploitation**

In Malaysia, forced labor in the palm oil industry is generally a result of international trafficking in people. Malaysia is a destination in Southeast Asia for migrants for many different industries requiring unskilled, manual labor.

Malaysia depends on immigration to supply its workforce. The population of Malaysia stands at just 28.4 million<sup>124</sup>, and population growth is relatively low, estimated at 1.74 percent in 2008<sup>125</sup>. While Malaysia has experienced low unemployment since 1990, the population is steadily aging, with an estimated 13.2 percent over 50 years of age in the year 2000.<sup>126</sup> The size of the workforce was estimated at just 10.9 million in 2007.<sup>127</sup> Additionally, Malaysians are relatively wealthy compared to other populations in the region, with per capita income of USD 8,372, making it an upper-middle-income country.<sup>128</sup> There is therefore little supply of Malaysian labor for low-wage jobs perceived as dirty, dangerous, or demeaning. This creates a significant need for migrant labor in sectors including agriculture, construction, manufacturing, and some service occupations.

The number of documented migrant workers now in the country ranges from 1.8 to 2.1 million people.<sup>129</sup> According to official figures, the number of registered foreign workers in Malaysia dropped by 5.6 percent

---

<sup>123</sup> Calculated from IFC, 2010, and MPOB, 2012

<sup>124</sup> World Bank, 2012b

<sup>125</sup> World Bank, 2008

<sup>126</sup> World Bank, 2012b

<sup>127</sup> World Bank, 2012b

<sup>128</sup> World Bank, 2007

<sup>129</sup> World Bank, 2010

in 2010, to 1.8 million at year end<sup>130</sup>, as authorities tried to reduce the labor market's dependence on migrant workers for internal political reasons. Still, with a need for migrant workers to perform jobs Malaysians won't take on themselves, Malaysia remains one of the world's largest destinations for international labor migrants. Registered foreign workers accounted for 15.5 percent of total employment at the end of 2010. Malaysia aims to be as competitive as possible in the globalized market. However, the country is very much challenged by the highly competitive market prices of products from China and India. Thus, migrant workers are engaged mainly in the manufacturing, plantation, and construction sectors, and are also employed as domestic helpers. Semiskilled and unskilled foreign workers are allowed to work only in these sectors.

Statistics vary on the number of undocumented migrants in Malaysia, with estimates ranging from 500,000 to 2 million, according to various governmental and nongovernmental sources. Migrant workers in Malaysia mainly come from 12 countries in Asia, with the majority coming from Indonesia.<sup>131</sup> Other major source countries include Bangladesh, Cambodia, India, Nepal, Pakistan, the Philippines, Thailand, and Vietnam.<sup>132</sup> All observers believe that migrant workers will continue to play an essential role in many sectors of the Malaysian economy, including palm oil plantations, for the foreseeable future.

Malaysia has been subjected to increasing public criticism by labor-supplying countries in the region, such as Bangladesh, for being unresponsive to criticisms in its immigration process and for failing to manage trafficking in people. These claims are substantiated. In 2012 the U.S. Department of Labor classified Malaysia as a Tier 2 Watch List country, due to it being a destination for men, women, and children subjected to conditions of forced labor<sup>133</sup>.

The Malaysian palm oil industry is labor-intensive. Migrant workers from Indonesia, Thailand, and Bangladesh largely make up the plantation-based workforce as a way of achieving a higher income or more consistent work than in their home countries. These workers often migrate to provide for families and communities back home, which depend on remittances. Workers on palm plantations often find they work and live in remote areas within closed plantation complexes, or they are otherwise segregated from larger communities. Under these circumstances, workers are completely at the whim of plantation owners or managers, whose priority it is to maximize productivity, often at the expense of reasonable working and living conditions and the rights of plantation workers. When faced with these conditions, workers have little recourse other than to leave the plantations; however, workers are unable to do so due to the closed nature of plantations.

Workers are often forced to submit work permits, visas, and passports to employers, which makes it impossible for them to legally depart plantations. This often does not prevent migrant workers from leaving the premises. However, if they leave, migrants are highly susceptible to extortion by local police, whose primary course of action is to return workers to the plantations where they are employed. Those migrants that successfully escape a plantation are unable to find legal employment in Malaysia. If they do find employment elsewhere, it is often at small, independent plantations that draw few visits from industry and government regulatory groups, making these migrants susceptible to further exploitative labor practices.

## **Management of immigration is lucrative business in Malaysia**

In order to support the large flows of foreign workers into Malaysia, the government has specific policies and procedures for employers to engage workers. Applications for foreign workers for companies in

---

<sup>130</sup> World Bank, 2010

<sup>131</sup> Amnesty International, 2010

<sup>132</sup> Amnesty International, 2010

<sup>133</sup> United States Department of Labor, 2012

peninsular Malaysia must go to the Immigration Department and must be from certain Asian countries. Nationals from Cambodia, Indonesia, Laos, Myanmar, Nepal, the Philippines, Thailand, and Vietnam may be employed in manufacturing, services, and plantations.<sup>134</sup> Employers in Sabah may employ foreign workers from Indonesia and the Philippines only, and these workers must apply at the Department of Immigration in Sabah. Companies based in Sarawak that intend to employ foreign labor must obtain a license and employment quota from the Sarawak Department of Labor.<sup>135</sup>

Typically, foreign workers are initially allowed to apply for a two-year work permit, which must be renewed annually by the employer. This may be extended to a maximum of five years. For any extension after the fifth year, the employer must obtain certification from the National Vocational Training Council, the Ministry of Human Resources, or the Construction Industries Development Board to certify that the particular worker classifies as a skilled worker.<sup>136</sup> Documented migrant laborers who have entered Malaysia are restricted to work only for the employer that brought them into the country. A migrant worker's employment can be terminated, and the worker's work permit cancelled, by the employer at any time — and without the permit, the migrant worker becomes immediately subject to arrest and deportation.<sup>137</sup> A migrant worker must also undergo mandatory health checks while in Malaysia, and if the worker is found with communicable diseases on the government's exclusion list (such as tuberculosis and HIV/AIDS), the worker is automatically excludable and will be deported.<sup>138</sup>

The employer must apply for work permit renewals, typically three months before the work permit is to expire. According to cases received by Tenaganita and other migrant-worker advocates, there have been many documented cases where employers intentionally allow work permits to lapse as a way to terminate workers, or discriminate against individual workers who are seen as playing a leadership/organizing role among their peers.

In August 2006, the Malaysian government initiated a centralized migration system that replaced direct recruitment. The system is designed so that employers outsource recruitment to a centralized group of labor brokers. The Malaysian Ministry of Home Affairs awards these licenses. The authorities rationalized the introduction of outsourcing as a way to stop the exploitation of migrant workers and a host of other problems. Previously, unlicensed agents were facilitating much of the migration to Malaysia. Some workers were cheated or left stranded at the airport. The goal was to resolve migrant labor abuses by placing the responsibility of recruitment, placement, and management of the migrant workers with a centralized set of specifically approved companies.

In this scheme, businesses hiring less than 50 workers are required to use specialized outsourcing companies, and employers with more than 50 workers can use the services of outsourcing companies or can recruit directly. The outsourcing companies are responsible for all administrative matters, and all responsibility for labor management is transferred from the employer to the outsourcing companies. Brokers provide workers to plantations at a contracted rate of payment, and in turn pay contract workers at a lower rate, profiting from the difference. The contract workers take on various jobs on the plantations, but as employees of the labor broker.

In labor outsourcing, the broker secures applicants for migration for a specific industry. The broker assumes the responsibility for recruitment and human-resources management of workers, including wages, living quarters, transportation, and meeting all legal requirements (such as permits, visas, etc.) of migrant workers. The broker also enters into a contractual relationship with the client company, stipulating

---

<sup>134</sup> Amnesty International, 2010

<sup>135</sup> Amnesty International, 2010

<sup>136</sup> Edge, 2012b

<sup>137</sup> Amnesty International, 2010

<sup>138</sup> FLA, 2008

the terms of payment (number of workers and period of time). In practice, however, these contracts can be passed off onto multiple layers of subcontractors.

Outsourcing of labor effectively removes specialized knowledge from the recruitment process. According to companies in the plantation industry, this results in many migrant workers being selected to work on plantations who are not ideally suited to or prepared for plantation work. Adjustment to the outsourced labor-recruitment model has led to migrant workers often being less satisfied, productive, and committed to their jobs.<sup>139</sup> Employers have seen migrants abandoning their jobs more frequently, directly impacting the profitability of plantations and leaving many employers in a constant process of recruitment. As a result, some larger plantations have continued or recommitted to direct-recruitment trips to find appropriately skilled and suitable candidates.<sup>140</sup> Therefore, despite the additional immediate cost of this recruitment approach, for employers it ultimately leads to greater productivity that justifies the expense.

