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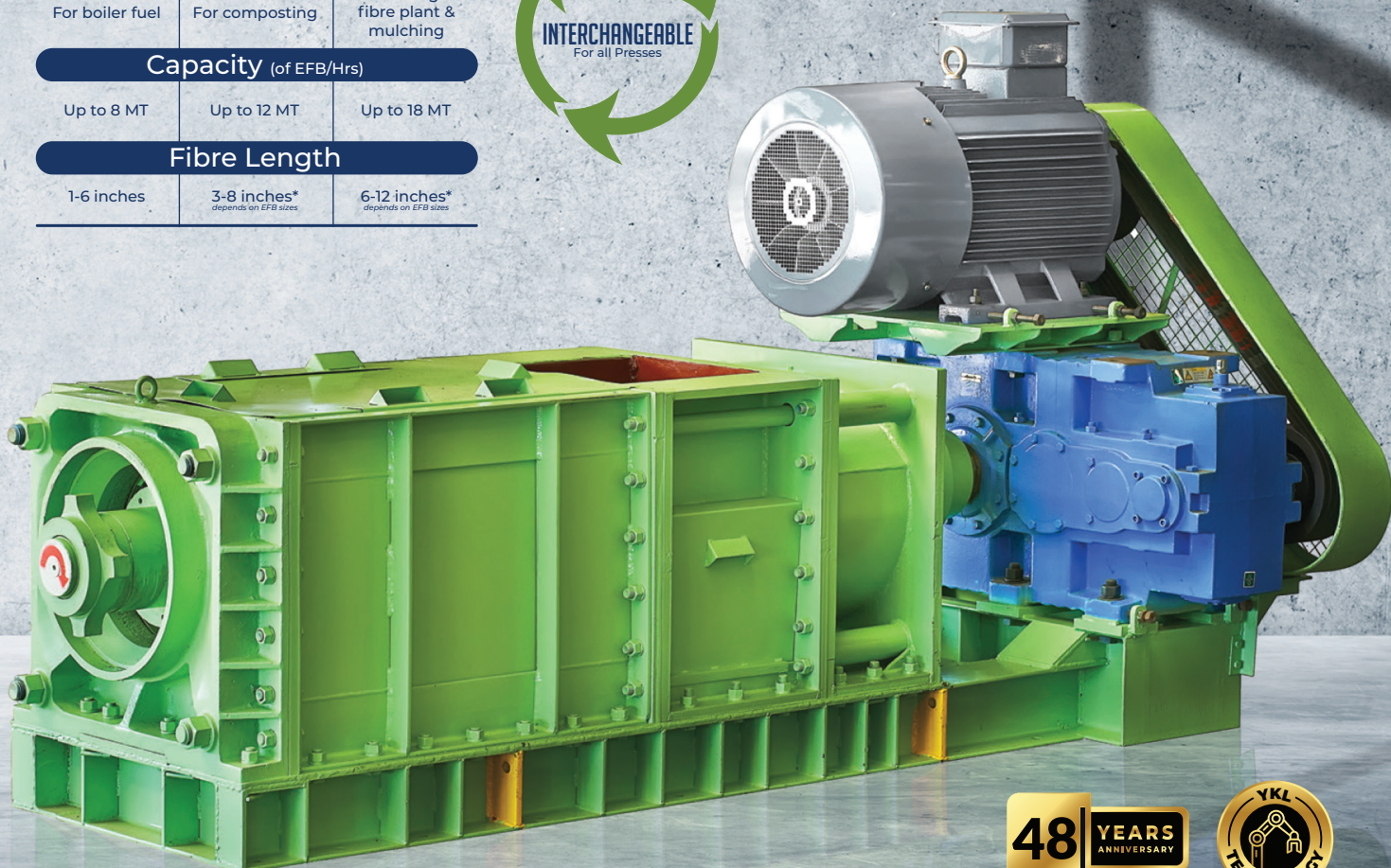


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ANNIVERSARY



It's finally the last issue of Asia Palm Oil Magazine for 2021! Another year has gone by and COVID-19 has started to reach the endemic phase with the numbers of vaccinated people coupled with the numbers of COVID-19 infections suggest that it's more manageable. Endemic does not mean that the virus will go away, it's however will still be transmitted. Malaysia has yet to shift to the endemic stage, with the Ministry of Health stated that we will go into transition by end of October.

We have seen Malaysia's effort in adapting to the new normal so that the economy will run as usual. Malaysia is expected to administer booster shots of the COVID-19 vaccine to the front liners, elderly and immunocompromised people beginning of October. We have also seen the vaccine being administered to teenagers following the COVID-19 vaccination program for adolescents to broaden the vaccination coverage. While we have seen various efforts being made and people's acceptance of the virus, let's not forget that getting vaccinated and adhering to SOPs are still number one priorities.

With misinformation and fake news circulating online to scare and worsen the anxiety in society, it's our responsibility to stand together and spread awareness to people with limited access and knowledge. Apart from fighting COVID-19, we also fight anti-vaccine that dampened the effort in achieving herd immunity. Let's play our role and stay focus on our main responsibility to slowly shift life back to usual. As everyone is fighting their struggles, a gentle reminder to support and help those in need especially small businesses.



Susan Tricia
Editor

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 get vaccinated and together we can fight COVID-19.

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Pertamina Develops Palm Oil-Based Jet Fuel to Curb Carbon Emissions



Pertamina refuels aircraft with Bioavtur J2.4 type biofuel to test the aircraft's engine performance. (ANTARA/HO-Pertamina/rst)

State oil and gas company PT Pertamina is developing palm-oil based aircraft fuel to create a mix to lower carbon emissions in the air transportation sector. The product, called Bioavtur J2.4, was developed by the Pertamina International Refinery in Cilacap, Central Java.

“Through a comprehensive development stage, Bioavtur J2.4 has proven to deliver performance equivalent to that of fossil-based aviation turbine (avtur) fuel,” Pertamina Subholding Refining & Petrochemical Corporate Secretary Ifki Sukarya noted in a statement.

Since 2014, Pertamina has pioneered research and development of bioavtur through the Dumai refinery and Cilacap refinery. Currently, bioavtur's performance is optimal with a difference of only 0.2-0.6 percent from that of fossil avtur fuel.

The Bioavtur J2.4 product made by Pertamina contains 2.4 percent of biofuel produced from palm kernel oil through a catalyst technology. The company's development of aircraft biofuels encompasses two crucial stages.

The first stage is marked by the hydro decarboxylation process, with the initial target being to produce bio hydrocarbon diesel and bioavtur on a laboratory scale.

The second stage is marked by the hydro deoxygenation process in the form of a more efficient bio hydrocarbon diesel. In 2020, the Dumai refinery succeeded in producing bio-hydrocarbon diesel -- Refined Bleached Deodorized Palm Oil (RBDPO) -- that is fully derived from vegetable raw materials.

RBDPO is palm oil that has undergone a refining process to remove free fatty acids and for purification to remove color and odor.

This initial stage is an important step in the development of green products, including green diesel and bioavtur. Sukarya conveyed that the bioavtur produced by the Cilacap Refinery was made from palm kernel oil and fossil-based avtur fuel.

Currently, the production capacity of bioavtur at the Cilacap Refinery reaches eight thousand barrels per day. Pertamina is committed to continuing to boost bioavtur production by looking at market requirements, starting in 2023.

“The development of Pertamina's J2.4 Bioavtur is in line with the clean energy roadmap of the Ministry of Energy and Mineral Resources regarding biofuel mix of up to five percent by 2025, including for air transportation,” he remarked.

The J2.4 Bioavtur product will pass a nine-day testing period using the CN-235-220 aircraft belonging to PT Dirgantara Indonesia.

The aircraft for the test took off and landed at the Husein Sastranegara Airport, Bandung, West Java. During the flight test period, the aircraft will refuel with J2.4 bioavtur at the Soekarno-Hatta Airport, Tangerang, Banten.

Earlier, this bioavtur product was tested twice by the static test cell facility owned by PT. Garuda Maintenance Facility (GMF) AeroAsia using Jet A1 avtur fuel and bioavtur (J2.0 and J2.4) in the CFM56-3 engine on December 23-24, 2020, and May 24-25, 2021.

The test results indicated that the engine performance using bioavtur (J2.0 and J2.4) provides the same correlation as using Jet A1.

Based on the success of the statistical test, the subsequent step is to conduct a flight test to ensure that the technical and safety aspects pertaining to the use of bioavtur can be applied properly.

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.

**MALAYSIAN SUSTAINABLE PALM OIL
(MSPO) STANDARD SUPPORTS THE
UN SUSTAINABLE DEVELOPMENT GOALS 2030**



SUSTAINABLE DEVELOPMENT GOALS
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certifying
Malaysian palm oil
for the world

Cameroon Development Corporation (CDC) Is Currently Fine-Tuning Two Projects for The Construction of Two Rubber and Palm Oil Production Plants.

Cameroon - State-owned agribusiness Cameroon Development Corporation (CDC) is currently fine-tuning two projects for the construction of two rubber and palm oil production plants. This is revealed in the call for expression of interests recently issued by the company to recruit a consultant that will carry out the projects' environmental impact assessment. According to the call, the palm oil production plant will be built in Idenau, in the Southwest, while the rubber production plant will be built in Pendamboko, in the Littoral region.

The launch of the two projects proves that the agribusiness company is gradually recovering from its woes caused by the Anglophone crisis. Indeed, CDC is undoubtedly one of the companies that suffered the most from the ongoing socio-political crisis that started in late 2016 in the Anglophone regions.

During the crisis, separatist militia transformed the company's plantations into training grounds. Work was badly disrupted while processing and storage plants were simply set ablaze. Because of that insecurity, the company and its about 22,000 employees partially stopped operations, on the banana segment notably. As a result, from September 2018 to May 2020, the company, which was previously the second-largest banana exporter in Cameroon, simply disappeared from the list of Cameroonian banana exporters.



An edible oil bottling plant

Its performance since June 2020 when it returned to the banana market demonstrates that it has not fully recovered from the fallouts of those attacks. For instance, in April 2021, it exported 1,354 tons of banana (according to the Banana association ASSOBA CAM), which is significantly below the 9,467.5 tons of banana it used to export monthly.

Nevertheless, the company's performance could increase tenfold in the coming months should its plan to develop 520 hectares of banana plantations this year come to fruition.





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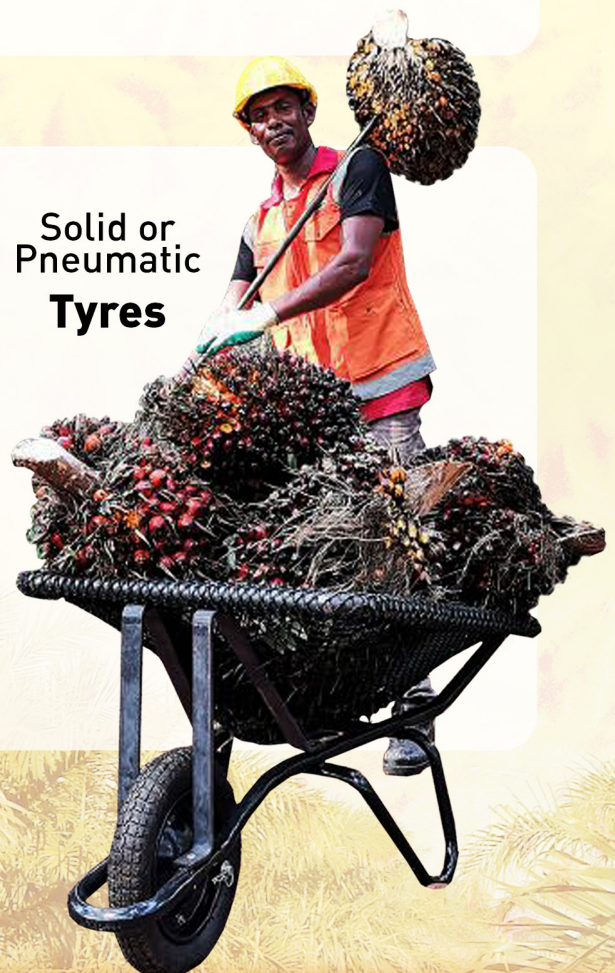
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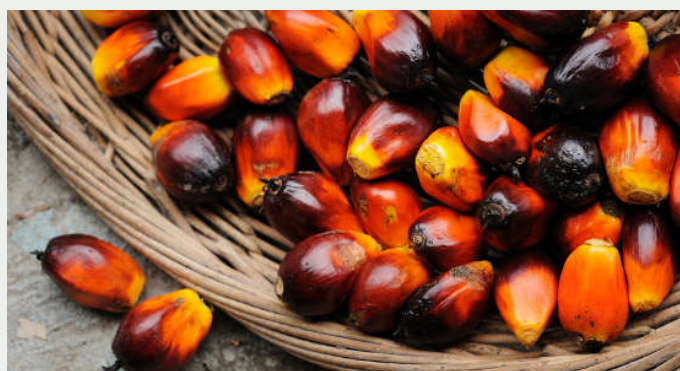
MPOA Urges Govt to Lift Freeze on Foreign Worker Recruitment for Palm Oil Industry at 'Breaking Point'

Palm oil planters have urged the government to unfreeze the recruitment of foreign workers as an acute shortage has and would continue to result in loss of revenue for planters and income to the government due to loss in palm oil yield, according to Malaysian Palm Oil Association (MPOA) chief executive officer (CEO) Datuk Mohd Nageeb Wahab.

“Our single biggest problem today is the acute shortage of workers, namely harvesters ... I would dare say the shortage since the [foreign labor] intake freeze took effect in March 2020 has increased to more than 75,000 workers. This shortage translates into an alarming 20% to 30% shortfall in our potential production. In 2020, as a result of this shortfall, the industry’s loss of revenue is estimated at about RM10 billion to RM12 billion on the back of an average crude palm oil (CPO) price of around RM2,685 per metric ton (MT).”

“That big reduction in revenue resulted in the reduced contribution of about RM1 billion to the government. And in spite of that, total taxes paid out by the industry amounted to about RM5.2 billion last year,” Mohd Nageeb said during the virtually-held National Recovery Summit.

According to him, the palm oil sector is at the “breaking point”, and he warned that the loss of production will quickly escalate too much higher numbers.



If the situation continues to be left unchecked, he stressed, the palm oil industry may not be able to compete with that of Malaysia’s neighbors by virtue of our higher cost of sales and wastage.

“The industry is enjoying a long bullish run, with CPO prices averaging at more than RM4, 000 per MT in the first half of 2021 (1H21). This is unprecedented and the highest-ever rate mainly due to the short supply of edible oil worldwide due to weather factors. And we expect this trend to prevail through 2022.

“And as a result, you can see plantation companies reporting very good returns despite lower yields and higher costs, brought about by the continued shortage of workers. We could have actually done much better if only we could actually optimize our production numbers.

“But even with much lower production and returns, the expected total effective tax, levy and cess paid to the government will be in the range of RM9 billion to RM12 billion for 2022. That 20 to 30% drop in production (estimation) will cause the government a [likely] opportunity loss to collect additional taxes of between RM1.5 billion and RM2 billion at current [CPO] prices,” he stressed.



To address the shortage and high dependency on foreign workers, Mohd Nageeb said the industry, together with the relevant government agencies, had embarked on many initiatives, with the top agenda to accelerate automation and mechanization transformation plans for the oil palm sector to reduce reliance on manual and foreign workers.

But he also said these initiatives are still in progress and the industry still needs labor to work in plantation fields.

