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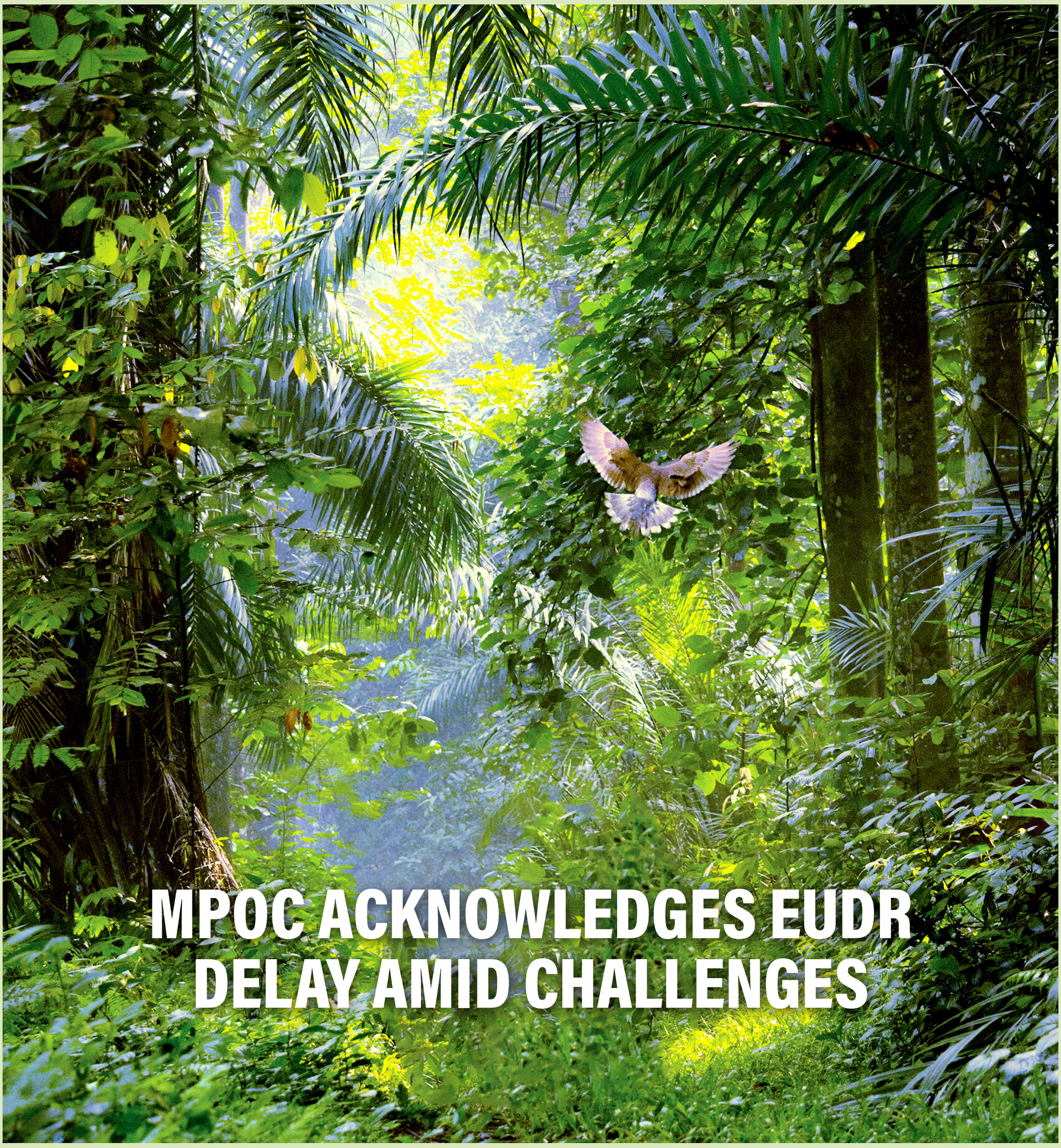
MPOC

THE FUTURE FOR MSPO IN EUROPE: NEW ANALYSIS SHOWS HOW EU CAN FORMALLY ACCEPT CERTIFICATION STANDARDS FOR PALM OIL

MALAYSIAN PALM OIL FORUM TACKLES GLOBAL TRADE CHALLENGES THROUGH SUSTAINABLE SOLUTIONS



MPOC ACKNOWLEDGES EUDR DELAY AMID CHALLENGES

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MESSAGE FROM THE CEO

Belvinder Sron
CEO of MPOC

Dear Readers,

Welcome to the sixth edition of PalmSphere. As we move into the final quarter of the year, I am pleased to share the latest updates on our industry's continued progress and the important steps we are taking to ensure a sustainable future for Malaysian palm oil. Our cover story focuses on the European Commission's proposal to delay the implementation of the EU Deforestation Regulation (EUDR) until December 2025. This extension is expected to provide smallholders and businesses critical time to adapt to the regulation's requirements, allowing for a smoother and more inclusive transition. We also explore the future of the Malaysian Sustainable Palm Oil (MSPO) certification in Europe, with a new analysis that presents pathways for the formal recognition of MSPO by the European Union.

Our flagship event, the Malaysian Palm Oil Forum (MPOF) Kuala Lumpur 2024, also features prominently in this issue. This year, industry leaders gathered to tackle the ongoing challenge of balancing economic growth with environmental responsibility. In a special feature, expert epidemiologist Dr. Jonathan Ellen explores the role of science-based decision-making in public health policies. His article draws thought-provoking parallels between the global debate on palm oil and the need for responsible, evidence-based policymaking in healthcare. We continue our Malaysian Sustainable Farmer Chronicles with the inspiring story of Muhammad Hariz, a millennial oil palm farmer whose approach combines tradition with innovation, highlighting the importance of youth-led sustainability efforts in palm oil farming. As we look ahead, I encourage us all to remain steadfast in our commitment to sustainability, innovation, and collaboration as we continue building an industry that supports economic growth and environmental stewardship.

MPOC ACKNOWLEDGES EUDR DELAY AMID CHALLENGES

Malaysia is ready to supply EUDR-compliant, sustainable, traceable palm oil to the European business sector, however, the decision to delay implementation will further ensure adequate time for global supply chains to recalibrate.

THE Malaysian Palm Oil Council (MPOC) has commended the European Commission's proposal to delay the implementation of the EU Deforestation Regulation (EUDR) until 30th December 2025.

MPOC's Chief Executive Officer, Belvinder Sron, described the postponement as a much-needed step, providing relief for businesses requiring additional time to comply with the EUDR's complex regulatory demands.