The motivation for labor brokers, however, is abundantly clear. High levels of migration to Malaysia mean that labor recruitment is a highly profitable business. Labor brokers benefit from receiving payments from both the employers seeking labor and the workers applying for jobs. Groups such as Verité and Amnesty International have reported abuses by labor brokers, who charge up to USD 1,000 for visas. These brokers have also been criticized for finding additional fees for each migrant worker, charging high amounts for re-registration of immigration documents. When responding to criticism of one of the immigration processes, the Minister of Home Affairs revealed that brokers were earning billions from migrant-worker registrations.<sup>141</sup> The interests of labor brokers are clearly not aligned with the palm oil industry or workers, and are costly and ineffective for both employers and laborers.

### **Migrant workers in Malaysia are abused by government-associated policing groups**

Authorities in Malaysia regularly crack down on illegal immigration. The most recent major action was between February and June 2010 and resulted in nearly 4,000 raids.<sup>142</sup> Amnesty International and other human-rights groups allege that undocumented immigrants face police brutality as well as abuse by employers. Migrants who are found to have violated the immigration laws face substantial fines, imprisonment, and corporal punishment (about 30,000 undocumented immigrants were caned between 2005 and 2010).<sup>143</sup>

The Police and Immigration Department are tasked with enforcement but have delegated significant powers to the RELA (Ikatan Relawan Rakyat Malaysia, Volunteers of Malaysian People), which is a part-time, poorly trained armed volunteer corps that has been repeatedly accused of serious human-rights abuses against migrant workers and resident foreigners<sup>144</sup>. RELA is greatly feared by migrant workers and has been implicated by Amnesty International in the abuse and deaths of migrant workers.

Authorities claim that the much-criticized 450,000-strong RELA is no longer involved in immigration enforcement, though eyewitness reports state otherwise.<sup>145</sup> Amendments to the Emergency (Stipulated Powers) Act 1964 issued in February 2005 allowed RELA to arrest and detain suspected undocumented immigrants, to raid premises without search warrants, and to carry small firearms. Some critics claim that RELA has regularly abused these powers.

---

<sup>139</sup> Edge, 2012a

<sup>140</sup> Edge, 2012b

<sup>141</sup> New Straits, 2012

<sup>142</sup> Amnesty International, 2010

<sup>143</sup> Amnesty International, 2010

<sup>144</sup> Robertson, 2008

<sup>145</sup> Amnesty International, 2010

## Commercial estates may exploit smallholder plantation owners

Governments and commercial plantations have been recognized for developing smallholder models of production on plantations that help create a more inclusive plantation industry. Smallholder owners typically borrow between USD 3,000 and 6,000 (at 30 percent interest per year) from a commercial grower for seedlings, fertilizers, and other supplies.<sup>146</sup> As oil palm plants take 3 to 4 years to bear fruit, in the interim smallholders work as day laborers with wages of USD 2.50 per day on the mature commercial plantations.<sup>147</sup> Once their plantation becomes productive, the average income for a two-hectare allotment is USD 680 to 900 per month.<sup>148</sup> The low level of income combined with the large start-up costs and relatively high interest payments means that smallholders frequently become indebted to the oil palm company, often for a long time. Rather than demand payment in cash, some of the companies that provide the loans require farmers to sell their palm fruit back to them at prices set not by the market but by the companies themselves.<sup>149</sup> Farmers are tied to the core plantation under terms set by the companies until their debts are completely paid off. These claims were substantiated by field interviews, as well as by the testimony of farmers at numerous meetings of the RSPO.<sup>150</sup>

Farmers speak emotionally of being “ghosts on our own land” because of the endless cycle of debt in which they are trapped<sup>151</sup>. While not universal, these problems are common and amount to the extraction of bonded labor from smallholder estates. Recent studies by researchers from the Australian National University show growing disparities between rich and poor in smallholder areas, especially in parts of Indonesia<sup>152</sup>.

## Child labor is employed on oil palm plantations, specifically smallholder estates

Numerous factors contribute to or cause child labor, including family social status, desire for children to learn a trade, poverty, and lack of access to education. For families on plantation estates, the remote locations of plantations often make school inaccessible for children. A small percentage of palm oil plantations provide schooling themselves. The result is that, rather than attending school, some children work on plantations.

In Indonesia especially, where average per capita incomes are low, it is highly common for children to work for the family. The Manpower Act, which sets Indonesia’s laws and regulations on child labor, sets the minimum age for work at 15 and the minimum age for hazardous work at 18. Light work is permitted for children aged 13 to 15. The Manpower Act specifically prohibits the worst forms of child labor. However, in spite of the Manpower Act, children in Indonesia are engaged in child labor, including the worst forms of child labor, on oil palm plantations<sup>153</sup>.

As children on plantations grow older, they begin to engage more frequently in plantation-based labor to earn a wage. In 2002 the Ministry of Manpower and Transmigration conducted a study in Indonesia<sup>154</sup>, interviewing 75 child laborers between the ages of 9 and 17 from oil palm plantations. The study found that:

- 85 percent worked as palm pickers, collecting loose palm fruits, carrying sacks of palm fruits to carts, and pushing carts to a collection site.

---

<sup>146</sup> Edge, 2012c

<sup>147</sup> Edge, 2012c

<sup>148</sup> Edge, 2012c

<sup>149</sup> Colchester & Jiwan, 2006

<sup>150</sup> Colchester & Jiwan, 2006

<sup>151</sup> Colchester & Jiwan, 2006

<sup>152</sup> Cramb & McCarthy, 2008

<sup>153</sup> USDOL, 2012

<sup>154</sup> Ministry of Manpower and Transmigration, 2002

- The average load carried was 10 kilograms over a distance of 250 meters.
- Nearly 75 percent did not have gloves, and most had suffered cuts, scratches, and abrasions.
- Nearly 90 percent had no training before working.
- 68 percent experienced heat exhaustion at a “heavy heat-stress level”.
- Average working time was more than four hours per day, without any regular break time.
- Just over half of the children spent between 30 and 60 minutes traveling between their homes and the plantation.

Authorities from the Indonesian Ministry of Manpower are responsible for enforcing child labor laws; however, the country’s child protection law is often not enforced. For example, there have been no documented cases of prosecution for exploitation of child domestic workers, and labor inspectors’ involvement in child labor issues are limited. Inspectors work with inadequate human and financial resources. Since they cannot inspect all workplaces, they give priority to large enterprises, consequently creating the large, unregulated range of smaller plantations in which most child laborers are found.

When enforcement does occur, it is often impossible to be certain of a child’s age, due to a lack of birth registration. It is estimated that 30 percent of workers do not have registration cards in Indonesia.<sup>155</sup> Companies that take possession of identification cards are easily able to falsify the age of workers. This practice sometimes involves the cooperation of government officials.

In Malaysia, children can be found working on palm oil plantations, where they assist their parents to collect loose fruit, help carry and load bunches of oil palm fruit, and weed the oil palm fields. One report estimates that 60 percent of the children working on palm oil plantations in Malaysia are 6 to 10 years old.<sup>156</sup> In order for workers on plantations to meet their daily quota of palm fruit harvested and collected, it has been identified that “assistance from the child worker is the savior.”<sup>157</sup>

As part of the terms of their immigration, migrant workers in Malaysia are not legally entitled to give birth to children. In practice, though, many migrants do. Children born of migrant parents in Malaysia are not granted citizenship in Malaysia or their parents’ home country and thus become stateless. The result is that the children are not awarded the rights of either their country of birth or their ancestral home, including the right to education. Without other opportunities, stateless children are often relegated to working on plantations — mostly informally, to help family members in meeting the high quotas set by plantation management. In Malaysia, it is estimated that between 72,000 and 200,000 stateless children work on palm oil plantations.<sup>158</sup>

## Summary of exploitative labor practices

In both Malaysia and Indonesia, the palm oil industry engages in exploitative labor practices. Migrant workers are trapped in bonded labor through exploitative labor brokers’ schemes that allow labor broker companies to rack up huge profits while forcing laborers to accrue more and more debt. Even non-migrants are vulnerable to exploitative bonded labor, with smallholder farmers able to become excessively indebted to large landholders under unfair loan agreements. Finally, child labor has been documented in both countries, including the worst forms of child labor.

---

<sup>155</sup> Colchester & Jiwan, 2006

<sup>156</sup> Edge, 2012c

<sup>157</sup> USDOL, 1995

<sup>158</sup> Asia Foundation, 2010

# The Roundtable on Sustainable Palm Oil (RSPO)

## Overview of the RSPO model

Stakeholders in the palm oil industry founded the RSPO in 2003 to promote the growth and use of sustainable palm oil. It is a multi-stakeholder initiative that encourages a collaborative approach to address the challenges in the palm oil industry, including economic, environmental, community, and social issues. The RSPO seeks to register all industry stakeholders as RSPO members, including producers, buyers, retailers, government groups, finance organizations, and nongovernment organizations (see Table 10). Today, the RSPO is widely considered the palm oil industry's best attempt to manage its effect on the people and places impacted by the palm oil industry.

