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PALM OIL INDUSTRY AND TECHNOLOGY NEWS

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Certificates Issued for
Producers as of Last Year**

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Cooking Oil in Polybags Meets
Prescribed Quality, Not Recycled**

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Greetings to all readers. We have come to the July issue, our well wishes for everyone as time started to get tough again. Although the national immunization program has been rolled out for the past few months, the number of cases has increased rapidly and drastically. The economy and livelihood of people have taken a toll with this effort to curb the ongoing pandemic sees no end in the near future. The situation in local hospitals is in a rough state too as the wards are fully occupied.

Vaccine coordinating minister, Khairy Jamaluddin stated that the government projects 10% of the population to be fully vaccinated for COVID-19 by mid-July. Putrajaya will roughly administer 10.7 million doses to fully immunize 3.2 million people. He also stated that Malaysia can only move to the second phase of the national recovery plan and one of it is when the healthcare system is no longer in a critical position.

We are witnessing the people's cries and voices for help as the sudden spike of cases and lockdown cause a deteriorating effect especially to households with lower income. We are also witnessing a tremendous effort among people in helping each other. Various NGOs come forward with foodbanks to aid those in need. People have also come up with several solutions such as putting white flag in front of houses to signify asking for help. At times like this, people are relying on each other to continue surviving until cases decreasing.





Susan Tricia
Editor

As for the palm oil industry, we are currently facing a labor shortfall of around 32,000 people with the COVID-19 restrictions being imposed. This labor shortage issue is estimated to cause around RM10bil losses annually, according to Minister Datuk Mohd Khairuddin Aman Razali.

On behalf of the editorial team, thank you for your continuous support in Asia Palm Oil Magazine. Stay in touch with us on www.asia-palmoil.com and follow us on Facebook and LinkedIn for more updates. Let's pray for a better future, stay at home, and together we can fight COVID-19.

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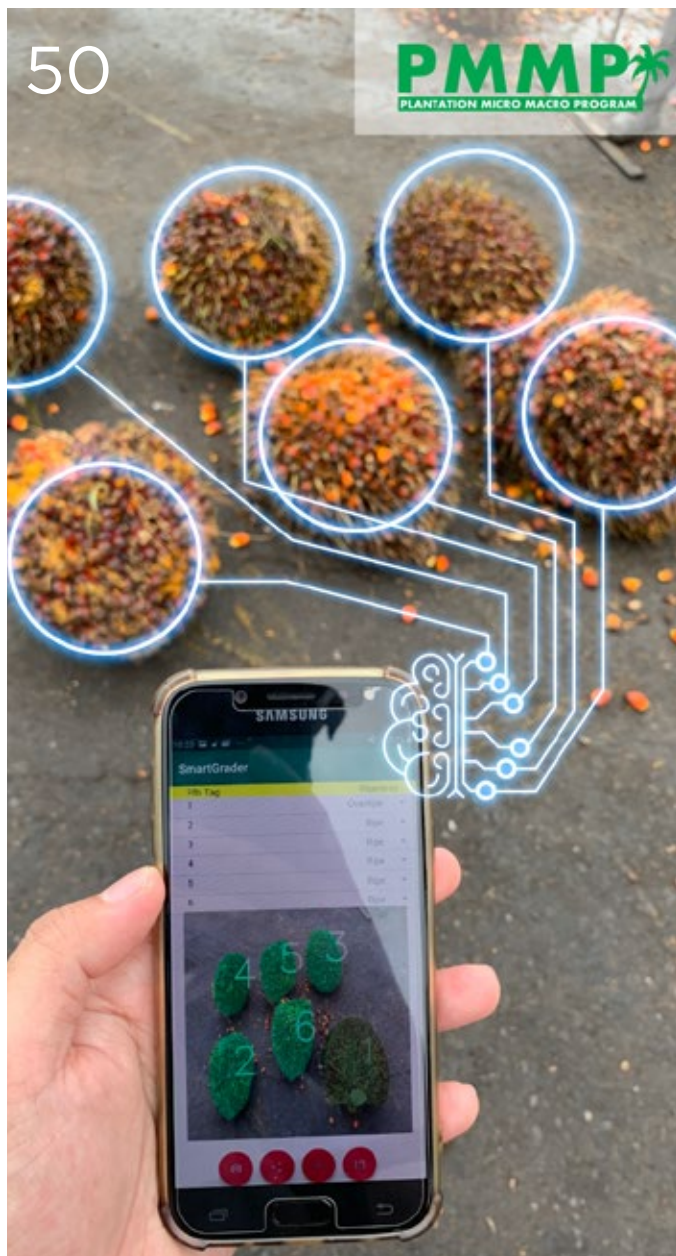


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KLK Set to Take Over IJM Plantations for RM1.5bil



KLK has a total planted area of 223,964ha across Malaysia, Indonesia and Liberia and could add another 60,966ha across Malaysia and Indonesia with the acquisition. (IJM pic)

Malaysian palm oil giant Kuala Lumpur Kepong (KLK) Bhd has proposed to acquire IJM Corporation Bhd's entire stake in IJM Plantations Bhd for RM1.53 billion (US\$371.72 million), IJM Corp said.

In a Bursa filing, IJM Corp said it has received a letter from KLK, one of the largest palm oil planters in the country, offering to acquire its 56.2% equity holding at RM3.10 per share.

The construction group said it has agreed in principle to finalise terms of the proposed acquisition with KLK.

"After having deliberated on the merits of the offer, the board is in principle agreeable to finalise the terms and conditions with KLK for the execution of the sale and purchase agreement," it said.

KLK, IJM Corp and IJM Plantations had requested for a trading suspension.

IJM Corp's potential disposal of its plantation division comes at an opportune time, capitalising on the crude palm oil upcycle to fetch a higher valuation, MIDF Research analyst Khoo Zhen Ye said in a note.

The offer, a 26% premium to IJM Plantations' last traded share price of RM2.46, values the palm oil producer at RM2.73 billion.

Shares in IJM Plantations have risen 35% this year, giving it a market capitalisation of RM2.16 billion.

The firm posted record profit in its 2021 financial year but was loss-making in the previous two financial years.

KLK's shares have declined 8.1% since the start of this year.

KLK has a total planted area of 223,964ha across Malaysia, Indonesia and Liberia. Acquiring IJM Plantation, which has a total planted area of 60,966ha across Malaysia and Indonesia, could expand KLK's planted area by around 27% and raise its palm oil production.

The deal will also give IJM Corp, which mainly deals with construction, property and infrastructure, an opportunity to strengthen its balance sheet in order to undertake mega construction and infrastructure projects, analyst Khoo said.

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Strong CPO Prices Boost Boustead Plantations 1Q Net Profit

Higher palm product prices saw Boustead Plantations Bhd posting net profit of RM12.22mil in the first quarter ended March 31, 2021. Announcing the stronger set of financial results, it expects the current high crude palm oil (CPO) prices will contribute positively to the group's earnings this year.

Boustead Plantations said the 1Q21 net profit was in stark contrast with a net loss of RM9.55mil a year ago.

Its revenue increased by 5.68% to RM171.94mil from RM162.69mil. Earnings per share were 0.55 sen compared with loss per share of 0.43 sen. It declared a dividend of 0.3 sen a share which will be paid on June 30, 2021 to shareholders on the register as at June 11.

"The group's strong results were primarily attributable to higher palm product prices. Average crude palm oil (CPO) selling price increased to RM3,751 per ton, reflecting an increase of RM958 or 34% from RM2,793 per ton in the same quarter last year. Average palm kernel price was also higher at RM2,520 per ton, up by RM820 or 48%," it said in a statement.

Boustead Plantations reported fresh fruit bunches (FFB) production for the quarter was 180,165 tons while FFB yield

came in at 2.6 tons per hectare. Average oil extraction rate and kernel extraction rate stood at 20.3% and 4.0% respectively. Its chief executive officer Ibrahim Abdul Majid said: "We are pleased to maintain our positive momentum to deliver improved results for the first quarter. Moving forward, the group's performance will continue to be driven by crop production and CPO prices.

"We are optimistic the current high CPO prices will contribute positively to the group's earnings this year, although this may be moderated by lower production due to the existing labor shortage in the plantation industry," he said.



Boustead Plantations expects the current high crude palm oil (CPO) prices will contribute positively to the group's earnings this year.

Ibrahim also pointed out the recruitment of foreign workers was impacted by the border closures as a result of the pandemic, as well as Malaysia's ongoing vaccination programme which is being rolled out in stages.

He added this was compounded by challenges in recruiting a local workforce for plantation estates, aggravating the labor shortage in the industry.

"Nevertheless, most global commodity prices including grains and edible oils such as sunflower oil, rapeseed oil, soy oil and palm oil surged to multi-year highs in the first quarter of 2021.

"The high edible oil prices were mainly due to lower production, growing demand, tightening stocks and speculative buying by hedge funds and commodity speculators. The global shortage of vegetable oils is likely to persist in the near to medium term, as palm oil production is recovering slower than expected," he said.

However, Ibrahim cautioned the demand for palm oil and soybean could potentially be affected by the recent resurgence of COVID-19 cases, particularly in India, as well as Asian Swine Flu in China. He added the increased pricing pressure on oilseeds and vegetable oils is expected going into the second half of 2021 based on the prospect of large production increases in the 2021/2022 season.

"However, palm oil prices are expected to remain elevated and above average throughout 2021," Ibrahim said. Meanwhile, Boustead Holdings group managing director Datuk Seri Mohammed Shazalli Ramly said in order to drive sustainable



growth, the group will continue to be guided by the group's "Reinventing Boustead" strategy.

"We are looking into creating new streams of revenue by exploring new high technology and digital-based start-up ventures that will leverage on BPB's core strengths and complement its current business operations. These are very exciting new opportunities for BPB and will help to put the company on a stronger footing to propel the group's sustainable growth," he said.



FGV Inks RM175mil Deal to Buy MSM Perlis from 51 Per Cent-Owned MSM

FGV Holdings Bhd, via subsidiary FGV Integrated Farming Holdings Sdn Bhd, has inked a share sales agreement with MSM Malaysia Holdings Bhd to buy MSM Perlis Sdn Bhd for RM175 million. The agreement is a continuation of the binding term sheet signed between MSM and FGV Integrated on April 30 this year.

MSM, which is 51 percent-owned by FGV, will obtain shareholders' approval via an extraordinary general meeting by the third quarter of 2021. The transaction was expected to be completed before the end of the year," FGV and MSM said in a joint statement.

MSM group chief executive officer Syed Feizal Syed Mohammad said the disposal of MSM Perlis was part of the group's blueprint in monetizing non-core assets to strengthen and improve its financial performance. Syed Feizal said an extraordinary income with an estimated gain of RM91.6 million would be realized as part of the disposal.

"It is also to enhance our operational front, particularly on utilization factor and yield improvement in MSM Sugar Refinery (Johor) Sdn Bhd (MSM Johor).

"Aside from the disposal, the accelerated planned rectification works at MSM Johor will also support MSM's target to reach a minimum utilization rate of 50 per cent by the third quarter of 2021," he said.

Recently, MSM Johor completed its boiler rectification work and resumed its sugar production and packing. The temporary closure was to allow planned rectification works and targeting higher operational reliability and stocks availability.

FGV group officer in charge and divisional director of logistic and support businesses sector Azman Ahmad said it was looking forward to developing and expanding the FGV Chuping Agro Valley project to realize FGV Integrated's strategic initiatives.

"This is in line with the government's proposition to bolster the domestic economic sector and provide employment opportunities in efforts to reduce the impact of the pandemic," said Azman.



FGV Holdings Bhd inks a share sales agreement with MSM Malaysia Holdings Bhd to buy MSM Perlis Sdn Bhd for RM175 million.

To date, more than 50 employees and field workers have been hired for the project.

In addition, a total area of 60 hectares has been allocated for the agropreneurs programme under the contract farming scheme for the MD2 Pineapple project. The first batch of agropreneurs' recruitment is expected to be in July 2021.

"FGV Integrated has already commenced the groundwork of 1,200 hectares of MD2 pineapple plantation where we target to complete the development by the year 2025," said Azman.

Since the cessation of sugar cane plantation in 2011, MSM Perlis managed agricultural land with rubber, oil palm and mango plantations. However, due to unsustainable performance associated with high operating costs of maintaining plantation activities, MSM Perlis ceased its plantation sector activities on June 30, 2019.

MSM Perlis' sugar refinery operations were discontinued a year later following MSM's capacity rationalization to consolidate the production in the new refinery, MSM Johor.

These decisions were mandated by both boards of directors of FGV and MSM in the companies' best interest to optimize the potential of the assets and strengthen the capital structure.

As public-listed companies, stakeholders will continue to be engaged, and both companies will make timely disclosures. Guided by its business plans and strategies, FGV and MSM will remain resilient in sustaining the turnaround journey and building on emerging opportunities.

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Techbond's New Upstream Polymerization Plant in Vietnam Commenced Operation



Techbond Group Bhd's (TGB) new upstream polymerization plant in Vietnam has commenced production of base material, polyvinyl acetate (PVAc) polymer, the raw material used by TGB to manufacture industrial adhesives.

Techbond Group Bhd's (TGB) new upstream polymerization plant in Vietnam has commenced production of base material, polyvinyl acetate (PVAc) polymer, the raw material used by TGB to manufacture industrial adhesives.

The production commencement at the Vietnam-Singapore Industrial Park II (VSIP II) will enable TGB to achieve cost savings through reduced transportation of raw materials from third-party suppliers.

It will also lower the company's reliance on external suppliers and improve TGB's profit margin from now on, coupled with the tax incentives given in Vietnam.

The setup of TGB's VSIP II factory complex entitles the company to a full tax exemption in Vietnam for the first two years upon having taxable income and a 50 per cent reduction of payable tax amounts in the subsequent four years.