While Mohd Nageeb disagreed that hiring foreign labor is cheaper, pointing out that high costs are involved in recruiting and training them, planters would have to continue to hire them as attempts to hire local workers have not been very successful so far due to lack of interest.

“I have received many comments on why we are not employing locals in place of guest workers to address the shortage. We actually would love to have locals, but our efforts to hire locals have not been very successful. They seem to shun this industry, and deem this industry as 4D — dirty, difficult, dangerous and demeaning. It is not about the money as we do offer lucrative total packages, but this does not seem to attract them, especially for harvesting. However, we have not given up hope, and shall continue trying to entice them,” he said.

“We plead to the government to unfreeze the recruitment of guest workers to enable the industry to optimize production at a profit and share its wealth with the nation in the recovery plan,” he added.

Source: www.theedgemarkets.com

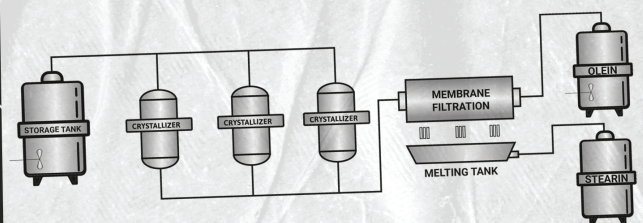
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Palm Oil Mills Builder Eonscience Seeks ACE Market Listing

Eonscience International Bhd, which specializes in the construction of palm oil mills, is seeking a listing on the ACE Market of Bursa Malaysia.

According to the group's draft prospectus posted on the Securities Commission Malaysia website, the proposed initial public offering (IPO) of 112.17 million shares will comprise a public issue of 82.17 million new shares and an offer for sale of 30 million existing shares.

A total of 17 million shares will be made available to the Malaysian public, while 6.8 million shares will be allocated to the group's eligible directors and employees.

Meanwhile, 42.5 million shares will be issued by way of private placement to Bumiputera investors approved by the Ministry of International Trade and Industry, and another 45.87 million shares to selected investors.

The price of the IPO shares has yet to be fixed.

Eonscience International described itself as a one-stop solution provider for the construction of palm oil mills and supporting facilities and fabrication of equipment.

"Our core activities are in the construction of plants, which are mainly palm oil mills and facilities, supported by our in-house fabrication of equipment. Other complementary activities include supply of materials and equipment, spare parts and provision of maintenance services," the group said in the draft prospectus.

Eonscience International plans to expand the supply of environmental-related equipment by hiring new sales and marketing staff with relevant experience, and increasing marketing activities.

As part of its business plan, the group also intends to establish a new fabrication facility and office located at Balikpapan in Indonesia's East Kalimantan province.

Eonscience International's profit after tax for the financial year ended Dec 31, 2020 fell 47.76% to RM6.5 million from RM12.48 million a year ago.

The group intends to distribute a dividend of at least 20% of its annual profit after tax attributable to its shareholders.

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A Nigerian Oil Palm Startup Raised \$4 Million to Build a “Smart” Factory



An image of a farmer carrying a head of oil palm on a stick over his shoulder, his face covered with a nose mask.

Why is it difficult to turn palm nuts into processed oil?

“A big challenge in the food processing industry in Africa today is that factories are too far from farmers,” Ikenna Nzewi, CEO and co-founder of Releaf, tells Quartz. “A lot of the money a farmer should receive for crops ends up being eaten up by logistics costs.”

Releaf’s operation begins after farmers harvest palm fruits from trees and remove the flesh for red oil. The company buys nuts from about 2,000 farmers, and crushes the kernel to produce vegetable oil at its factory in Uyo, a town in southern Nigeria.

Nzewi says the factory, which uses proprietary nut de-shelling technology whose patent is pending, cost \$150,000 to set up and processes 500 tons of palm nuts per month. The money Releaf has just raised partly went into building and deploying the facility.

We’re working with the world’s most efficient crop at producing vegetable oil in a market that is starving for vegetable oil. It’s a domestic market for the taking.

The big picture is to put a factory closer to smallholder farmers who produce 80% of Nigeria’s oil palm. Most production happens in the Niger Delta (42%), southwest (27%), and southeast (25%) regions, according to the US Department of Agriculture (USDA). “We believe the firm’s thesis on decentralizing food processing would have a strong match with Africa’s economic development landscape for the next few decades,” says Rena Yoneyama, managing partner at Samurai Incubate Africa.



Besides being a key ingredient for cooking jollof rice, vegetable oil is used industrially in paints, soaps, biofuels, and lubricants. But getting the oil from palm nuts can be a hassle for manufacturers if they have to engage smallholder farmers directly. In most cases, the Nigerian farmer cracks palm nuts with large stones, an inefficient process that makes eventual finished goods more expensive.

Nigeria-based startup Releaf intends to solve this problem by processing produce from farmers, and also delivering the oil to food manufacturers.

The startup has raised \$2.7 million from a number of investors including Samurai Incubate, a Japanese venture capital firm, and Nigeria-based firms Future Africa, and Consonance Investment Managers. Stephen Pagliuca, chairman of Bain Capital, and Twitch co-founder Justin Kan are also on board.

Releaf also won a \$1.5 million grant from the Challenge Fund for Youth Employment (CFYE), a program by the Dutch ministry of foreign affairs, and the United States Agency for International Development.



Releaf is targeting a gap in supply

A major motivation for Releaf is that Nigeria barely produces enough oil palm to meet local demand.

Current USDA data show Nigeria produces 1.4 million metric tons, but at least 1.34 million of that is consumed within the country. Refined vegetable oils and fat are on Nigeria's list of prohibited imports, ostensibly to aid local production. "We're working with the world's most efficient crop at producing vegetable oil in a market that is starving for vegetable oil. It's a domestic market for the taking," Nzewi says.

A picture of the two founders of Releaf, both dressed in black polos with the green logo of their company inscribed.

But taking this market will not be easy. Nigeria's major oil palm processing companies, mainly Okomu and Presco, have a far larger asset base of plantations and factories, capital, and market connections with consumer goods companies. Releaf will need partnerships to get a foothold in the industry, which is why they have got help from investors who promise connections.



Releaf co-founders Uzoma Ayogu (CTO), and Ikenna Nzewi (CEO)

Endeavor Nigeria inducts startups on a fast-growing path into a global network that helps such companies grow even faster. This month, it chose Releaf and three other startups for a 10-week program to "provide them with access to mentorship, capital, partnerships and a strong peer network of high impact entrepreneurs who have scaled their businesses," says Tosin Faniro-Dada, managing director and CEO of Endeavor Nigeria.

Bundling other services is part of the plan

Releaf is a food processing company at heart. It has similar needs—electricity, talent, equipment—as a large-scale corn, rice, or cassava-processing company.

But in competing with incumbents in the oil palm industry, Releaf hopes its advantage will be direct relationships with farmers. Offering them better technology for harvesting palm heads and extracting fruits, and services like insurance is part of the long-term plan. "We're using our position with food processing as a wedge to become a trusted member of rural economies," Nzewi says.

A former private equity consultant at Bain, Nzewi is of Nigerian origin, but was born and raised in the US. He first visited Nigeria in 2015 was intrigued by research activities at the International Institute for Tropical Agriculture. Releaf started as a marketplace for agriculture commodities, but that didn't look sustainable in a sector with low margins. The company switched to taking an active role in the oil palm value chain in 2017, bringing the 26 year-old closer to a family goal.

"My grandfather actually had a vision to start a big oil palm plantation. My mum feels like I am fulfilling his ambition," he says.

Sime Darby Plantation's Rare Invite to Malaysians to Become Harvesters as Foreign Worker Hiring Freeze Drives Labor Shortage



Sime Darby Plantation Bhd appears to have extended a rare invitation to Malaysians to fill various on-site oil palm plantation jobs including positions as harvesters across Malaysia amid a COVID-19-driven industry-wide labor shortage due to the freeze on the intake of foreign workers to curb the spread of the pandemic.

In a notice on its website, Sime Darby Plantation said the job vacancies include positions as harvesters, general workers besides oil palm processing facility employees.

“The locations (of the jobs) are at oil palm plantations owned by Sime Darby Plantation across Malaysia,” Sime Darby Plantation said.

Sime Darby Plantation said its employment benefits include Employees Provident Fund (EPF) contributions for workers, telephone allowance and transportation for workers’ children to school.

“A life with a happy community awaits you,” Sime Darby Plantation said.

Within the Malaysian context, it is no secret that jobs described as dirty, dangerous and difficult (3D) including those in the construction and plantation sectors are deemed less popular among Malaysians.

As such, construction projects and oil palm plantations across the country have been heavily dependent on foreign workers to ensure continuity of operations.

The COVID-19 pandemic’s emergence since early 2020 has been a game changer for these sectors due to the country’s foreign worker hiring freeze to curb the spread of the pandemic.

According to plantation sector analysts, oil palm planters in Malaysia are heavily dependent on foreign workers, who make up about 70% of total workforce.

However, COVID-19 vaccination progress in the country has led to the anticipation of reopening of more economic sectors, hence “providing a glimmer of hope in easing the labor shortfall issue in Malaysia”, Hong Leong Investment Bank Bhd analyst Chye Wen Fei stated.

CGS-CIMB Securities Sdn Bhd analysts Ivy Ng Lee Fang and Nagulan Ravi wrote in a note dated May 31, 2021 that in early May 2021, it was reported that the Malaysian government had approved the return of about 32,000 foreign workers in batches to oil palm plantations in the country.

However, CGS-CIMB gathered that the plan had then been delayed, following the sharp rise in new COVID-19 cases in the country, according to Ng and Ravi.

On Bursa Malaysia today, Sime Darby Plantation’s share price closed up nine sen or 2.31% to RM3.99 for a market value of about RM27.61 billion based on the company’s 6.92 billion issued shares.

Chye said Hong Leong, which maintained its “buy” call for Sime Darby Plantation shares, had however cut its target price for the stock to RM4.99 from RM5.17.





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EU's Indirect Land Use Change Approach to Palm Oil Flawed — CPOPC



Elaborating further, the CPOPC said by looking only at past deforestation which does not in fact measure ILUC effects, the EU ignores the fact that palm oil requires six to 10 times less land than all other oilseed crops, which clearly require more agricultural land and lead to high indirect land use change. (Photo by Mohd Suhaimi Mohamed Yusuf/The Edge)

The Council of Palm Oil Producing Countries (CPOPC) said public consultation on the European Union's (EU) Renewable Energy Directive (RED II) is based on a false basis that had been used to continue its unfair policy and regulation of sustainable palm oil.

It urged the EU to listen and act on the feedback and suggestions from all of its trading partners, which should form the core of the consultation.

"In a post-COVID-19 world where economic recovery will be the overriding need for all nations, the EU must not choose trade barriers over international cooperation and open trade," the CPOPC wrote in a column section of Euractiv, a pan-European media network specialising in EU policies.

The council noted that despite continuous criticism from the palm oil industry, the EU appears to be indifferent when it comes to the politics of trade, affirming its protectionist and discriminatory policy.

The RED II Delegated Act on the determination of high indirect land use change (ILUC)-risk feedstock drew on the results of consultation exercises undertaken by the commission with "experts and stakeholders" in 2018 and 2019 dominated by European groups who were perceived as advocates for the fossil fuel industry, it said.

The CPOPC said it had from the very beginning held the view that the ILUC approach being used by the EU to categorise feedstocks into high ILUC-risk and low ILUC-risk is flawed.



“The ILUC scheme is not consistent with the actual business model and operational practices of palm oil companies; the criteria are not implementable and the potential impact on smallholders is not yet assessed.

“Furthermore, ILUC is uncertain because it is dependent on several assumptions that cannot be empirically tested and demonstrated.

“For example, there is no direct link when estimating GHG emissions with ILUC because it is difficult to verify GHG emissions and to identify whether they are part of a biofuel life cycle or a product made from the displaced crop,” the council explained.

“The EU has declared its ambition to reduce the environmental impact based on EU citizens’ choices.

“However, palm oil is the most heavily certified of all commodities imported into the EU.

“With respect to its use as bioenergy for the EU, palm oil has to meet additional criteria in the RED II Delegated Act, while other vegetable oils do not have to.

“In fact, the Delegated Act adds additional criteria discriminating against palm oil and ruins a decade of progress instead of rewarding the sector’s sustainability efforts.

“The application of ILUC to single out palm oil in the Delegated Act of RED II is therefore seen as a thinly disguised form of neocolonialist protectionism and punitive discrimination.

“Worse, the EU has not been able to produce European feedstock without massive use of fertilisers and pesticides: How can the EU focus on the non-accountable ILUC factor and be blind to such important and measurable sustainability factors in the environmental impact of EU feedstock?”

Source: www.theedgemarkets.com

Elaborating further, the CPOPC said by looking only at past deforestation which does not in fact measure ILUC effects, the EU ignores the fact that palm oil requires six to 10 times less land than all other oilseed crops, which clearly require more agricultural land and lead to high indirect land use change.

“The world cannot afford to wait 10 years for the EU to look back at the impact of its RED II Delegated Act and realise that its wrong decision led to even more global deforestation,” it said.

In a wider partnership context, the EU’s successful elevation to becoming a strategic partner of ASEAN provides the platform for the EU to consult with palm oil producing countries in ASEAN and work towards a win-win solution.



Until then, it is counterintuitive and counterproductive for EU leaders to claim commitments to a geopolitical strategy while banning and restricting an important source of export revenue from key trading partners, it said.

The council said a successful partnership will only be possible once the EU drops its biased ILUC approach in favour of equal standards for all vegetable oils.



Palm Oil Industry Remains Resilient Under MCO - Dr Ahmad Parveez

Malaysia's oil palm industry remains resilient during the Movement Control Order (MCO) and the National Recovery Plan (NRP) currently being implemented nationwide as the agriculture sector continues to be one of the main contributors to the country's Gross Domestic Product (GDP) growth during the COVID-19 pandemic.

Director-general of Malaysia Palm Oil Board (MPOB) Dr Ahmad Parveez Ghulam Kadir said during the first implementation of the MCO from March 18 to April 28, 2020, agriculture was the only sector that recorded positive growth of 0.9 percent year-on-year for the second quarter of 2020.

He said that economic activities in the agriculture sector are allowed to operate during the MCOs and players continue their activities in the plantations and the supply chains as usual – however, they must adhere to strict standard operating procedure (SOP) issued by the Malaysian National Security Council (MKN), especially on the limitation of workers up to only 60 percent, which took effect on May 26 this year.

Dr Ahmad Parveez said the average price of crude palm oil (CPO) rose 66.9 percent or RM1, 628 to RM4, 061.50 per ton for the first half of 2021 from RM2, 433.50 per ton for the same period in 2020. In sync with that, export value of palm oil increased 36.3 percent or RM7.69 billion to RM28.87 billion for

the period of January – June 2021 from RM21.19 billion in the previous corresponding period.

“Export volume of palm oil during the period of January-June 2021 was 7.07 million tons, lower by 9.3 percent as against 7.80 million tons during the same period of 2020 due to stiff competition from other competing vegetable oils and import policy in importing countries.

“Prices of CPO and soybean oil in the world market were on an upward trend during the period of January-June 2021 compared to the previous corresponding period due to the resumption of social and economic sectors in many countries as well as supply tightness in the global vegetable oils market which has supported prices. During January-June 2020, prices were traded lower in line with the global economic recession as a result of the COVID-19 pandemic,” he said in a statement.

He added that MPOB expects the price of CPO to be firmer this year and may average at around RM3, 600 per ton, primarily due to the expected firmer soya bean oil price and slower palm oil production growth especially in the first quarter of this year.