RSPO Member Categories	Members (#)
Banks and Investors	10
Consumer Goods Manufacturers	223
Environmental or Nature Conservation Organizations (NGOs)	17
Oil Palm Growers	111
Palm Oil Processors and Traders	225
Retailers	43
Social or Development Organizations (NGOs)	9
Total Membership	639

**Table 10: Distribution of RSPO Member Categories, 2012 (RSPO)<sup>159</sup>**

The RSPO promotes the use of sustainable palm oil through three key actions: (1) defining a set of standards for “certified sustainable” palm oil (CSPO) and palm kernel oil (CSPKO), (2) supporting suppliers of palm oil (growers and processors) to increase the supply of CSPO and CSPKO, and (3) supporting buyers of palm oil to increase the demand for CSPO and CSPKO. Through these efforts, the RSPO is seeking to create a market for ethically and sustainably produced palm oil that is driven and remunerated by consumers.

## The RSPO Principles and Criteria for Sustainable Palm Oil Production

In 2005 the RSPO adopted its first set of the RSPO Principles and Criteria for Sustainable Palm Oil Production (P&Cs). The P&Cs serve as the foundation for RSPO certification standards for CSPO and CSPKO. Their purpose is to define and codify production and management practices that are sustainable and ethical, and that address the critical issues identified in the palm oil industry. The critical provisions for social accountability in the P&Cs include:

- Ongoing commitment to transparency
- Compliance with the law, including ratified international laws and respect for customary law
- Demonstrable right to use the land and absence of legitimate land conflicts
- No diminishment or loss of customary rights without free, prior, and informed consent (FPIC)
- Documented and acceptable systems for resolving disputes and achieving negotiated agreements based on FPIC
- Social assessments of the impacts of existing operations
- Implementation against health and safety requirements
- Open and transparent communications

<sup>159</sup> RSPO, 2012a

- Assurances of acceptable pay and fair prices and appropriate training for smallholders
- Recognition of the right to organize and free collective bargaining
- Protection against child labor and for women, migrant laborers, and smallholders
- No forced labor or discrimination
- Contributions to local development, with appropriate participatory social- and environmental- impact assessments of proposed new plantations

The P&Cs are authored by a multi-stakeholder taskforce advocating the diverse priorities and perspectives of the RSPO membership. The RSPO recently went through a revision process of the P&Cs. The new draft is currently under review by RSPO membership. It is anticipated that the new P&Cs will be adopted in 2013 and will include new, specific provisions addressing forced labor, human trafficking, business ethics, and human rights.

The RSPO follows the third-party certification method advocated by the U.N. that segregates the authoring of standards and the certification. Producers and processors of palm oil can apply for a certification audit of their facilities and operations. Operations that satisfy the certification standards can openly claim to be “certified sustainable” and market their relevant outputs as CSPO and CSPKO.

### **Supply of Certified Sustainable Palm Oils**

By October 2012 the RSPO membership included 111 growing operations and 255 processing and trading organizations,<sup>160</sup> including many of the notable market leaders in Malaysia and Indonesia. Together these organizations are responsible for much of the global supply of palm oils.

Each organization is obligated to identify the volume of land, FFB, and palm oils that fall under their management and to commit to a time-bound schedule when the full scope of their organization will be certified as compliant with RSPO standards. This *commitment* approach allows producers to adopt certification at a rate favorable to management, but it is also designed to ensure the consistent growth of the supply of CSPO and CSPKO. RSPO policy is that organizations are accountable for their progress against their target time-bound plan. Organizations that fail to comply with commitments, either the P&Cs or the time-bound plans, are reprimanded and placed on probation until the issues are addressed. Continued failure to comply with policies and conditions would eventually result in the loss of certification. However, in practice, there have been no reprimands and no losses of certification to date for companies that have failed to comply with the commitment protocol.

Many growers in Indonesia and Malaysia, and also those in smaller producer countries, have been certified to produce CSPO and CSPKO. Collectively these producers account for 1.1 million hectares of oil palm planted land, 135 palm oil mills, 5.6 million MT of CSPO, and 1.3 million MT of CSPKO, 12.4 percent of global palm oil and 23 percent of global palm kernel oil.<sup>161</sup> This progress is driven by the certification of plantations that are owned and operated by large integrated growers. The top 10 producers of certified sustainable palm oils account for 74.2 percent of total certified plantations, by area, and 74.4 percent of total certified sustainable palm oils.<sup>162</sup>

Sime Darby, the largest single grower and producer of CPO, is also the producer that has made the most progress in achieving certification. In 2011 Sime Darby produced 29.3 percent of the global supply of CSPO and CSPKO.<sup>163</sup>

Several other large, integrated producers of palm oils have also made progress in achieving certification and account for notable volumes of certified sustainable palm oils (see Table 11). In 2011 notable

---

<sup>160</sup> RSPO, 2012b

<sup>161</sup> RSPO, 2012b

<sup>162</sup> RSPO, 2012b

<sup>163</sup> RSPO, 2012b



suppliers included Wilmar (9.1 percent), IOI Group (7.2 percent), PT Musim Mas (6.3 percent), and New Britain Palm Oils (6.1 percent).<sup>164</sup>

Name of Producer Organization	Country of Origin	Certified Production Area (ha)	Annual CSPO Production capacity (MT)
Sime Darby Plantation Sdn Bhd	Malaysia	352,564	2,013,207
IOI Group	Malaysia	73,802	496,505
PT Musim Mas	Indonesia	71,444	434,267
New Britain Palm Oils Ltd	Papua New Guinea	65,725	415,808
Wilmar (PPB Oil Palms Bhd)	Singapore	58,252	371,230
Kuala Lumpur Kepong Bhd	Malaysia	51,904	359,689
SIPEF Group	Belgium	50,192	287,056
Wilmar International Ltd.	Singapore	45,690	255,616
PT Agrowiratama	Indonesia	36,575	267,915
Agropalma S.A.	Brazil	33,272	170,008
<b>Subtotal (Top 10)</b>		<b>839,420</b>	<b>5,109,881</b>
<b>Total</b>		<b>1,130,969</b>	<b>6,869,690</b>

Table 11: Top 10 Producers of CSPO and CSPKO, 2011 (RSPO, 2012b)<sup>165</sup>

### Demand for Certified Sustainable Palm Oils

The RSPO membership includes 223 buyer organizations and 43 retail organizations that are responsible for bringing palm oils to the consumer market. Similar to its approach to growing the supply of CSPO and CSPKO, the RSPO obliges buyers of palm oil to identify how much palm oil they consume annually and to identify in what operations or products this commodity is used. Like suppliers, buyers must commit to a time-bound plan that targets when the company's demand will be completely filled by CSPO and CSPKO.

As of 2011, the RSPO has facilitated the purchase of 2.5 million MT of CSPO, and 0.6 million MT of CSPKO were purchased (see Table 12). This demand for certified sustainable palm oils equates to roughly half of supply.<sup>166</sup>

<sup>164</sup> RSPO, 2012b

<sup>165</sup> RSPO, 2012b

<sup>166</sup> RSPO, 2012b

Name	Purchases/Certified	Consumption/Planted	Percentage	Year Committed to 100%
Unilever	484,500	1,600,000	30.3%	2015
Body Shop	600	600	100.0%	2012
Avon	13,000	13,000	100.0%	2012
Colgate-Palmolive	Not Disclosed	Not Disclosed	Not Disclosed	2015
ConAgra	Not Disclosed	Not Disclosed	Not Disclosed	2015
Mars-Effem	Not Disclosed	Not Disclosed	Not Disclosed	2015
P&G	Not Disclosed	Not Disclosed	Not Disclosed	2015
SC Johnson	Not Disclosed	Not Disclosed	Not Disclosed	2015
Seventh Generation	1500	1500	100.0%	2015
Sun Products	0	40500	0.0%	2015
Hershey Company	Not Disclosed	Not Disclosed	Not Disclosed	2015
WhiteWave Foods	0	18000	0.0%	2015
Birdseye Iglo Foods	718	718	100.0%	2015
Boots	500	500	100.0%	2014
Heinz	3300	6200	53.2%	2013
IKEA	60000	60000	100.0%	2011
Johnson & Johnson	Not Disclosed	Not Disclosed	Not Disclosed	Not Disclosed
Kraft Foods	Not Disclosed	Not Disclosed	Not Disclosed	2015
Reckitt Benckiser	0	90200	0.0%	No Timeline

**Table 12: Summary of CSPO Purchases by Major Buyers, 2011 (RSPO, 2012b)<sup>167</sup>**

## RSPO challenges

The RSPO has created a platform for palm oil stakeholders to collaborate and promote sustainable palm products. As one of the first multi-stakeholder groups to collaborate on sustainability issues in commodity markets, its creation marks an important step forward. However, while the RSPO has made some progress to develop supply and demand for sustainable palm oil, its slow progress has also been roundly criticized by many outside stakeholders.