TGB managing director Lee Seng Thye said that the capability to produce its own raw material provides the company with greater control over the quality, properties, and characteristics of the polymer.

"Currently, we plan to meet our own polymer needs for existing industrial adhesives.

"Subsequently, the excess will be used to produce new types of adhesives to be sold to customers. Techbond's new polymerization plant is part of our new 6,968 sq meters factory complex in VSIP II, which comprises new industrial adhesives manufacturing lines, warehouses, office, and quality control center," he said in a statement.

He said TGB also took a big step toward becoming a pioneer

in non-toxic palm oil-based industrial adhesives. Together with the Malaysian Palm Oil Board (MPOB), the company has successfully filed a patent application for the improved production process of palm-based polyol.

"We were able to significantly reduce the production process of the polyol, which is key in enabling commercialization.

"Currently, we are undergoing testing with our customers and potential customers as well," Lee said.

To recap, 72 per cent or RM28.7 million of the proceeds raised from TGB's initial public offering (IPO) exercise in December 2018 has been earmarked for the VSIP II factory complex.

The new factory complex sits on a 30,000 sq meters land with a built-up size of 6,968 sq meters, and TGB existing factory in Vietnam sits on 9,037 sq meters land with 3,972 sq meters built up.

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Indonesian Authority Revokes Plantation Licence of TDM's Land in West Kalimantan



The Indonesian authority has revoked the plantation business licence (IUP) issued to TDM Bhd's Indonesian subsidiary PT Sawit Rezki Abadi (PTSRA) for its 10,000ha land located in the municipality of Melawi, West Kalimantan, which is expected to result in a financial impact amounting to RM3.5 million on the group.

In a filing with Bursa Malaysia, TDM said PTSRA received the revocation letter on June 11 and after due deliberation and consultation with the relevant party, PTSRA informed TDM of the issue.

"The decision to revoke the IUP is made on the reason that the property has not been developed since 2015. PTSRA is currently consulting its legal counsel and in the process of making an appeal to the Bupati of Melawi," the group said.

Bupati of Melawi refers to the regent of the municipality of Melawi.

TDM said the revocation of IUP will have a financial impact of RM3.5 million at the group level, based on the net assets directly associated with PTSRA as at Dec 31, 2020.

However, TDM maintained that the amount is not material as it represents less than 0.5% of the group's total equity.

"There is no operational impact as there is no activity on this land. The operation of the other TDM Indonesian subsidiary PT Rafi Kamajaya Abadi (PTRKA) runs as usual and no adverse implication arising against it due to the revocation of PTSRA's IUP," it said.

According to TDM, PTRKA is its main active Indonesian subsidiary and currently operates 10,727ha of oil palm planted area at Kecamatan Pinoh Utara, Kabupaten Melawi, Indonesia.

TDM shares today slid one sen or 3.85% to close at 25 sen apiece, giving the group a market capitalisation of RM422.74 million.

IOI Corp Notes Forced Labor Claims Against Planter in US Letter to Activist

IOI Corp Bhd said the company has taken note of the US Customs and Border Protection's (CBP) letter to migrant worker rights specialist Andy Hall to whom the CBP indicated that the CBP had acknowledged the receipt of a petition providing information on alleged forced labor at oil palm plantation company IOI Corp's operations in Malaysia.

According to a statement on IOI Corp's website today, the CBP indicated in a letter dated May 26, 2021 that the CBP had determined the information was sufficient to investigate the merits of the allegation.

"As at the date of this statement (June 25), IOI Corp has not been contacted by CBP with regard to their investigation. Nevertheless, IOI Corp will take the proactive step in contacting CBP to confirm the existence of an investigation and offer our cooperation in providing explanation and documents to assist the investigation.

"Being a founding member of Roundtable on Sustainable Palm Oil (RSPO) and among the first Malaysian companies to announce a zero recruitment fees policy — where workers do not have to pay any fees or flight charges to join the company, for all our migrant workers in year 2017, IOI Corp is well aware of the importance of our workers' rights and working conditions, as well as the requirement to adhere to Malaysian labor laws and international labor standards.

"We have been working with a number of local and international labor rights experts and NGOs (non-governmental organizations) during the last five years to monitor the implementation of our labor policies, and provide recommendations on improving our labor policies, practices and conditions in our plantations. We recognize that this is an ongoing process and will endeavor to achieve our objective of being an exemplary company in this area," IOI Corp said.

On Bursa Malaysia today, IOI Corp's share price slipped one sen or 0.26% at 12.21pm to RM3.82, giving the company a market capitalization of about RM24.03 billion.

IOI Corp has 6.29 billion issued shares.



PM Urges Egypt to Increase Palm Oil Imports from Malaysia



Prime Minister Tan Sri Muhyiddin Yassin has called on Egypt - the largest Malaysian palm oil importer in Africa - to increase future palm oil imports from the country.

Muhyiddin also proposed for a Comprehensive Economic Cooperation agreement between both countries, which was well received by Egyptian president Abdel Fattah Al Sisi.

“During our first virtual conference yesterday, I suggested that it is time for Malaysia to reinvigorate ties with Egypt and Abdel Fattah welcomed this suggestion and called for top leaders from both countries to deliberate on this.

“We also discussed various areas of mutual interest, especially to enhance cooperation in trade, economy, education, tourism and infrastructure development.



Muhyiddin also proposed for a Comprehensive Economic Cooperation agreement between both countries, which was Prime Minister Tan Sri Muhyiddin Yassin has called on Egypt -the largest Malaysian palm oil importer in Africa - to increase future palm oil imports from the country. - BERNAMA Pic

“Abdel Fattah and I also expressed our readiness to step up Malaysia-Egypt trade ties in the future.

“I encouraged Egypt to not only continue purchasing the commodity from Malaysia but also to increase its imports in the future,” he said via a Facebook post, referring to palm oil.

Muhyiddin said, he also conveyed his appreciation to the Egyptian government for offering education opportunities to some 8,000 Malaysian students who are currently pursuing their higher education various fields, such as Islamic studies, medicine and dentistry in the country.

On the international front, Muhyiddin also praised Egypt’s constructive role in brokering a ceasefire agreement between Palestine and Israel that came into force on May 21.

“In this regard, I also suggested a prospective cooperation between Malaysia and Egypt to channel medical and humanitarian aid to Palestine through the Rafah borders which is the only gateway that connects Egypt and Gaza.

“The President has expressed his readiness to help Malaysia send our assistance to Palestine,” he said.

Both leaders also pledged to make an official visit to their respective partner countries once the COVID-19 pandemic ends.

Egypt is currently Malaysia’s largest trading partner in the North Africa region with a trade value of RM2.06 billion in 2020.



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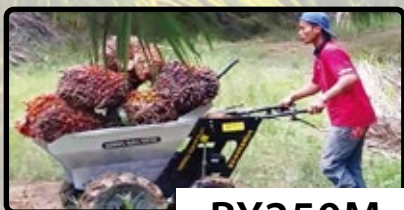
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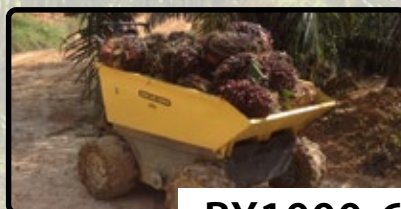
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Bourse to Launch New Palm Oil Contract



Palm oil traders in the two states said the current palm oil contract puts them at a disadvantage – Sabah and Sarawak crude palm oil is typically sold at a discount to spot prices in peninsular Malaysia, while freight costs are higher as the designated delivery points are also in the peninsula. This makes physical delivery unfeasible.

The new contract – the East Malaysian Palm Oil Futures (FEPO) – will cater for physical deliveries in Sabah and Sarawak through three designated ports, Ho said.

The Bursa Malaysia Derivatives Exchange manages Malaysia's crude palm oil futures contract (FCPO), which sets the global price benchmark for the world's cheapest and most widely used edible oil.

Malaysia plans to launch a new palm oil futures contract in the third quarter, allowing traders in the nation's two largest palm producing states greater price discovery and a viable option for physical delivery.

The Bursa Malaysia Derivatives Exchange manages Malaysia's crude palm oil futures contract (FCPO), which sets the global price benchmark for the world's cheapest and most widely used edible oil.

"The (new) contract mirrors most of the FCPO specifications, with enhancements made to benefit Sabah and Sarawak palm oil players," said Samuel Ho, CEO of Bursa Malaysia Derivatives.

Located on the island of Borneo, Sabah and Sarawak contribute 45% of Malaysia's crude palm oil production.

Malaysia is the world's second-largest palm oil producer and exporter after Indonesia.

The contract also provides greater price discovery to the Sabah and Sarawak market and an avenue for traders to hedge their price risks, he added.

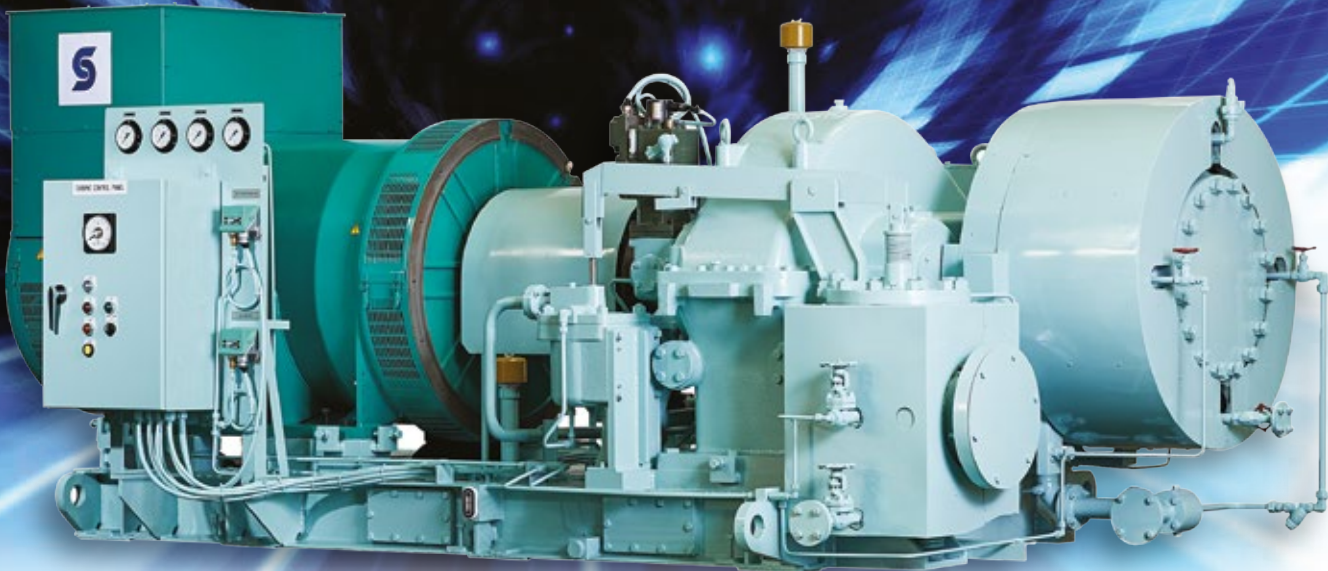
FEPO will start trading earlier at 9am to coincide with Chinese trading hours, Ho said. The current FCPO contract starts trading at 10:30am

Andrew Cheng, chief executive of the Sarawak Oil Palm Plantation Owners Association, said producers in the two states lose more than RM1bil (US\$241.7mil) a year due to the price difference and that the new contract can eliminate that.

Based on Malaysian Palm Oil Board data, Sarawak's crude palm oil price had been trading at a discount ranging between RM13 and RM198 a tone during January 2020 to April 2021, he said.

"It will allow us to fetch a better price, and with the savings we can expand the downstream industry in Sarawak to be fully-integrated and mature," he added.

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IMPLEMENTATION OF B20 BIODIESEL MANDATE IN SABAH, PENINSULAR MALAYSIA DELAYED AGAIN

The execution of the B20 biodiesel programme in Sabah and Peninsular Malaysia has been postponed, to a date to be decided upon later.

Sources with knowledge on the matter said the decision was based on the rise in COVID-19 cases as well as the nationwide Movement Control Order (MCO).

“The COVID-19 pandemic has impacted the movement of manpower by petroleum companies in the preparation process for biodiesel blending in Sabah and Peninsular Malaysia,” they added.

The sources added discussions with parties involved are being held to discuss an implementation date that is more realistic, subject to the MCO.

They added the implementation of the B20 biodiesel programme is still ongoing in Langkawi, Labuan and Sarawak without any changes.

Some sources also attributed the delay to high crude palm oil (CPO) prices, which made blending biodiesel too expensive.

Malaysian Palm Oil Board (MPOB) director-general Ahmad Parveez Ghulam Kadir said at the virtual Palm Oil Economic Review and Outlook Conference 2021 that B20 will be introduced in Sabah in June and in Peninsular Malaysia in December.

It was reported that at the virtual Palm and Lauric Oils Price Outlook Conference earlier this year, Malaysian Biodiesel Association (MBA) president UR Unnithan said the B20 biodiesel mandate in Malaysia is expected to use one million tons of CPO.

Sarawak started the roll-out of B20 biodiesel in September 2020, while Labuan and Langkawi started their roll-out of B20 biodiesel in January 2020.

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MPIC Names MPOB, MRB Chairman

Plantation Industries and Commodities Ministry (MPIC) has named Mad Zaidi Mohd Karli, the ministry's deputy sec-gen for plantations and commodities, as the interim chairman of the Malaysian Palm Oil Board's (MPOB).

MPIC minister Datuk Mohd Khairuddin Aman Razali said the appointment was made after Datuk Ahmad Nazlan Idris, the former chairman of the Malaysian Rubber Board (MRB), declined the offer.