The COVID-19 pandemic has moderate impact on export demand as palm oil is an essential product for edible and non-edible use. Export of palm oil and palm-based products during

January – June 2021 declined by 8.5 percent to 11.14 million tons from 12.17 million tons during January-June 2020.

Dr Ahmad Parveez said, total sales of oil palm seeds and seedlings increased by 33.4 percent during January to June 2021 to 27.73 million seeds and seedlings as against 20.79 million of oil palm seeds and seedlings for the previous corresponding period as activities including transporting of seeds and seedlings are allowed during the current MCO. During the first MCO, seed producers and nursery operators were not allowed to operate. However, their operations were later allowed with strict SOP.

Total production of fresh fruit bunches (FFB) decreased by 7.2 percent to 42.76 million tons during January-June 2021 compared to 46.09 million tons in the same period of 2020 due to labor shortage.

“Plantations now need to seriously consider embarking into mechanization and automation to address the shortage,” he said.



Director-general of Malaysia Palm Oil Board (MPOB) Dr Ahmad Parveez Ghulam Kadir said during the first implementation of the MCO from March 18 to April 28, 2020, agriculture was the only sector that recorded positive growth of 0.9 percent year-on-year for the second quarter of 2020. — Bernama photo

The government has introduced the PEMERKASA stimulus package to encourage the adoption of machineries and the Workforce Recalibration Program, aimed to enable illegal immigrants to be employed as legitimate foreign workers. These moves ensure the operations of oil palm plantations run smoothly, especially the harvesting activities which can impact productivity.

The production of CPO and crude palm kernel oil (CPKO) during January – June 2021 were lower by 7.6 percent and 8.2 percent respectively as against January – June 2020 mainly due to lower FFB received by mills.

Despite being able to operate, he said the delay in technology transfer due to border closure and the delay of transportation such as inflow of overseas experts, machines and equipment

have dampened productivity. Hence, the country's production of CPO is expected to decline marginally this year-due to the decline in FFB production arising from limited labor availability from the national border closure.

“However, in the coming five to ten years, MPOB expects production of palm oil to increase gradually and steadily. Production is expected to reach 22 million tons by 2025 and will further rise to 25 million tons by 2030. The anticipated upward trend will be attributed to the expected higher matured oil palm area and higher oil palm productivity through better FFB yield and higher oil extraction rate.

“As we move forward, we do not see oil palm land area as a major barrier for Malaysia to upscale its palm oil production. With the advancement in technologies particularly in the high yielding planting materials and with the adoption of mechanization and automation in estates, we believe that we can assist plantation players to increase their productivity,” Dr Ahmad Parveez said.

In addition, he pointed out that the improvement in the quality of planting materials is also expected to enhance the oil palm yield and consequently help Malaysia to meet the rising demand for palm oil globally while preserving the existing land.

On the other hand, palm-based oleo chemicals and biodiesel sectors are not significantly affected during the COVID-19 pandemic as both sectors are allowed to operate with strict SOPs. In January – June 2021, the capacity utilization rate of the palm-based oleo chemicals and biodiesel plants was lower by 5.8 percent and 4.5 percent – to 84.3 percent and 44.2 percent respectively compared to the same period in 2020.

“The numbers recorded prove that plantation companies are capable of managing the current situation well as they have been through similar situations during the implementation of the earlier series of MCOs. Industry players in the midstream as well as downstream do not have much problem in adhering to the SOP as it has become a new norm for the industry since the first introduction of the MCO in March 2020,” he said.

He said MPOB expects the impact of the COVID-19 pandemic to be less severe in 2021 as the country is more prepared in managing the economic activities despite the pandemic.

The economic growth trajectory is projected to improve, driven by the stronger recovery in global demand and increased public and private sector expenditure amid continued support from policy measures, he added.

Post-Pandemic Future Looks Bright for Palm Oil Industry

The post-pandemic outlook for the palm oil industry in Malaysia remains bright, backed by the balanced supply and demand as well as expected recovery from labor shortages next year.

Council of Palm Oil Producing Countries (CPOPC) executive director Yusof Basiron said palm oil prices had been relatively high for most of 2020 and 2021, and for producer countries, whose economies were affected by the pandemic, the increased revenue from the palm oil sector was much welcomed.

He said consumers, on the other hand, were affected by the high prices of oils and fats, since lower supply of rapeseed and sunflower oil and strong demand for soybean and its oil had led to the current high prices of soybean oil.

However, Yusof said, the lower prices of palm oil relative to soybean oil were benefiting consumers, especially those whose incomes were affected by the economic slowdown due to the pandemic.

“The current trend of long periods of high prices experienced by palm oil (and other oils and fats) may be part of a new long-term shift in the supply and demand balance of palm oil as well as for other oils and fats,” he said in his keynote address at the second edition of the World Palm virtual exhibition and conference today.



Yusof Basiron says if palm oil yield can be increased by 50%, an additional 35 million tons of palm oil can be produced a year without any land area expansion. (Bernama pic)



“While demand for oils and fats has continued to grow according to past trends due to expanding population, the supply of palm oil may not be increasing at a high rate as in the past.”

Yusof said the moratorium on new land expansion for oil palm cultivation in Indonesia and similar lack of new land for oil palm cultivation in Malaysia had limited the growth rate of palm oil production in recent years and in the long-term.

As other oils and fats were growing at a lower rate than palm oil, he said, it was unlikely that the next major crop, like soy production, would grow at a “super high rate” to compensate for the lack of rapid expansion in palm oil production as in the past.

Hence, the future supply of oils and fats had to experience a slowing growth relative to demand, and prices had to rise to reflect this new supply and demand balance.

“If this outlook holds true, palm oil producers will continue to enjoy remunerative prices for their palm oil, and maximizing the production of palm oil will be done by improving yield through better agronomic practices,” he said.

Yusof also said yield improvement for the palm oil industry had not happened unlike other oilseed crops where 50% increase in yield has been achieved in the last few decades.

“If the palm oil industry can seize the opportunity to improve its yield by 50% like the other oilseed crops, over 35 million tons of palm oil can be additionally produced per year, without any plantation land area expansion.

“This will represent an opportunity for a huge increase in revenue for palm oil producers, given the projected high prices in the near future,” he said.

Faye Loo, an analyst at global agricultural commodity and agribusiness economic consulting firm LMC International, said the rising Covid-19 cases had caused experienced foreign workers from Indonesia and Bangladesh to leave as their permits were not renewed.

On top of that, there were also no new arrivals of workers due to the border closure.

She expressed hope that the situation would change in 2022, thus increasing production and yield.

Loo said an estimated 75,000 additional workers were needed to ensure good plantation operations in Malaysia.

“The effect of a lack of workers has caused harvesting intervals to prolong to above one month at some plantations.

“In some cases, fruits were being left to rot on trees because they were not harvested in time, while some neglected maintenance in trying to focus on harvesting work, leading to the palm fruits trees being left unpruned,” she said.

For 2022, LMC expected Malaysian palm oil production output to slightly rebound to 18.4 million tons, and Indonesia’s to be up by two million tons to 47.2 million tons in 2022.

This year, she said, Malaysia’s output was expected to be similar to that of 2020 at 18.1 million tons, while for Indonesia, the volume was expected to be 45.5 million tons.

Source: www.freemalaysiatoday.com



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Cabinet Gives Nod to Rs 11,040cr Palm Oil Plan to Cut Imports

Seeking to reduce India's dependence on import of edible oils in due course, the Cabinet on Wednesday approved launch of an exclusive Mission on Palm oil — National Mission on Edible Oils – Oil Palm (NMEO-OP) — as a new centrally sponsored scheme with a special focus on the northeast region and the Andaman and Nicobar Islands. A financial outlay of Rs 11,040 crore has been made for the scheme. Rs 8,844 crore would be the central share while remaining Rs.2,196 crore would come from states.

Under this scheme, the agriculture ministry has proposed to cover an additional area of 6.5 lakh hectare (ha) for palm oil cultivation till the year 2025-26, leading to over 10 lakh ha of farm lands under palm oil. At present only 3.70 lakh ha is under oil palm cultivation.

“The production of Crude Palm Oil (CPO) is expected to go up to 11.20 lakh tones by 2025-26 and up to 28 lakh tones by 2029-30,” said agriculture minister Narendra Singh Tomar.

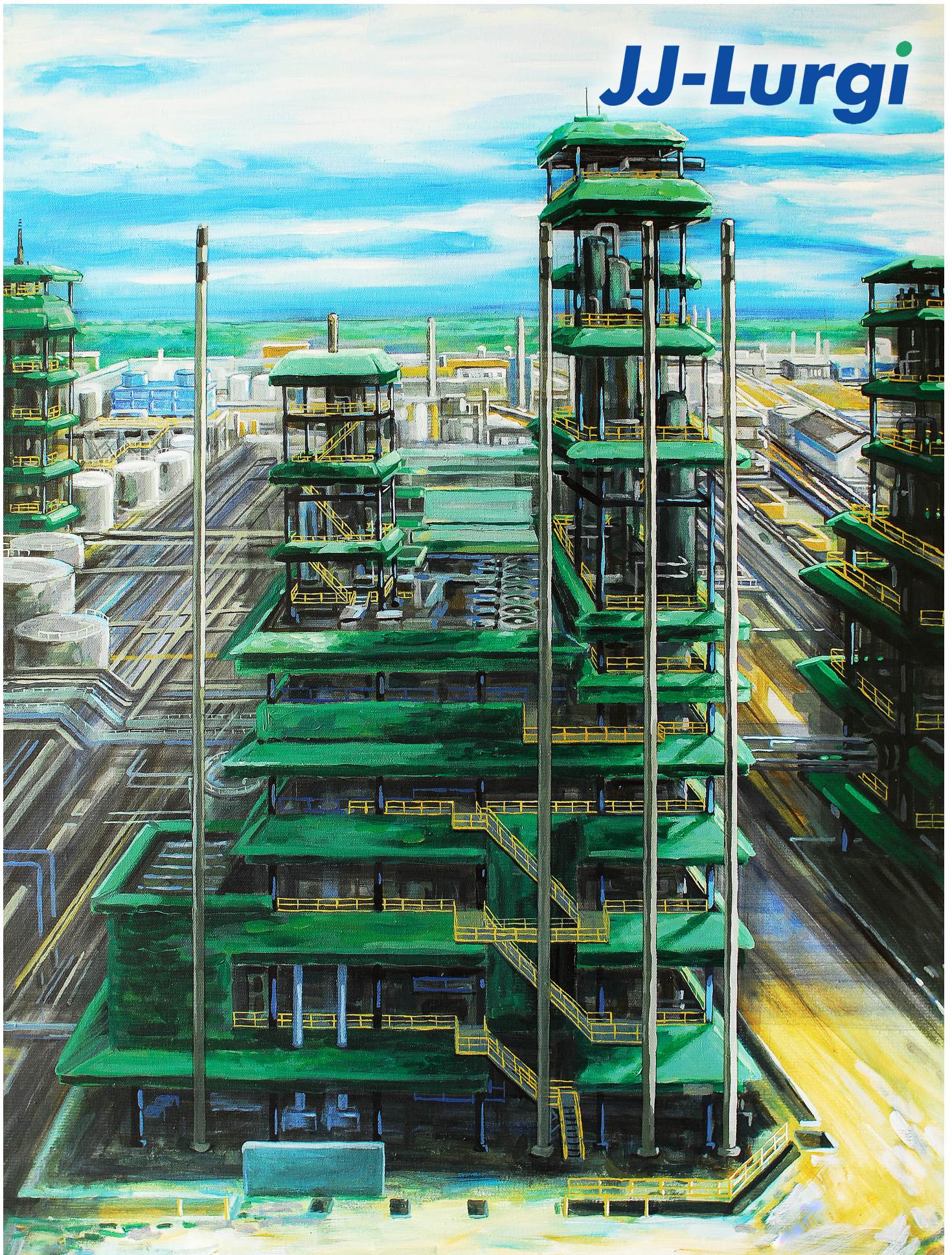
According to an assessment made by the ICAR's Indian institute of Oil Palm Research (IIOPR) last year, India has 28 lakh hectares of land that can be suitable for palm oil cultivation. Nearly one-third (9 lakh hectares) of such land is available in north-east India.

Asked whether this move would not promote environmentally-damaging monoculture farming in the country, Tomar said, “The cultivation will be done only in areas which have been identified by the ICAR.”

On why the government is not looking for alternative oilseeds, the minister said, “Oil palm produces 10 to 46 times more oil per hectare compared to other oilseed crops and has a yield of around 4 tons oil per hectare. It has thus enormous potential for cultivation.”

The scheme will subsume the current National Food Security Mission-Oil Palm programmer. Under the new scheme, the central government for the first time will give a price assurance to the oil palm farmers for the Fresh Fruit Bunches from which oil is extracted by the industry. This will be known as the Viability Price.

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The Newly Constituted Board of Trustees, Bot, of The National Palm Produce Association of Nigeria, NPPAN, Called on National Assembly, NASS, to Tackle and Sanitize the Country's Oil Palm Industry with Legislation



Harvesting of palm oil fruit

The newly constituted Board of Trustees, BoT, of the National Palm Produce Association of Nigeria, NPPAN, called on National Assembly, NASS, to tackle and sanitize the country's oil

palm industry with legislation. Expressing concern over the oil palm industry being without standards over the years, the newly elected BoT Chairman of NPPAN, Chief Abiodun Adejo, while addressing journalists on the roadmap of the association said it is now time for oil palm to take its place in the agricultural sector, because the commodity is the largest money spinner in the economy at the moment.

Adejo lamented that unfortunately, despite the huge potential of the commodity, government over the years has neglected it, and nothing tangible is done to activate its prospects as it is in other countries, which in Malaysia, government has given strong and sustainable support through various policies that have placed its oil palm industry on an enviable height.

Also other members of the new BoT spoke in same vein as they emphasized the need for an enabling environment they expect government at the federal, state and local government levels should provide for the private sector to push forward and open a new vista in the drive to diversify the economy, because palm oil as a commodity has the biggest opening to generate foreign exchange than the oil and gas sector following the number of profitable by-products it has including its life's span which is over 50 years.

Meanwhile, the BoT chairman was elected along with the Secretary, Rose Gyar, with other members have both hit the ground running and promised to galvanize the oil palm industry in a short time. Speaking on the need to formulate policies that would grade Nigeria's palm oil to regulate production and sale of the commodity as it is with the crude oil, the BoT chairman disclosed that the association is already on the move to approach NASS with a presentation whereby palm oil will be gazetted alongside other agric commodities as exportable commodity.

He said: "We want to work with the association to make sure that palm oil is not sold out until it is graded, we want to make sure that we are able to legislate that ungraded palm oil cannot be taken out of the country or sold to other states, the states that produce the palm oil must grade and certify it as good oil before it is taken to any other state or to any other market. "So, this grading has to be legislated upon at the national level so that everybody will know that when you are selling the oil you are certified, that will also make the state and local government earn from the sales of palm oil.

"We will make sure those palm oil-producing companies' key into the association goals and aspiration. The BoT will be able to bring in these big companies and let them know the advantages of working together. Our aim as the BoT is to make sure the National Assembly is able to gazette palm oil as a product that is an exportable commodity for the country."

"We will have to either make a presentation to the National Assembly, to make them see the benefit of palm produce that can generate enough foreign exchange rather than going into crude oil production."