### The RSPO Is Not Facilitating Sufficient Demand for Sustainable Palm Oils

In 2011 the RSPO's reported sales of CSPO and CSPKO equated to 44.7 percent and 46.2 percent of the volume supplied to the global market. This surplus supply of certified palm oil has resulted in low market prices for certified oils — a significant portion of CSPO and CSPKO was sold at parity with noncertified oils. Without receiving a premium for certified products, producers are forced to absorb the additional costs of certification and certified operations, which is financially unsustainable for producers.

The low demand for certified palm oil implies that consumers and buyers of palm oil do not value CSPO and CSPKO and are not motivated by consumers to absorb these costs themselves. While there are multiple explanations for this hesitancy, the most likely causes are:

- Buyers of palm oil are cautious to reveal their actual stake and exposure to palm oil due to negative consumer associations with palm oil and the fear of being vilified by NGOs and advocacy groups.
- Companies do not feel significant consumer or external pressure warranting additional allocation of resources beyond RSPO membership.
- Palm oil producers and processors with integrated marketing operations — companies that market palm oil to consumers themselves — are not buying sustainable palm oil. Wilmar, for instance, is the largest refiner of palm oil but does not purchase certified palm oil from other producers.

<sup>167</sup> RSPO, 2012b

To date, only a handful of organizations purchase a significant volume of certified sustainable palm oils. One notable buyer of CSPO is Unilever, which in 2011 purchased 20.6 percent of the certified sustainable palm oils produced under the RSPO scheme.<sup>168</sup> Many of the other top buyers of certified sustainable palm oils are other well-known European and American branded, consumer packaged-goods companies (see Table 13).

Name	Country of Origin	Purchased CSPO & CSPKO (MT)
Unilever	British/Dutch	1,415,015
Kraft Foods	USA	125,960
J&J Companies	USA	101,142
Nestle	Switzerland	85,334
Ikea	Sweden	60,000
Kellogg	USA	41,081
Premier Foods Group	United Kingdom	39,407
AAK UK	United Kingdom	33,593
Frieslandcampina	Netherlands	27,825
Vandemoortelle Group	Belgium	25,050
<b>Subtotal (Top 10)</b>		<b>839,420</b>
<b>Total</b>		<b>1,130,969</b>

**Table 13: Top 10 Buyers of RSPO-Certified Palm Oils, 2011 (RSPO, 2012b)<sup>169</sup>**

Buyer demand for CSPO and CSPKO is expected to rise in 2013 and again in 2015, based on many organizations' targets for when they will procure only certified sustainable palm oils.<sup>170</sup>

At the RSPO's general assembly in the first quarter of 2012, producer organizations put forward a motion to place a moratorium on producer certification, effectively halting producers' time-bound plans, until the demand for certified palm oils reaches the current level of supply. While RSPO members rejected this motion, it clearly identifies that producers are frustrated by the slow uptake of certified palm oils. If the RSPO does not encourage increased demand, it risks further antagonizing its member producers, who are critical drivers of RSPO success.

Some organizations point out that the RSPO has not yet created awareness in consumers to demand certified sustainable palm oils from manufacturers, due to the lack of an RSPO consumer brand or label. While this is accurate, it is questionable whether many buyers of palm oil would use such a label.

Labeling a product with the RSPO trademark would indicate to consumers that this product includes palm oil, a product that is considered unhealthy by many American consumers due to its high content of trans-fatty and saturated acids. This negative consumer image was so strong that in the 1990s the FDA, lobbied by the palm oil industry, banned labels on products that indicated that no palm oil was included in the content, claiming this label was defamation of palm oil.<sup>171</sup> Instead, American products tend to identify only that the product contains vegetable oil. The situation in Europe is more promising, with a recent decision of the European Parliament mandating labeling of palm oil in all products.

Other organizations question whether the RSPO will ever be able to raise significant demand for sustainable palm oils, given that much of the global demand for palm oil is in the developing world, where consumers are typically too price-sensitive to support sustainability premiums. Today, one of the

<sup>168</sup> RSPO, 2012b

<sup>169</sup> RSPO, 2012b

<sup>170</sup> RSPO, 2012b

<sup>171</sup> APOC

RSPO's key objectives is to identify how to create demand for sustainable palm oils in these major consumer markets.

### **Certification Standards and Process Do Not Ensure That Certified Producers Are Operating in a Sustainable Fashion**

Many producer organizations believe that the RSPO P&Cs are too strict and will inhibit their ability to grow effectively. On the other hand, many NGO members and commentators disagree and believe that the RSPO allows too much leeway for producers to operate in an unsustainable manner.

One critical concern is that producer organizations can claim to be certified by the RSPO when only a small portion of their planted land is in fact certified. While these producers cannot claim to be marketing palm oil produced from uncertified oil palms as CSPO and CSPKO, they may represent themselves as organizations that are certified under the RSPO. For example, Mongabay.com, an environmental science and conservation news site, points to the fact that IOI has at times had many estates in major conflict with RSPO P&Cs, but the company has certified estates and has served as a member of the RSPO's prominent executive body.

Furthermore, unspecialized, third-party certification agents are often unprepared to accurately assess whether estates are meeting the P&Cs effectively. NGOs point out that agents do not meaningfully review the actual living and working conditions of plantation workers. Typically, certification agents must call ahead to plantations to organize time for a visitation. This advance notice allows the real conditions on estates to be distorted by temporarily relocating illegal, abused, or exploited workers; by embellishing safety procedures on the day of the audit; and other simple methods. Other NGOs note that certification agents check policies and procedures against a checklist of standards and do not effectively gauge conditions by engaging with workers or performing more exhaustive and revealing forms of enquiry.

Greenpeace, a major critic of the RSPO and of regulation of the palm oil industry, suggests that the certification scheme serves as a conciliatory "smoke screen" to convince consumers that environmental problems and other issues associated with the palm oil industry are being addressed.<sup>172</sup> It substantiates this claim with the number of producer and buyer members who have failed to commit to or to act on any specific initiatives to improve practices and policies.

William Laurance of James Cook University and the Smithsonian Tropical Research Institute argues that the RSPO's objectives are undermined by the composition of its membership, which is dominated by palm oil industry growers, processors, and traders.<sup>173</sup> Laurance claims that "this conflict of interest results in lax requirements for membership, a cumbersome complaints process for reporting violations, and lack of oversight and enforcement. It needs to get tougher with member companies that are destroying large swaths of primary forest. Otherwise, it risks becoming an apologist for an environmentally destructive industry."

Critics stress the need for harsher penalties for offending companies. To date, not a single company has had its membership revoked, despite evidence of noncompliance.

### **The RSPO Lacks a Robust Agenda for Labor Issues**

One of the most significant concerns raised by NGO's focused on labor causes is that the RSPO does not place due focus on these issues in the P&Cs or the RSPO structure — no working group exists to focus specifically on addressing labor issues. While a working group focusing on social issues has recently been formed under Sawit Watch, an Indonesian social NGO, many organizations point out that little

---

<sup>172</sup> RAN, 2011

<sup>173</sup> RAN, 2011

progress has been made to improve working conditions on plantations or to improve members' focus on collaboration with local communities.<sup>174</sup>

Tenaganita, a Malaysian NGO, claims that the RSPO is not making any progress on social issues such as ensuring ethical labor conditions. Tenaganita and others claim that their mandates and issues are considered low priorities for the RSPO and that their ability to engage with plantation workers has diminished since the RSPO was formed.<sup>175</sup>

The RSPO currently does not have any members representing workers' unions. These groups claim the organization does not support their efforts to facilitate worker-based organization and collective bargaining.

In late 2012, the RSPO Taskforce on Standards Revision developed draft criteria on forced labor, human trafficking, and human rights. Formal approval of the draft criteria would mark an important step forward in the RSPO's response to forced labor and trafficking.

### **Competition from Indonesian Sustainable Palm Oil (ISPO) initiative**

In 2011, Gabungan Pengusaha Kelapa Sawit Indonesia (GAPKI) — the Indonesian Palm Oil Association — seceded from the RSPO in order to participate solely in the Indonesian government's sustainability initiative, the ISPO. In leaving the RSPO, GAPKI suggested that RSPO standards are too strict and will inhibit the growth of the Indonesian palm oil industry.

The stated goals of establishing ISPO are to:

- Simplify producer requirements
- Manage sustainability requirements in line with the government's economic objectives
- Expand value-added processing activities in Indonesia and avoid barriers to trade
- Meet Indonesia's commitment to reduce greenhouse gases

To implement the certification system and the ISPO in accordance with the regulation of the Minister of Agriculture, the assessment or certification of palm oil plantations will be done by a third-party certification body that has gained recognition (approval) of the ISPO Commission.

GAPKI claims the scheme is intended to “speed up the implementation of sustainable palm oil.” A posting on the GAPKI website in August 2010 states that more than 12 companies audited by certification bodies appointed by the RSPO have been waiting since 2009 to be approved. Indonesian palm oil firms have long argued that voluntary RSPO certification — where initial audit fees averaged USD 25 per hectare for large plantation companies — was excessively expensive, especially for smallholder farmers. The ministry of agriculture has said that ISPO will cost less than the RSPO, and subsidies would be offered to smallholders.