"Datuk Ahmad Nazlan Idris has been appointed as the chairman of the MPOB, effective April 15, 2021 to replace Datuk Ahmad Jazlan Yaakob, who resigned in January.

"However, following the media statement by Datuk Ahmad Nazlan who rejected the appointment as MPOB chairman, a new candidate has been determined to allow for a streamlined administration and management.

"Thus, deputy sec-gen for plantations and commodities, Mad Zaidi Mohd Karli, has been appointed as the interim chairman of the palm oil board," Mohd Khairuddin said in a statement.

Meanwhile, the ministry has also named Raja Datuk Idris Raja Kamaruddin as the new chairman of the Malaysian Rubber Board (MRB), effective April 15, 2021

"In this regard, Ahmad Nazlan's service as the chairman of the rubber board was terminated on April 14, 2021 and Raja Datuk Idris Raja Kamaruddin was appointed to replace him, effective April 15, 2021.

"Among the key mandates entrusted to Raja Datuk Idris is to rearrange the direction strategic involving MRB's properties, resolving issues involving five facilities in Sungai Buloh that have been disrupted since a few years ago as well as MRB and LGM Properties Corp (LGMPC) new strategic plans," he said.

He added that Raja Datuk Idris's previous experience in leading the Kumpulan Perangsang Selangor Bhd and TDM Bhd, which is a subsidiary of the Terengganu state government, is hoped to benefit MRB through good corporate governance practices.



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Palm Oil Output at Risk as Lockdown Worsens Labor Shortage



The shortage of oil palm harvesters, which was around 40,000 before the pandemic hit, has probably doubled by now, says a growers' group.

A resurgence of COVID-19 infections in Malaysia is set to exacerbate a labor shortage and curb production of the world's most-consumed cooking oil.

The extension of the national lockdown until June 28 has shuttered non-essential industries and is expected to prolong a freeze on the recruitment of foreign workers as the country battles with a third wave of the pandemic.

"The crux of the issue is the labor shortage. We have lost of about 20% to 30% of our potential production because of this," according to Nageeb Wahab, chief executive at the Malaysian Palm Oil Association, a growers' group that represents 40% of palm plantations by area.

"That would have gone up more this year especially among smallholders," he said in an interview.

That means Malaysian palm oil planters may now miss estimates for yields to rebound in the second half, which were made due to the annual seasonal high cycle that typically begins in July, and the initial assumption that restrictions on workers' intake would have been eased.

The Malaysian Palm Oil Board (MPOB) last week reported January-May production is about 6% smaller than a year ago.

Lower-than-expected supplies in Malaysia are preventing a deeper drop in benchmark palm futures, which tumbled about 8% on Monday to close at the weakest in over four months. More than 70% of the plantation workforce are migrant workers

and the country produces about 26% of the world's palm oil, the second largest after Indonesia.

"There is a good chance that production will continue to disappoint as the government is not allowing foreign workers to come in," and it is unlikely to do so when COVID cases are high, according to Ivy Ng, head of research at CGS-CIMB.

"It should be supportive to prices if supplies are not as strong as projected."

Crop losses

Despite nearing the peak cropping months, labor constraints will prevent a big jump in yields and keep Malaysian production below 19 million tons this year, Nageeb said, lower than the 19.14 million tons in 2020.

The shortage of oil palm harvesters, which was around 40,000 before the pandemic hit, has probably doubled by now, he said.

"Everybody is short of workers today," Nageeb said. "We're seeing numbers from companies, the shortage keeps on increasing month by month."

While the government initially approved the sector to bring in 32,000 workers, "that has taken a backseat in view of the recent spike" in cases, he said.

Losses in revenue will also be "much, much higher". Planters, who were already losing about RM1 billion a month last year because of the shortage, may now be missing out on at least RM1.2-1.5 billion per month as palm oil prices are higher on year and labor is even tighter.

In contrast, Indonesia is set to churn out a record crop this year as favorable rains boost yields, according to PT Astra Agro Lestari, the country's biggest-listed planter.

Production may climb by two million tons to reach 53.6 million tons in 2021, with output of fresh fruit bunches rising gradually to a peak in the months of September through November.



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Collaboration Is Key to Scaling up Training for Oil Palm Smallholders in Indonesia



Delivering training on sustainability to smallholders in Indonesia, one of the largest palm oil producers in the world, is challenging. There are around 2.5 million smallholders within the country - a formidable asset to the industry. Yet many independent smallholders - whether due to geographic isolation, a lack of access to other supply chain actors, or the absence of supporting organizations - do not have access to structured training or other reliable sources of knowledge on palm oil farming.

In view of this, RSPO pioneered the Smallholder Trainer Academy (STA). Dedicated to developing a community of trainers across the country, it helps to build capacity amongst a growing number of smallholders. Since its launch in November 2019, more smallholders can now demonstrate proof of legal land holding, apply good agricultural practices and are members of a farmer group (co-op, association, etc.).

Key to success has been partnership. By working with 12 local organizations in Indonesia, the RSPO STA has managed to train 6,635 smallholders as of April this year.

Guntur Prabowo, the Smallholder Programme Manager in Indonesia, mentioned that “While knowledge alone will not (at least directly) address other issues, such as a lack of access to technology, markets and financing, it is a necessary condition for creating sustainable livelihoods. Without it, traditional farming practices, which may include damaging environmental practices, are being passed down from generation to generation”. There is no “one size fits all” solution given the diverse needs

and realities of smallholders. With a 170% jump in the number of smallholders being certified last year, we see that the bulk of program costs derive from the delivery of trainings and technical support. “We need to partner with more organizations and companies to make it easier and more affordable for smallholders to access this knowledge and expertise” he added.

STA recognizes the need to move from scaling organizations to scaling impact through a network of intermediaries, institutions, organizations, and initiatives that are already actively pursuing the same aims. This ensures that efforts build off existing practices and support existing Government programs to scale up and reach more farmers. A recent training collaboration between the STA and Yayasan Kehati under the SPOS Indonesia Programme, provided an understanding of sustainability and nudged smallholders in three producing provinces towards participation in the formal value chain of ISPO and RSPO certification.

Irfan Bakhtiar, the SPOSI director argues that this is the time for smallholders to have full awareness of meeting sustainability standards. “With ISPO becoming mandatory by 2025, there should be a generic capacity building method developed for smallholders.”

These trainings in Central Kalimantan, East Kalimantan, and West Sulawesi are led by Master Trainers of STA from various participating organizations that focus on adult learning approaches based on needs and outcomes of the smallholder groups.



(Courtesy of RSPO)



The training sessions focus on topics covering environmental, economic and social sustainability, health and safety and group formation of smallholders. These topics were curated with the aim of helping the smallholders to better understand sustainable approaches towards long-term planting of palm trees.

Harris Silalahi, one of STA's Master Trainers was the lead trainer for both the trainings with Yayasan Kehati. Pak Harris has 15 years of experience as an individual consultant and trainer under De Guru Consulting in Indonesia. He explained that "Like other people, oil palm smallholders learn in different ways. For example, while printed materials are likely to resonate with people visual-spatial and verbal-linguistic intelligence, coaching and mentoring for transaction-based learning may relate more to interpersonal and intrapersonal intelligence, and field-based training may for instance trigger people's logical-mathematical and naturalistic intelligence."

"Smallholders also learn in different places. For many, the classroom setting will be unusual and boring but possibly also far away and the opportunity cost too high. More feasible venues for learning may be their own or surrounding farms, the closest collection point or mill, or their mobile phones."

The training includes interactive exercises and discussion among the smallholders to encourage participation. The content was designed with inputs from smallholders on their ability to understand the context and the language barrier.

Muhammad Ramli, one of the smallholders who attended the training said, "Now we understand better what constitutes good agricultural practices and the importance of record keeping, thanks to this 4-day training. We hope that we are able to continue applying what we have learned in order to access better social and economic opportunities whilst living in harmony with the environment."

This is not the first training to take place. STA has worked with their global STA Master Trainers to disseminate the knowledge on sustainable planting since the end of 2019. As of April 2021, they have managed to train a combined total of 7,456 smallholders, group managers and community trainers globally.

In line with the RSPO's Smallholder Strategy, the objective of the STA is to improve the livelihood of smallholders and enable them to survive and thrive with decreasing amounts of external assistance.

"Our Smallholder Livelihood program goes beyond certification. Whilst this training bridges the knowledge gap on the journey to certification, more important is making sustainable planting of oil palm the norm. This, we believe, will contribute significantly to improving smallholders' livelihoods" according to Kertijah Abd Kadir, the Smallholder Livelihood Programme Manager.

The Smallholder Training Academy (STA), an initiative of the Roundtable of Sustainable Palm Oil (RSPO), is a training platform for smallholders globally to access knowledge and high quality training in order to build their capacity to achieve sustainable livelihoods.



Potential Ban on Palm Oil, Glove Products by Canada is Unfounded

Malaysia's palm oil and glove exports will suffer a minimal impact should Canada decide to ban the import of the products following allegations of forced labour practices in the industries.

Industry expert MR Chandran said Canada is not a very big market for Malaysian palm oil which can be diverted to domestic use or other new or existing export markets.

"They have not done anything yet at the moment. I think Canada is trying to follow what the US has done. The US Customs and Border Protection (CBP) banned Sime Darby Plantation Bhd and FGV Holdings Bhd last year.

"However, there is no evidence to prove the allegations until now which is ridiculous. Sime Darby Plantation has a few international certifications such as the Roundtable on Sustainable Palm Oil, so what is the basis?" he told The Malaysian Reserve (TMR).

Reuters reported last week that Canada is investigating allegations of forced labour in Malaysia's palm oil and glove manufacturing industries.

Employment and Social Development Canada's Labour Programme was actively researching a number of forced labour allegations in different countries and sectors, including palm oil and glove manufacturing in Malaysia.

Malaysian firms, which include some of the world's biggest palm oil and rubber glove producers, have faced increasing scrutiny in recent years over reports of labour abuses and destruction of tropical jungles.

Chandran questioned how the US and Canada could come with allegations concerning Movement Control Orders that have been in place since March 18, 2020, to combat the spread of the COVID-19 pandemic.

"How can they go to the ground and make an audit? Probably, it is only done through phone interviews or somebody has complained. What is the justification, where is the proof?" he added.



The country is investigating allegations of forced labour in Malaysia's palm oil and glove manufacturing industries

According to open data available from Canadian government, Malaysia exported some RM282 million worth of palm oil and RM1.31 billion worth of rubber gloves to the country in 2020.

Chandran did not express concern that such action could spread to other countries, especially European countries.

"The European Union has its own rules and regulations. Both Malaysia and Indonesia have a lot of investment in Europe — in the downstream space which creates a lot of jobs for European. So, I don't think Europe will take such a drastic measure," he said.


The US CBP has stopped and/or confiscated Malaysian-made gloves in the past on the ground of forced labour indicators, such as excessive hours, abusive living and working conditions, debt bondage, intimidation, physical and sexual violence and the retention of identity documents by companies.

The sanctioned companies include Top Glove Corp Bhd, Sime Darby Plantation and FGV Holdings.

An analyst at a local brokerage said the Canadian action will have a minimal impact because Canada is not a major market for the big four local glove companies.

"Western countries raising forced labour issues in Malaysian companies is not something new. I strongly believe our companies have done a good job to adopt labour guidelines.

"All the impact of such action has been factored into the share prices of the glove and plantation companies," he told TMR.



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More Than 750 ISPO Certificates Issued for Producers as of Last Year



An aerial view shows an oil palm plantation in Bulutumbang, Belitung, in August 2020. The government is issuing Indonesia Sustainable Palm Oil (ISPO) certificates for more and more oil palm plantations across the country, but the certificate is not recognized by the European Union. (JP/Donny Fernando)

More than 750 Indonesia Sustainable Palm Oil (ISPO) certificates have been issued as of last year, but the vast majority are for private corporations and state-owned plantation company PT Perkebunan Nusantara (PTPN), while smallholders remain largely uncertified.

According to Didi Junaedi, the director for processing and marketing of plantation products at the Agriculture Ministry, 735 of those certificates were for corporate entities.

“There are also 20 ISPO certificates for smallholders, although it was previously voluntary,” Didi said at an online discussion.

Through the issuance of the certificates, the government seeks to address global concerns over deforestation in crude palm oil (CPO) production. Presidential Regulation No. 44 of 2020 requires smallholders to get ISPO certificates no later than 2025. For companies, the obligation under the presidential regulation took effect immediately after it was issued.

The government has been seeking to counter what it calls a campaign against Indonesian CPO over alleged environmental damage, especially from the European Union, one of the country’s major trading partners. However, the EU does not recognize the ISPO certificate.

More than one-third of the 16.38 million hectares of oil palm plantations across the country are now certified, according to Rusman Heriawan, an advisor of the National Action Plan for Sustainable Palm Oil Forum.

Nearly 63 percent of the plantations owned by companies have been certified, as have nearly one-third of state-owned plantations, according to an estimate from Rusman, who in the past served as deputy agriculture minister and as the head of Statistics Indonesia (BPS). By contrast, a mere 0.19 percent of smallholder plantations have been certified.

“This is still very uneven,” Rusman admitted. “Meanwhile, we cannot exempt smallholder plantations in the context of the entire palm oil industry. It has to be everyone.”

Smallholders account for around 41 percent of the total plantation area in Indonesia, which stretches across 26 provinces, according to Rusman.

Riau has the largest oil palm plantation areas with a total of 2.43 million ha, followed by West Kalimantan, North Sumatra, Central Kalimantan and South Sumatra, according to data from the Agriculture Ministry. But the productivity was highest at almost 5 tons per ha in North Sumatra.