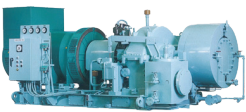
He further stated that, "The only way it can be done is to make the federal government, the state and local government know that there is a lot of money that can be earned through palm production in Nigeria. Other countries believe that palm comes from West Africa, and if we own it, while should we be the one importing the product. We should be the one exporting it to everywhere in the world, and if we export it, a barrel of palm oil today is twice the price of crude oil which shows that the future of Nigerian depends on palm oil."

"The foreign exchange we get from palm produce is greater than any other products in this country, the only product that can compete with oil palm is rubber, but rubber is mono. Whereas in our own case we have the palm kernel, we have the palm kernel oil, we have the oil that we can sell to the whole world, and the one we are producing now cannot meet up with local demand. So, it is an open market for us, we can explore a lot and we can develop Nigeria through palm produce."



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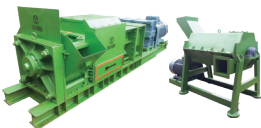


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India's Ruchi Soya to Start Palm Oil Plantations in North East



Workers are Ruchi Soya's Plant

Yoga guru Baba Ramdev's Patanjali group led Ruchi Soya plans to start palm oil plantations in Assam, Tripura and other North-Eastern states. The oil processor which was taken over by the Patanjali group two years back after it slipped into the red has already done field surveys for the palm oil plantations which will be set up through contracts that guarantee farmers a buy-back by Ruchi Soya's processing plants to be set up in those states.

"We plan to set up palm oil plantations in the North East. We have completed our survey there. We have plans for Assam, Tripura, Meghalaya, Manipur among others," said Baba Ramdev, Yoga tele-evangelist who backs the Patanjali business group in an interview with PTI.

"We want to make India self-sustainable in edible oil. The groundwork for the plan has been done. It can be started at any time," Ramdev said.

India currently has patches of palm oil plantations scattered in Assam, Tripura, West Bengal, Andamans, Gujarat, Goa, Andhra, Karnataka, Kerala, Tamil Nadu and Maharashtra.

While Ramdev was unwilling to place a date for the start of the oil plantations, he indicated that it would be done after Ruchi Soya which is in the process of raising funds from investors, retires its debts with the proceeds of a share sale.

He indicated that the plantations to be run by farmers would be backed by processing plants set up by Ruchi Soya, as oil has to be processed within 48 hours of the palm being harvested.

Patanjali acquired Ruchi Soya in 2019 by successfully bidding for the soya oil processor under the Insolvency and Bankruptcy Code. Under Securities and Exchange Board of India's rules, a buyer has to bring down its holding in a firm to below 90 per cent within 18 months of acquisition if public shareholding fell below 10 per cent, while acquiring the target company.

Patanjali Ayurved is consequently selling stake worth Rs 4,300 crore in Ruchi Soya. The money raised through the sale will be used to retire debt, said Ramdev.

Ruchi's planned foray into palm oil comes on the back of a 44.42 per cent increase in palm oil prices in the retail market in July compared to the year-ago period, according to official data given in a written reply to Rajya Sabha last month.

India imports most of its palm oil requirements from South East Asia, despite its home-grown plantations as edible oils are an essential ingredient in the cuisine of this nation of 140 crore people and its appetite for all forms of edible oils has been increasing over the years as per capita incomes go up.

A high rate of import duty on palm oil also makes it attractive to grow locally. India's effective tax rate on crude palm oil is 30.25 per cent despite a recent tax cut.



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Ghana to Become Regional Top Performer in Palm Oil Production



Ghana's palm oil workers

Ghana will displace Ivory Coast to become the lead exporter and earner of palm oil production in West-Africa for the next five years, according to Bloomberg and Fitch Solutions.

Ghana's palm oil production will increase by an average of 4.4% year-on-year from 2021 to 2025, with the growth rate increasing at the end of that period.

This means the nation will dislodge Ivory Coast as the regional top performer.

"A number of recent establishments of both industry and government bodies to regulate and support the Ghanaian palm oil industry have improved the potential of the national sector compared with other countries in the region", the report emphasized.

Already, the Ghana Export Promotion Authority and the Ministry of Trade are seeking to develop a palm oil surplus, from which they estimate \$134 million could be earned within the next 10 years through exports.

The report added that "the Oil Palm Development Association of Ghana (OPDAG) was revived in 2015, and is currently being supported by Solidaridad in a strategic plan to improve its governance and administration by 2024. OPDAG aims to increase the productivity of Ghana's palm oil sector, whilst also addressing the challenges of

land access (attracting investment by making it easier to acquire new land), trade malpractice (especially smuggling of vegetable oils into Ghana) and sustainability."

The government also recently provided support for the sector in multiple ways, which Fitch Solutions and Bloomberg believe will incentivize further investment in the coming years.

The establishment of the Tree Crop Development Authority, aimed at improving the policies and programs set by the government to promote the production of six tree crops, including palm oil, is also a booster.

"Palm oil was excluded from a 50% cut in the benchmark value on imports in 2019 after OPDAG argued that the cut would negatively affect Ghanaian producers. With the New Patriotic Party (NPP) having maintained their rule during the December 2020 election, we expect these policies to continue", it stressed.

However, despite the recent developments in the Ghanaian palm oil sector, production growth will fail to meet demand growth.

Also, West Africa will not become a major global supplier of palm oil in the coming years, with the top producers remaining in south East Asia.



WWF Global Palm Oil Lead Michael Guindon Moves On



Guindon joined the conservation group from Zoological Society of London last year.

Michael Guindon joined WWF from ZSL in 2020. Image: Michael Guindon

World Wide Fund for Nature's (WWF) Singapore-based global palm oil lead, Michael Guindon is moving on after 17 months in the role.

Guindon joined WWF from the Zoological Society of London in January 2020 as senior palm oil engagement manager before being appointed the global lead in April last year.

During his time with WWF, Guindon helped to devise the conservation group's global palm oil strategy, strengthened the group's engagement with buyers and traders, and was part of the formation of the Accountability Framework Southeast Asia Coalition, designed to guide ethical supply chains. Guindon has also been working on the latest Palm Oil Buyers Scorecard, which is slated for release next month.

Guindon told Eco-Business that it has been "an honor" to lead WWF's global palm oil programme and work with stakeholders to improve the sustainability of the palm oil sector.

"The Covid-19 pandemic has been challenging for all of us and has caused me to reflect on my personal and professional priorities. As a result I've made the difficult decision to leave WWF to pursue other opportunities that will allow me to split my time between Southeast Asia and the Americas to be closer to family," he said.

He will leave WWF in September. The conservation group is currently searching for a replacement.

Over his career, Guindon has also worked for Global Canopy as a project manager, and as a copywriter for Peter Lang International Academic Publishers. He also previously worked for WWF in the Netherlands as a supply chain consultant.

Unlicensed Palm Oil Operators to Face the Law by Next Year



Government is set to arrest and prosecute unlicensed and illegal artisanal palm oil producers and processors in the country by next year.

The move is to drive away bad operators from producing unclean and unhealthy palm oil for consumption, which is causing a lot of illnesses, such as cancer.

The effort is expected to enhance market access for workers in the palm oil value chain in the producing districts and ensure that finished products meet both local and international market standards to generate income and taxes for development.

Paul Amaning, the National President of the Artisanal Palm Oil Millers and Outgrowers Association of Ghana, gave the hint during a product packaging training for palm oil producers at Twifo Hemang.

He noted, that a substantial part of Ghana's palm oil imports could be sourced locally from artisanal palm oil producers if they met the quality requirements of both industrial users and palm oil exporters.

Mr Amaning said the government was ready to support the millers with portable machines for palm oil processing at a convenient process within a shorter period of time.

He urged the artisanal mill owners to adapt to change and also work together as a team in advancing and digitalizing the palm oil business.

Mr Amaning, further charged the participants to register their businesses to meet the requisite standards to enhance trading and also provide jobs to reduce unemployment and increase the living standards in the Country.

John Odai Tettey, the Regional Manager of the Food and Drugs Authority (FDA) schooled participants on the requirements of business registration for them to be able to operate without interference.

He added that food hygiene and safety should be the core element of all food preparation processes, including palm oil, hence the need for processors to obtain and regularly update their knowledge in food safety and good manufacturing practices.



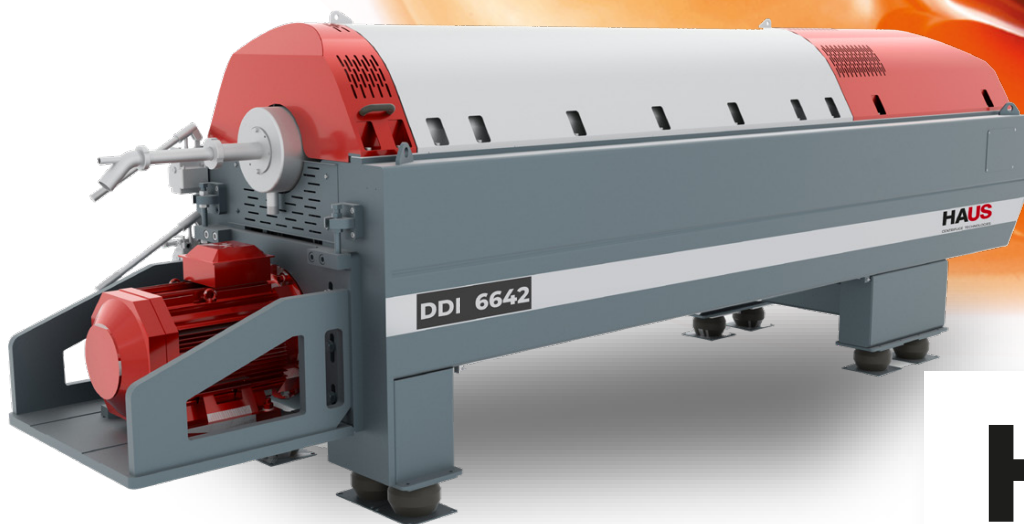
Mr Tettey advised consumers to stop demanding palm oil with a redder hue, explaining that such market preferences made some unscrupulous palm oil producers add substances to the product to change its natural color, which could compromise food safety.

He urged the participants to be committed to ensuring the safety of their products to safeguard public health.

The Regional Manager advised the mill owners to follow the right procedures and measures to produce the best and quality product for the market.

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Planters to Benefit from India's Move



According to CGS-CIMB Research, local planters such as IOI Corp Bhd, Kuala Lumpur Kepong Bhd (KLK) (pic) and Genting Plantations Bhd will stand to benefit from India's latest move, which will result in the base import tax on crude palm oil (CPO) being slashed to 2.5% from 10% previously, while the base import tax for refined palm oil has been cut to 32.5% from 37.5% earlier.

India's decision to further cut import duties on edible oils including palm oil starting Sept 11 is positive on the upstream planters and integrated plantation players regionally.

According to CGS-CIMB Research, local planters such as IOI Corp Bhd, Kuala Lumpur Kepong Bhd (KLK) and Genting Plantations Bhd will stand to benefit from India's latest move, which will result in the base import tax on crude palm oil (CPO) being slashed to 2.5% from 10% previously, while the base import tax for refined palm oil has been cut to 32.5% from 37.5% earlier.

Other regional beneficiaries include Wilmar International Ltd, First Resources Ltd and Astra Astro Lestari Tbk, it added.

However, this latest move came as no big surprise, said CGS-CIMB Research in its latest report. There had been talk that the world's largest edible oil importer was looking to cut the import duties to make palm oil, soybean oil and sunflower oil cheaper for its consumers ahead of the upcoming festivals.

This also marked the fourth time India has revised its import duties on edible oils this year.

Apart from palm oil, the base import tax on crude soybean oil and crude sunflower oil has also been reduced to 2.5% from 7.5% while the base import tax on refined soybean oil and sunflower oil has been cut from 37.5% to 32.5%.

To put it into perspective, CGS-CIMB Research said the reference CPO price used to calculate the import duties in India was set at US\$1,029 (RM4, 271) per ton from Aug 11.

"The 5.5%-point reduction ineffective import duties implies a reduction in import duties of CPO of around US\$56.60 (RM237) per ton, which is likely to be partially passed on to consumers," it noted.

In addition, the 11%-point import duty gap between CPO and refined palm oil is maintained post-latest revision to provide a margin advantage to Indian refiners to compete against Indonesia's palm oil refiners.

Indonesian refiners had benefitted from the country's lower export levy on refined palm products against the price of CPO at about US\$150 (RM623) per ton for September. "This is around 12.6% of the reference price of US\$1,185 (RM4, 919) per ton for palm oil," explained CGS-CIMB Research.

The research house has also reiterated a "neutral" call on the plantation sector with its top picks being KLK, Wilmar and First Resources.

"We continue to favor KLK as its current forecast financial year 2022 (FY22) price-to-earnings (PE) ratio of 22 times is below its historical average mean PE of 26 times.

"There is also a potential earnings upside from its acquisition of a controlling stake in IJM Plantations Bhd," said the research house.

It added that First Resources was also attractive, given its strong output growth prospects from its young estates and undemanding valuation at 13.8 times PE for FY22.

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As UN Sustainability Deadline Looms, Credit Suisse Believes Palm Oil Sector's Best Bet Lies In Transition Support



(Photo by Suhaimi Yusuf/The Edge)

Support in transitioning towards sustainability would be the best way forward for the palm oil industry, said Credit Suisse after determining that there is a lack of commercially available alternatives to progress as the UN sustainable development goals' deadline of 2030 looms.

In a report, Credit Suisse' environmental, social and governance (ESG) research analysts Amanda Foo, Phineas Glover, Alfred Chang and Samuel Pratama noted that investor engagement — rather than divestment — in supporting the palm oil industry's transition, would spur the sector forward in light of palm oil's inherent benefits compared with other crops, which include its "unrivalled productivity" in being three times more productive, ability to alleviate poverty, as well as being a healthy food source.

The analysts said that the sector's ongoing environmental and social concerns as "one of the most controversial crops" in a time

of where sustainable investing has gained momentum globally, had caused the sector to trade at record-low price earnings (PE) valuations today.

"The sector trades at a 72% discount to its peak PE today, wider than the 60% average of other ESG-excluded names. As the focus shifts from divestment to engagement on transition, we believe this steep discount will incrementally be removed for sustainability leaders due to the viability of sustainable palm oil," the analysts said.

Cultivation of palm oil has been commonly associated with deforestation and climate change concerns, and more recently, labor exploitation issues.

Palm oil, which accounts for 36% share of global vegetable oil production, plays a key role in meeting food demand.



The world's population is estimated to grow to circa 10 billion by 2050, which will require another 100 million tons of vegetable oil for food needs.

“Being the most productive oil crop (at least three times more productive compared to other crops), we see palm oil playing a key role in fulfilling global food security. Planting alternative crops would increase the risk of deforestation, as more agricultural land would be needed (five to seven times more land to meet food demand in 2050). Palm oil has also helped alleviate poverty among major producing countries Indonesia and Malaysia by providing much-needed jobs and higher income to rural communities.

“Given the lack of commercially available alternatives and the increasingly pressing sustainable development agenda [UNSDG goals to be attained by 2030], we opine that transition support would be the best way forward for the industry. More companies have commitments for palm oil (71%) today compared to other agricultural products such as soy (31%) and beef (28%),” they said.

The analysts noted that higher commitment would pave the way for higher accountability and better industry practices, which should help to accelerate the transition.

Currently, the most complete and effective certification standard, they said, can be found in the Roundtable on Sustainable Palm Oil RSP; however, it remained a “perfectible standard”.

In order for the industry to become more sustainable, they noted there was room for improvement in addressing labor and social risks, smallholder incorporation and certified sustainable palm oil uptake.