However, many critics believe that ISPO standards will neither truly promote sustainable palm oil operations nor encourage ethical labor.<sup>176</sup> It is not yet clear yet to what extent ISPO standards will promote genuine sustainability. Regardless, it is clear that the creation of a rival sustainability scheme risks eroding the value of membership for current RSPO members and could inhibit the organization's ability to drive the supply and demand of CSPO and CSPKO globally. To date, the RSPO has been used as the only standard for palm oil plantations. Malaysian oil palm planters in Indonesia will now need to be separately certified under ISPO whether or not they have been certified by the RSPO — there is no flow-through of RSPO certification to meet ISPO standards. This lack of harmonization will create a potential

---

<sup>174</sup> RAN, 2011

<sup>175</sup> RAN, 2011

<sup>176</sup> RAN, 2011

burden for companies operating in both Malaysia and Indonesia that may be certified under both RSPO and ISPO schemes.

### **Summary of the RSPO**

The creation of the RSPO was an important development for the advancement of certified sustainable palm oil products. However, there is still significant work to be done if the RSPO seeks to promote true sustainability, free from exploitative labor practices. That work includes adoption of P&Cs to address forced and child labor, enforcement mechanisms for the existing P&Cs, and expanded production and promotion of certified sustainable palm oil.

## Recommended Interventions

The global palm oil industry has grown significantly over the last 30 years, shifting from an industry primarily providing cooking oil to domestic markets, to a global industry fueling growth in processed food, household goods, and biofuel industries. This growth and development has made palm oil one of the world's most crucial commodities. However, the manner in which it is produced, primarily in Malaysia and Indonesia, continues to be a concern for the global community. As outlined in this report, the palm oil industry must address the conditions under which the industry recruits and employs the workers who drive production of oil palm plantations and the oil they produce.

The following recommendations will, if implemented, greatly improve the working conditions of the laborers in the palm oil industry. These recommendations target three groups:

1. **Governments** that are responsible for regulation and legislation of industries, as well as labor markets
2. **Companies** that are the largest employers of workers in the palm oil industry and that directly use exploitative labor practices, or that produce products containing unsustainably produced palm oil
3. **The RSPO**

### Government initiatives

To date, the governments of Malaysia and Indonesia have prioritized the expansion of their respective palm oil industries by facilitating the transfer of land and the recruitment of controllable labor to palm oil growers in their countries. While this support has led to significant growth in the palm oil industries of each country, the governments have failed to provide the regulation that is essential to the protection of workers in the palm oil industry. Free of effective government regulation and enforcement, the industry has failed to meaningfully self-regulate the labor practices applied on oil palm plantations. Without immediate and focused action, these practices will continue to occur.

In the United States, government departments including the Department of Labor and the State Department recognize that both Malaysian and Indonesian plantations are employing labor practices that are modern forms of slavery. While the United States has taken action from time to time with respect to these shortcomings, such as past threats of sanctions against Malaysia, as a whole the U.S. government has not to date responded in a coherent and focused way on this issue, including not sending a single message diplomatically. In addition, though the U.S. government has the authority to prevent the importation of goods made with slave labor, there is little evidence it has used that power to block the importation of products that include palm oil produced with forced labor. Finally, while the U.S. government has supported initiatives to make people aware of products they use that were produced with forced labor, more could be done to single out these issues. A lack of concerted effort in the U.S. is allowing exploitative labor practices to persist, while businesses benefit from palm oil imports that do not reflect the true costs of the palm oil industry.

#### ***Malaysia: Increase regulation and oversight of the labor broker industry***

**Issue:** Malaysia employs a structured, centralized immigration system that must be used by all companies looking to recruit fewer than 50 workers. The system allocates licenses to a limited number of organizations that are responsible for recruiting hundreds of thousands of migrants for the many industries in Malaysia that need additional workers — recruiting predominantly unskilled workers for low-paying jobs that cannot be filled by domestic Malaysian workers. Plantation work for palm oil production is

one of the industries that needs unskilled labor, and it is estimated to employ thousands of foreign workers each year, largely from Indonesia.

Malaysian labor brokers, also called manpower companies, work with foreign brokers to identify potential workers. In practice, this means that migrants are often recruited without specific jobs in mind and may be promised completely different occupations, working environments, remuneration, and benefits than the positions where they are ultimately employed. Largely, migrants are unaware of the type or rigor of labor that they will be providing and the communities that they will be working in. Actual remuneration and benefits may be very different from what is originally presented to a migrant worker.

Regulation of this service provided by labor brokers is not enforced, and many companies charge high rates that require migrants to enter debt or to mortgage their assets in their home country.

**Desired Outcome:** Improved accountability for recruitment contracts, the elimination of fees for migrants, and recourse for workers against labor brokers who fail to meet committed terms.

Despite the Malaysian Ministry of Home Affairs' efforts to improve migrants' experience when dealing with centralized labor brokers, migrants continue to be overcharged and deceived when engaging in the migration registration process in Malaysia. In practice, labor brokers now benefit from a less competitive environment for migration that allows them to legally charge higher rates with the support of the Malaysian government.

The Ministry of Home Affairs should change the structure of the existing immigration system and promote the following key objectives:

- Eliminate fees for specific immigration services that labor brokers charge migrants.
- Require the use of multilingual, comprehensible contracts for which labor brokers will be held accountable, and that accurately set expectations of workers' roles, responsibilities, benefits, remuneration, living and working conditions, and who the employer is.
- Institute a government hotline that can be used to report noncompliance or exploitative practices by labor brokers of migrant workers.
- Enforce labor-broker laws through civil and criminal penalties for violations.

### ***Allow stateless children in Malaysia to attend schools***

**Issue:** Estimates indicate that there are at least 72,000 "stateless" children in Malaysia — neither Malaysian citizens nor citizens of their parents' home country — that currently live on plantations. These children were born to parents who, as migrant laborers under Malaysian law, are not allowed to give birth while working in Malaysia. Stateless children are afforded no rights by the Malaysian government and are not able to attend schools or seek legal employment. Without alternatives, these children are often informally employed at the plantations alongside their parents as child laborers. Both Malaysia and Indonesia have ratified the ILO Convention No. 188 on the Worst Forms of Child Labor in recognition that child labor cannot be tolerated. Despite this, both governments have failed to ensure that these "stateless" children are able to avoid their current fate as child laborers.

**Desired Outcome:** Create an alternative to child labor for stateless children.

Without an alternative to employment, stateless children have few options. Without formal education, stateless children are also more likely to become unproductive members of society who may contribute negatively to Malaysian society.

Malaysian growers, members of civil society, and the U.S. government should lobby the Malaysian Ministry of Home Affairs to find an acceptable compromise that allows these children to be accepted into society. Additional school capacity and costs of education inherited by Malaysian institutions should be



redistributed in an agreed, formal way between Malaysia and the child's parent's home country. By leading the effort to resolve this issue, the Malaysian government would address a major challenge of its national growers, fulfilling commitments to the ILO Convention on the Worst Forms of Child Labor and potentially benefiting from future laborers who would be acclimatized to Malaysian society.

To facilitate the assimilation of stateless children who may not speak the Malay language into schools, the Malaysian government could work with nongovernment organizations and foreign governments to develop a program of bilingual education that would enable the education of these stateless children.

In addition to governments, individual growers could be engaged to support efforts to provide schooling for children living on plantations, including both stateless and registered children. By increasing the accessibility of educational institutions for children on plantations, employers would provide a longer-term incentive to workers to remain engaged at the plantation.

***Standardize smallholder land contracts and promote the use of unions during the negotiation process***

**Issue:** Grower organizations continue to invest in supported smallholder plantation models in order to acquire new landholdings. These models can be economically favorable for all parties involved, but some smallholders fail to secure fair deals with private estates and quickly become indebted to them through additional fees and unfair terms. Often, smallholders are ill-suited to settling on fair terms with large businesses that are experienced and familiar with this process.

**Desired Outcome:** Improve the bargaining power of smallholder farmers.

NGOs like the Forest People's Program, RAN, Sawit Watch, and others should work together to devise a standard contract for supported smallholder land-sale agreements that simplifies the negotiation process. Smallholders will then be less likely to fall victim to exploitative agreements that make them more susceptible to debt bondage. NGOs could also engage with labor and trade unions to establish them as trusted brokers during land-sales agreements with smallholder communities. Organizations such as the National Union of Plantation Workers (NUPW) and others could facilitate negotiations through a structured approach to ensure that terms are agreed, understood, and documented in a satisfactory way that leaves smallholders less susceptible to future debts.