The administrative burden imposed by the regulation is significant, particularly for small farmers to meet these new requirements. Industry estimates suggest compliance could cost the palm oil sector USD 650 million annually, with USD 260 million borne directly by smallholders.

> **“Malaysian palm oil exporters can comply with EUDR: this is not in doubt. Malaysia’s commitment to zero deforestation is written in law. The MSPO standard is a leading mandatory palm oil certification scheme. Malaysia is ready to supply EUDR-compliant, sustainable, traceable palm oil to our European customers. This delay is a sensible decision to ensure that supply chains worldwide have the time to prepare the technical and bureaucratic processes demanded by EUDR.”**
>
> **Belvinder Sron,** CEO of MPOC

The decision to delay its implementation allows global supply chains to adjust to the technical and administrative requirements of the EUDR without risking trade disruptions, particularly for smallholder farmers. Malaysia has been a vocal advocate for this postponement, consistently warning that the original 2024 deadline was unfeasible, given the readiness of EU systems. This position was supported by a broad coalition of governments, industries, and experts worldwide, all concerned about the potential negative impact on smaller producers and the palm oil industry.

According to Belvinder, the additional time should be used to address key concerns, including a genuine exemption for smallholders to prevent their exclusion from international supply chains, the creation of transparent benchmarking criteria to categorise sustainably produced commodities like Malaysian palm oil as ‘low-risk,’ and the acceptance of MSPO certification as a recognised compliance tool for the EUDR. These improvements, she said, would facilitate market access for Malaysia’s zero-deforestation palm oil.

The EUDR, aimed at regulating commodities linked to deforestation, requires suppliers and exporters to provide complex geolocation data and ‘polygon’ mapping, while EU operators must submit due diligence statements to ensure compliance. The administrative burden imposed by the regulation is significant, particularly for small farmers, who may struggle to meet these new requirements. Industry estimates suggest compliance could cost the palm oil sector USD 650 million annually, with USD 260 million falling directly on smallholders.

Malaysia’s MSPO standard guarantees compliance with zero deforestation and sustainability goals while supporting smallholder farmers. Recognising MSPO certification within the EUDR framework would allow the EU to achieve its environmental objectives without burdening producers.

The EUDR, aimed at regulating commodities linked to deforestation, requires suppliers and exporters to provide complex geolocation data and ‘polygon’ mapping, while EU operators must submit due diligence statements to ensure compliance.

The MPOC remains committed to continuing its collaboration with the EU and other global stakeholders to ensure that the eventual implementation of EUDR is both fair and practical, recognises Malaysia’s sustainable palm oil practices, and supports trade.

THE FUTURE FOR MSPO IN EUROPE: NEW ANALYSIS SHOWS HOW EU CAN FORMALLY ACCEPT CERTIFICATION STANDARDS FOR PALM OIL

Analysts identify options for the EU to formally accept Malaysia's MSPO certification scheme. While compliant with EU deforestation rules, Malaysia urges extending the December 2024 deadline to protect small farmers and ensure market access.

A new Expert Paper from European Analysis Implement Economics has identified several options for the European Union to formally accept the Malaysian Sustainable Palm Oil (MSPO) certification scheme as a compliance mechanism for the European Union Deforestation Regulation (EUDR).

MSPO already meets and complies with the EUDR as confirmed in a separate assessment undertaken by European sustainability auditor Pierre Bois d'Enghien earlier this year.

Bois d'Enghien concluded that:

"MSPO meets the basic regulatory benchmarks of the EUDR and provides importers with the information required under EUDR."

His full report is available online here.

This means that the question is not whether MSPO should be formally accepted by the EU Commission – but how that process could be executed in practice.

The findings from the Copenhagen-based Implement Economics team assess that the EU and Malaysia should pursue five available paths for formal acceptance of MSPO, confirming Malaysian exporters' ability to meet EU deforestation standards.

The five paths identified by the team from Implement Economics are:

1. Third-Party Verification Mechanism

Using the model based on the EU's Renewable Energy Directive (RED), MSPO and other compliant schemes could be approved by third-party standards that provide a fast lane to access the EU market.

2. Equivalence

Future bilateral agreements exist in other fields, such as the Organic equivalency. This approach could be replicated for certification standards that meet EUDR requirements.

3. Leverage EUDR Benchmarking

The existence of a mandatory and compliant scheme such as MSPO could be made an automatic factor for 'low risk' benchmarking under existing EUDR rules.

4. Voluntary Partnership Agreement (VPA) Or Mutual Recognition

Future bilateral agreements between the EU and Malaysia that would include mutual recognition of relevant agricultural certification standards, including MSPO.

5. Free Trade Agreement (MEUFTA)

The FTA negotiations between the Malaysia and the EU could accept MSPO certification as meeting EU requirements – either under Technical Barriers to Trade (TBT) or Trade & Sustainable Development (TSD) chapters in the FTA.

The analysis concludes by addressing how the five options can be moved forward as part of the broader EU-Malaysia relationship.

The Implement Economics team writes:
"These options are not mutually exclusive, and the EU and Malaysia could pursue multiple pathways concurrently. Additionally, the options differ across several evaluation parameters, offering flexibility in the approach towards formal recognition."

Many of the pathways identified in this new Report will be discussed in Brussels in the coming months:

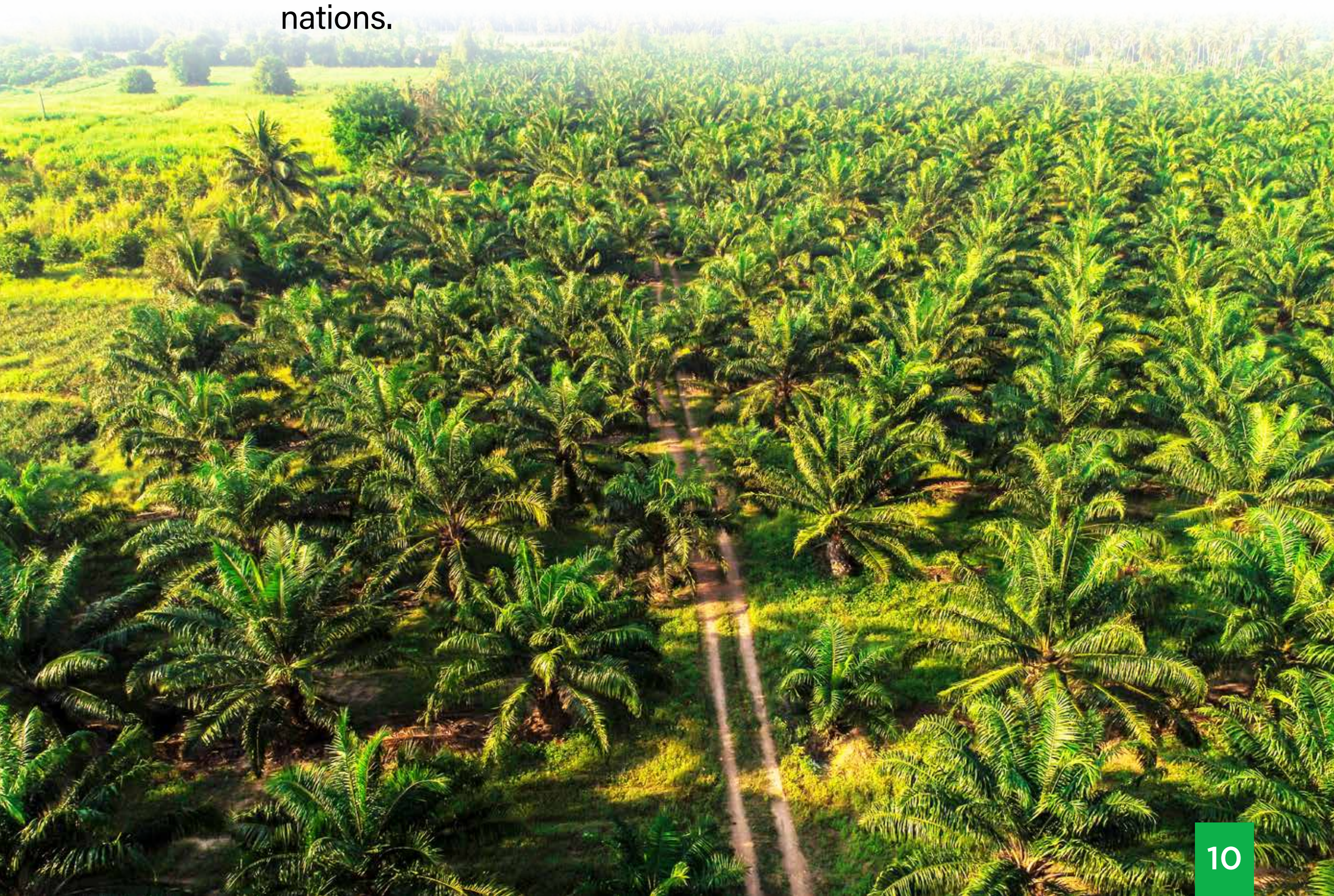
- Delegated acts under EUDR, including benchmarking, are already being prepared.
- Review of some core EUDR elements will begin in 2025.
- Free trade negotiations between the EU and Malaysia.

Each of these developments represents an opportunity to advance MSPO's case for acceptance.

Updates of the 3rd EUDR Ad Hoc Joint Task Force (JTF) Meeting, 12 September 2024, Brussels

At the recent 3rd EUDR Joint Task Force (JTF) Meeting in Brussels, Malaysia and Indonesia voiced concerns about the EUDR's impact on smallholders, particularly regarding stringent geolocation requirements. While Malaysia has made significant progress with its traceability systems, such as Sawit Intelligent Management System (SIMS), Geopalm portal, and MSPO Trace, smallholders remain at risk of exclusion from the EU supply chain.

According to MPOC CEO Belvinder Sron, the rigid deadline must account for small farmers' operational challenges and risks significant disruption to global supply chains. Malaysia advocates for recognising the MSPO certification as a compliant standard under the EUDR, ensuring that sustainable, deforestation-free palm oil can access the European market without disproportionately affecting small-scale producers. Malaysia has consistently highlighted the discriminatory nature of the EUDR, which disproportionately affects developing nations.



Representatives from Malaysia, Indonesia, CPOPC and the EU gathered at the 3rd EUDR Ad Hoc Joint Task Force (JTF) Meeting in Brussels on 12 September 2024.

The discussions focused on the impact of the EU Deforestation Regulation (EUDR) on smallholders and Malaysia's progress in meeting the EUDR requirements, including in its traceability systems and advocacy for MSPO certification as a compliant standard under EUDR.

The approaching December 2024 deadline fails to account for palm oil producers' operational and technical challenges. A range of governments, industries, and experts within Europe and globally have echoed Malaysia's stance, supporting a delay to allow for a more practical and inclusive implementation.

The EU is urged to establish clear criteria to classify sustainable commodities such as Malaysian palm oil as "low risk". The formal recognition of MSPO certification as a compliance tool under the EUDR would further facilitate market access for sustainable, zero-deforestation palm oil, ensuring that smallholders are not unfairly burdened.

The European Commission has recently announced that it has proposed to delay the EUDR's implementation by 12 months, enabling all stakeholders a phasing-in period to facilitate its implementation and compliance requirements.

Once approved by the European Parliament and the European Council, the new regulation implementation deadline will be 30 December 2025 for operators and traders, and 30 June 2026 for EU small and medium-sized entrepreneurs (SMEs).

More information can be found here.

MALAYSIAN PALM OIL FORUM TACKLES GLOBAL TRADE CHALLENGES THROUGH SUSTAINABLE SOLUTIONS

MPOC successfully concluded MPOF 2024, a forum for industry experts to unveil critical challenges and opportunities overlooking the palm oil future.

THE Malaysian Palm Oil Forum (MPOF) 2024, organised by the Malaysian Palm Oil Council (MPOC), successfully concluded at the Shangri-La Hotel, Kuala Lumpur, bringing together nearly 500 leading international stakeholders, including manufacturers, traders, NGOs, and industry associations. With the theme "Navigating Trade Challenges with Sustainable Solutions", the forum served as a pivotal platform to tackle the most critical challenges and opportunities shaping the future of palm oil, particularly about sustainability and trade.

The event showcased Malaysia's responsible palm oil production leadership, backed by the Malaysian Sustainable Palm Oil (MSPO) certification. Over 100 oils and fats buyers representing more than 30 countries participated in the forum, creating valuable opportunities for engagement between international buyers and local palm oil suppliers. This collaborative effort strengthens Malaysia's role in promoting sustainable and traceable palm oil solutions across global markets.

The forum featured a comprehensive line-up of discussions and expert presentations on sustainability compliance, economic trends, and future market dynamics. Among the key highlights are:

- A plenary session titled “Navigating Non-Tariff Barriers” explored the importance of inclusive global trade practices.
- A panel discussion on EU Deforestation Regulation (EUDR) compliance focused on balancing economic growth and environmental responsibility.
- Insights into the future of global commodities, including geopolitical influences and the outlook for palm oil in 2025.