According to data from Refinitiv's Institutional Brokers Estimate System, Bloomberg Professional Services and Credit Suisse, in terms of price-earnings (P/E) ratio derating, Wilmar International (-18%) ranked favorably against key ESG pressures, followed by Kuala Lumpur Kepong Bhd (-59%), while Indonesia's PT Astra Agro Lestari Tbk (-88%) and Sime Darby Plantation Bhd (Sime Plant) (-85%) lagged their peers. The latter, however, they said, stood out in terms of governance based on data from Refinitiv, an American-British global provider of financial market data and infrastructure.

The analysts also point out that planters had been undervalued amid favorable crude palm oil (CPO) price prospects.

“Planters currently trade at 24% below replacement cost with significant discount seen in upstream planters. We note landbank appreciation prospects in stringent new planting certification standards and reforestation potential.

“Separately, palm oil price is rebounding to multi-year highs on the possible re-emergence of La Niña,” Foo said, upgrading Sime Plant to “outperform” from a “neutral” call previously and raising its target price to RM4.40 from RM3.43.

She added that Sime Plant was now trading at an undemanding FY21E P/E of 12 times – 13% below regional average – and was the most leveraged to upside surprise in CPO price.

“Its 100% Roundtable on Sustainable Palm Oil (RSPO)-certified landbank and good governance make it a potential beneficiary of future ESG inclusion,” Foo said.

Meanwhile, Foo expects Genting Plantations Bhd to benefit from improved earnings prospects, following the revision in Indonesia's export levy scheme effective July 2, which brought the selling price in the nation to “an estimated RM3,280 per ton, 11% higher than the previous duty structure”.

“This bodes well for Genting Plant as 58% of its planted area is situated in Indonesia. Should CPO price average RM4,000/t throughout 2021, we estimate 44% earnings upside for Genting Plant, the second highest within our coverage,” Foo said, ascribing the stock with an “outperform” call and giving it a target price of RM8.90.

It's Important to Talk about Sustainable Palm Oil

Used in everyday items across virtually every fast-moving consumer good (fmcg) category, palm oil can be found in more than half of products on supermarket shelves. It offers multiple benefits over comparable vegetable oils and helps ensure products are available to shoppers with the frequency and quality they demand.

So why is it perceived negatively? Quite simply, it is misunderstood.

Making it sustainable

Shoppers will often cite concerns over the environmental and social impacts that palm oil has on the regions in which it is grown. While some concerns over any negative impacts of ingredient sourcing are valid, the perceived problems of palm oil are not best overcome by eradicating use altogether. The solution is *sustainable* palm oil.



“The most sustainable alternative to palm oil is sustainable palm oil, but achieving a sustainable supply chain that respects biodiversity, natural ecosystems, deforestation, local communities, and workers in palm oil producing countries is a global challenge and a shared responsibility,” says Fay Richards, acting head of marketing and communications at the Roundtable on Sustainable Palm Oil (RSPO).

“For this reason, RSPO calls on all UK stakeholders to close the gap towards 100% certified sustainable palm oil.”

For palm oil to be considered sustainable – as is increasingly a key requirement of suppliers and retailers – it must meet strict criteria. This typically includes ensuring land is being preserved, crops are being grown responsibly, and effective programmers are supporting farmers and their communities.

Palm oil's versatility, including being solid at room temperature and having higher stability to oxidation (which can give products a longer shelf life), makes it a crucial ingredient in thousands of products. Beyond that though, growing and harvesting palm oil is a more efficient option when compared to the alternatives. It requires a fraction of the land used by soya, for example, and produces four to 10 times more oil per hectare than any other vegetable oil crop¹.



“Due to its high yield compared to other vegetable oil crops, banning palm oil is likely to be counterproductive – shifting the issue elsewhere, creating even greater habitat loss and negative impact on biodiversity,” says Simon Dowell, science director at Chester Zoo, a leading advocate of sustainable palm oil (see boxout).

“We strongly believe that part of the solution is embracing sustainable palm oil: raising awareness with individuals, communities and businesses and creating increased demand for sustainable.”

Educating consumers

Recent research from Kantar reveals the current situation and the challenges that need to be addressed by the industry¹.

When asked about their perceptions of different vegetable oils, UK consumers believe palm oil to be the worst option when considering its negative impact on the environment, as well as its negative social impact on communities. These perceptions are predominantly influenced by content seen on TV, which is the main source of awareness of palm oil among consumers².

Overall awareness of palm oil levels remains flat at 63%³, yet just a quarter of consumers have heard of it being sourced sustainably. But there are many benefits to using sustainably sourced palm oil.

Sustainability in action: Chester Zoo

A charity organization leading the way on sustainable palm oil is Chester Zoo, which helped Chester to be named the world's first 'sustainable palm oil city' in 2019.

The project saw the city become the flagship example of the kind of conservation impact that can be achieved when whole communities come together to make a change. Chester Zoo was at the heart of the campaign, leading the way by switching its entire food offering to only include products containing sustainable palm oil, as well as operating a holistic programme to educate visitors to the zoo and members of the local community.

Last year, Ferrero UK pledged to support Chester Zoo's ongoing efforts in this space, with a shared aim of raising awareness of sustainable palm oil and encouraging more suppliers, towns and foodservice providers to make positive changes too.

That is not to suggest that palm oil's use should not be considered with extremely high levels of care and attention. And many measures, programmes and charters in recent years have been introduced to improve standards across the industry and are providing greater support to the regions involved.

In January 2015, Ferrero became one of the first global companies to source 100% RSPO Certified Segregated sustainable palm oil. In 2016 the company achieved 100% traceability to plantations. This year it committed to 100% satellite monitoring of its palm oil supply chain through the Starling satellite monitoring and verification service.



Through working in close collaboration with the RSPO and other bodies such as the Palm Oil Innovation Group (POIG), Ferrero is ranked as number one out of 173 global companies by the World Wide Fund for Nature (WWF) on its annual Palm Oil Buyer's Scorecard.

Regularly going beyond the parameters set by industry programmers, Ferrero recently published its updated Palm Oil Charter to underline the commitment in playing a leading role the sustainable transformation of the palm oil sector to benefit the environment and people living and working in palm oil producing communities.

Sustainable future

With high standards for responsible sourcing being more widely adopted across the industry, it is important for suppliers, accreditation programmers and non-governmental organizations (NGOs) to come together to give consumers a more balanced understanding of palm oil.

"It is key we support consumers through education and transparency, showing that the ingredient can be sourced responsibly through consistent positive messaging about its benefits. This will give consumers the confidence they need to pick products that contain sustainable palm oil without confusion," says Charlie Cayton, director of communications and corporate affairs at Ferrero.

"United, we can drive change through industry-wide collaboration. At Ferrero, we will continue to strengthen our palm oil sustainability programmer to achieve a positive and lasting impact on the palm oil value chain, and will share our progress along the way, as we know this is important to our consumers."



Malaysia Giving 100 Pct Effort on Sustainable Palm Oil

The revision of the Malaysian Sustainable Palm Oil (MSPO) certification that will include the latest sustainability requirements and practices solidifies Malaysia's commitment to elevating the crop's sustainability game and garner consumer confidence.

This move is timely, given the pressing sustainable development agenda by the United Nations Sustainable Development Goals (SDGs) which are to be achieved by 2030.

While governments and authorities work seamlessly both on sustainability and eliminating misconception, the industry continues to gear up production to cater for the world's 10 billion population come 2050 with an additional 100 million tonnes of vegetable oil needed for food – making them future-ready.

The oil palm is the most efficient oil-bearing crop in the world.

This is due to its abundant yield per hectare, ability to produce more than one type of vegetable oil (i.e. palm oil from the mesocarp and palm kernel oil from the kernel) and long economic lifespan.



For palm oil to be considered sustainable – as is increasingly a key requirement of suppliers and retailers – it must meet strict criteria. — Bernama photo

Sustainable palm oil is the only solution

The most sustainable alternative to palm oil is sustainable palm oil, acting head of marketing and communications at the Roundtable on Sustainable Palm Oil (RSPO) Fay Richards said.

Having said that, she pointed out that achieving a sustainable supply chain that respects biodiversity, natural ecosystems, deforestation, local communities and workers in palm oil-producing countries is a global challenge and a shared responsibility.

For palm oil to be considered sustainable – as is increasingly a key requirement of suppliers and retailers – it must meet strict criteria, she said in a promotional feature in *The Grocer* – a UK-based online service and weekly magazine with coverage of the whole fast-moving consumer goods (FMCG) sector.

This typically includes ensuring land is being preserved, crops are being grown responsibly and effective programmers are supporting farmers and their communities.

Established in 2004, the RSPO aimed to promote the growth and use of sustainable palm oil products through global standards and multi-stakeholder governance.

Richards said the RSPO has called on all UK stakeholders to close the gap towards 100 per cent certified sustainable palm oil.

Ferrero sustainability approach

Ferrero Group, an Italian manufacturer of branded chocolate and confectionery products were among the European company that has been consistent in its stand in using palm oil in its products, despite various campaigns in the region against the golden crop.

In fact, this world's second biggest chocolate producer and confectionery is famous for its Nutella, Ferrero Rocher and Kinder Bueno chocolate brands said it sought about 80 per cent of sustainability certified palm oil from Malaysia, followed by Indonesia and Papua New Guinea.

“We are aware that the palm oil supply chain faces environmental challenges, particularly concerning its impact on deforestation.

“That’s why Ferrero is committed to leading the way in driving the sustainable transformation of the palm oil sector and has been one of the first global companies to obtain 100 per cent RSPO-certified segregated palm oil supply chain,” it said.

According to the Ferrero Group Sustainability Report, it acknowledged that when sustainably sourced, there are good reasons to use palm oil and this crop has been used for thousands of years and provides a livelihood for millions of people.



Palm oil has an excellent yield compared with other vegetable oils – it requires 0.26ha to produce one tons of palm oil compared with 1.25ha for rapeseed and 2ha for sunflower oil. — Bernama photo

Palm oil enhances the taste

“Palm oil has an excellent yield compared with other vegetable oils – it requires 0.26 hectare to produce one tons of palm oil compared with 1.25 hectares for rapeseed and 2 hectares for sunflower oil.

“We source palm oil for Ferrero products as it plays an important role in achieving a balance between the components, ensuring that the product has the desired structure.

“This enhances the taste of the other ingredients since it is odorless and tasteless after the refining process. It helps maintain the distinctive taste of Ferrero products along with the entire shelf life because of its stability, also thanks to our way of processing it.”

For example, palm oil is key to Nutella’s recipe as it ensures its texture and, with its neutral taste, heightens the flavor of other ingredients.

In financial year 2019/2020, the company sourced around 220,000 tonnes of palm oil from seven countries.

Ferrero which has been a member of the RSPO since 2005 and in 2015, became one of the first global companies to source sustainable palm oil that is 100 per cent RSPO certified segregated.



In 2013, it created the Ferrero Palm Oil Charter to manage the impacts on palm oil communities and address the leading causes of deforestation and social issues, as usual building on top of the group due to diligence process, as per all the commodities of the group.

Malaysia's MSPO to be at par with RSPO

Malaysian Palm Oil Board (MPOB) director-general Dr Ahmad Parveez Ghulam Kadir said as the country has made the MSPO certification mandatory since Jan 1, 2020, the country could also offer MSPO certified oil that should be graded at par with RSPO-certified oil.

"Perhaps we can offer more premium as it complies with all relevant national and international law with regard to sustainability," he told Bernama recently.

Ahmad Parveez noted that the revised version of the MSPO would see new standards that include the latest sustainability requirements and practices.

"Palm oil will continue to be the powerhouse of the oils and fats market and while we are doing it, we might have done it sustainably."

In 2020 alone, the world used about 73 million tonnes of palm oil with Indonesia and Malaysia, two of the world's largest producers, accounting for 85 per cent of the global palm oil production.

What can Malaysians do?

In the Merdeka spirit this month, besides raising our Jalur Gemilang, Malaysians should all act as social media influencers by defending this wonderful crop that has been in the country for more than a century and even before Malaysia gained its independence.

Our ancestors might have been among the people who have worked in the oil palm cultivation, which has become among the economic pillars especially in the 70s and until now it has been passed on to the second and third generations.

So let us spread all the good information about palm oil including Malaysia's sustainability agenda using social media and reaching out to consumers worldwide.

This public service announcement perhaps could be our way to show appreciation to the country.

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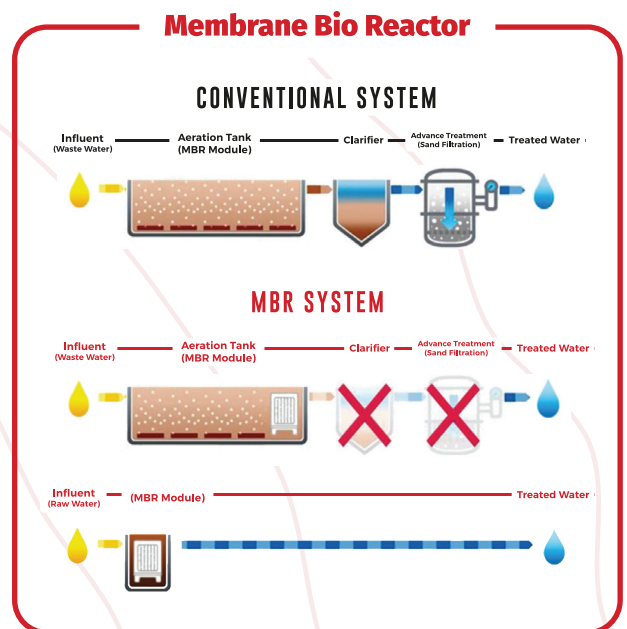
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Ensuring Palm Oil Quality

Ensuring the safety and quality of the nation's palm oil are of paramount importance as more than 80 per cent of the commodity is used for food products. As such, industry players must address the issue of 3-MCPDE (3-Monochloropropane-1,2-diol esters) and GE (Glycidyl esters) effectively.

These are contaminants that can occur in edible oils, such as vegetable oils, and food made from these oils. Food manufacturers and consumers use edible oils as an ingredient in food and for cooking.

During industrial refining, 3-MCPDE and GE can form in edible oils when they are heated at very high temperatures to remove unwanted tastes, colors and odors.

In July 2019, the Codex Alimentarius Commission (CAC) adopted a Code of Practice (COP) for the reduction of 3-MCPDEs and GE in refined vegetable oils and food products made with them.

The COP guides how producers and users can reduce 3-MCPD and GE levels through good practices in agriculture, manufacturing and oil selection in food products.



NSTP file pic

The CAC is a body established to develop, harmonies and implement international food standards under the Joint United Nations Food and Agriculture Organization/World Health Organization Food Standards Programme.

Governments refer to the CAC food standards to protect the health of consumers.

It has been more than two years since the CAC adopted the COP. We must be ready with sufficient data from the commercial runs so that our voice can be heard when the CAC approves new work for setting up the maximum limits for 3-MCPDE and GE in refined oils and fats after three years of adoption of the COP.

At MPOB, efforts are in place to ensure the 3-MCPDE and GE issue is being managed constructively as we cannot compromise on food safety. While resolving these issues, we need to consider the industry's concerns and views.

With these in mind, MPOB has agreed to the implementation of Licensing Conditions for 3-MCPDE and GE starting Jan 1, 2023.

The industry has ample time to procure and install the necessary equipment to reduce the contaminants.

We should not solely emphasize profitability. If we fail to meet the food safety and quality requirements, the oil palm supply chain will be affected.