***Increase consumer awareness in the United States through mandatory labeling of palm oil content***

**Issue:** In the United States, few consumers understand what palm oil is, and fewer still understand which products contain this commodity. Without understanding their own consumption of palm oil, consumers are not placing the necessary pressure on American businesses or on businesses with American operations to responsibly and sustainably source palm oil. Without this consumer pressure, most American buyers of palm oil are adopting low or moderate volumes of CSPO, despite it being readily supplied in the global market.

**Desired Outcome:** Increase market for sustainable and ethically produced palm oil products in the United States.

In the United States, consumers themselves do not buy palm oil, but rather purchase processed goods that incorporate palm oil products. While palm oil is in over 50 percent of processed goods in the United States, consumer goods manufacturers label palm oil as vegetable oil due to negative consumer perception of the health value of palm oil. Consumers are not aware of their own usage and thus cannot be expected to adjust their purchasing to demand certified sustainable palm oils in their products. Mandatory labeling of the palm oil content of products, as was recently adopted in Europe, will lead American consumers to be more aware of their palm oil usage, to adjust their consumption, and to demand that companies use certified palm oils to produce these products.

The Food and Drug Administration should update its policies and regulations on the labeling of palm oil, setting them in line with those in Europe. In doing so, the FDA would create awareness of palm oil among Americans, and consumers would be able to place pressure on retailers and consumer goods manufacturers to meet higher standards of care in the sourcing of palm oil.

***Investigate tariff-based solutions to create incentives for retailers in developing countries to purchase and market certified sustainable palm oil***

**Issue:** While the sustainability-driven, multi-stakeholder RSPO initiative has led to some success in the adoption of CSPO, this market take-up is concentrated in Europe and is not occurring in the developing markets of India, China, Pakistan, Bangladesh, Indonesia, or Malaysia, where 80 percent of the world's palm oil is being consumed. In these countries, consumers do not actively respond to “sustainable” product values, as they are extremely price-sensitive and consider sustainability at best a luxury and at worst wasteful and ineffectual. To motivate markets to embrace ethically produced palm oil, an alternative solution must be identified.

**Desired Outcome:** Increase motivation for palm oil retailers to purchase and sell ethically sourced palm oil in key developing countries.

Recognizing that the largest markets for palm oil — India, China, Indonesia, Pakistan — are not demanding CSPO or other forms of certified palm oil, the RSPO and others leading efforts to address environmental, social, and labor issues — such as RAN, WWF, and the IFC — should work together to identify a way of encouraging trade in ethical products to the developing world.

One option for aligning incentives of retailers is reducing tariffs on products that are certified under a recognized sustainability certification scheme such as the RSPO. In doing so, buyers of palm oil in foreign countries would essentially receive a discount on ethically produced palm oil, subsidized partially by the government through deferred tariff revenue. In order to come to a balance on tariffs, countries could investigate the feasibility of raising tariffs on unsustainable palm oil imports to compensate for the lost revenue.

## **Company initiatives**

The growers are the organizations that are using exploitative labor practices. While this certainly makes them key organizations to engage with, this does not necessarily mean growers are averse to potential solutions to redress these practices. Growers are profit-maximizing businesses whose explicit goal is to produce the most palm oil feedstock possible given the available resources, while still following the national laws and meeting the relevant commitments of certifications.

However, it is possible to implement initiatives that both benefit the employer's profitability and free workers from the exploitative labor practices often employed by growers on plantations.

***Encourage direct recruitment by large grower organizations***

**Issue:** Since the introduction of the centralized labor-broker system in Malaysia in 2006, most recruitment of unskilled workers for plantations has been effectively outsourced to labor brokers, who have little interest in the alignment of workers with their employers. This issue has negative effects for both the worker and the employer.

Workers do not receive accurate descriptions of their employment, such as living and working conditions, the type of work to be performed, remuneration, and benefits. They are obliged to pay a fee to labor brokers and as such are more susceptible to becoming indentured in debt-bondage scenarios.

From the employer's perspective, workers who enter their employ with limited knowledge of their future position are more likely to become frustrated with their job, less likely to meet acceptable levels of productivity, and more likely to leave the plantation, either illegally or to return to their home country. Under these circumstances, employers feel compelled to exert additional control and to restrict the freedom of employees by withholding documents, to ensure that employees do not flee the plantation.

**Desired Outcome:** Aligned expectations and longer-term tenure of workers on plantations.

In the current Malaysian and Indonesian environments, these companies are not especially motivated to practice responsible and ethical management of human capital. In using labor brokers, employers are distancing themselves from the recruitment process and making it more challenging to recruit workers suitable for and willing to commit to longer-term employment at plantations. By taking direct ownership of recruitment, growers can set appropriate expectations and agree on fair, contracted terms and conditions of employment that are more likely to leave both parties' interests served.

Large, integrated growers looking to hire more than 50 people have the ability to recruit directly. This investment in the recruitment of laborers increases the likelihood of longer-term employment whereby productivity can be gradually increased — meaning growers can regain their investment over a longer term, with less concern that they will need to replace the worker. The workers themselves are able to benefit from better working conditions that allow them to gain the competencies that make them more productive workers.

***Eliminate quota systems in favor of balanced, incentive-based schemes for plantation-based workers***

**Issue:** Growers currently set required, fixed quotas that must be met by employees for such activities as harvesting, spraying, and other plantation-based work. These quotas often do not reflect the specific competencies or abilities of workers, nor do they necessarily make other important considerations. Excessive quotas that are misaligned with realistic targets decrease productivity and result in poorly motivated employees. Overworked employees are at higher risk of causing injury to themselves and others due to fatigue. Workers who are under constant stress and fatigue are also considerably more likely to leave the plantation if presented with an opportunity. Even if they do not leave, constant toil can lead to lower overall productivity. Perhaps most critically, excessive quotas create incentives for children to contribute to harvesting activities by picking up loose fruit or carrying felled FFB. This engagement in key harvesting activities — a notably fatiguing and dangerous job — is a critical instance of child labor on many plantations.

**Desired Outcome:** Improved, balanced productivity and elimination of the incentive for child labor.

Growers should re-evaluate quota systems in order to apply more effective motivation tools, such as targeted and balanced metrics that accurately evaluate and encourage individual productivity and reduce the likelihood of absencing work due to fatigue, injury, or departure.

***Purchase only segregated-certified palm oil.***

**Issue:** Buyer uptake of RSPO-certified palm oil represents only about 45 percent of available supply and is not segregated-certified. Furthermore, most certified palm oil is sold under a “book and claim” system, a certificate trading system separate from the physical trade in palm oil. Under this system, buyers purchase certificates for sustainable palm separately from their purchases of physical palm oil. This system has the benefit of being a cheaper form of certification, and allows companies who need to buy products that are not available certified to contribute to the production of CSPO. However, it also means that companies may still use oil that comes from uncertified sources, and thus may still support unsustainable practices. Segregated-certified palm oil is physically separated from noncertified palm oil all the way through the supply chain, and allows a company to guarantee that they are using CSPO.

While midstream traders are insulated from consumer pressure, they are highly concentrated, providing an opportunity for large-scale impact. In the U.S., 87 percent of palm oil is imported by nine companies.

**Desired Outcome:** Increase demand for segregated-certified sustainable palm oil.

Companies purchasing palm oil for use in their products should make an effort to buy only segregated-certified palm oil. This is the only way they can guarantee that their products are not produced using unsustainable methods.

## **The RSPO**

Significant efforts to improve the management of the expanding palm oil industry have been initiated, namely the Roundtable on Sustainable Palm Oil (RSPO). However, this significant initiative requires greater commitment from all stakeholders involved. The RSPO in particular must strengthen its focus on labor issues that are within its mandate. As the importance of palm oil continues to grow, so will the number of workers whose livelihoods depend on this industry for prosperity. The conditions afforded to plantation workers must be a priority for all industry stakeholders, including the growers of oil palms that own and operate plantations, the downstream buyers of palm fruit and its derivative oils, and the governments of countries both producing and buying palm oil.

The downstream supply chains of palm oil buyers in the United States and Europe are completely reliant on plantations where exploitative labor has been identified. While these companies have made initial commitments to redress their engagement and management of suppliers, and to invest in sustainable and socially responsible sourcing practices, for many buyers, this outcome continues to be a commitment to act but not committed action.

### ***Create RSPO structures, measures, and indicators that improve the focus on providing labor rights and addressing labor issues***

**Issue:** While the RSPO has made some progress in encouraging sustainable and ethical behavior, as well as collaborative discussion and action in the self-regulation of the palm oil industry, the priority of the organization remains on environmental issues and the profitability of member organizations. To date, no structure has been established that specifically assesses and promotes the management of labor issues. At present, there are no key, measurable indicators of some of the most crucial labor standards, including forced labor, meaning that organizations are equipped with little visibility into how such exploitative labor practices are considered and how compliance with these standards can be evaluated.

**Desired Outcome:** Develop an RSPO structure, that is, a working group that can support creation of motions targeting crucial labor issues, standards, and indicators for all exploitative labor practices.