Source: www.thejakartapost.com

The government needs to resolve deforestation resulting from opening new oil palm plantations, says Diah Suradiredja of Yayasan Kehati, a foundation that collects and manages grants and other support to preserve the country’s biodiversity. She said 3.4 million ha of plantations were located inside forest areas, which are officially off-limits for cultivation.

“Why do we have to be concerned about this? Because this is one of the issues raised and has put us under pressure; we have to solve issues related to deforestation,” said Diah. Indonesian CPO exports were down 41.10 percent year-on-year at 418,259 tons in March, according to the latest BPS data, the majority of which was shipped to India.



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Indonesia Yet to Decide on Whether to Revise Palm Oil Export Levy, Say Officials

Indonesian authorities have yet to decide on whether to cut their crude palm oil (CPO) export levy, three officials told Reuters as the levies remained at their highest for five months in a row, hurting demand.

Indonesia, the world's top producer of the edible oil, raised CPO export levies last year to generate funds for its ambitious palm-based biodiesel program and smallholder farmer replanting scheme, at the expense of demand.

"It is still being discussed ... the export levy needs a review," Joko Supriyono, a member of the supervisory board of BPDP, the government body in charge of subsidizing palm oil programs, told Reuters.

"[We need to] consider market dynamics but also sustainably support the biodiesel program and replanting program," he added.

Musdhalifah Machmud, deputy minister of food and agriculture, told Reuters that authorities routinely review the levy but no decisions about cutting levies have been made yet.

Abdul Rochim, director general of the industry ministry said the issue was being debated but nothing had been decided.

The levy was raised from a flat rate of US\$55 per ton to a price-dependent, progressive system of US\$55-US\$255 per ton. For June, it was set at US\$255 for the fifth successive month.

Analysts, traders and trade groups have warned that higher tariffs could impact demand for the versatile oil as consumers look at cheaper alternatives, while farmers say that higher levies lower prices for their fresh fruit bunches.

But Indonesia's biodiesel policy, where it is mandatory for diesel to be blended with 30% bio content from palm, has helped the country sop up excess supply of palm and has supported prices.

Downstream sector industry groups showed support for a higher levy for palm oil, which is widely found in consumer products, saying it guaranteed supply and higher value-added palm oil shipments.

Indonesia's CPO exports rose 18.7% in March year-on-year, the country's palm oil association (GAPKI) reported last month. GAPKI has not released data for the subsequent months.

MALAYSIAN SUSTAINABLE PALM OIL MSPO

CERTIFICATION SCHEME

The Malaysian Sustainable Palm Oil (MSPO) Certification Scheme was implemented on a voluntary basis in 2015 as the national scheme in Malaysia for oil palm plantations, independent and organised smallholdings and palm oil processing facilities to be certified against the requirements of the MSPO Standards (MS2530:2013).

The MSPO Scheme sets stringent guidelines for the establishment of implementation and best operational and agricultural practices that ensures sustainable production of Malaysian palm oil for the world.

The Malaysian Sustainable Palm Oil (MSPO) Certification Scheme was announced in May 2017 for mandatory implementation by end 2019.

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India's Palm Oil Imports Seen to Slow

The sustained spike in COVID-19 infections in India, one of the biggest crude palm oil (CPO) importers, could see the flow of the commodity into the country slowing for the months of May and June.

This could happen due to the current lockdown, which requires the temporary closure of hotels and restaurants, said TA Research.

“The hotel, restaurant and cafeteria segment accounts for 40% of the country’s total edible oil demand of 23 million tons annually,” it said.

Industry statistics by the Solvent Extractors Association of India showed that the country bought about 1.68 million tons of CPO from Malaysia and 1.29 million tons from Indonesia from November 2020 to March 2021.

The statistics showed that the total stock of edible oils as of April 1 had decreased to 1.68 million tons, which is 16% below the five-year average of 2.0 million tons.

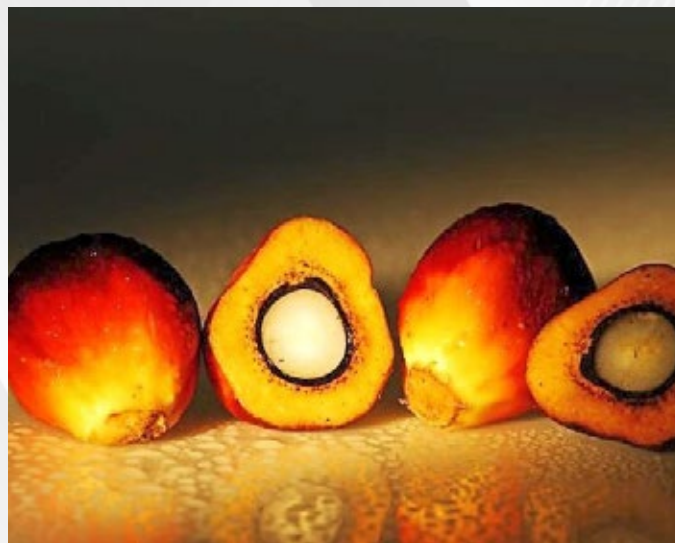
“Besides the pandemic-led demand slowdown, the decline in palm oil exports to India in May and June could also be aggravated after the (anticipated) Ramadan restocking activities,” it said.

“Based on India’s monthly consumption of 1.9 million tons during the normal period, its current stock of 1.68 million tons suggests that India would be running out of palm oil by the end of June without significant imports,” TA Research added.

This stock level, which is deemed threatening, makes it believe that palm oil exports to India would recover significantly once the COVID-19 pandemic in the country is under control.

TA Research is also anticipating for its imports to rebound from July onwards with the resumption of restocking activities upon the upliftment of lockdowns should the COVID-19 infections decline.

It cited also India-based scientists from IIT Kanpur and Hyderabad, who are predicting that daily COVID-19 cases in India may peak at 440,000 between May 14 and 18.



Buying less: India is one of the biggest importers of palm oil in the world, but a spike in COVID-19 cases, leading to a lockdown, is seen to slow its purchase of the commodity.

Meanwhile, CGS-CIMB said in its report that it believes that rising CPO stocks in the country could limit the CPO price upside.

“Malaysia’s palm oil stocks rose 7% from the previous month but fell 24% from the previous year to 1.55 million tons as at end-April.

“This is due mainly to higher output and lower local usage. The stock level at end-April was 5% above our forecast of 1.47 million tons, due mainly to lower-than-expected domestic consumption, likely on rising cooking oil prices,” CGS-CIMB said.

“The palm oil stockpile level still remains tight relative to historical levels (the past ten-year April month average inventory was at 1.98 million tons),” it added.

Moving forward, it expects Malaysian planters to report better year-on-year (y-o-y) first-quarter 2021 earnings, as the higher CPO price that gained some 48% y-o-y more than offset the lower output of -5% y-o-y.

TA Research has kept its “overweight” recommendation on the plantation sector, while CGS-CIMB has maintained its “neutral” stance on Malaysian planters.



India Palm Oil Imports from Thailand Spike As Price Pressures Mount

India's palm oil imports from Thailand in May have increased by almost ten times from a month before as Thai-origin palm oil has become more price-competitive than Indonesian and Malaysian supplies, although by a slim margin.

More than 90,000 mt of Thai palm oil arrived in India by May 21, a market source told S&P Global Platts.

India is the largest buyer of palm oil in the world and relies almost completely on Indonesia and Malaysia for its monthly supply of 650,000-750,000 mt, principally for cooking, confectionery, soaps and cosmetics.

"Thai-origin palm oil was cheaper by \$10/mt compared to its larger rivals... India is a price sensitive market," Sandeep Bajoria, CEO of Sunvin Group, a Mumbai-based vegetable oil brokerage said.

However, he pegged total Thai imports slightly lower at 75,000 mt in May.

For perspective, India's imports of crude palm oil (CPO) from Thailand in April 2021 were recorded at 8,206 mt, data from India's vegetable oil industry body, the Solvent Extractors' Association of India (SEAI) showed.

Prior to this, India did not import any Thai palm oil between January and March, SEAI data showed.

"I do not think this high [spike in Thai-imports] will be seen in the coming months as Indonesia's production is rising and it will get competitive again," Bajoria said when asked if India's purchases from Thailand will carry on at a similar pace.

SEAI will release May supply and demand data on June 12.

Palm, soybean and sunflower oils are currently trading around 13-year highs due to supply and demand constraints, which has forced bulk buyers to pare down stocks and consumers to shell out more for the essential commodity.

Prices have been further aggravated by progressive tax slabs set by Indonesia and Malaysia which increase incrementally as reference prices of palm oil cross per-determined thresholds. Notably, Indonesia also has an additional progressively increasing export levy on palm oil.

India, with a per capita vegetable oil consumption of 19 kg one the highest in the world has been particularly hard hit. On May 24, senior government officials met with industry trade bodies to take stock of the situation and look for solutions to ease the pressure on customers.

Indian traders are currently in a wait-and-watch mode as there is market chatter that a cut to Indonesia's \$255/mt export levy may be announced in the coming weeks, multiple sources told S&P Global Platts. However, there is no official announcement yet.

Thailand is the third-largest producer of palm oil. However, it accounts for only 3% of the global production, while Indonesia and Malaysia account for 85% of the world's estimated annual production of roughly 73 million mt.

Indonesian Oil Palm Plantations Urged to Tighten COVID-19 Curbs As Infections Climb

Indonesia is the world's top producer of palm oil.



The Indonesian palm oil association (GAPKI) is urging oil palm plantations to tighten COVID-19 protocols in the country's top-producing province of Riau after a surge in infections in the area, an official at the industry body said.

The South-east Asian country is the world's top producer of palm oil, used in everything from soap to ice cream and fuel, with exports in 2020 estimated at about US\$23 billion (\$30 billion).

Riau is located on Sumatra Island and accounts for 3.38 million hectares, or about a fifth of the country's 16.38 million hectares of oil palm plantations.

The province has seen a surge in coronavirus infections in recent weeks, reporting an average of around 522 cases per day since May 16, and ranking among the worst-hit provinces.

"There has been an increase in cases in these (palm plantations) with loose protocols, though they are operating normally," Mr. Jatmiko Sentosa, head of GAPKI's Riau chapter, told Reuters.

Some plantations had already adopted measures since the beginning of the pandemic, including COVID-19 testing and not allowing workers to leave the plantation, but they were not

always standardized or enforced in the same way, Mr. Jatmiko said.

"With cases increasing, we are compiling and providing detailed health protocol referrals, which we will urge all members to refer to," he said, noting that such measures should not affect the output of plantations.

Farmers had been encouraged by high palm oil prices to ramp up production, making it more crucial to avoid a spike in infections, Mr. Jatmiko said.

"If employees are exposed, production is disrupted. They cannot take advantage of this good price moment," he said.

Epidemiologist Wildan Asfan Hasibuan, an adviser for the Riau COVID-19 task force, said outbreaks in plantations should be easier to contain than in urban areas.

"Our biggest problem is in the cities.... in rural areas, it's relatively safer," he said.

Indonesia has suffered the worst coronavirus outbreak in South-east Asia, reporting 1.87 million infections and 51,992 deaths.



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Sabah Makes Strides towards Sustainable Palm Oil Production

Growing up during the late 1980s, this writer used to visit his grandfather's small oil palm estate in Batu Pahat, Johor, where his favorite activities were catching ikan puyu or the climbing perch fish and trapping burung wak-wak or white-breasted waterhen.

His grandfather Mohtar Haron, who is now 86, was well aware of the importance of sustainable palm oil production as he used to tell this writer that fauna such as climbing perch and white-breasted waterhen would have disappeared from there if he had used excessive chemical products to take care of his oil palm trees.

His plantation and the surrounding area's ecosystem were kept intact by the wild owls that kept the pests away and the fallen palm fronds that were turned into organic fertilizer with the help of certain insects and animals.

Sabah, Malaysia's biggest palm oil-producing state with a total planted area exceeding 1.35 million ha, is taking the necessary measures to position itself as a global leader in sustainable palm oil production.

According to the Sabah Socioeconomic Report 2019 published by the Department of Statistics Malaysia, its agriculture sector – which is the third-largest in the country – contributed to 16.1 per cent of the state's RM85.4 billion gross domestic product that year.

Sabah's palm oil industry – which constitutes 65.3 percent of Sabah's agriculture sector – is among the state's most important economic sectors that provide jobs and livelihood assurances to millions of Sabahans.

Jurisdictional approach

Last year, its palm oil production stood at 4.65 million tons, which comprised 6.2 per cent of the world's palm oil production. Naturally, Sabah has not been exempt from widespread criticism, what with the international media often alleging that the opening of oil palm plantations is causing massive deforestation and loss of wildlife habitats in the state.

How does the state strike a balance between conserving the environment and boosting its palm oil industry?



In 2020, Sabah produced 4.65 million tons of palm oil. — Bernama photo

A crucial step taken by the state in this direction is the implementation of the Jurisdictional Certification of Sustainable Palm Oil (JCSPO) and establishment of the Jurisdictional Certification Steering Committee (JCSC) in 2016.

Central to the JCSPO is the jurisdictional approach which provides a structured approach to establishing wider commitments from stakeholders to sustainable palm oil practices state-wide.

The JCSC is co-chaired by Sabah Forestry Department and Sabah Natural Resources Office, while its members comprise representatives from the government and private sectors, and civil society.

The jurisdictional approach also seeks to align interests and coordinate the actions of the government, businesses, local communities and non-governmental organizations towards shared conservation, supply chain sustainability and green development goals to bring about a sustainable palm oil industry.

Sabah Forestry Department chief conservator of forests Frederick Kugan told Bernama the jurisdictional approach will be able to address environmental and social issues faced by the palm oil industry, as well as support the sustainability of the industry in the future.

"The JCSPO is a very important initiative to ensure conservation and sustainable development, and certification of palm oil production is necessary especially in addressing issues such as chemical use and labor standards," he said.