Refineries need to stand firm when it comes to the quality of the CPO. They must ensure that its chloride content does not exceed two parts per million and reject those that fail to conform to the threshold. Refineries and mills must complement each other in ensuring the wellbeing of the palm oil industry.

The industry is one of the most regulated sectors in Malaysia, with laws and regulations to ensure that it complies with domestic and international standards.

In showing our commitment to food safety and quality, MPOB, with the Plantation Industries and Commodities Ministry and sister agencies, including the Malaysian Palm Oil Certification Council and Malaysian Palm Oil Council, as well as the Health Ministry, have reached a consensus to incorporate food safety compliance through the Malaysian Sustainable Palm Oil (MSPO) certification.



The inclusion of mandatory food safety compliance will not dilute the overall sustainability principles in MSPO.

Industry players should realize that food safety and quality could be the next trade barrier in the coming years.

Other food safety issues related to environmental contaminants are hovering on the horizon. These issues are linked to mineral oil saturated hydrocarbons and mineral oil aromatic hydrocarbons, which are used as lubricants at mills and refineries.

We have to be alert and proactive to ensure the quality and safety of our palm oil so that the industry can sustain itself for another 100 years.

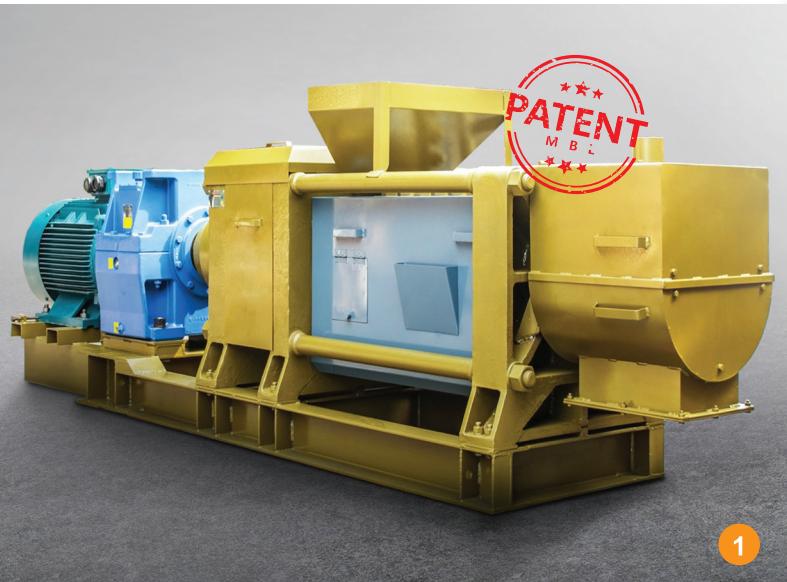
The writer is Dr. Ahmad Parveez Ghulam Kadir, director-general of Malaysian Palm Oil Board.

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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Get The Most Out Of It





Solutions to Rehabilitation of Electrostatic Precipitator (ESP) in Biomass Industry

Most of the biomass power plants in the southern part of Thailand employ palm kernel shell and empty fruit bunch (EFB) as fuel for their power boiler due to its abundance in this tropical country and very low cost. Nevertheless, one major drawback of such kind of biomass fuel is high moisture content. High moisture content together with high frequency of rain make it difficult for biomass power plants to provide dry fuel for their power boiler. This issue causes lower heating value in the power boiler and flue gas with higher moisture entering the Electrostatic Precipitator (ESP).

Case Study: A biomass power plant located in Suratthani, Thailand

This biomass power plant in the southern part of Thailand experienced a major issue of high moisture flue gas that accelerates corrosion on ESP internal mechanical parts. Deterioration of ESP internal parts leads to decrease in dust collection efficiency and underperformance of the ESP, and thus resulting in high emission. There are 3 fields in this one-chambered Indian-made ESP, but only one field was able to

operate since the remaining two fields were malfunctioned because of internal mechanical problem. The only one field operating obviously could not handle all the dust load in the flue gas from the power boiler and so the plant faced a very high emission and opacity that could easily be observed from the black smoke coming out of the stack.



Black smoke coming out of the stack indicating high emission and opacity



Natural drying process of biomass fuel

We, Tai & Chyun Associates Industries, Inc., recommended solutions to the problem by first performing a thorough inspection to determine root causes and assess current condition of the ESP. More than 10% of the total no. of Collecting Electrode (CE) and ESP casing were found severely corroded. Missing access door caused air in-leakage and contributed further to the high moisture from external surroundings aside from the flue gas entering the ESP from the power boiler.

Based on the findings, ESP internal mechanical part replacement must be carried out in order to improve its dust collection performance, which included Collecting Electrode (CE), Discharge Electrode (DE), and Rapping System for both CE and DE. Maintenance on corroded ESP casing and replacement to double-layered access door were also implemented.



Missing access door



Severely corroded CE



ESP inspection and maintenance



Severely damaged Gas Distribution (GD) screen



Corroded ESP casing

Despite the main challenge of frequent rain and strong wind, with good management, the abovementioned project work scope had been successfully completed within an extremely tight timeframe of only 10 days according to the plant's shutdown schedule. Manpower was arranged into 2 shifts that worked 24 hours non-stop. Even with very limited timeframe, details must still be paid attention to such as making sure ESP casing was properly patched and repaired before installing new parts and lifting and installation processes of CE were done strictly in accordance with safety procedures. During testing and commissioning, CE and DE rapping systems were tested to ensure the correctness of rotating direction and smooth operation as well as performing no-load test to confirm the normal operation of ESP system.



Lifting process of CE



Installing new CE



Newly installed CE and DE



Installing new spiral (spring) DE

After major mechanical part replacement and maintenance, ESP has resumed its performance achieving maximum secondary voltage and current of 33 kV and 149 mA during plant operation. These running values have improved from previous values of only one field operating at 19 kV and 100 mA. The plant (client) was quite satisfied with the results, in addition to no more visible black smoke coming out of the stack and stable operation at full load capacity that maximizes the plant's benefits.

	V-I Curve Field 1		V-I Curve Field 2		V-I Curve Field 3	
	kV	mA	kV	mA	kV	mA
Before	0*	200*	19	100	0*	200*
After	33	149	24	149	23	149

** The value implies short circuit condition and not able to operate.*

About the authors

Thompson Tsai and Johnny Svenstrup, Vice President and Field Engineer of Tai & Chyun Associates Industries, Inc., a provider of optimized solutions of parts and services for Electrostatic Precipitator (ESP) to ensure emission compliance with standard regulations.

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The Harvester's Best Friend



Automating and mechanizing the single most important activity in the plantations - Harvesting. Image Courtesy of IRGA

In today's day and age, it's not rocket science to manage a profitable plantation company, however it's no mean feat either to manage one in a highly labor-intensive industry. In the oil palm industry in particular, all its operations, from planting to field maintenance and harvesting to processing, are highly dependent on manual labor.

Although this creates job opportunities, it does not appeal to local country workers because of the 3D perception - dangerous, demeaning and difficult. The world's second biggest oil palm producer, Malaysia in particular, is heavily reliant on foreign workers.

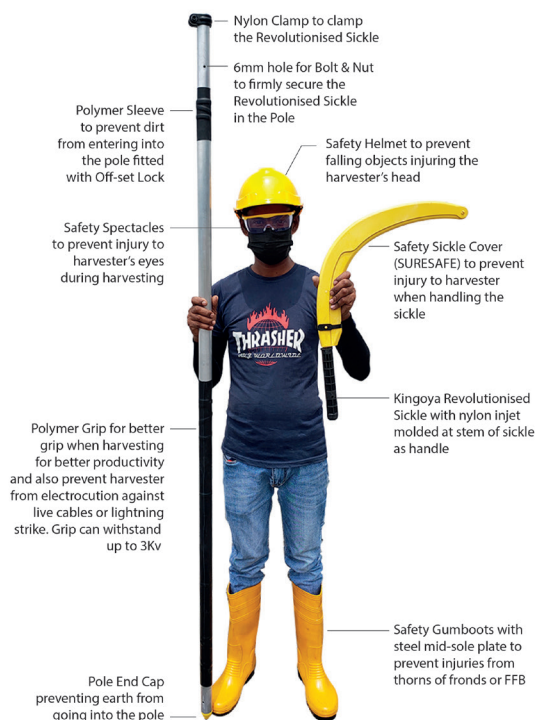
One activity that has not changed much over time is oil palm harvesting. It remains the single most important and time consuming activity in oil palm estates in correlation with infield collection and transportation. With progress, came talks of automation and mechanization of harvesting, to be at

par with the sweeping new and efficient practices in plantation companies.

It is safe to say the traditional sickle and pole is still the mainstay in most plantation companies globally. An experienced harvester with the sickle and pole is able to cover an average of 2.5 to 3.0 hectares per day with assisted loose fruit collection, provided that the interval between harvesting rounds is at 10-12 days.

In recent times, new inventions have been introduced – the first generation mechanized and electrical cutters however, came with limitations, length or height as it may be, some ungainly weight and / or features, even environmental issues such as noise and sound pollutions and a generally consensus of not being user friendly. Most have not lasted the test of time and soon retired to the store due to lack of spare parts and improper maintenance.

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Cutting-edge harvesting pole which allows greater flexibility in handling. Industry practitioners should propagate the use of correct tools with the right technique so that accidents and incidents can be vastly reduced in plantations. Image courtesy of Kingoya Enterprise Sdn. Bhd.

On the positive side, unverified data from these intermittent inventions shows that a harvester can certainly increase efficiency. These early inventions, was capable of raising productivity from 1.5 MT to 1.7 MT to 2.5 MT to 3.0 MT FFB per worker per day – a substantial 100% increase in productivity.

Nevertheless, factors such as variability in the height of the palms, ground and terrain conditions and field layout amongst others, make harvesting the most challenging unit process for mechanization. Thus, is the harvester's best friend - that elusive dream harvesting tool which can raise his productivity for an all-around better quality of work and life – still a pipe dream?

CHANGING PHASES OR FACES

The dramatic demonstration of the revolution in agriculture propelled by mechanization in first world countries is visible to all. It is predominantly the enormous upsurge in productivity that makes this labor reduction possible.

The Industrial Revolution will certainly transform the global palm oil industry, though it comes with challenges. Just as the industry acknowledges that it is impossible to see a sustainable future for the overall oil palm industry without automation and mechanization, the race is simultaneously on, to successfully design and commercialize a highly efficient harvesting tool to enhance workers' productivity.

The advent of such a highly geared tool for starters will witness a makeover in the role of the traditional plantation worker or harvester – as the job of harvesting takes on new meaning and possibly description. In years to come will it be a shift from less brawn to more brain?

Sustainability and competitiveness of the oil palm industry hinges on extensive mechanization in all the field operations. It was envisaged that this would be achieved through labor saving tools and mechanization to enhance workers' productivity. The introduction of an innovative, practical and user-friendly electrical cutter would therefore herald the new age in harvesting.



Kingoya NetBarrow - Innovating systems and methods that translate into lower operating costs and higher productivity. Image courtesy of Kingoya Enterprise Sdn. Bhd.



Moving forward, investing in new age technologies for the advancement of the oil palm industry.

Image courtesy of Kingoya Enterprise Sdn. Bhd.

THE DREAM CUTTER ... WHAT A HARVESTER WANTS

Sale left his family in the Bangladesh – India border district of Cumilla, as a young man of 22, to come to Malaysia, to earn a living and support his family. Fast forward 14 years on, he is a seasoned oil palm harvester and confident worker. His confidence stems partly for his ability to speak the local lingo, as well as staying motivated to better himself. His “career” in Malaysia has seen him working under difficult conditions for almost a decade, to becoming the key product tester for an established harvesting tool manufacturer.

We asked Sale what would be a harvester’s dream cutter? His invaluable feedback gives a good picture – helpful to the end user and not unexpectedly advantageous to plantation companies.

First and foremost, they seek a machine that is light or as light as possible in weight. Inventors in their pursuit to power the machine for a quick and clean cut have been consistently dogged by the issue of the weight.

The second important criteria, is the ability of the tool to reach older palms of up to five to six meters in height. This invariably gave rise to the need for two versions to cater to tall and short palms. Ideally, it should have detachable parts, which makes it safe for transit around the plantation.

A harvester spends an average of eight hours on the estate per day. The electrical cutter must be one that can be economically maintained, with rechargeable battery and a sufficient battery life of up to five hours or one harvesting session. In addition, it would also need to be ergonomically designed to maximize productivity by reducing operator fatigue and discomfort.

As with all high powered tools there is the inevitable vibration. This was a major downside in the first generation mechanized cutters, for there were concerns about the long term effects on the health of the harvester. Newer electrical cutters on trial have been able to overcome this problem.



The Safety Cover is an original KINGOYA innovation that is today an industry median. Image courtesy of Kingoya Enterprise Sdn. Bhd.

THE TRUE VALUE OF A HARVESTER

A look into the role of a harvester in a plantation would not be complete without understanding his/her true value. Industry expert and commentator M R Chandran explained the true value of a harvester in numbers.

Harvester Output: 1.5MT/Day on average

No of Working Days per Annum: 280

Total FFB Output per Year: 420 MT

Over 3-Year Contract Service of a Guest Worker: 1,260 MT

Assuming an average FFB price of RM700/MT, the revenue generated equals: RM882,000

The skills of a harvester need to be honed and optimized by providing the necessary training to manage and maintain an electrical or motorized cutter. To reap top dollar results, plantation companies also have to do their part in adopting new systems like allowing the harvester to focus primarily on the task of bunch cutting by employing separate assisted units for fruit collection and delivery to the roadside.

THE RACE IS ON ...

The global palm oil value chain is estimated to be worth a whopping US\$100 billion, with the largest contributors coming from Asia. Thanks to Malaysia's pole position as one of two, top palm oil producing and exporting countries in the world, harvesting equipment manufacturers and industry related organizations in the country are certainly well placed to develop solutions for the industry globally.

The race is on for a custom made solution for the oil palm industry and the winner will surely take it all.

Gopi Nath Nair, September 2021

In order to achieve their sustainability promise, plantation companies also look for green and eco-friendly features in an electrical cutter – one that has zero-carbon footprint through zero emissions and a significantly lower sound level.

With that on paper, what can a smart and well trained harvester with a cutting-edge harvesting tool deliver?

Managing Director of Kingoya Enterprise Sdn. Bhd., a premier harvesting tool manufacturer in Malaysia, Mr Yama Yeo said his company has invested heavily to create the ideal electrical cutter. "We are in for the long haul," he said.

"The trial is extremely promising and the numbers are impressive. On average, Sale working eight hours a day and was able to cover 10 hectares and harvest approximately 6-8 MT FFB."



MPOB Develops Technology to Control Upper Stem Rot Disease on Oil Palm Trees

BANGI, 1 October 2021 – Malaysian Palm Oil Board (MPOB) has developed an effective solution for oil palm trees infected by *Ganoderma* which causes upper stem rot disease.

Due to the increase in upper stem rot disease attacks, a group of researchers from MPOB have developed a technology to control the disease, which was launched at the MPOB Transfer of Technology Seminar and Exhibition (TOT) 2021, held virtually in last July.

The technology, which uses the developed systemic hexaconazole fungicide is effective as the upper stem rot-infected palms can successfully recover from the disease. The technology reduces the rate of infection by killing the *Ganoderma* fungus in oil palm trees.

In using the technology, it is recommended to dissolve hexaconazole (4.5 gram active ingredient) in three liters of water and applied it three times at six-month interval. The trunk injection is carried out using pressure injection apparatus.