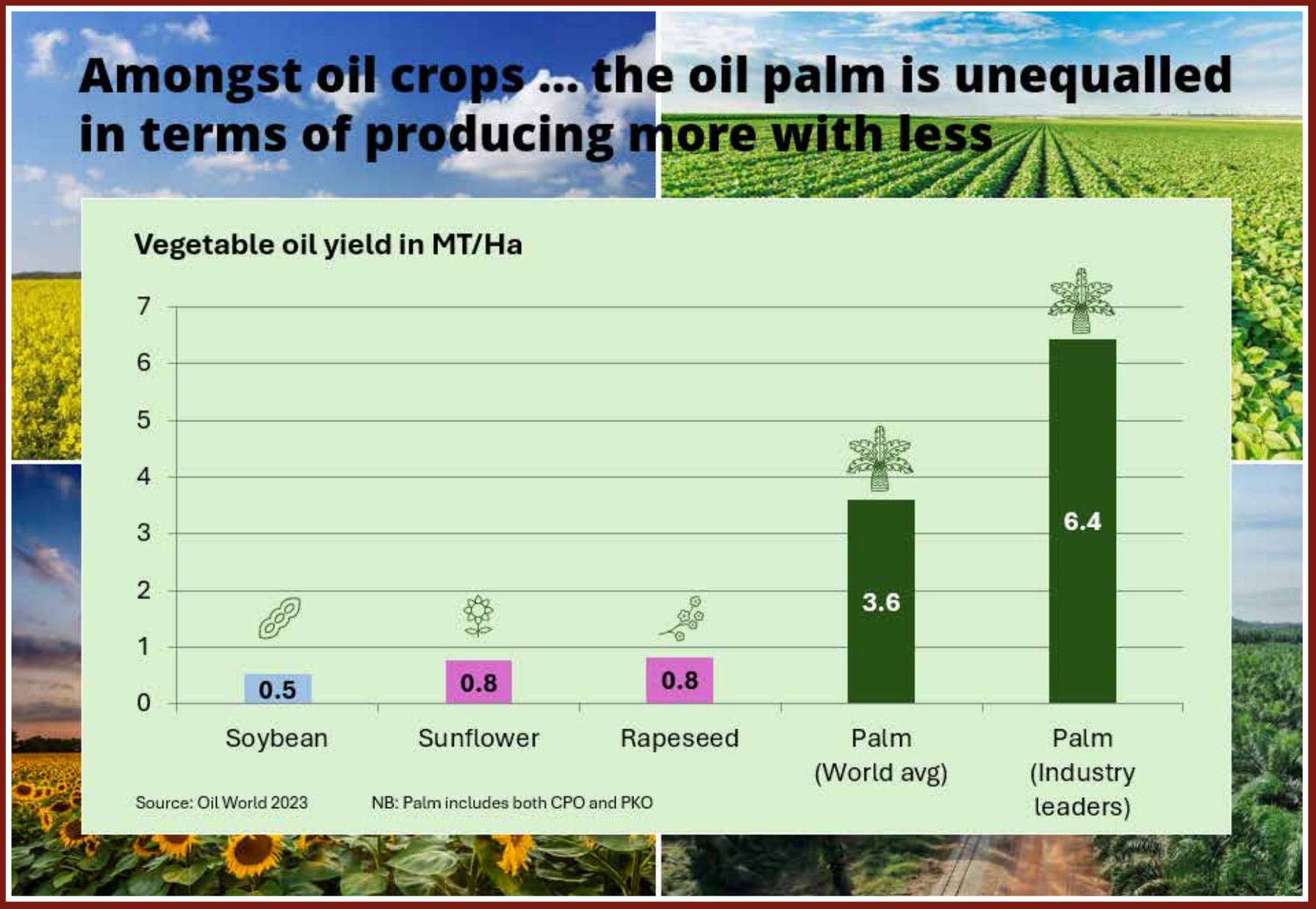
Over 100 buyers representing 30 countries, attended including key players in the oils and fats and food industries from Asia Pacific, South Asia, Middle East, Africa, and Eastern Europe.

Keynote Address: Balancing Growth with Sustainability

In his keynote address, YB Datuk Seri Johari bin Abdul Ghani, Minister of Plantation and Commodities, highlighted the importance of sustainability as a key driver in overcoming global trade challenges. He pointed to Malaysia’s notable progress in 2024, which saw a 10.6% increase in palm oil production, underscoring the country’s dedication to enhancing smallholder productivity and supporting replanting initiatives to ensure continued growth. “Malaysia is committed to aligning with global sustainability standards, particularly through our MSPO certification, which guarantees traceability and environmental responsibility,” he remarked.

Welcome Remarks from Dato' Carl Bek-Nielsen

Dato' Carl Bek-Nielsen, Chairman of MPOC, reiterated Malaysia's commitment to sustainability and global trade, stressing the importance of facts and science in shaping the global narrative around palm oil. "Our goal is to not only expand the global footprint of Malaysian palm oil but also to highlight its sustainability credentials and economic benefits on the world stage," he said during his opening remarks.



Dato' Carl Bek-Nielsen emphasised the exceptional land-use efficiency of oil palm during his welcome remarks. Although oil palm occupies just 0.5% of global agricultural land, it produces 35% of the world's edible oils. The slide above illustrates how palm oil significantly outperforms other oil crops, such as soybean, sunflower, and rapeseed, in terms of yield per hectare. Replacing palm oil with other edible oils would require an additional 240 million hectares of land, equivalent to 6.7 new Germanys, 7.3 new Malaysias, or 58 new Hollands, highlighting the sizable environmental cost of substituting palm oil.

Reflecting on the event's success, Belvinder Sron, CEO of MPOC, called MPOF Kuala Lumpur 2024 a pivotal initiative in promoting sustainable practices and addressing trade challenges. She added that since its inaugural edition in Kenya in 2023, the forum has become a key driver of economic growth and resilience within the palm oil industry. "This forum has become a key platform for creating significant business opportunities, connecting Malaysian suppliers with over 100 international buyers from 30 countries. It is instrumental in driving growth while reinforcing Malaysia's commitment to sustainable palm oil," she commented.

Sustainability Debate: Focusing on Industry Progress

The Sustainability Debate took centre stage at MPOF Kuala Lumpur 2024, where industry leaders and experts discussed the delicate balance between economic growth as well as environmental and social responsibilities.

Key discussions included:

- Efforts to reduce carbon emissions.
- Protecting biodiversity in palm oil production.
- Empowering smallholders to adopt sustainable practices.

The debate highlighted Malaysia's progress in addressing these challenges and reiterated the industry's commitment to promoting environmentally responsible palm oil production.