According to Frederick, a larger perspective is needed to safeguard wildlife populations, forest resources and ecosystems.

“Thus, finding a common ground is vital so that nature, as well as the palm oil industry, benefit from each other.

“I think we have done much to achieve great conservation efforts in Sabah that can, in fact, benefit other sectors, especially palm oil,” he added.

The JCSPO initiative is a 10-year plan that aims to produce 100 percent Roundtable on Sustainable Palm Oil (RSPO) certified sustainable palm oil by 2025. To date, about 26 percent of Sabah-produced palm oil is RSPO-certified.

Helping estate owners

World Wildlife Fund (WWF) Malaysia executive director and chief executive officer Sophia Lim said the JCSPO initiative will help the Sabah government to address deforestation in the oil palm supply chain by putting in place strategies, policies and measures to safeguard the forests.

“This is a crucial step in positioning Sabah and laying the foundation for the state as the global leader in sustainable palm oil (production),” she said.

One of WWF-Malaysia’s contributions towards the realization of the JCSPO initiative in Sabah is the Sabah Landscapes Programme, which supported the certification of 70,000 hectares of mid-sized plantations and smallholdings in the Tawau, Tabin and Lower Sugut landscapes.

“WWF-Malaysia has set up a dedicated sustainable palm oil team to provide technical support to growers located within the landscapes to form growers’ groups and subsequently guide them to undergo the RSPO group certification process.

“Through the living landscapes approach, we also work on advancing sustainable palm oil to include elements of conserving the orang utan and Bornean elephants, as well as supporting the management of protected areas and forest reserves within the landscapes,” said Lim.

Wildlife conservation

With regard to wildlife conservation, one of the most common problems faced by oil palm estate owners in Sabah is the conflict between humans and wildlife, with local media having reported several incidents of Bornean elephants found dead in plantations, obviously killed by humans for ‘trespassing’ their land.

Sabah Wildlife Department director Augustine Tuuga said the holistic approach offered by JCSPO provides the platform for plantation companies and local communities to find solutions to the man-animal conflict and allow wildlife to coexist with humans and development.

“When elephants, for example, are squeezed into small areas without food and water, they will rampage through plantations and eat the crops. The JCSPO is our hope of ensuring a brighter future for wildlife species in Sabah,” he said.

He said having wildlife corridors that link the small patches of forests remaining in oil palm estates to wider forest habitats is the key to the survival of animals such as the orang utan stuck in the plantation landscapes, especially in the lowlands of Sabah.

Tuuga said these corridors are needed because the monoculture nature of oil palm plantations means that the plants cannot support species that are dependent on the forest environment.

“So the forest patches within plantations are important as the orang utan and other wildlife species use them for survival as well as to travel to the adjacent forest areas,” he said.

Better control

Sabah Assistant Agriculture and Fisheries Minister Datuk James Ratib, meanwhile, said the state government needs to formulate a clear policy on the palm oil industry.

“A clear policy for palm oil development is needed to make it sustainable. We also need to establish a Sabah Palm Oil Board if we want to be the main player in the palm oil industry,” he said.

According to James, several issues of concern have cropped up in view of the vibrancy of the state’s palm oil industry, one of which is the opening of illegal plantations by people who clear forests without any concern for the environment or sustainable practices.

“Some farmers are even opening oil palm plantations without owning any land grant, which can be troublesome when they want to sell the palm fruit bunches or get RSPO or JCSPO certification.

“That’s why better control is needed in this industry so that we can make it beneficial and sustainable for the people and the environment,” he added.

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Cargill Plans Indonesian Sustainable Palm Oil Refinery



Trading company Cargill has started building a dedicated sustainable palm oil refinery in Indonesia's Lampung province in southern Sumatra, which it plans to complete in late 2022.

The firm will invest \$200mn in the plant but cannot specify capacity at this stage.

The plant will accept certified sustainable crude palm oil and process according to Cargill's sustainable palm oil policy. This will allow it to guarantee deforestation-free products throughout the entire palm oil supply chain and better cater to traceability demands of buyers in North American and European markets.

Long-running concerns about sustainability of palm oil cultivation have been heating up in Europe during the last year, with France, Austria, the Netherlands and Germany already or soon banning the use of palm oil-based biofuels in their markets, ahead of an EU-wide phase-out by 2030.

The US has also prohibited palm oil imports from two Malaysian companies on allegations of human rights abuses on plantations.

"This project is a key step for Cargill to increase the availability of sustainably sourced and produced edible oil ingredients for our customers," said Cargill Asia-Pacific president Robert Aspell.





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CPOPC CALLS ON EU TO ADOPT NON-DISCRIMINATORY BIOFUELS POLICY TO FIGHT CLIMATE CHANGE

The Council of Palm Oil Producing Countries Urges the EU to Adopt a Biofuels Policy That Will Provide Realistic Solutions towards the Decarbonization of Energy

The Council of Palm Oil Producing Countries (CPOPC) urges the European Union (EU) to revise its approach on vegetable oils in biofuels under the framework of the Renewable Energy Directive II (RED II) in light of the upcoming revision of the Directive expected on 14 July 2021 as well as the Commission's approaching deadline for adopting rules on certifying low indirect land-use change (ILUC)-risk biofuels and updating the list of high ILUC-risk feedstocks.

The use of ILUC as a policy tool has been fraught with methodological problems and biases from the beginning. Therefore, a new approach, which treats all sustainable vegetable oils equally, based on verified production practices and not on the type of commodity, is urgently needed. After all, commodities in themselves are not responsible for deforestation – it is the practices that matter.

Palm oil has been singled out as damaging to the environment based on a comparison study that used 2008-2016 as a gauge for ILUC. This timeline discriminates against countries that were late in development whose growth during that period affected Land Use Change.

The CPOPC argues that a proper timeline for the sustainable development of palm oil producing countries including Indonesia and Malaysia should start from post-colonial times. A new expansive study on Land Use Change by Nature tracked Land Use Change from 1960-2019 and identified 43 million Km² from the Global North to the South. Estimates on palm oil cultivation globally puts it at a mere 250,000 Km².

Further evidence of the EU's bias against palm oil lies in its analysis of Annual Net Increase of Harvested Area 2008-2016 which highlighted palm oil as the highest at 4%. This puts palm oil at the highest risk of ILUC if one only looks at the percentage.

It must be noted that the same analysis showed considerably larger land footprints of other vegetable oils. Palm oil started at a base point of 15.369 kha while rapeseed and soy started at 30.093 kha and 96.380 kha respectively. The EU analysis granted rapeseed an annual net increase of 1%.

This is a clear distortion of facts. Had palm oil producing countries developed at the same pace as rapeseed producing countries, palm oil would have shown a 2% increase instead of 4%. The most apparent distortion of facts is in granting soybean 3% based on a start point and annual increase of harvested areas that is more than four times larger than palm oil.

Seen in this perspective, the CPOPC argues that the energy yield per hectare of land used for biofuels must be included for fair analysis. Scientific research has shown that palm oil has an energy efficiency of four times that of rapeseed or soy. Once this knowledge is applied to the EU analysis on land use of vegetable oils, it would place palm oil as the most efficient crop for renewable energy. In addition to land use, recent studies on the environmental impacts of tilling and heavy agri-chemical use for soy and rapeseed demand that the EU include the environmental impacts these vegetable oils have as their contribution to climate change is more quantifiable than the ILUC supposition.

Confidence in Palm Oil Producing Countries

Major palm oil producing countries of Indonesia and Malaysia, both of which have interests in the EU's biofuels program have shown commitments and concrete actions to the sustainability of their palm oil production. That Indonesia enforces a moratorium in opening new land for oil palm and Malaysia has also committed to cap the total size of oil palm cultivated area at 6.5 million hectares are just two examples of progress recorded by both countries. Significant decrease of wildfires and deforestation in Indonesia has to be acknowledged.



CPOPC gives credit to better land use management by the respective countries for this phenomenon as both countries strive towards sustainable management of all their natural resources and positive impacts of palm oil in uplifting millions of farmers out of poverty.

The implementation of national certification schemes for palm oil including the Indonesian Sustainable Palm Oil (ISPO) and Malaysian Sustainable Palm Oil (MSPO) have been instrumental in establishing the sustainability of their palm oil production.

Clarity in Certification

The CPOPC acknowledges the EU's concerns on the efficiency of voluntary certification schemes and looks forward to proving the efficiency of mandatory national schemes in removing deforestation from EU imports.

The CPOPC further acknowledges the EU's new proposal that "the share of high indirect land-use change-risk biofuels, bioliquids or biomass fuels produced from food and feed crops for which a significant expansion of the production area into land with high-carbon stock is observed shall not exceed the level of consumption of such fuels in that Member State in 2019, unless they are certified to be low indirect land-use change-risk biofuels, bioliquids or biomass fuels pursuant to this paragraph."

The global ambition to decarbonize is one of supreme urgency. The recent decision by G7 countries to back off ambitions for EVs is a clear signal that biofuels are a needed tool in fighting climate change without disrupting global economies.

Palm oil producing countries look forward to the ongoing EU-ASEAN Joint Working Group (JWG) on sustainable vegetable oils where a holistic and non-discriminatory approach towards vegetable oils can be developed to meet the Sustainable Development Goals (SDGs).

The national certification schemes which are mandatory for all palm oil production in Indonesia and Malaysia are without peer in the global trade for commodities. The CPOPC believes that the ISPO and MSPO schemes provide the right path towards the SDGs for both parties at the EU-ASEAN JWG.



Cooking Oil Subsidy Mechanism Discussions in Final Stages, Says Khairuddin

The government is in the final stages of discussions to determine the best mechanism for two-kilogramme (kg) or five kg bottled cooking oil, Plantation Industries and Commodities Minister Datuk Dr Mohd Khairuddin Aman Razali.

He said the matter will be tabled at the weekly Cabinet meeting on June 23, before it can be decided and announced to the public.

He said discussions between three relevant ministries, the Plantation Industries and Commodities Ministry, the Domestic Trade and Consumer Affairs Ministry, and the Finance Ministry have been ongoing, which included crude palm oil suppliers, wholesalers and other stakeholders.

“At the Plantation Industries and Commodities Ministry level, which safeguards the interests of crude palm oil suppliers, we have discussed and suggested the best methods to ensure the public can enjoy low prices for 2kg and 5kg bottle cooking oil.

“It’s just that we can’t announce it today, as the matter has not been decided at Cabinet level,” he said on TVI’s “Bicara Politikonomi” programme entitled *Palm Oil and Cooking Oil Prices: Opportunity or Burden*.

He said his ministry also suggested to the government, a long-term mechanism or targeted cooking oil subsidy like the one being implemented for petrol currently.

“The targeted subsidy mechanism suggestion is still being developed and it is aimed at addressing weaknesses in the existing cooking oil supply system,” he added.



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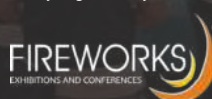
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Malaysian Palm Oil Board: Cooking Oil in Polybags Meets Prescribed Quality, Not Recycled



MPOB director-general Ahmad Parveez Ghulam Kadir said the price of cooking oil in polybags was controlled by the Domestic Trade and Consumer Affairs Ministry, therefore the retail price could not exceed RM2.50. — Picture via Twitter/Bernama

The quality of olein cooking oil in one kg polybags sold in the local market meets the prescribed quality and not recycled, said Malaysian Palm Oil Board (MPOB) director-general Ahmad Parveez Ghulam Kadir.

He said the price of cooking oil in polybags was controlled by the Domestic Trade and Consumer Affairs Ministry, therefore the retail price could not exceed RM2.50.

“The perception that subsidized cooking oil in polybags is of lower quality is wrong. The price is subsidized and controlled by the government, hence it is cheaper than the price of bottled cooking oil in the market,” he said in a statement.

He explained that the subsidy kept the price of cooking oil in polybags at RM2.50 despite the increase in the price of crude palm oil in the market, and it was aimed at reducing the burden of consumers to get cooking oil at an affordable price.

“This targeted subsidy is for consumers who buy cooking oil in one kg polybags for personal use, especially the low-income group.

“Whereas bottled cooking oil of various brands offers an option to middle- and upper-class consumers who are willing to pay a higher price,” he said.

Elaborating, Ahmad Parveez said there are 49 refineries and 312 packaging companies that are actively operating for the supply of cooking oil to the local market which is estimated at one million tons a year.

He said MPOB conducted monitoring and testing of cooking oil samples in the market on a regular basis and found that the quality and important characteristics were in line with the criteria set by the Department of Standards Malaysia.

He said it comprised oleic acid content, color and essential qualities including polar and polymer compounds, oxidative stability index and vitamin E (tocotrienols and tocopherols).

In 2020, Malaysia produced 19.14 million tons of crude palm oil and the consumption of olein cooking oil for the local market accounted for only 4.1 per cent of the country’s total crude palm oil production.



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AI DRIVEN PLANTATIONS

“You just can’t differentiate between a robot and the very best of humans” - Isaac Asimov

In science fiction, in galaxies far away, there are usually robots and intelligent systems to manage and complete work with ultimate precision and proficiency. What was once fantasy, is quickly becoming a reality for many industries today, namely agriculture. As Isaac Asimov famously quoted, “Today’s science fiction, is tomorrow’s science fact!” The philosopher-farmer Masanobu Fukuoka said “the ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings. “It is uncanny that both Masanobu and Asimov thoughts’ intersect when Asimov prosaically states, “You just can’t differentiate between a robot and the very best of humans.” In the realm of science fiction, where writers explore a future that is plausible but yet to be, we can see that even the humble bedrock of civilization - agriculture - must be ensconced with artificial intelligence, for society to make the necessary leap into the future.