No structure exists within the RSPO to ensure that labor rights are enshrined in the RSPO or to manage resolutions to key industry-labor issues. Such working groups exist currently for environmental and social issues, but no structure exists that can target and propose solutions to labor issues. The RSPO has indicated it is interested in forming a working group that seeks to refine and promote the certification of labor rights. This structure would facilitate the prioritization of labor issues among the other focuses of the organization. This would also serve as an effective channel through which to engage progressive member organizations in pilot programs and initiatives related to labor issues.

Labor-focused NGOs should seek to lead this initiative in order to drive the agenda on labor issues in the palm oil industry. To do so, they would need to become a member of the RSPO and be approved by the board of directors to sit on this working group.

The current principles and criteria of the RSPO do not create a framework from which all principal labor rights (based on the core ILO conventions) can be monitored and evaluated. By creating indicators

associated with these rights, the RSPO can more effectively evaluate the compliance of member organizations with labor standards. This effort can be promoted during the RSPO's current re-evaluation of P&Cs or through the next general assembly of the RSPO.

***Strengthen the grievance process at RSPO, including penalties, sanctions, and recourse for noncompliance***

**Issue:** The grievance process in the RSPO has not yet demonstrated that it is capable of requiring RSPO member organizations to comply with its P&Cs. Member organizations are not required to operate under the spirit of transparency and accountability that the organization suggests are the foundation of membership. A specific example of noncompliance that did not result in a grievance was the failure of the IOI Group to resolve its land disputes. Furthermore, organizations continue to traffic migrant workers into bonded situations, confiscating their travel documents without penalty or recourse.

**Desired Outcome:** Create motivation in member organizations to meet RSPO P&Cs and regulations.

To date, no organizations have been reprimanded significantly for failure to comply with the principles and criteria of the RSPO. Without penalties or recourse for noncompliance, organizations are not highly motivated to meet RSPO standards.

NGOs should engage with other members of the RSPO to re-evaluate the existing grievance process and to agree on meaningful, more-enforceable penalties that provide incentives for member organizations to respect the RSPO guidelines. Failure to comply should result in monetary fines as well as public indication of noncompliance.

## References

- Abdullah, Ramli; Labour Requirements in the Malaysian Palm Oil Industry in 2010 (Abdullah, 2010).
- AFP, Indonesia to double palm oil production by 2020 (AFP, 2009), available at <http://www.google.com/hostednews/afp/article/ALeqM5jkuiUPjbbpQ7bWEHWyx3ekSqxTAq>
- American Palm Oil Council, The Truth About Palm Oil (APOC), available at <http://www.americanpalmoil.com/palmtruth.html> accessed on November 1, 2012.
- Amnesty International, Trapped: The exploitation of migrant workers in Malaysia, 2010 (Amnesty International, 2010).
- Asia Foundation, Sabah's Stateless Children, December 8, 2010 (Asia Foundation, 2010), available at <http://asiafoundation.org/in-asia/2010/12/08/sabahs-stateless-children/> accessed on November 1, 2012.
- Astra Agro Lestari Tbk, PT; Embracing the Future, 2011 (Astra, 2011).
- Bakrie & Brothers, Building a Global Position, 2010 (Bakrie & Brothers, 2010).
- British Broadcasting Corporation, Proctor and Gamble — maker of Pringles (BBC, 2012), available at [http://news.bbc.co.uk/nol/shared/bsp/hi/pdfs/panorama\\_pringles.pdf](http://news.bbc.co.uk/nol/shared/bsp/hi/pdfs/panorama_pringles.pdf) accessed on November 1, 2012.
- Bursa Malaysia Information Services as of January 6, 2011 (Bursa Malaysia, 2011).
- Ghosts on our Own Land: Indonesian Palm Oil Smallholders and the Roundtable on Sustainable Palm Oil (Colchester and Jiwan, 2006) available at <http://www.forestpeoples.org/sites/fpp/files/publication/2011/02/ghostsonourownlandtxt06eng.pdf>
- Cramb, R.A., and McCarthy, John F.; Policy Narratives, Landholder Engagement, and Oil Palm Expansion on the Malaysian and Indonesian Frontiers (Cramb & McCarthy, 2008), available at [http://www.crawfordev.anu.edu.au/palm/palm\\_pdf/OP\\_expansion.pdf](http://www.crawfordev.anu.edu.au/palm/palm_pdf/OP_expansion.pdf) accessed on November 1, 2012.
- Cray, Charlie, The Story Behind the Informant, Corp Watch, available at [http://community.corpwatch.org/adm/pages/adm\\_palm.php](http://community.corpwatch.org/adm/pages/adm_palm.php) accessed January 9, 2013.
- Economist, The; The Other Oil Spill, June 24, 2010 (Economist, 2010), available at <http://www.economist.com/node/16423833> accessed on November 1, 2012.
- Edge, Brian; Interview with sustainability executive from large Malaysian palm oil producer in Kuala Lumpur, Malaysia, on March 2, 2012 (Edge, 2012a).
- Edge, Brian; Interview with Dr. Irene Fernandes of Tenaganita in Kuala Lumpur, Malaysia, on April 13, 2012 (Edge, 2012b).
- Edge, Brian; Interview with Daniel Lo of CAMSA (Coalition to Abolish Modern-day Slavery in Asia) in Kuala Lumpur, Malaysia, on February 28, 2012 (Edge, 2012c).
- Edge, Brian; Interview with Aman Shah Alladin of FELDA in Kuala Lumpur, Malaysia, on April 4, 2012 (Edge, 2012d).
- Environmental Leader, Kellogg's to Back All Palm Oil with Green Certificates, in Industry First, March 4, 2011 (Environmental Leader, 2011), available at <http://www.environmentalleader.com/2011/03/04/kellogg%E2%80%99s-to-back-all-palm-oil-with-green-certificates-in-industry-first/> accessed on November 1, 2012.
- Fair Labor Association, Migrant Workers in Malaysia, 2008 (FLA, 2008), available at [http://tp.fairlabor.org/en/migrant-worker-rights-forum/Occasional%20Paper\\_Migrant%20Workers%20in%20Malaysia.pdf/download](http://tp.fairlabor.org/en/migrant-worker-rights-forum/Occasional%20Paper_Migrant%20Workers%20in%20Malaysia.pdf/download)

First Resources Limited, Annual Report 2011 (First Resources, 2011).

Food and Agriculture Organization of the United Nations, FAOSTAT database, Production: Crops (FAOSTAT, 2010a), available at <http://faostat.fao.org/site/567/DesktopDefault.aspx?PageID=567>

Food and Agriculture Organization of the United Nations, FAOSTAT database, Production: Crops Processed (FAOSTAT, 2010b), available at <http://faostat.fao.org/site/636/DesktopDefault.aspx?PageID=636>

Food and Agriculture Organization of the United Nations, FAOSTAT database, Trade: Crops and Livestock Processed (FAOSTAT, 2010c), available at <http://faostat.fao.org/site/535/DesktopDefault.aspx?PageID=535>

Food and Agriculture Organization of the United Nations, FAOSTAT database, Trade: Detailed Trade Matrix (FAOSTAT, 2010d), available at <http://faostat.fao.org/site/537/DesktopDefault.aspx?PageID=537>

*Forbes*, Malaysia's 40 Richest (Forbes, 2012a), available at [http://www.forbes.com/lists/2012/84/malaysia-billionaires-12\\_rank.html](http://www.forbes.com/lists/2012/84/malaysia-billionaires-12_rank.html)

Forbes, Indonesia's 40 Richest (Forbes, 2012b) available at <http://www.forbes.com/indonesia-billionaires/>

Golden Agri Resources; Preserving the Present, Ensuring the Future: Annual Report 2011 (GAR, 2011).

Guardian, The; New Commitment on Sustainable Oil Palm, July 30, 2012 (Guardian, 2012) available at <http://www.guardian.co.uk/sustainable-business/commitment-sustainable-palm-oil-unilever> accessed on November 1, 2012.

Hap Seng Plantations Holding Berhad, Annual Report 2011 (Hap Seng, 2011).

Hardman & Company, Global Palm Oil Sector Monthly, July 11, 2011 (Hardman, 2011).

Independent, The; Big Brands: Palm oil policy, May 2, 2009 (Independent, 2009) available at <http://www.independent.co.uk/environment/green-living/big-brands-palm-oil-policy-1677480.html> accessed on November 1, 2012.

International Finance Corporation, Environmental, Economic and Social Impacts of Oil Palm in Indonesia: A Synthesis of Opportunities and Challenges, 2010 (IFC, 2010) available at [http://www.ifc.org/ifcext/agriconsultation.nsf/AttachmentsByTitle/WB+discussion+paper/\\$FILE/WB\\_Oil+Palm+SynthesisDiscussionPaperMay2010.pdf](http://www.ifc.org/ifcext/agriconsultation.nsf/AttachmentsByTitle/WB+discussion+paper/$FILE/WB_Oil+Palm+SynthesisDiscussionPaperMay2010.pdf)

International Labour Office of the United Nations: Results and Methodology (ILO, 2012), available at [http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---declaration/documents/publication/wcms\\_182004.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_182004.pdf)

IOI Corporation Berhad, Annual Report 2011 (IOI, 2011).