Shaping the Future of Sustainable Palm Oil

As the global palm oil industry evolves, sustainability remains critical in shaping its future. The MPOF Kuala Lumpur 2024 underscored the industry's commitment to balancing profitability with environmental and social responsibilities, ensuring Malaysia remains a global leader in sustainable practices for years.

Panel of industry leaders and experts at the Sustainability Debate during the MPOF Kuala Lumpur 2024, moderated by Jeremy Goon, Chief Sustainability Officer, Wilmar International.

From left to right: Dr. Robecca Jumin (Head of Conservation, Sabah, WWF Malaysia), Dr. Isabelle Lackman (Co-Founder & Director, HUTAN), Tessa Van Hoorn (Donor Relations Manager, Solidaridad Network), Arina Kok (Partner, EY APAC Decarbonization Leader & Malaysia CCaSS Leader), and Dato' Carl Bek-Nielsen (Chairman, MPOC).

HEALTH CARE POLICY DOES NOT EXIST IN A VACUUM

By Dr Jonathan Ellen

GOOD public health policy should be grounded in sound science and prudence. When considering drastic policy changes that could impact millions of people, our leaders must act soberly, in our best interest, and with a full grasp of their policies' full impact.

The ongoing global debate about palm oil is an opportunity for policymakers to look beyond the heated rhetoric and act responsibly. In Europe, Asia and the United States, environmentalists and activists are driving pressure campaigns to limit the use of palm oil, and too many public officeholders are keen to lend a sympathetic ear. But indulging these activists is not merely wrong. It could be dangerous, too.

Policymakers would do well to remember their history. In the 80s and 90s, we saw the replacement of palm oil with Partially Hydrogenated Oils (PHOs). These PHOs were made by adding hydrogen to liquid fats to solidify them, creating what we now know as trans fats. Experts now say that trans fats dramatically increase cholesterol and contribute to heart disease. Although many governments have outright banned or limited the use of trans fats, the World Health Organisation (WHO) estimates that trans fats contribute to more than 500,000 premature deaths from coronary issues per year.

Contrary to the naysayers, the switch back to palm oil has been an addition by subtraction. Palm oil is a balanced fat since it is approximately 50% saturated and 50% unsaturated. Studies have shown that palm oil, unlike trans fats, has a neutral effect on cholesterol levels. When considered in its proper context, the shift from trans fats to palm oil has been a net positive for global health outcomes.

Beyond its effect on individual health outcomes, policymakers must also consider the economic implications of limiting its use. That is because such decisions are not made in a vacuum.

Experts call for evidence-based policies, noting palm oil's role as a balanced, affordable fat amid global health and food security challenges.

Palm oil is ubiquitous, in part, because it is incredibly affordable. Alternatives like butter, coconut oil, and coconut butter, all fine when consumed in moderation despite their high saturated fat content, are also far less affordable.

As prices rise globally and food insecurity is high, easy accessibility to high-quality products like palm oil is critical. According to the most recent reports by the Global Report on Food Crises, nearly 282 million people in 59 countries experienced high levels of acute hunger in 2023, representing a worldwide increase of 23 million from the previous year.

Taking actions that would exacerbate these crises absent sound scientific evidence would be nothing less than tragic.

Global health leaders should recognise that there is no scientific evidence that palm oil is dangerous and that, if anything, it is a valuable tool to fight food insecurity. It is an affordable, abundant form of high-quality dietary fats for those around the globe. Policymakers looking to improve their country's health should focus instead on encouraging a balanced lifestyle that embraces a variety of foods in moderation, physical activity and overall well-being.

Dr. Jonathan Ellen is an epidemiologist, CEO of Connections for Health and former CEO of Johns Hopkins All Children's Hospital.

Studies have shown that palm oil, unlike trans fats, has a neutral effect on cholesterol levels. When considered in its proper context, the shift from trans fats to palm oil has been a net positive for global health outcomes.

Muhammad Hariz Mat Jailani,
29-year-old independent smallholder

Photo Credit @ Wild Asia 2024

MALAYSIAN SUSTAINABLE FARMER CHRONICLES: THE MILLENNIAL OIL PALM FARMER

Meet the next-gen oil palm farmer who steers his farming comrades to embrace sustainable farming, leverage new tools and reconnect with the land.

HOW are millennial farmers different from their older compatriots?

Historically, farming has always been driven by sustenance—to feed, shelter, and clothe the family. Today, new-generation farming prioritises lifestyle choices, advocacy, and conservation.

“My father’s generation extols the virtue of hard work. They don’t mind the struggle if they can create a better life. They don’t mull over green issues,” says 29-year-old independent smallholder Muhammad Hariz Mat Jailani.

“My generation puts equal weight on social, environmental and economic success. Working smart outweighs working hard!”

The millennial generation (born between 1981 and 1996) bridges traditional growing methods with innovative practices, leverages technology and tools to farm more efficiently, and cares about environmental challenges.

The Gen Y Farmer

Muhammad Hariz is a third-generation oil palm farmer from Kampung Sungai Lesong, an idyllic Malay village in Batang Padang District, Perak, a two-hour drive north of Kuala Lumpur. He owns and manages a 1.2 ha smallholding in Sungai Lesong.

According to a study, young farmers like Muhammad Hariz are an anomaly in Malaysia, where the average oil palm farmer is 58 years old (Azman Ismail, 2018). 92% of these smallholders hire workers to harvest and collect FFB (fresh fruit bunches), and over 65% are foreign workers. As a full-time farmer, Muhammad Hariz is as hands-on as they come. He does everything from applying fertiliser and grass cutting (to manage weeds) to harvesting and collecting palm fruits. He also helps at his father's oil palm plots, totalling 40 hectares, for additional income.

"One of the many perks of being young and strong means we're not overly-dependent on of migrant labour," says Muhammad Hariz with a smile. "More importantly, we bring a fresh mindset and are open to trying and exploring different approaches."

Photo Credit @ Wild Asia 2024

The new-gen farmer hopes more young people will be interested in venturing into the sustainable oil palm industry.

As the chairman of the Young Farmers Coalition under the Farmers' Organisation Authority (*Pertubuhan Peladang Kawasan Tapah* or FOA) in Tapah Area, Muhammad Hariz leads a group of 90 farmers under the age of 40 from diverse backgrounds—from oil palm smallholders and vegetable growers to cash crop, livestock, and aqua farmers.

This Gen Y farmer is on a mission to grow the new-generation farmer network that advocates for nature-positive farming.

The Formative Years

Muhammad Hariz's farming journey is a complex trajectory. Born into a family of six siblings, the middle child was adamant about not following in his father and grandfather's footsteps.

In Sungai Lesong, agriculture — oil palm and other cash crops — is the mainstay of the local economy. Muhammad Hariz's grandfather began planting oil palm in 1987 on land converted from rubber plantations.