AI BUNCH COUNTING & GRADING

Up till now, for quality to be controlled at the source, capturing yields up to a block or sub-block level, and measuring individual harvester productivity, the industry has relied on hiring bunch-checkers to count and grade the produce. However, this method has made it difficult to win the war on under ripe, overripe, and missing bunches. The inconsistency of grading standards from estate to estate, and differing exactness in quality between checkers has resulted in crop quality not improving, questionable OERs at mills and losses due to penalties for poor performance unable to be enforced.

“Robots will neither be common nor very good in 2014, but they will exist,” predicted Sir Asimov. He was right. Today robots can even exist purely as lines of code, and are capable of learning at incredible speeds. Unleashing the power of this “Machine Learning (ML) & Machine Vision (MV)” has been able to provide wide range of technologies, that benefits the plantation industry. This “Artificial Intelligence” can be integrated with other improved technologies such as drones, sensors (IoTs), satellites, digital handheld computers, and advanced cameras, turning them in to solutions that help to drive improvements in quality, productivity & yield.

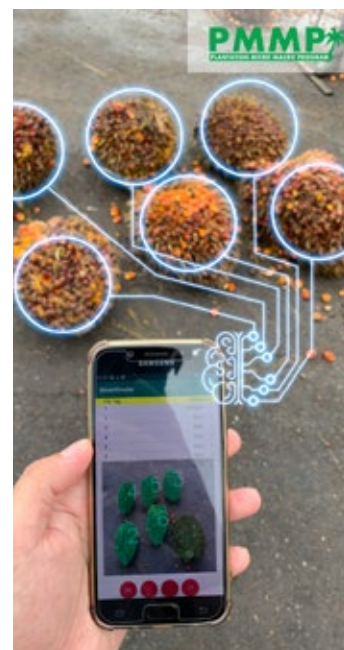
One example is the FFBQQ+ which is embedded into ABS Innovations (ABSi) PMMP FFBQQ Module for quantitative and qualitative control. The AI can count up to 15 bunches laid flat, and assigning a quality grade from the appearance of the bunches (color and morphology) this finally standardizes grading and counting operations, to ensure consistent and honest result of FFB Grading and Counting are being performed at the platform and ramp. Finally the adage

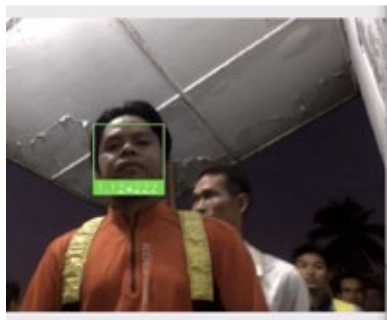
from the Ancient Roman historian, Pliny the Elder, can come to pass, “The master’s eye is the best fertilizer”. However, it is not just in crop quality that the master of the plantation needs to delegate to cast his eye.

AI FACIAL RECOGNITION FOR ATTENDANCE

A more familiar use case of AI or Machine Vision in many industries in the post-covid world today is in identifying people through Facial Recognition Technology. The AI in Facial Recognition systems serves to quickly identify people accurately and dispassionately, so when using this for daily worker attendance at the morning muster and while using handheld devices to take attendance in the field we can quickly ensure that estate’s operation are being completed by the right workers, at the right place doing the right activity, at the right time.

Facial Recognition has also very quickly addressed the trouble of ghost workers that have been haunting estates for generations. Ghost workers are harmful to plantations due to drops in productivity, wastage in support and infrastructure, work quality and work completion inconsistency and most harmful of all to business profits, as costs are expanded but work is not being completed.





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During Morning Musters there will no longer be shouting and calling worker names, instead self-serve attendance with Facial Recognition saves estates operation time, and provides an opportunity to use Muster sessions for more beneficial activities such as safety briefing, performance review and motivational training. It will ultimately allow for workers to reach the fields earlier and have longer productive days.

AI DRONE DECISION SUPPORT SYSTEM

Besides quality and employee attendance, it would be preferable if the master could also cast his eye over his entire plantation.

While obtaining photographs and other such digital imagery has been available since the advent of satellites, the automation of studying the photos to identify findings both good and bad, and using software to stitch the photos together into a single map has been a long time coming, and is still largely being done manually. So while companies may boast that they have the latest in terms of drones, they would be hard pressed to share to their shareholders the ROI from buying the technology but being unable to show real creation of value to the bottom-line.

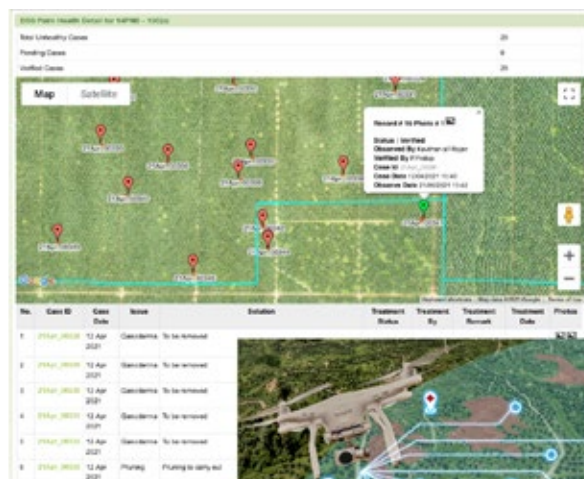
The AI of the PMMP Drone Decision Support System (DDSS) is able to stitch all drone captured images, while also being able to study the images and detect, blank spots or vacant points, unhealthy and dead palms, count trees, and where necessary and predict the most suitable terracing. Once identified, the AI brain



will recommend the best courses of action to the plantation manager and tabulate and track these decisions in a dashboard. The DDSS does the

work of deciding what action needs to be taken, and where and by when, and to keep checking whether it's been done has been automated and refined by using AI technology.

"The master's eye is the best fertilizer"- Pliny the Elder



INTELLIGENCE EMPOWERED PLANTATIONS

Pulitzer Prize winner, Junot Diaz, had this to say about Science Fiction, "When you look at a lot of science fiction (novels), they're asking questions about power. About what it means to have power, and what are the long-term consequences of power." While AI and robots are no longer confined to the realm of science fiction, we can safely conclude that it is inevitable that the parties who embrace AI and robotics to enhance and augment plantations to be more intelligent, will also become more powerful players in the industry and even in the nations and communities they operate in.

However, as with any part of human history when winds of change are bellowing, it is expected that many are frightened by what the advent of AI and robots will do? Will it mean many jobs are lost? Will our personal data be safe? Can we trust a line of code with poisons and fertilizers? "... (In the future), a robot will likely be on the cover of the Time Magazine as the best CEO," is the optimistic view of Jack Ma. He and many business leaders are of the view that machines will partner and cooperate with humans, not becoming their enemies. While the plantation industry is still new to the task of adopting these new technologies, it can take heart that companies like ABS Innovations are here to ensure that science fiction, becomes science fact.

Remember... it's not how much you plant, it's how you plant, and with AI... It's how smart you plant.

- Deputy Managing Director of ABS Innovations Sdn Bhd (ABSi)

Utilizing Senix ToughSonic Sensors for Palm Oil Tank Measurement



Image Credit: Senix Corporation

Grown exclusively in the tropics, the oil palm tree yields premium oil, which is typically utilized for cooking in developing countries.

It is also used in food products, cosmetics, detergents, and, to some extent, biofuel. Palm oil is a minor ingredient in the diet of those in the U.S., but palm oil can be found in more than 50% of all packaged products consumed by Americans.

Oil palms are grown both on small family farms and large plantations across Africa, Asia, and Latin America. The expense of rapid expansion in the palm oil industry comes at the cost of tropical forests—which are essential habitats for a number of endangered species and also offer a lifeline for several human communities.

Securing the highest possible yield with minimum disruption to the natural environment is one major challenge sustainable farming faces.

The World Wildlife Fund (WWF) is aspiring toward delivering an environment-friendly global marketplace that is based on the production and sourcing of palm oil that can be considered socially acceptable.

As well as the WWF, a number of certifications have been drawn up in recent years, including the Roundtable on Sustainable Palm Oil (RSPO), the Rainforest Alliance, International Sustainability & Carbon Certification (ISCC) and the Roundtable on Sustainable Biomaterials (RSB).

These aim of these groups is to stimulate an increase in demand for, and use of, produce using such practices.

An increasing number of companies around the world are facing up to their responsibility in the global supply chain and are only buying RSPO certified palm and palm kernel oil.



Image Credit: Senix Corporation

With exceptional market prospects in addition to being very profitable per hectare, sustainable palm oil represents excellent earning potential for smallholders in rural areas.

Sustainability certification opens the door to the international market, which offers better earning opportunities while increasing employment in rural regions of countries farming the oil palm tree.

The Senix ToughSonic 30 has been chosen as the preferred sensor at a large-scale Asian Palm Oil producer. The Senix ToughSonic 30 can measure and monitor with great accuracy the Palm Oil levels in large tanks around 9 meters in height.

The level data is transmitted via the sensor's 4-20mA output on a display unit, also available from Senix.

The sensors must have the capacity to tolerate a dirty, hot environment due to the fact these kinds of tank are located outdoors.

The Senix ToughSonic 30 was also selected due to its durable design, which was engineered for use in some of the harshest industrial environments incorporating potted and protected electronics, rugged 316 stainless steel housing, and IP68 rating.

They can be simply connected to display units that can control switches or pumps while rapidly measuring level or distance with outstanding precision and much more.



Image Credit: Senix Corporation



Image Credit: Senix Corporation

Senix
distance & level sensors



Reducing Particulate Matter Emissions from Palm Oil Mills



Palm oil is big business. Over the next five years, global market growth is forecast to grow at a compounded annual growth rate of five percent. While this bodes well for the industry, especially for the world's top palm oil producers in Malaysia, Indonesia and Thailand, growth comes with challenges.

Reducing particulate matter (PM) emissions is one of the challenges for palm oil mills that use biomass as boiler fuel. PM pollution has a huge impact on forests, wildlife, and coastal regions. Heavy PM pollution makes the groundwater become acidic and removes vital nutrients out of the soil, which prevents trees from growing, both on plantations as well as in nearby rain forests.

While millions of people depend on palm tree plantations for their livelihoods, they may become ill from PM pollution, which causes a broad range of health effects – from irritated eyes, nose and throat to heart and lung diseases.

With the UN 2030 Global Goals deadline less than a decade away, regulatory authorities are introducing more stringent regulations on the palm oil industry to contribute in meaningful ways to more sustainable production. For instance, the Malaysian Department of Environment (DoE) has issued stricter air emission regulations, limiting PM emissions from palm oil mills to 150 mg/Nm³.

PM emissions well below 150 mg/Nm³

Reducing PM emissions is essential for palm oil producers. Which solution is best to do so safely, reliably and economically while protecting people, planet and profitability – today and tomorrow?

Popular PM emissions reduction technologies include electrostatic precipitators and bag filters to vortex tube separators and wet scrubbers. But none are as effective and economical as the Alfa Laval MultiScrubber PM. Compact and easy to install, it is a complete solution that reduces PM emissions to well below 150 mg/Nm³ with minimal effluent.

Standard MultiScrubber PM with optional modules for SOx and visible plume reduction



PM emission reduction
Well below 150 mg/Nm³



SOx reduction
Meets the most stringent limits



Plume reduction or removal
Reduced visible plume

Standard MultiScrubber PM with optional modules for Sox and visible plume reduction

Future-proof, three-in-one scrubber

Compact and modular, the standard MultiScrubber reduces PM emissions to comply with environmental regulation. Palm oil producers can easily upgrade it to reduce emissions of sulphur oxides (SOx) and/or visible plume, providing a low-cost migration path to additional functionality.

Reducing PM emissions simply and economically

The Alfa Laval MultiScrubber PM is a closed-loop system that minimizes PM emissions, effluent and discharge. The scrubber sprays water to capture PM, which collects in a settling tank. Sludge dewatering can be accomplished in various ways, for example, using an Alfa Laval decanter. The decanter separates the sludge into clean water for process reuse and minimal solid cake for disposal.

Corrosion resistant and built to last

The Alfa Laval MultiScrubber PM is a game changer for palm oil mills. Unlike many wet scrubbers produced in the recent past for palm oil mills, the MultiScrubber PM is made of SMO austenitic stainless steel. It provides maximum resistance to chloride stress corrosion cracking, pitting and crevice corrosion, with no material damage.