Ganoderma fungus causes two main diseases on oil palm trees, namely, basal stem rot and upper stem rot.

“The increase in upper stem rot disease attacks has prompted MPOB researchers to study control measures immediately. The use of hexaconazole fungicide is recommended to reduce the onset of the upper stem rot disease,” said MPOB Director General Dr. Ahmad Parveez Hj. Ghulam Kadir.

According to Dr. Ahmad Parveez, hexaconazole fungicide is recommended as it is a curative treatment for upper stem rot-infected palms.



Hexaconazole can also extend the lifespan of diseased oil palm trees, he said.

“In addition, no residue of hexaconazole poison is found in palm oil and it is safe for use,” he added.

Dr. Ahmad Parveez explained that the fungicide can also reduce the risk of spreading *Ganoderma* fungus in oil palm plantations, thus reducing the losses due to *Ganoderma* fungus attack.

Apart from using chemical fungicide, both upper and basal stem rot diseases can be controlled with sanitation or destruction of *Ganoderma* inoculum sources, using biological agents such as endophytic or soil microorganisms, degrader and resistance oil palm materials.

The *Ganoderma* disease has affected 221,000 hectares of oil palm estates in Malaysia with an estimated loss of approximately RM1.5 billion per annum.

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Indonesia Doesn't Pretend Palm Oil Industry Has Been Without Problems



Labor has become a contentious issue in the palm oil sector over the past few months. Those within the palm oil community will be well aware that negative claims around labor have been made against palm oil for years, dating back to 2015 at least. However, when it comes to labor, NGO's claims have often been indiscriminate. Activists have used a small number of examples in the region to argue that palm oil – regardless of where and how it is produced – is 'contaminated' with labor rights or human rights violations, including human trafficking and slave labor.

This also includes palm oil produced by Indonesia's 2.7 million smallholders. Clearly this is absurd, but the claims continue to be made, whether it is in reports funded by the Norway government and so-called philanthropic organizations, or Western agriculture groups seeking yet another way to block palm oil from their wealthy markets.

In terms of governments and global policy, the US government has been one of the key and main governmental actors for raising labor rights and standards. European governments have tended to focus more heavily on environmental and climate change concerns rather than labor standards and poverty reduction. The US government approach is slightly different from other intergovernmental actors such as the International Labor Organization. The ILO works closely with governments

and civil society – as it has for many years with the Indonesian palm oil sector -- to improve practices, compliance and enforcement. The US government does this too; but it is also prepared to call things as they are and call out bad behavior when it sees it – and penalize it with trade sanctions.

What do these bodies have to say about Indonesia's palm oil sector? The US State Department's most recent Trafficking in Persons report has generally given Indonesia's palm oil sector a positive report, despite NGO claims. One of the key reasons for this is that Indonesia is generally a source of trafficked labor, rather than a destination for trafficked labor. Indonesia often finds itself on the bad end of exploitation. It is for this reason that the Indonesian government has established the Indonesian Migrant Worker Protection Agency (BP2MI), for example, which operates a hotline to protect Indonesian workers overseas.

It is also worth pointing out that Indonesia is considered a 'tier 2' country on the US State Department report; this is a classification shared by wealthy countries such as Italy, Germany and Norway. The report is not perfect for Indonesia. It states that trafficking and exploitation of workers still takes place within Indonesia. But this is not the main concern of the US State Department nor the ILO when it comes to palm oil.





The US and the ILO are currently both collaborating with the Ministries of Agriculture and Manpower, the Coordinating Ministry of Economic Affairs, the Indonesian Palm Oil Association (Gapki) and the country's trade unions to improve worker rights across the sector as part of a two-year program. This coordination between Jakarta, Washington and the ILO clearly indicates that the Indonesian government and the industry are well aware of the problem and taking steps to address it. Similarly, the ongoing collaborations between some of Indonesia's largest plantation companies, civil society and certification organizations indicate the industry's willingness to face the challenge.

At a recent symposium on labor rights co-hosted by Gapki and the ILO it was readily apparent that the challenges of improving labor rights in the palm oil sector will continue. This is true for two reasons. First, the industry is becoming more significant in areas such as Kalimantan, and operations in those regions are now under greater scrutiny. Second, the fluidity of Covid-19 has made it difficult for companies to maintain human resources capacity; it has similarly made it difficult for labor agencies to engage in on-site inspections.

However, there is an additional tool that can and will assist the industry going forward, and assist importing nations that

need assurances around Indonesia's exports: ISPO or Indonesia Sustainable Palm Oil certification. ISPO certification requires companies to adhere to all labor requirements, whether they are paying minimum wages, in compliant to occupational health and safety regulations (K3) or adhering to human rights principles such as "no child labor" and "no slavery".

The key message behind Indonesia's international collaborations, business-government collaborations and certification initiatives is that Indonesia is not pretending that problems do not exist. But nor is the industry 'rife' with exploitation as some activists in the West would argue. Indonesia as a whole takes this problem seriously and as part of a national commitment to social welfare.

Writer is Fadhil Hasan, Senior economist at the Institute for Development of Economics and Finance (INDEF).

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

Artificial Intelligence: The Future of Plantations



Sheldon Lahra has had an interesting career across the Asia Pacific region, working with over a dozen business sectors, where he focused his attention on leveraging technology and customer, employee, product, and brand experience as a driver to successfully consult and manage teams both internally and for clients. Sheldon has a passion for innovation and the application of technology which has led him to find a new work home at ABS.Global.

Sheldon Lahra joined ABS.Global in May 2019 as the Director of Customer Experience & Development and has now stepped into the position of Group Chief Executive Officer (GCEO) where he continues to drive an arrowhead vision of increasing business productivity and financial performance by focusing on the key behaviors of the business' most valuable assets, its people.



ABSI Malaysia Country Head, Viknes Perumal working with Estate Managers to adapt to our PMMP digital solution

1. The last interview we had was back in 2020, knowing that ABS is always at the forefront of technology, would you like to update what ABS has been busy with recently?

Firstly, thank you for having ABS back. It is always a pleasure to work with Asia Palm Oil Magazine. Now to your question, the past two years has been both exciting and positively challenging for ABS, as we embarked on the integration of more refined and intelligent technologies to better assist our customers in achieving greater productivity and yield improvements in their plantations & mills through our core products PMMP and MMMP. For anyone who has not yet heard of ABS, our products simply put are programs that ensure that the right job is done, by the right person, at the right time, in the right way. PMMP offers a variety of essential modules for successful plantation management such as,

- Field Inspection & Loss Recovery Control to ensure all losses are recovered and accounted for and fields are well maintained.
- FFB Quantity & Quality Control to improve harvesting quality and accuracy of data.
- Evacuation & Backlog Control to reduce FFB backlog and improve evacuation performance.
- Maintenance & Upkeep Control to provide transparency on fertilizer, Pest & Disease, Weeding, and Pruning activities in the field.
- Morning Muster Attendance Control to ensure accurate, productive, and transparent morning briefings.

As for our mill solution MMMP, we offer the following modules to effectively monitor and close the loop on key mill operations,

- FFB Grading & Quality Control to ensure grading is performed accurately and timely.
- Production Floor Control to drive proactive inspection and have early error detection.
- Maintenance Control to create a behavior of Total Productive Maintenance.
- Lab & Oil Loss Control to ensure oil loss management is managed and improved on.
- FFB Supplier Management Control to create a “Win-Win” relationship between suppliers and the mill.

With our feet always in the fields, our ears always with our customers, and our heads often in the clouds, we have concluded that the next big space where we have already established a footprint, is the utilization of AI and Machine Learning to rapidly improve work done and work reviewed by plantations companies.



ABS working with the mill team to Implement a Control Panel with Edge Device & 3G Gateways to support IoT's in a clients mill



AI Bunch Counting & Grading as an integrate product to PMMP to improve on Consistency & Accuracy

2. It has been almost two years since the start of the COVID-19 pandemic. What are the challenges that ABS faced throughout the pandemic?

The most obvious challenge presented to ABS I believe was the case for many companies, working remotely. The work style change was initially alarming, as we have always been a hands-on business when working together with clients, we enjoy being out in the field and mills to do our evaluations side by side with the plantation team to have a true sense of business operations. We have, however, come to appreciate both the technology and commitment from our teams and customers, where we have successfully moved all our business into a hybrid structure to be able to remotely work together as a team and go to the field when safe and necessary.

One of the positive outcomes from this global change is how the plantation industry has become more aware and ready to implement the right systems and technologies to remotely review and manage their estates, as travel has become a costly

and sometimes impossible thing to do due to regulations. Although travel restrictions will certainly change, I can see the sentiment of technology adoption and Industry 4.0 becoming more prevalent in the plantation sector. Many business owners, C-suite executives, and senior managers are quickly taking to the benefit of having daily digital reports on their mobile device or laptop so they can peek into the operations of their plantation of mills to actively supervise and provide direction on improvements. So, although the year has been swamped with tragic downsides, we have seen one or two silver linings within the industry – the industry is moving forward on smarter tech and doing so very rapidly.



3. Players in the industry have started to embrace Industry 4.0 to help alleviate manpower shortages and lockdown disruptions. Could you share with me what the AI-Driven Plantation by ABS has to offer?

AI and Machine Learning technology has become more prevalent in the past couple of years and certainly have their benefits. However, we have seen a real case of the blind leading the blind, where algorithms and systems are being implemented into everyday solutions in plantations in an attempt to be considered IR4.0 technologies but have yet to prove any real benefit to

- Increasing potential yields
- Improving manpower productivity

This is where ABS has combined our profound knowledge on business transformation & business consultancy to apply AI to key areas of the plantation operations where we can help to provide a reduction in cost, improvement in revenues, and significantly greater transparency & truth of the key business activities.

Three of our more recent AI integrations to our platform, Plantation Micro Macro Program or PMMP, would be the following:

First, FFB QQ+, a module that combines AI into the practice of bunch counting & grading. Just snap a quick photo of your bunches at the platform or infield and let the computer within your mobile device think. This is the fastest route to collecting a non-bias and honest inventory of your harvested bunches in the field.

Second is our DDSS+, a Drone Decision Support System enhanced by three different neural networks so once drone images are collected and stitched, we can process key data such as your stand count, vacant points, and even palm health.

Third but not least, our Attendance+, with the latest introduction of facial recognition & thermal reading, can improve morning muster turn-around-time and eliminate any ghost workers or illegitimate employees within a matter of seconds.

Our three new technologies are certainly forward-thinking but will always fall short if it was not for our platform and approach, PMMP. Now that we have these tools, it is imperative to have a place to report and drive actions to close the loop on performance gaps or opportunities identified.

4. In your opinion, how could AI and robotics play a role in managing plantations more effectively? And would this ever be a threat to replace manual labor?

At ABS we do believe that AI and robotics are already starting to make a positive impression on the industry, however, we have a long way to go. Technology does not always transfer as an equal from different industries. For example, all the way down in Melbourne, Australia, there are apple orchards that have started testing AI-driven robots that identify ripeness and then

physically harvest the apples from the tree, truly remarkable technology, but not yet ideal for the oil palm industry. With an average commercial plantation ranging anywhere from 1,500 to 3,000 hectares and palm trees that can grow as tall as 30 meters, the practicality of a robot harvesting your bunches seems very far away.

I do however believe there is a place for AI & robotics in plantations today, by sharing the workload with people. We have seen ample success when our customers combine both the evaluation and decision making through AI automation and the corrective action and enhancement driven by the people and employees of the business. We have found that AI & Robotics help to replace mundane and repetitive tasks that typically would have been seen as an unexciting job to do, this has enabled companies to redirect their labor to more complex and higher-value tasks. A great example of this is using our DDSS+, where a drone is used to capture your plantation images, the algorithm will process these images, providing an output of over the canopy census of every tree, task, and block. Now that the Drone and AI have performed the data collection and analysis to identify critical factors such as vacant spots or unhealthy palms, we can now pass the baton to the labor force by issuing follow up activities directly through our platform PMMP where the workers can step in to close the loop on any key actions, whether it be fertilizer programs, pest & disease treatments, or replanting schedules.

So if we look at applying AI and robotics to plantations, it can certainly play a major role by speeding up data collection, but for the short, to medium term, we will still need to rely on a labor force to drive the corrective action.



ABS Senior Consultant, Siva, teaching estate executives how to successfully manage maintenance activity actions identified from their first experience using our DDSS+



Sheldon Lahra walking the field with the estate manager to review the real ground operations

5. Which other industries do ABS Innovations plan to expand their portfolio into?

We certainly have major growth plans, looking at expanding our current capabilities to better service the oil palm plantations, where we have already amounted to a significant footprint of 2 million hectares and over 100 mills. In addition, we have stretched our knowledge to other unique and key crops across the SEA region, where we can help to improve operations for industries such as Durian, Pineapple, Rubber, Sugarcane, Coconut, and the list goes on. This growth will not only target the SEA region, but we will continue to drive a focus to other locations such as West Africa and Latin America.

One of our new and exciting expansions took off in 2018, ABS was the first to pioneer a system to better improve the management and operations of durian plantations. We decided to drive change in the durian industry due to the complexity and sensitivity of successfully achieving the right yields, due to the durian tree's fragile and fickle nature. ABS is also proud to announce that in collaboration with the most prestigious and successful agricultural research university in Malaysia, Universiti Putra Malaysia (UPM), to develop a Centre of Excellence to uplift the durian industry with more insights on best agricultural practices and sciences. So far, we have seen huge success with our current client base and have seen an overwhelming response from planters who are looking to achieve greater results in their plantations.

The truth is, our value proposition at ABS encompasses the three core principles to driving business success in agriculture: Management Approaches, Technology & Agricultural Science. We can assist any Agri industry with the objective of driving yield and productivity.

6. What are the steps that companies need to take and challenges that they need to address when adopting Industry 4.0 especially in the palm oil industry?

The first and most important step is to eliminate your traditional methods of data collection, reporting, and people management. Without taking this first plunge, businesses may see very little return or improvement in their plantations or mill. Implementing a holistic program such as PMMP or anything of its equivalence is the first step. It is important to first focus on improving the behaviors of your people to effectively collect, analyze and act on the operational insights of your plantation, once this is done right you can look at implementing the right technologies to subsidize the steps of either collection or analysis on the data. As for the action portion, it is still more reliable to rely on our labor force in plantations due to the technology gap.

At ABS not only has the systems to get you started, but our core specialty is the consultation and assessments to evaluate current the landscape in plantations and mills, and we can certainly point you in the right direction of is the first step you need to take.

ABS INNOVATIONS presents comprehensive Digital Solutions and Innovative Technologies to directly improve the Yield & Productivity of plantation companies. ABS INNOVATIONS Estates (PMMP), Mill (MMMP) and Financial Suite (AERP) are Programs that have Digitally Transformed plantation companies to achieve quantum leap improvements in Performance and Profitability

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Ensuring Sustainable Palm Oil: Challenges in Indonesia & Malaysia



Mohammad Hafezh Abdul Rahman

Chief Executive Officer (CEO) of Malaysian Palm Oil Certification Council (MPOCC), Malaysia

Mohammad Hafezh Abdul Rahman, no stranger to the palm oil industry. He looks forward to getting the Malaysian Sustainable Palm Oil (MSPO) certification scheme to be globally accepted as a valid economic tool in ensuring that it is responsibly and sustainably produced. He was appointed as the Chief Executive Officer (CEO) of the Malaysian Palm Oil Certification Council on 15 February 2021. He holds a master's degree in Business Administration from Multimedia University (MMU) and a Bachelor of Science in Information Technology from the National University of Malaysia (UKM).