His father, Mat Jailani Arshad, inherited the family legacy in the 1990s.

Mat Jailani is the *'rock star'* farmer in the farming fraternity. A two-time winner of the *Anugerah Peladang Jaya* (exemplary farmer award) from the FOA, which boasts 10,000 members nationwide, Mat Jailani regularly gets invited by farming associations and government agencies, including the Malaysian Palm Oil Board (MPOB), to share his farming know-how.

He was also a member of MPOB's 30 Tonne Club, an incentive to recognise farmers who churn out 30 metric tonnes of FFB per hectare per year (the average farmer produces a maximum yield of 19 metric tonnes of FFB per hectare per year). Today, his farms generate an average of 25 metric tonnes of FFB per hectare per year. Mat Jailani also heads the FOA in Tapah Area, which has over 500 members and runs a lucrative *kelulut* (*Meliponini*) honey enterprise and fertiliser business.

Talk about the pressure of being his father's son.

After secondary school, Muhammad Hariz was not keen to continue higher education. He joined the rural exodus to seek greener pastures.

"Like my peers, I wanted an office job. Farming was perceived as dirty, back-breaking and backward," he admits. With only a high school diploma, his options were limited, and he could not find stable employment. After shuffling between odd jobs, he changed tack.

"My dad wasn't getting any younger, so I thought it was time for me to step up," says Muhammad Hariz. His older siblings pursued their tertiary degrees, and the two younger siblings were still in school.

In 2015, his father gave him a three-acre plot to develop. Unlike most farmers starting, Muhammad Hariz had the upper hand, thanks to lessons gained from working on the family farm.

Spurred by his father, Muhammad Hariz joined the Wild Asia Group Scheme (WAGS) in 2021 to further improve his farm management practices and to meet international sustainability standards. Mat Jailani has been a WAGS member since 2017 and joined the WAGS BIO programme in 2020.

"One of many valuable tips from my dad was the importance of sourcing high-quality palm seedlings from a trusted supplier," says Muhammad Hariz. He waited one year to get his hands on good seedlings. In the interim, he planted bananas and pineapples as cash crops. Taking a cue from his dad, Muhammad Hariz reared livestock like cows, buffalos and goats as his side hustle.

In 2019, he joined MPOB's Sustainable Palm Oil Clusters (SPOC) initiative to work towards his MSPO certification. Although he usually taps into his father's broad experience and wisdom, he is always open to gaining new insights.

"Through the TUNAS extension agents, I learned about good agricultural practices like cutting down chemical inputs and the importance of nutrient management and keeping ground cover to maintain moisture and soil organic matter," he explains. He received his Malaysian Sustainable Palm Oil (MSPO) certification in 2020. "I shaved 30% off my production costs by reducing chemical use."

However, as a young, impressionable farmer, Muhammad Hariz is not immune to other farmers' critiques. When he switched to using a grass cutter instead of herbicide to manage weeds, neighbouring farmers complained about the messy undergrowth.

"They said, 'You have to use *racun* (pesticide) for oil palm!' Of course, that sowed a seed of doubt, and I wondered if I was doing the right thing," he says. Yet his father's farms have been chemical-free for eight years and still reaping high yields.

"He must be doing something right," Muhammad Hariz adds. "Another piece of advice from dad: "Don't listen to those who discourage you!"
It has been four years since he last applied herbicide on his farm.

Initiated by Wild Asia in 2019, WAGS BIO is a production system designed to help conventional oil palm farmers switch to regenerative agriculture practices.

Connecting the Dots
The WAGS BIO training proved to be a game-changer for Muhammad Hariz.

Regenerative farming helps restore and regenerate soil health by restoring its carbon content and improving plant health, productivity, and resistance to pests and diseases. Through hands-on BIO workshops, Muhammad Hariz learned to make compost, fruit enzymes, and fish fertiliser to create microbe-rich soil. He also uncovered the benefits of intercropping and integrated pest management to improve soil and farm biodiversity.

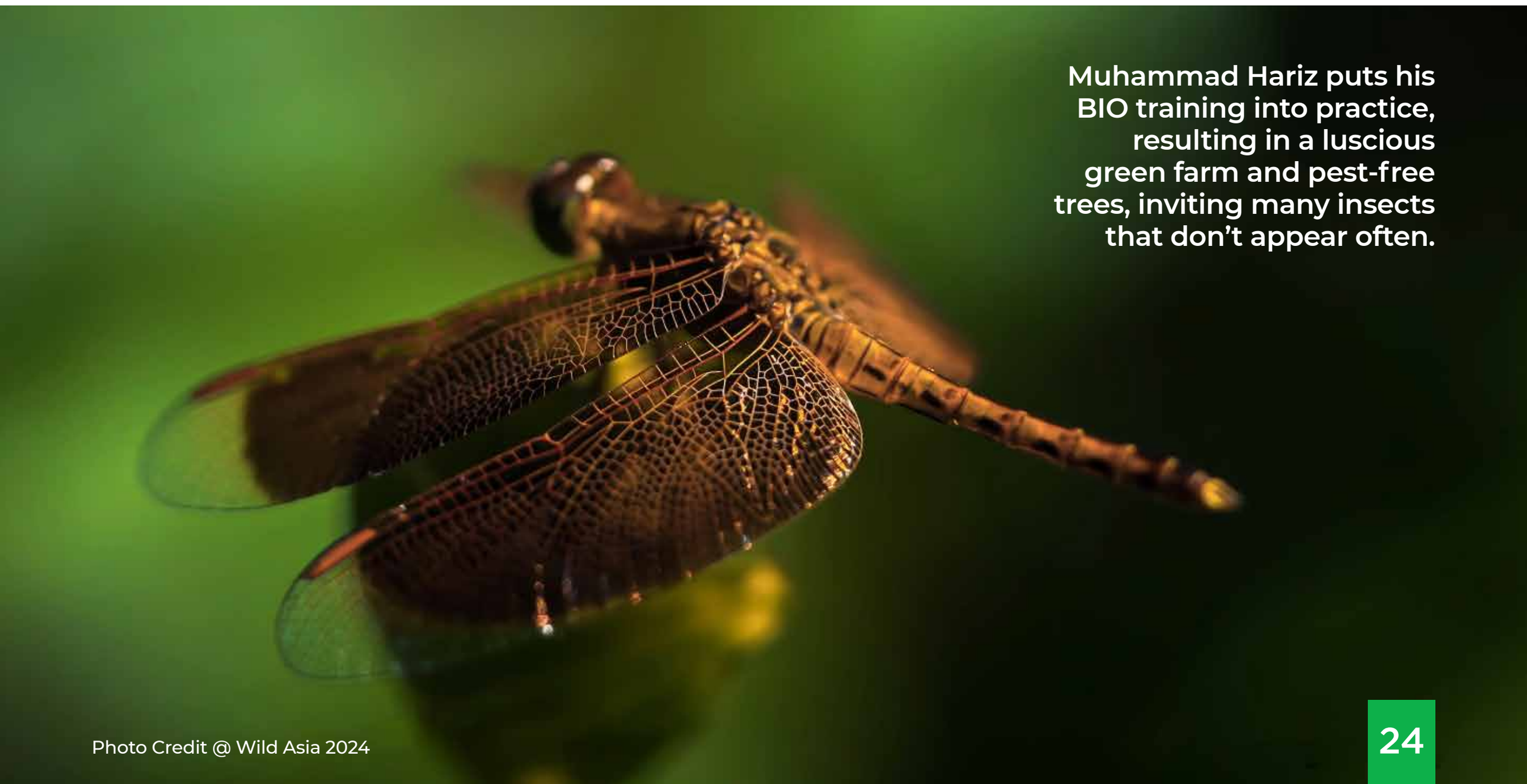
He has used BIO juice and fish hydrolysate (liquid enzyme fertilisers) on his farm for three years and progressively reduced synthetic fertiliser applications.