Highly efficient, cost-effective PM reduction

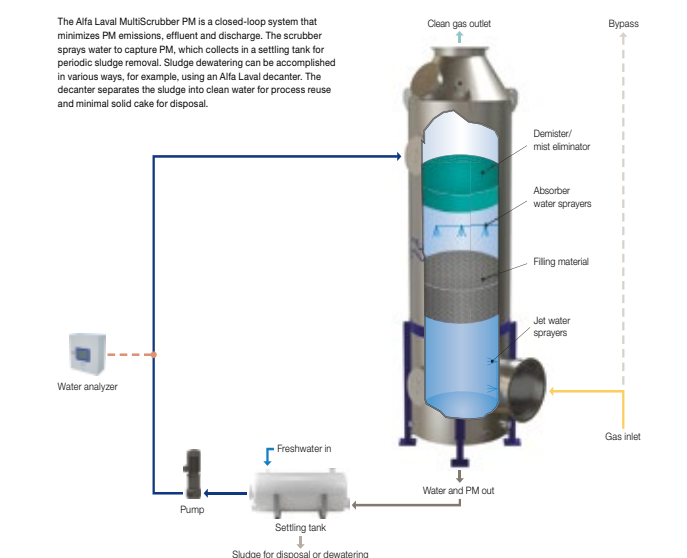
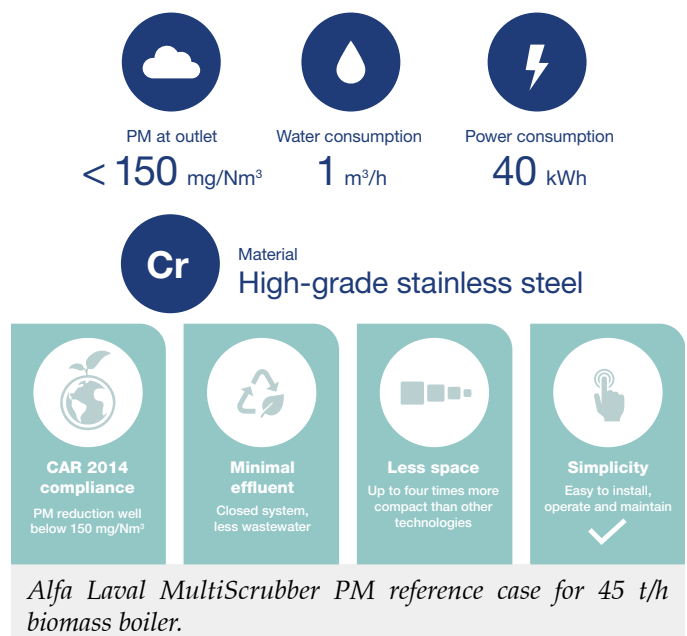
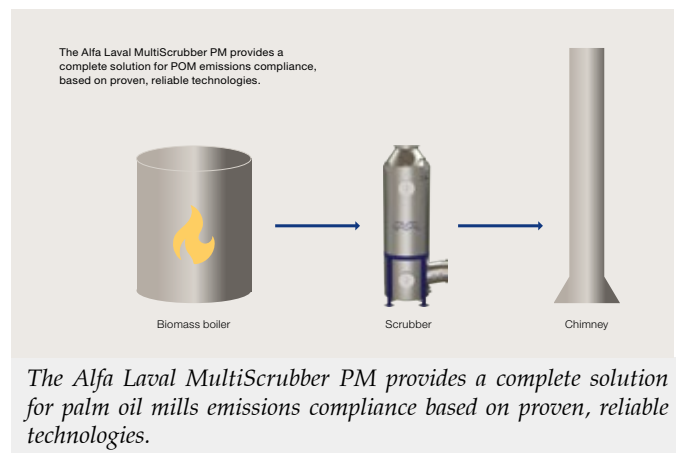
Compared to other PM emissions reduction technologies, the Alfa Laval MultiScrubber PM is up to two times more economical, with relatively low capital cost, low power consumption, minimal water consumption and effluent. Particle removal efficiency is not affected by fluctuating gas load.

Standardized, ready-to-install components make installation quick and easy, reducing installation costs. The MultiScrubber PM is up to four times smaller in size than other PM emissions reduction technologies. It is also very easy to operate and maintain.

Global clout, local presence

Alfa Laval wet scrubber technology is proven with more than 500 installations worldwide. All wet scrubbers installed more than a decade ago are still in use today.

Service, if required, is always close at hand. Established in Sweden in 1883, Alfa Laval has been present in Southeast Asia since 1969 and has local offices and service centers already working with palm oil producers.



Schematic diagram of the Alfa Laval MultiScrubber PM.

Learn more about Alfa Laval Multiscrubber PM at www.alfalaval.com



Advancing Palm Oil Industry



The development of the palm oil industry has contributed significantly to the increasing export of the commodity and the well-being of the smallholders.

The development of the palm oil industry has contributed significantly to the increasing export of the commodity and the well-being of the smallholders.

Hence, we need to increase the productivity of palm oil to ensure the export competitiveness of the country and to enhance the economy of the oil palm growers, particularly the smallholders.

Therefore, they have to turn to new technologies in farming and harvesting to be more productive in order for them to generate higher income. This can only materialize with the commercialization of new and innovative technologies for the palm oil industry.

Malaysian Palm Oil Board (MPOB) has been the focal point in research and development (R&D) for the palm oil industry, consistently developing and innovating technologies to enhance production efficiency of the industry.

All MPOB's new technologies and innovations have great potential for commercialization. Thus, they provide business opportunities, especially for the local entrepreneurs in the small and medium industry.

Today, hundreds of MPOB's technologies have been transferred to the industry and SMEs, covering the technologies in fertilizer, oil palm clone breeds, farm mechanization, crop protection, manufacturing and processing, green energy, oleochemicals, agricultural products, automotive components, nutrition, pharmaceuticals, laboratory equipment and analytical services.



As of November last year, MPOB developed 704 technologies and innovations that are ready to be transferred to the oil palm industry, and small and medium enterprises (SMEs) for adoption and commercialization. Of this, 30.7 per cent of the technologies and innovations were commercialized by SMEs and industries.

MPOB's annual transfer of technology seminar and exhibition (TOT) acts as a vital platform in disseminating its latest research findings and technologies to local entrepreneurs and parties interested in exploring technology-based business opportunities in the palm oil industry.

The TOT has been providing business opportunities to small and medium industry entrepreneurs through the commercialization of MPOB's technologies.

On July 1 2021, MPOB will hold its 27th TOT to unveil and disseminate its latest inventions and innovations.

This year, MPOB's TOT annual seminar will be held online as Malaysia is still under the Movement Control Order to curb the spread of the COVID-19.

It will be officiated by Minister of Plantation Industries and Commodities Datuk Dr. Mohd Khairuddin Aman Razali.

MPOB will introduce four new technologies and innovations developed by its researchers that include crop protection, biomass and farm machinery at the TOT Webinar 2021.

These new technologies encourage the use of innovation and new techniques which will increase plantation efficiency and the productivity of oil palm crops.

Mechanization and automation are imperative for the advancement of the oil palm sector.

The introduction of a technology innovation at this year's TOT will see that labor dependency is minimized and productivity in the oil palm plantations will be maximized.

Another technology that will be introduced at the 2021 TOT Webinar will assist growers in protecting their oil palm crops against a disease. It will extend the life span of the affected crops and reduce the loss of revenue from the disease.

We will also unveil an innovation that introduces a system and method to treat the final disposal of palm oil mill effluent.

The TOT Webinar 2021 should not be missed by the entrepreneurs in the small and medium industry, professionals in the field of engineering, scientists, researchers, food technologists, chemists, manufacturers and producers as well as those involved in the palm oil industry as it provides business opportunities and knowledge for them.

The writer is the director-general of Malaysian Palm Oil Board, Dr Ahmad Parveez Ghulam Kadir

The above comments and opinions in the article are the author's own and do not necessarily represent Asia Palm Oil Magazine's view.

Accurate Narrative around Palm Oil Vital



He added that existing research and ongoing initiatives already point to the significant capacity of the current hectare age of oil palms to provide low-emission solid and liquid fuel, non-forest, non-timber pulp and paper, and by-products for upcycling that significantly impact greenhouse gas emissions, and meet and surpass ILUC criteria.

In the past few years, developed countries and trade blocs have implemented product seizures and unilateral carbon border adjustments by using “decarbonizing economies” as a pretext.

In 2020 and 2021 for instance, the US put up a detention order on crude palm oil from two of Malaysia’s major palm oil producers, as well as putting the nitrile glove shipments from Malaysia into detention.



pic by TMR FILE

The narrative that oil palm acreages are expanding at the expense of climate and biodiversity is flawed, and a comprehensive census of resources, sinks and flows is needed to restore the narrative and dignity of Malaysia’s golden crop.

Forest Research Institute Malaysia senior research officer Dr Gary W Theseira opined that the prevailing narrative surrounding the palm oil industry is that it is both land and labor-hungry, and frequently associated with indirect land use change (ILUC).

“The narrative needs to be corrected as there is ample evidence the palm oil industry actually facilitates climate action and enables transition by reducing emissions associated with mobility, counteracting ILUC as a non-tree and non-forest fiber source.

“It will also green the grid while optimizing locked-in assets and reduce emissions from organic waste,” he said in a lecture titled “How Integrating Resource Management in the Palm Oil Industry Can Shape Global Consensus on the Sustainability of the Humble Oil Palm” yesterday.

Theseira said the diverse resource base of the industry requires assessment across traditional sectoral lines used as the basis for government institutional frameworks.

Theseira said the industry has the potential in substituting environmentally harmful energy.

“The first resource area is by using the fatty acid methyl ester (FAME), which is successfully used as a base fluid for a high-performance, oil-based drilling fluid.

“Just seeing the FAME production in 2020, we can compare it to the equivalent that is required from fossil diesel, which is 465,887 tons of CO₂ emissions to 9.54 million tonnes CO₂ emissions.”

Another resource in which the industry can be useful for is the pulp and paper, thus reducing potential land use.

Theseira said the industry has long been recognized as a potential fiber source for other industries.

“Potential products that have been tested and can be made include fiberboard, core-board, pulp and paper.” He added that resource substitution has averted the felling of 144,000 trees by utilizing palm oil as fiber source.

The palm oil can also be used for biomass or renewable energy initiatives, by greening the grids for all users.

“Given the 30,200 gigawatt per hour generated in Peninsular Malaysia in 2018, a 5% biofuel substitution would yield an estimated 498,300 tons of emissions reduction.

“Every coal-fired power plant in Peninsular Malaysia and Sarawak is within a 30- to 45-minute access to one or more palm oil mills.”

Source: themalaysianreserve.com

The last resource area in which palm oil can play a role is in the livestock food production space.

Currently, Malaysia's livestock industry requires around four million tons of feed to be imported yearly from South America.

“This means there are emissions from the transportation and production, but Malaysia is also exposed to supply and price uncertainties.”

He added that substituting locally produced hide protein feed for imported feed will reduce costs and lower climate risk.

This can be done by upcycling technologies already in use to produce animal feed include bio digester and entoculture technologies that utilize palm oil by-products co-processed with other organic by-product streams.

The above comments and opinions in the article are the author's own and do not necessarily represent Asia Palm Oil Magazine's view.



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Boron a Major Key for Fertilizers in the Palm Oil Industry

Weng Kee Ch'ng

Regional Senior Agronomist



Weng Kee is a seasoned agribusiness professional currently handling commercial and technical functions for agriculture customers in Southeast Asia and China. He has worked in a variety of roles for stable, emerging, and start-up organizations, including:

- Business development
- Technical
- Sales and marketing
- Retail sales

In addition, Weng Kee has a successful record of establishing business and high performance teams.

He received his bachelor's degree in biology/biological sciences from the Universiti Putra Malaysia and his master's degree in food science and technology from the Universiti Sains Malaysia.



Palm fruit treated with borates. Photo courtesy of U.S. Borax

1. As a leading supplier of borates, briefly share with us U.S. Borax's, history and milestones in this industry.

U.S. Borax traces its roots to California's Death Valley, where borate deposits were discovered in 1872. The first 20 mule team hauled borax 165 miles through Death Valley in 1883. Fully loaded with two ore wagons and a 1,200-gallon water wagon, the rig weighed 36.5 tons. Though the expansion of railways led to the 20 mule team's retirement, the team has lived on for more than a century as a trademark for U.S. Borax.

Since 1924, we have shipped products from our facility in the Port of Los Angeles. The refinery and shipping operation produces and ships more than 36,000 tons of packaged goods and more than 300,000 tons of bulk material to customers in Europe, Malaysia, and China.

Today, U.S. Borax is acknowledged as the world leader in borate technology, research, and development.



With crinkled pinnae, the leaf bone shrinks. This is a sign of severe boron deficiency. Photo courtesy of U.S. Borax

2. How did U.S. Borax grow to a massive 1,700 locations globally? What is the current demand for the refined borates industry?

U.S. Borax supplies about one-third of the world's need for refined borates. We have grown our business through our high standard for quality and purity, ensuring the best performance for growers and fertilizer manufacturers. Our technical, scientific, and agriculture experts are dedicated to continuous research and product improvement as well as a high level of personalized, customer service. The bottom line is that we care about our customers' crops. That's why U.S. Borax mines and refines only top-quality boron, free of unwanted contaminants.



Farmer applies Fertibor to palm oil plant. Photo courtesy of U.S. Borax

3. Borates are used in fertilizers as a mineral essential to plant growth. What are the advantages of having boron in fertilizers?

As a micronutrient, boron is essential to plant growth. Adequate boron is necessary for proper absorption of macronutrients and for maintaining the integrity of plant cell walls.

Adequate boron is a crucial factor in high crop yields and quality. Existing research indicates that boron plays a significant role in:

- The strength of plant cell walls
- Membrane function and cell division
- Stimulation/inhibition of metabolic pathways
- Development of flowers and fruit
- Both new and reproductive growth

For oil palm, boron is necessary for:

- Preventing "fishbone leaf" (the development of extremely small, thin pinnae)
- Preventing "hooked leaf" (a single or double hook on the pinnae near the tip)
- Elimination of white stripe occurrence in leaves
- Preventing seedless fruitlet (parthenocarpy)
- Adequate fresh fruit bunch formation
- Enhanced root growth

4. What fertilizer products does U.S. Borax manufacture for the palm oil industry?

Fertibor® is our primary product sold in SEA for palm oil, but we also offer Solubor® and Granubor®. Fertibor® (15% B) is a fine crystalline borate ideal for NPK compound fertilizers and suspensions. Manufactured as free-flowing granules, Fertibor® is easily handled and offers superior flow and consistency. For more information about our fertilizer products, please visit: <https://agriculture.borax.com/products>



Fertibor granules are ideal for compound fertilizers and suspensions. Photo courtesy of U.S. Borax



Boron deficient fruit. Photo courtesy of U.S. Borax

5. U.S. Borax's parent company launched its first integrated sustainability strategy in 2018. Why was the Roundtable on Sustainable Palm Oil (RSPO) platform chosen? How important is sustainability to U.S. Borax?

We've been an affiliate member of the RSPO since 2008. The RSPO has developed a set of environmental and social criteria which companies must comply with in order to produce Certified Sustainable Palm Oil (CSPO). When they are properly applied, these criteria can help to minimize the negative impact of palm oil cultivation on the environment and communities in palm oil-producing regions.