Jiwan, Norman; What's Happen in the Indonesian Palm Oil Industry, 2011 (Jiwan, 2011), available at <http://sawitwatch.or.id/2011/09/what%E2%80%99s-happen-in-the-indonesian-palm-oil-industry-2/>

Kuala Lumpur Kepong Berhad, Annual Report 2011 (KLK, 2011).

Kulim (Malaysia) Berhad, We Care for Tomorrow: Annual Report 2011 (Kulim, 2011).

Lonsum, Strengthening Capabilities, Enhancing Value: Annual Report, 2010 (Lonsum, 2010).

Malaysia Palm Oil Board, Overview of the Malaysian Palm Oil Industry 2011 (MPOB, 2011), available at [http://bepi.mpob.gov.my/images/overview/Overview\\_of\\_Industry\\_2011.pdf](http://bepi.mpob.gov.my/images/overview/Overview_of_Industry_2011.pdf)

Malaysia Palm Oil Board, Economics & Industry Development Division (MPOB, 2012), available at <http://bepi.mpob.gov.my/index.php/statistics/production/71-production-2012.html> accessed on November 1, 2012.

New Strait Times, Chance to be part of a global company, January 16, 2012 (New Straits, 2012), available at <http://www.nst.com.my/opinion/columnist/chance-to-be-part-of-a-global-company-1.32876> accessed on November 1, 2012

OECD-FAO Agricultural Outlook 2012-2021 (OECD, 2012), available at <http://stats.oecd.org/viewhtml.aspx?QueryId=36355&vh=0000&vf=0&i&il=blank&lang=en> accessed on November 1, 2012.

PriceWaterhouseCoopers, Palm oil plantation: Industry landscape, regulatory and financial overview (PWC, 2010), available at <http://www.pwc.com/id/en/publications/assets/Palm-Oil-Plantation.pdf>

Pulitzer Center, In Indonesia and Malaysia, as Demand for Palm Oil Grows, So Do Environmental, Labor Concerns, November 26, 2012 (Pulitzer Center, 2012), available at <http://pulitzercenter.org/reporting/indonesia-malaysia-palm-oil-development-environment-labor-migrant-workers> accessed on January 9, 2013.

Rainforest Action Network, (RAN, 2011), available at <http://understory.ran.org/2011/03/21/the-great-rspo-membership-myth-why-buying-from-rspo-members-doesnt-mean-jack-shit/> accessed on November 1, 2012.

Reuters, Insight: Top palm oil producer Indonesia wants to be more refined, July 16, 2012 (Reuters, 2012) available at <http://www.reuters.com/article/2012/07/16/us-indonesia-palm-idUSBRE86E0HV20120716> accessed on November 1, 2012.

Robertson Jr., Philip S.; Migrant Workers in Malaysia – Issues, Concerns and Points for Action, 2008 (Robertson, 2008) available at [http://tp.fairlabor.org/en/migrant-worker-rights-forum/Occasional%20Paper\\_Migrant%20Workers%20in%20Malaysia.pdf](http://tp.fairlabor.org/en/migrant-worker-rights-forum/Occasional%20Paper_Migrant%20Workers%20in%20Malaysia.pdf)

Roundtable on Sustainable Palm Oil, Annual Communication of Progress 2011-2012 for Body Shop (Body Shop, 2012).

Roundtable on Sustainable Palm Oil, Annual Communication of Progress 2011-2012 for General Mills (General Mills, 2012).

Roundtable on Sustainable Palm Oil, Annual Communication of Progress 2011-2012 for Ikea (Ikea, 2012).

Roundtable of Sustainable Palm Oil Annual Communication of Progress 2011-2012 for Johnson & Johnson, 2012 (Johnson & Johnson, 2012) available at [http://www.rspo.org/sites/default/files/ACOP2012\\_CGM\\_4-0030-06-000-00-1.pdf](http://www.rspo.org/sites/default/files/ACOP2012_CGM_4-0030-06-000-00-1.pdf) accessed November 1, 2012.

Roundtable on Sustainable Palm Oil, Annual Communication of Progress 2011-2012 for Kraft (Kraft, 2012), available at [http://www.rspo.org/sites/default/files/ACOP2012\\_CGM\\_4-0195-11-000-00-77.pdf](http://www.rspo.org/sites/default/files/ACOP2012_CGM_4-0195-11-000-00-77.pdf) accessed on November 1, 2012.

Roundtable on Sustainable Palm Oil, Annual Communication of Progress 2011-2012 for Mars (Mars, 2012), available at [http://www.rspo.org/sites/default/files/ACOP2012\\_CGM\\_4-0127-10-000-00-25.pdf](http://www.rspo.org/sites/default/files/ACOP2012_CGM_4-0127-10-000-00-25.pdf) accessed on November 1, 2012.

Roundtable on Sustainable Palm Oil, List of Members (RSPO, 2012a), <http://www.rspo.org/en/member/listing/membership> accessed on November 1, 2012.



Roundtable on Sustainable Palm Oil, Member Certification Data (RSPO, 2012b), available at <http://www.rspo.org/en> accessed on November 1, 2012.

Sime Darby Berhad, Annual Report 2011 (Sime Darby, 2011).

Teoh, Cheng Hai; The Palm Oil Industry in Malaysia: From Seed to Frying Pan (Teoh, 2002), available at [http://assets.panda.org/downloads/oilpalmchainpartaandb\\_esri.pdf](http://assets.panda.org/downloads/oilpalmchainpartaandb_esri.pdf)

United States Custom and Border Protection (USCBP, 2012), accessed on April 18, 2012 using Panjiva.

United States Department of Agriculture, Economic Research Service Table 47: World Vegetable Oils Production, 2007/08-2011/12 (USDA, 2011), available at [http://www.ers.usda.gov/datafiles/Oil\\_Crops\\_Yearbook\\_2012/table46.xls](http://www.ers.usda.gov/datafiles/Oil_Crops_Yearbook_2012/table46.xls) accessed on November 1, 2012.

United States Department of Agriculture, Global Agricultural Information Network Report Number IN2030: Oilseeds and Products Update for India, February 29, 2012 (USDA, 2012).

United States Department of Agriculture, Global Agricultural Information Network Report Number CH12020: Oilseeds and Products Annual for China – People Republic of, March 1, 2012 (USDA, 2012a).

United States Department of Labor, List of Goods Produced by Child Labor or Forced Labor, 2010.

United States Department of Labor, By the Sweat and Toil of Children: The Use of Child Labor in U.S. Agricultural Imports, A Report to the Committee on Appropriations U.S. Congress (USDOL, 1995), available at [http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1143&context=key\\_workplace](http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1143&context=key_workplace) accessed on November 1, 2012.

United States Department of Labor, Bureau of International Labor Affairs, 2011 Findings on the Worst Forms of Child Labor, 2012, (USDOL, 2012) [http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDMQFjAA&url=http%3A%2F%2Fwww.dol.gov%2Ffilab%2Fprograms%2Focft%2F2011TDA.pdf&ei=c\\_ULUcKCDogkiQK2yYG4AQ&usg=AFQjCNHPwW09DzKbRQ1T9XcHLtsA9NclNA&bvm=bv.41867550,d.cGE](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDMQFjAA&url=http%3A%2F%2Fwww.dol.gov%2Ffilab%2Fprograms%2Focft%2F2011TDA.pdf&ei=c_ULUcKCDogkiQK2yYG4AQ&usg=AFQjCNHPwW09DzKbRQ1T9XcHLtsA9NclNA&bvm=bv.41867550,d.cGE) accessed January 31, 2013.

United States Department of State, 2012 Trafficking in Persons Report, 2012, <http://www.state.gov/j/tip/rls/tiprpt/2012/index.htm>

Wilmar International Limited, Sustainable Growth: Annual Report 2011 (Wilmar, 2011).

World Bank Group, The; GEM Commodities Databank (World Bank, 2012a), available at <http://data.worldbank.org/data-catalog/commodity-price-data> accessed on November 1, 2012.

World Bank Group, The; World Databank database (World Bank, 2012b), available at <http://data.worldbank.org/indicator> accessed on November 1, 2012.

World Wildlife Fund, WWF Palm Oil Buyers' Scorecard 2011 (WWF, 2011) available at [http://assets.panda.org/downloads/wwf\\_palmoil\\_buyers\\_scorecard\\_2011.pdf?utm\\_source=Scorecard\\_websection&utm\\_medium=button&utm\\_campaign=PalmOilScorecard](http://assets.panda.org/downloads/wwf_palmoil_buyers_scorecard_2011.pdf?utm_source=Scorecard_websection&utm_medium=button&utm_campaign=PalmOilScorecard) accessed on November 1, 2012.