Today, his yields have grown by 30%, his trees are disease- and pest-free with healthy green fronds, and more insects are buzzing around his farm, indicating a healthy ecosystem.

“We spotted a giant shield bug *(Pycanum sp.)* recently. My dad says this bug has not been seen in this village for 50 years,” says Muhammad Hariz proudly.

Psyched by the tangible results, he ran an informal BIO juice workshop for farming friends in 2023. Four of the 10 farmers who showed up for the workshop still apply what they learned to their farming operations. One 32-year-old farmer commercially grew bananas, pineapples, and *sengkuang (Pachyrhizus erosus)* and made a 180-degree switch to organic fertiliser. Not only did he reduce his farming costs, but he was fetching a premium price for his chemical-free crops.

“Beyond yields and profits, what excites us is knowing that we have affordable, low-tech solutions to build resilience to climate change,” says Muhammad Hariz. For these young farmers, adopting regenerative farming translates to advocacy in action.



Muhammad Hariz puts his BIO training into practice, resulting in a luscious green farm and pest-free trees, inviting many insects that don’t appear often.

Photo Credit @ Wild Asia 2024

> One of many valuable tips from my dad was the importance of sourcing high-quality palm seedlings from a trusted supplier."

Leading the New Generation of Farmers

Today, Muhammad Hariz's income averages RM4,000 a month, including wages from working on his dad's farms. He invested in a powerful mist blower to spread liquid fertiliser and an electric harvester to increase his work efficiency.

"Sometimes I wonder when I will be as good as my dad," he says, chuckling. "But he's happy if I emulate just 50% of his practices." More importantly, he knows his father always has his back.

To his peers, however, Muhammad Hariz is their role model and ring leader. Heading the young farmers' group allows him to share ideas and practices with other farmers. Of the 90 members, 40 are oil palm farmers, including part-timers. The group meets monthly to brainstorm ideas and organise talks, workshops, and study tours to farms and factories. Topping their agenda are land, subsidy and market access, high equipment costs, and training opportunities to hone a range of skill sets.

"We're rallying for more support and incentives for young farmers," says Muhammad Hariz. "There is still so much to learn, like harnessing technology to improve farming, for example."

Though many young people are keen to take up farming full-time, they are wary about the economic viability and uncertainties.

"Farming is a way to be economically empowered so young people won't be exploited," says the bachelor who enjoys hobbies like badminton, football and mountain biking. He is also recruiting members to form a youth club that champions sustainable farming.

> **Beyond yields and profits, what excites us is knowing that we have affordable, low-tech solutions to build resilience to climate change."**

So far, he has 15 sign-ups, including a police officer and a doctor, but he needs a minimum of 25 members to register the club. As if he does not have enough on his plate, Muhammad Hariz is starting an aqua farming venture. "Diversifying my income is another way to be resilient to swings in oil palm prices," he explains.

But come February 2025, he is headed for another big adventure. He has been accepted into a part-time degree programme in business management at Universiti Malaysia Pahang (UMS). The onsite classes will only be held on weekends. Therefore, he can continue managing his farm.

"It's time to step up my business knowledge and work towards my dream to become a farmer-entrepreneur," he says.

Slowly but surely, he is stepping out of his father's shadow.

In Malaysia, 5.65 million hectares of land have been cultivated with oil palm (MPOB 2023). Independent smallholder farms like Muhammad Hariz Mat Jailani (40.46ha of land or less) account for 14.5% (0.82Mha) of this planted area. As of 2023, there are 214,680 independent smallholders in Malaysia.

MPOC

wild asia
www.wildasia.org

Malaysian Sustainable Farmer Chronicles is a collaboration between Wild Asia and MPOC that shares the innovations and best practices of MSPO-certified smallholder farmers in Malaysia.

WATCH THE VIDEOS HERE

FREQUENTLY ASKED QUESTIONS (FAQ)

Your go-to guide for understanding the palm oil industry and gaining insights into nutrition and health, sustainability, environmental impact, and industry practices.

QUESTION:

Does substituting palm oil lower the risk of heart disease?

No single dietary component will reduce all risks associated with heart disease. Cardiovascular disease risk is influenced by factors such as overall lifestyles, dietary habits, nutritional status, and genetics/epigenetics. Studies conducted in the 1950's advanced the diet-heart hypothesis that saturated fats caused heart disease. The promotion of this hypothesis was based on weak, associational evidence. Subsequent clinical trials attempting to substantiate this hypothesis could never establish a causal link. More recent clinical evidence and re-examining the early evidence by nutrition experts have concluded that saturated fats do not affect cardiovascular disease, cardiovascular mortality, or total mortality. In this diet-heart hypothesis, palm oil was thought to have a negative impact on heart disease risk due to its saturated fatty acid content.

However, much scientific evidence has challenged this misconception. Researchers have found that palm oil, with a balanced fatty acid composition of about 50% saturated and 50% unsaturated fatty acids, has a neutral effect on blood cholesterol and heart disease risk factors. In fact, more contemporary studies suggest that its impact on blood cholesterol is similar to that of olive and canola oils when consumed in moderate amounts as part of a balanced diet.