The RSPO has more than 4,000 members worldwide who represent all links along the palm oil supply chain. They have committed to produce, source, and/or use sustainable palm oil certified by the RSPO. Not only RSPO, we also encourage plantation and small holder to adopt MSPO/ISPO for sustainability of oil palm business.

U.S. Borax is committed to adopting high standards, often going beyond legal requirements, on the sustainability issues that are material to our business, our employees, the communities that host us, and the customers that buy and use our products.

Our world's population is growing rapidly—yet the amount of arable land is not. A changing climate. Soil contamination and depletion. Crop demands. All threaten our ability to maintain a sufficient global food supply.

U.S. Borax wants to help farmers meet society's needs today without hindering future generations' ability to feed themselves. Through our sustainable agriculture policies, we promote farming practices and methods that are environmentally conscience, good for local communities, and profitable for growers.

6. Has the pandemic dampened the growth of U.S. Borax's business in the palm oil industry and how has it affected expansion plans (if any)?

We saw some challenges and new rules and regulations on the way we operate in the value chain at the start of pandemic. But, once we understood the “new normal” and adapted, we were back on the right track as in our plans. Our business continues to grow and develop in the palm oil industry. The majority of plantation users are aware of the significance of borates in fruit formation. They are using our product to increase the quantity and quality of FFB in order to capitalize on the current market's high CPO prices.

About U.S. Borax

U.S. Borax is a global leader in the supply and science of borates—naturally-occurring minerals containing boron and other elements. We are 1,000 people serving 500 customers with more than 1,700 delivery locations globally. We supply 30% of the world's need for refined borates from our world-class mine in Boron, California, about 100 miles northeast of Los Angeles. We pioneer the elements of modern living, including:

- Minerals that make a difference: Consistent product quality secured by ISO 9001:2015 registration of its integrated quality management systems
- People who make a difference: Experts in borate chemistry, technical support, and customer service
- Solutions that make a difference: Strategic inventory placement and long-term contracts with shippers to ensure supply reliability.

Our local agriculture experts understand the uses and benefits of boron on crops. In addition to a global sales team, we have a number of agronomists on staff to help fertilizer distributors maximize the benefits of borates in agriculture applications. Our Ag team can answer individual grower's questions and concerns about their particular crop.

For more information, please visit our web sites:

- English: <https://agriculture.borax.com/>
- Chinese: <https://agriculture-china.borax.com/>
- Malay resources: <https://agriculture.borax.com/resources/malay>

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Musim Mas, MUFG Bank, Danamon, and iAPPS Collaborate to Promote Financial Inclusion among Independent Smallholders

29 June 2021, Singapore/Jakarta – A digital finance and financial learning platform, AgriON, will soon be in the hands of oil palm independent smallholders enrolled in Musim Mas Group's smallholders program. The culmination of this is a joint effort between Musim Mas Group, MUFG Bank, PT. Bank Danamon Indonesia Tbk (Danamon), and iAPPS.

This collaboration aims to complement and strengthen Musim Mas' existing financial literacy classes with a comprehensive series of workshops and introduce smallholders to products that are aligned with their financial goals, such as customized savings plans, via the AgriON platform. Developed by iAPPS, AgriON is a scalable and bank agnostic digital payment and financing solution driving traceability and sustainability across the agricultural supply chain.

The financial literacy workshops encourage smallholders to improve their financial planning by focusing on significant milestones in life, such as growing their farming businesses in a sustainable way, preparing for replanting palm on their farms, funding their children's or grandchildren's education, and retirement. Through these workshops, farmers will also be able to opt for saving accounts and saving plan accounts from Danamon, thereby paving the way for greater financial inclusion for these smallholders.

The pilot workshops, run by Musim Mas, span from June to July 2021 and take place in Rokan Hulu, Riau, Indonesia.

A 2019 survey by the Financial Services Authority of Indonesia (Otoritas Jasa Keuangan) highlighted that Indonesia's financial inclusion rate climbed rapidly to 76.1 percent. However, for a population of 270 million, many Indonesians, especially in rural areas, remain unbanked, meaning they do not have access to financial products and services such as transactions, savings accounts, and credit.

Both MUFG Bank and Danamon are committed to promote financial inclusion as part of their sustainable finance initiatives. The financial literacy program in collaboration with Musim Mas and iAPPS is, therefore, a first and necessary step in that direction. Danamon will also provide relevant financial products and services that can support smallholder farmers in achieving their financial goals.

Musim Mas runs Indonesia's largest independent smallholders program for oil palm and offers smallholders a suite of agricultural and management modules designed to share best practices for improving their farms' yield. The program is also



Independent smallholders using the AgriON platform at a financial literacy workshop t by Musim Mas.



Musim Mas, MUFG Bank, and PT. Bank Danamon Indonesia Tbk (Danamon) co-developed a financial literacy curriculum for independent smallholders. Musim Mas' field assistant (in pink) conducts a workshop in one of the smallholders' houses.

designed to be gender-sensitive and encourages participation from female farmers. Financial literacy is often a tool that empowers female farmers within its program.

Quote from Musim Mas:

“Musim Mas recognizes that independent smallholders often are unable to act on the good agricultural practices that they learned from our smallholders program. This is because they are challenged by several systemic issues, one of which is access to finance,” said Olivier Tichit, Director of Sustainable Supply Chain at Musim Mas. “Collaborating with financial institutions, such as MUFG Bank and Bank Danamon, is one of the ways we intend to empower smallholders in their sustainability journey and transform landscapes.”

Quote from MUFG Bank

“In today’s world of digital services, it is easy to forget that millions of people still lag far behind when it comes to accessing even the most rudimentary financial services. Both MUFG Bank and Danamon are very excited to partner Musim Mas and iAPPS on this financial literacy enablement program for the masses to propel them towards a more inclusive and green economy,” said Yip Shue Heng, Managing Director, Head of Digital Transformation, Asia & Oceania, MUFG Bank.

“MUFG recently announced its Carbon Neutrality Declaration to achieve net zero emissions in its portfolio by 2050 and operations by 2030. This initiative will not only bring us closer to our sustainability goals but help us further contribute to the long-term growth of communities in Asia.”

Quote from Danamon

Herry Hykmanto, Syariah Director who also leads the Sustainability Finance team in Danamon, is very supportive towards this initiative. He said: “Farmers are one of the drivers of the national economy, so we feel the need to provide special training that can increase their understanding and knowledge of the basics of financial management. This collaboration with Musim Mas, MUFG and AgriON is in line with Danamon’s vision of “We Care and Help Millions of People to Achieve Prosperity”. We hope that with this activity, farmers will be more prepared and economically resilient in the future.”

Quote from iAPPS:

“Digital transformation is key to enabling financial inclusion, traceability and sustainability for the agricultural communities. We see this collaboration as a critical step forward to empowering smallholders with AgriON.” – Daniel Loh, Director, iAPPS Pte Ltd.





MPOB Researchers Innovate Fertiliser Formulation That Can Raise Oil Palm Yield

Bangi, 4 June 2021 -- A group of researchers at the Malaysian Palm Oil Board (MPOB), led by Ahmad Afandi Murdi have innovated a fertiliser formulation containing optimum balanced nutrients that can raise oil palm yield.

Director-General of Malaysian Palm Oil Board (MPOB) Dr. Ahmad Parveez Hj. Ghulam Kadir said, the innovation, called MPOB F3 compound fertiliser, is in the form of compact fertiliser and contains a balanced ratio of nitrogen, phosphate, potassium, magnesium and borate, specifically formulated for oil palms planted on mineral soils. MPOB F3, formulated with balanced nutrients is also suitable for oil palm planted on various soils.

“Palm trees need proper fertilisation including optimum balanced nutrient fertilisers to raise their yield. Even though the nutrient requirement is site-specific, the balanced nutrient ratio in such formulated compound fertilisers will provide a satisfactory nutrient input needed at the various locations. The systematic use of this fertiliser is cost effective as it will increase the productivity of fresh fruit bunches and hence, will raise the income of growers,” said Dr. Ahmad Parveez.

According to him, MPOB F3 is a cost-effective fertiliser as it can reduce the loss of nutrients and increase the nutrient uptake efficiency of the oil palm roots.

The introduction of this balanced fertiliser formulation in oil palm plantations subsequently minimises the negative environmental impacts related to over-fertilisation, land degradation and pollution from heavy metal.

Research for the innovation began in 1990 until 2006 and the selection of raw materials as sources for the formulation of the fertiliser is based on cost-effectiveness, consistency in nutrient contents and suitability for blending and compounding. The formulation includes a conditioner or zeolite to increase nutrient recovery by the crops.



MPOB F3 will be in the market as MPOB has signed an agreement with FGV Fertilizer Sdn Bhd whereby the company will produce the fertiliser.

MPOB has signed an agreement with FGV Fertilizer Sdn Bhd for the commercialisation of MPOB F3 fertilizer. The handing over ceremony of the agreement document between MPOB and FGV Fertilizer Sdn Bhd was witnessed by the Minister of Plantation Industries and Commodities during the pre-launch ceremony of the Transfer of Technology 2021 Webinar last April.

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Esri Indonesia in Partnership with PT Fireworks Indonesia Launches an Online Conference on “Digital Transformation in the Indonesia Palm Oil Industry”.

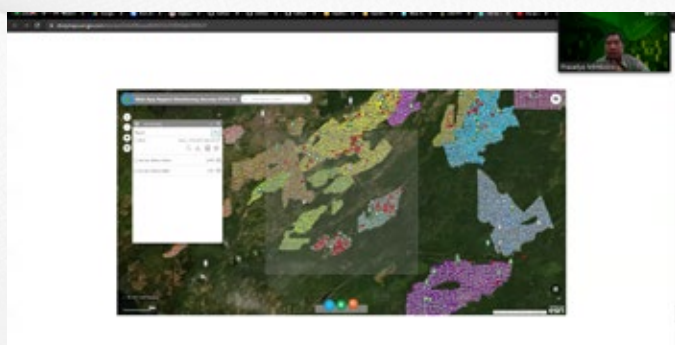
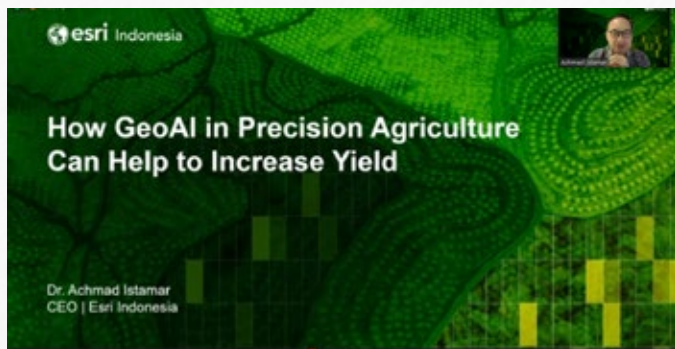


Indonesia, 10 June 2021 – A conference organized by PT Fireworks Indonesia (Organizer of PALMEX Indonesia) and Esri Indonesia supported by media partners Asia Palm Oil Magazine and Palm Oil Today Indonesia took place on the 10th of June, 2021. The webinar sponsored by Esri Indonesia covered the topic of ‘Transformasi Digital Untuk Industri Kelapa Sawit Indonesia’ (“Digital Transformation in the Indonesia Palm Oil Industry”) with three speakers, Mr. Ir. Derom Bangun, the Chairman of Indonesian Palm Oil Board (IPOB), Dr. Achmad Istamar, Chief Executive Officer (CEO) of Esri Indonesia and Mr. Prasetyo Mimboro, Plant Investment and GIS/RS Supervisor of PT Perkebunan Nusantara.

The first session commenced with Mr. Ir. Derom Bangun, the Chairman of IPOB on which he covered the topic of ‘The Future of the Indonesian Palm Oil Industry from 2021’. He talked about the overall picture of the palm oil industry globally, the growth of production in Indonesia, the diplomatic strength, and also the advocacy and future of palm oil. One of the main points that he highlighted was Indonesia has to play a part to prevent deforestation concerning climate change.

The session continued with talks from Dr. Achmad Istamar, the CEO of Esri Indonesia on ‘How Geo-AI in the Precision Agriculture Can Help Increase Yield’. This topic gave insights to the audience as it addressed the challenges for the plantation industry in the new normal. Dr. Achmad also explained three fundamentals systems on geospatial. He gave an in-depth elaboration on the precision plantation system and how to digitally transforming the plantation business cycle. The conference ended with the third guest speaker, Mr. Prasetyo Mimboro from Plant Investment and GIS/RS Supervisor of PT Perkebunan Nusantara which he touched on Agro-industry Management using GIS (Geospatial Information System) Technology.





This conference conducted in the Indonesian language aimed to give some insights to the audience on predictions on the palm oil industry in Indonesia. Audiences that consisted of SMEs will have a better idea and understanding of the current trends and major issues surrounding the nation's palm oil industry. Plus, audiences can also learn in-depth on the Geo-AI in the precision agriculture and GIS Technology in plantation cultivation.



About Esri Indonesia

Esri Indonesia is the nation's foremost authority on Geographic Information System (GIS) technology, and more specifically, Esri's world-leading ArcGIS platform. We show the highest level of integrity in all our dealings and enjoy the trust of the nation's leading government agencies and commercial enterprises. Our reputation and commitment to quality have seen us awarded some of the country's most important projects, including the ongoing development of a National Spatial Data Infrastructure (NSDI). Outside the professional sector, Esri Indonesia also maintains strong ties with the community, providing services to a range of not-for-profit and educational institutions. Armed with a quality product and a unique understanding of the ArcGIS platform, we are committed to delivering commercially responsible solutions for a stronger Indonesia.

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