Dr. Kasdi Subagyono

Chairman of ISPO Secretariat, Secretary General at the Ministry of Agriculture (MoA), Indonesia

Prior to his current assignment, Dr. Kasdi Subagyono has held strategic positions at the MoA as Director General of Estate Crops, Director of Planning Bureau, Executive Secretary of Indonesian Agency for Agricultural Research and Development, and Director of Indonesian Agroclimate and Hydrology Research Institute. He received his Ph.D in Geoscience from Tsukuba University in Japan, in 2003, and completed his Master degree in Soil Science at Gent Universiteit, Belgium. His area of expertise includes agriculture policy and planning, hydrology, soil conservation, and climate change.



1. Local community involvement is the key to success in ensuring sustainability in palm oil. What are some of the challenges faced by Malaysian Sustainable Palm Oil (MSPO) and Indonesian Sustainable Palm Oil (ISPO) in addressing the importance of sustainability to society?

Mr. Hafezh: There are challenges that we need to address with regards to addressing the sustainability concept to the society. The first thing is a mindset change. One thing we have to remember is that oil palm is being planted by farmers or the local communities to get a decent income for the families. For generations, they have been planting in a certain way, normally maximising profit by cutting operating costs which often leads to unsustainable practices. The same problem escalates as we go further down the supply chain. Naturally, there will be resistance when we want to introduce something new. Moreover, it requires extra efforts that could potentially diminish their existing income – especially among the smallholders.

The MSPO scheme will eliminate all these problems by promoting sustainable practices which include best practices along the supply chain for common benefits. We want everybody involved in the industry, including the natural resources are in perfect balance.

Dr. Kasdi: First of all, there are 16.4 million hectares of palm oil area in Indonesia and 45% is from the smallholder. This is very strategic to have standardization and also certification for palm oil. We have the opportunity for the smallholder to have certification because the government supports the budget for the financing in five years. The farmer is allowed to accomplish the whole prerequisite of the Indonesian Sustainable Palm Oil (ISPO) in five years. Secondly, the government pays for the certification so it's free for smallholders to get a certification. Therefore, the regulation is for the farmers to have a free certificate. This is good news because Indonesia is now number one in the world for palm oil production. If there are a lot more people signing up for certification it means our grades standard is higher now.

2. Palm oil ban can be very damaging such as it will affect the livelihood of the smallholders. Could you elaborate on some of the steps that (MSPO) has taken to encourage the smallholders to opt for sustainability certifications?

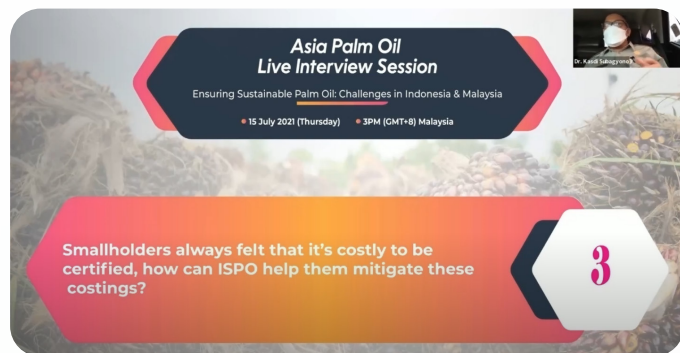
Mr. Hafezh: The palm oil ban will affect everyone in the industry especially smallholders, which is why the inclusion of smallholders in the sustainable palm oil supply chain has always been the priority for MSPO.

The government offers total support to the smallholders due to their lack of technical and financial resources. To begin with, the government provides financial support for smallholders to be certified through *Dana Insentif Pekebun Kecil*.

For technical support, the Malaysian Palm Oil Board (MPOB) provides around 500 *Tunjuk Ajar Nasihat Sawit* (TUNAS) officers all around the country that are tasked to take care of all the oil palm planters in their respective areas. These officers' main tasks are to help smallholders in areas such as licensing, replanting, and auditing. MPOB also provides and establishes Sustainable Palm Oil Clusters (SPOC) to help the smallholders to be MSPO certified by preparing them for audits and arranging audits with the certification bodies.

In its early adoption, there was a lack of awareness about MSPO among the smallholders. Therefore, we engage them through various collaborative programs between MPOCC, MPOB, and the ministry. There were media programs and roadshows in the cities and rural areas where we inform the society on the importance of environmental sustainability and to adopt MSPO if they are planting oil palm. The idea is to get the smallholders to grasp the idea of sustainability in palm oil production. Once this is ingrained in their practice, then they will have better access to the global market.





3. Smallholders always felt that it's costly to be certified, how can ISPO help them mitigate these costs?

Dr. Kasdi: As an indicator for the sustainable development goals, from the 17 we already cover 12 and we still completed that in terms of the process of certification. For the next three or five years, we are still focusing on how to do refunding of the process and procedure of the ISPO. This is to have more opportunities for the smallholder to have access to the certification. We also have a few comparisons with MSPO. The process that we are still concerned with is that the strength of the management of ISPO itself. This is as we have to increase the capacity of the human resource. More facilitation of the smallholders and for the local alternative to make it easier to proceed to ISPO. Overall, we still complete the indicator parameter itself to have the sustainable development goals. RSPO has to take part since giants like Malaysia and Indonesia respectively confirming to the local regulation such as refunding the ISPO itself especially for the system and human resources.

4. What role would RSPO have to play since giants like Malaysia and Indonesia have MSPO and ISPO respectively conforming to local regulations? How do we differentiate MSPO and ISPO from RSPO?

Mr. Hafezh: I think RSPO will continue to play its role as the industry's voluntary scheme. They are a group of big corporations that agree to comply with a certain sustainability requirement and to trade among its members.

Compared to MSPO and ISPO, we are a national scheme where we adopt all sustainability requirements and translate them to suit the local law and practices. We cover a holistic scope by ensuring all that are involved in the palm oil industry will adhere to the global sustainability demand and be rewarded with fair market access. This is done in accordance with the national laws, constitutions, and other complex issues such as resource management.

MSPO also addresses this as a national initiative which is very different from a corporation focus initiative. As compared to other voluntary schemes, our commitment to sustainability is by the country itself. Malaysia has always supported sustainability efforts since the Rio Summit 1992 where we pledged to keep more than half of our lands forest covered. We also want to make sure that palm oil is sustainable not just for profit or to satisfy specific consumer demand but more importantly is to ensure the sustainability efforts that are being taken by us are for the future generation.

This is a national commitment as we are putting Malaysia's name to it, so definitely our certification would cater not only to the profit side but the benefits of people who are involved in it. We also want to show a good relationship with our trading nations, and I believe this is what embodies a national certification. I hope to see more trading nations adopting national schemes like MSPO.

Dr. Kasdi: With the Indonesian government's push to make the farmer a major part of the biofuel mix doesn't mean getting a certification will be easier to cope with the demand. The policy is to have a link to the market with the high price they can get it from the palm oil production. The certification is important that we have to continue. We have also more socialization for the farmer and access to the ISPO process. We also have an increased capacity of ISPO. With the pandemic occurring now, it doesn't mean more companies are now focusing on production instead of getting certification as especially smallholders are surviving. It seems to be more crucial. We still proceed with the certification itself and focus on the production because the farmer in the villages is still working normally in the field especially in the palm oil plantation. The best commodity of agriculture should support the economy of Indonesia.





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Musim Mas Partners with AAK and Nestlé to Address Deforestation Outside Of Concession Areas

22 September, 2021, Singapore – Today, AAK, Nestlé, and Musim Mas announced a partnership to address deforestation outside of plantation concession areas in Aceh, Indonesia. Aceh is a priority landscape as 87% of the Leuser Ecosystem lies within the province.



AAK and Nestlé have pledged to fund the first two years of the five-year program, reaching out to approximately 1,000 oil palm independent smallholders within two years and enrolling them in Musim Mas' smallholders program supported by a Smallholders Hub. The Smallholders Hub will provide advanced training to village extension officers on good agricultural practices and NDPE (No Deforestation, No Peat, and No Exploitation). The officers will then train and upskill oil palm smallholders in their assigned areas. Musim Mas will be training 40 officers. This will be Musim Mas' third Smallholders Hub in Aceh province, in line with their Aceh strategy.

Smallholders will receive training in good agricultural practices, business management, and NDPE (No Deforestation, No Peat, No Exploitation). The program will help smallholders increase yields and earnings from their existing farmland, and reduce the risk of encroachment into protected areas. As the majority of deforestation in Aceh occurs outside plantation concession areas, such programs are vital.

"We are glad that downstream actors AAK and Nestlé share our vision to transform the Aceh landscape and work together with actors on the ground. Integrating smallholders into sustainable supply chains is an industry effort," said Olivier Tichit, Musim Mas Director of Sustainable Supply Chain. "Our partnership in Aceh is crucial to expanding our reach to the independent smallholders and protecting rainforests."

"Nestlé is committed to achieve a deforestation-free palm oil supply chain by 2022. Making the industry truly sustainable, however, will require us collectively moving towards a Forest Positive strategy where agricultural production and forest protection exist in harmony. Supporting smallholders is a key element of this strategy. We will continue to conserve and restore forests and natural ecosystems while promoting sustainable livelihoods and respecting human rights," said Emily Kunen, Global Climate Delivery Leader, Forests at Nestlé.

"Engaging with our suppliers in the most sensitive landscapes and focusing on deforestation outside concessions is crucial. We believe that this partnership program can significantly contribute to the protection and preservation of this important landscape and have a positive impact on the livelihoods of the smallholders involved," said Caroline Westerik-Sikking, Global Manager Sustainable Oils at AAK.



About Musim Mas

Headquartered in Singapore, Musim Mas is one of the world's largest, integrated palm oil corporations with operations in every part of the supply chain across the Americas, Europe and Asia. Our global workforce pursues innovative and sustainable developments, ensuring product quality, safety and efficiency as the industry evolves.

As one of the most prominent players in the industry, it aspires to be a responsible leader in the evolution of the industry, driving a new era of sustainability with innovation. To that end, we take active steps to go beyond industry-recognized sustainability standards and will continue to step up in response to critical industry issues in our quest to contribute to a more sustainable industry and equitable world.

About Nestlé

Nestlé is the world's largest food and beverage company. It is present in 186 countries around the world, and its 273,000 employees are committed to Nestlé's purpose of enhancing quality of life and contributing to a healthier future. Nestlé offers a wide portfolio of products and services for people and their pets throughout their lives. Its more than 2,000 brands range

from global icons like *Nescafé* or *Nespresso* to local favorites like *Ninho*. Company performance is driven by its Nutrition, Health and Wellness strategy. Nestlé is based in the Swiss town of Vevey where it was founded more than 150 years ago.

About AAK

Everything AAK does is about Making Better Happen™. We specialize in plant-based oils that are the value-adding ingredients in many of the products people love to consume. We make these products better tasting, healthier, and more sustainable. At the heart of AAK's offer is Customer Co-Development, combining our desire to understand what better means for each customer, with the unique flexibility of our production assets, and a deep knowledge of many products and industries, including Chocolate & Confectionery, Bakery, Dairy, Plant-based Foods, Special Nutrition, Foodservice and Personal Care. Our 3,900 employees support our close collaboration with customers through 25 regional sales offices, 15 dedicated Customer Innovation Centers, and with the support of more than 20 production facilities. Listed on Nasdaq Stockholm and with our headquarters in Malmö, Sweden, AAK has been Making Better Happen for 150 years.

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CPOPC Questions Palm Oil Free Policies

Jakarta, 17 September, 2021 - Discriminatory policies against palm oil have long been challenged by palm oil producing countries. It is obvious that the marketing ploys used by some companies are pure acts of discrimination against palm oil which are directed to consumers. These unacceptable smear campaigns have been echoed in policies and regulations by governments and regional organization such as the European Union. For that reason, as part of the advocacy campaign using facts and science, CPOPC launched a public complaint in July 2021 on the Commission Consultation on Sustainable biofuels, bio liquids and biomass fuels (<https://bit.ly/feedbackCPOPC>) urging the European Commission to stand on the right side of history on sustainable energy.

This was done to challenge the anti-palm oil position of energy companies like TotalEnergies. In its reply to a letter sent by the CPOPC Secretariat, Total Energies acknowledged that it would stop the use of palm oil by 2023.

The Secretariat underscored that "...TotalEnergies is no longer concerned about sustainable supply chains for palm oil, nor the successful efforts of our member governments to mitigate CO2 emissions by addressing deforestation and wildfire, nor the economic and social benefits to the rural population; nor of the general importance of palm oil to the concerned economies in Asia, Africa and Latin America."

In its response, TotalEnergies recognized the strong efforts from palm oil producing countries to produce sustainable palm oil products and that it diligently screens purchased palm oils for its La Mède refinery but that they continue to receive pressure from groups opposed to the use of palm oil in France.

Total Energies added that the company's decision is based on the decision of the French Parliament to withdraw tax incentives for palm oil as a biofuel feedstock.

Objective readers would recognize the contradictory position of TotalEnergies which recognized that its palm oil is sourced sustainably but has not provided similar assurances of environmental quality for its substitutes.

In addition, for TotalEnergies to suggest that the company's use of Used Cooking Oil (UCO) and animal fats as alternative feedstocks will be sustainable is equally indefensible. There is no doubt that animal agriculture is a major contributor to climate change and that there would not be enough animal fats to produce sustainable energy if the science-based fact to reduce animal agriculture is adopted globally to fight climate change. TotalEnergies has yet to provide explanations on how its use of UCO is more sustainable than palm-based biofuels.

The CPOPC Secretariat expresses its deep displeasure towards TotalEnergies in preying upon palm oil by making a public statement against palm oil when it is obvious that substitutes are not proven to be more sustainable. The CPOPC Secretariat is of the view that a company has no right to cast shadows over the credibility of an entire agricultural sector for short-term political and economic gain. Excluding palm oil is indeed a regression from the genuine interests of palm oil producing countries and the millions of smallholders of the Global South to meet the UN SDGs.

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MPOB wins Clarivate South and Southeast Asia Innovation Award 2021

Bangi, 28 Sept 2021 -- Malaysian Palm Oil Board (MPOB) has bagged the Clarivate South and Southeast Asia Innovation Award in Government Research Organizations category for the second consecutive time.

The Clarivate South and Southeast Asia Innovation Award 2021 places MPOB amongst top innovators in Malaysia, said Director-General Dr. Ahmad Parveez Hj. Ghulam Kadir.

The announcement of the award was made at the Clarivate South & Southeast Asia Innovation Forum held virtually on 21st September 2021.

"I would like to thank Clarivate for recognizing and selecting MPOB as the top innovator in Malaysia under the category of Government Research Organization. MPOB is honored to receive this meaningful appreciation," he said.

"As of August this year, we have developed 709 breakthrough technologies of which 31.4 percent or 222 technologies have been commercialised with the aim to improve the oil palm industry. Meanwhile, as of 21 Sept 2021, a total of 381 patents were filed of which 252 have been given grants.

As the premier research and development institution, MPOB will continue to provide leadership and impetus in developing a diversified, globally competitive and sustainable oil palm industry," Dr. Ahmad Parveez added.



Every year, Clarivate recognises the most innovative companies in the region according to patent-related metrics that get to the essence of what it means to be truly innovative.

This analysis is done using proprietary Clarivate data and tools. The evaluation is strictly driven by metrics for both patent volume (patents published) as well as patent quality (grant success rate, extent of globalization, and citations).

The awards are being given in three broad categories of Government Research Organizations, Academic Institutions, and Corporations for each country in the region.

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