Source:

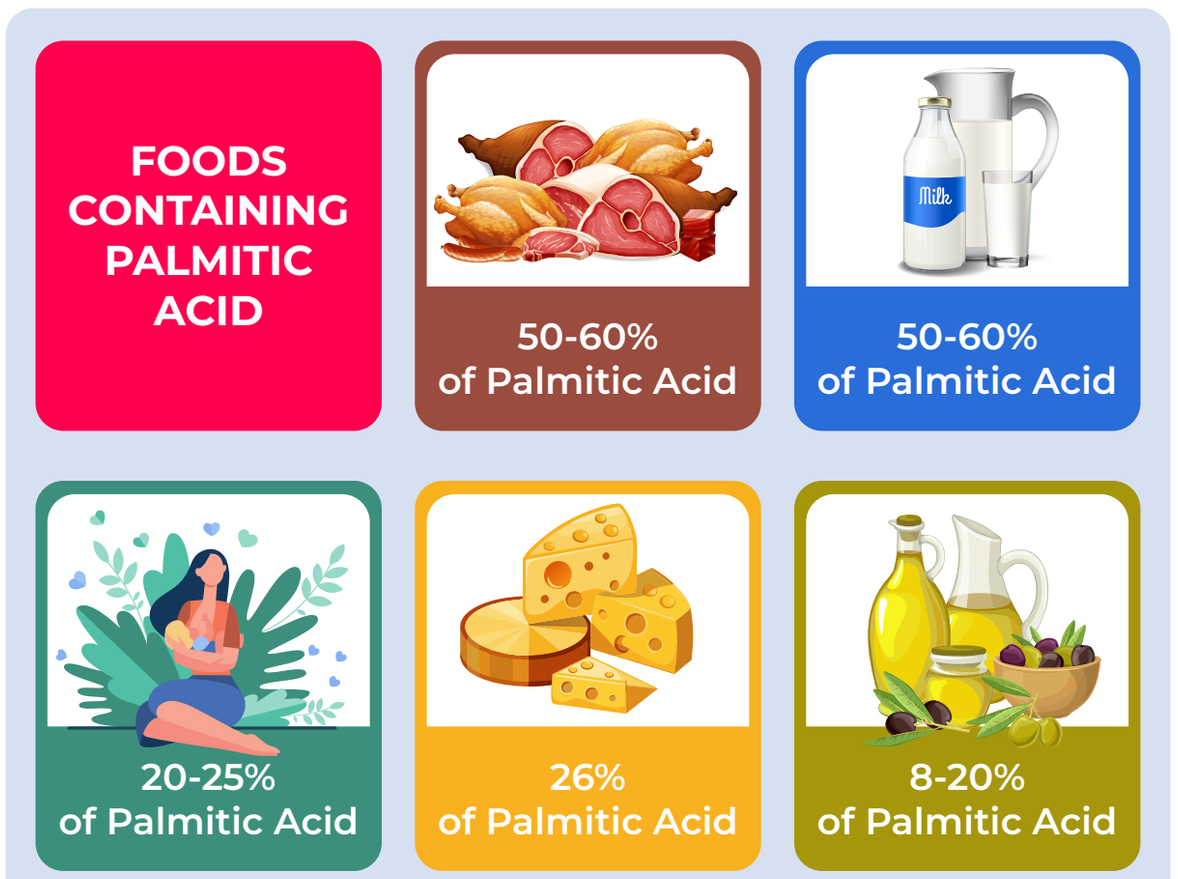
1. *Fattore, E et al. (2014). The Am J Clin Nutr. 99(6): 1331-1350.*
2. *Teicholz N. (2023). Curr Opin Endocrinol Diabetes Obes. 30(1):65-71. doi: 10.1097/MED.0000000000000791.*

QUESTION:

Is dietary palmitic acid a potential carcinogen?

There is no credible or clinical evidence that dietary palmitic acid is a potential carcinogen or prometastatic. Palmitic acid is present in all oils and fats regardless of sources. In fact, palmitic acid is the most abundant saturated fatty acid in nature, including all mammalian milk. Dietary palmitic acid represents about 2% of the palmitic acid in humans. Limited in vitro and animal studies do not reflect clinical reality, in which palmitic acid plays a vital role in human development and metabolism. Palmitic acid represents about 20-30% of total fats in cell membranes and body fat. It can be found in dairy and meat products, cocoa butter, olive oil, palm oil, and even in human breast milk (as the predominant saturated fatty acid). The trajectory and progression of cancer are characterised by a huge constellation of intricate mechanisms, and the vast majority of experimental and epidemiologic data suggest that dietary palmitic acid is not a central determinant in cancer development. If anything, there are exciting and clinically compelling data that its effects may attenuate transformation to malignancy.

Source: Carta, G et al. (2015). PLoS ONE, 10:e0120404



The key to good health is moderation. Palm oil consumed within the recommended level and in a balanced diet is beneficial for overall health and does not promote cancer.

MPOC's Participation at the IUFoST World Congress 2024

MPOC supported a pivotal session at the 22nd IUFoST World Congress at the Palacongressi di Rimini, Italy. This session brought together international experts to delve into the complex relationship between dietary fats, human health, and sustainability, with a focus on palm oil. The discourse underscored the need to re-examine the generalisations surrounding saturated fats, particularly those in palm oil. It highlighted the sustainable practices in palm oil production that address environmental concerns and food security.

Reassessing Saturated Fats and Their Impact on Health

Prof. Francesco Visioli, a pharmacologist and professor in human nutrition from the University of Padova, presented a sophisticated perspective on saturated fats, often misunderstood in public health discourse. Salient points outlined in his presentation comprise:

- The effects of dietary saturated fats on cardiovascular health vary based on their sources and the fatty acid profile of those sources.
- Scientific evidence, including data from the Global Burden of Disease Study, highlights that lifestyle, dietary habits, and fat-processing methods are key factors in health outcomes.
- Emphasised the need for precision nutrition, tailoring dietary advice to individual responses to fats instead of general warnings.

Challenging Misconceptions about Palmitic Acid in Palm Oil

Dr Peter Pressman, an expert in the biomedical field from the University of Maine, addressed misconceptions about palmitic acid – a fatty acid in palm oil and the human body. His comprehensive review includes the following:

- Dismissed claims linking palm oil's palmitic acid to cancer, noting that such assertions lack credible scientific evidence.
- Highlighted that palmitic acid is prevalent in palm oil and constitutes a significant portion of human milk and infant fat stores.
- Emphasised the need for more rigorous research on human health to enhance our understanding of palmitic acid's role rather than relying on oversimplified or unrealistic experimental models.
- There is no credible clinical evidence linking dietary palm oil or palmitic acid consumption in humans with the development of cancer or making it more likely for cancer to spread in those with established disease.

Promoting Sustainability and Food Security through Palm Oil

Highlighting Malaysia's commitment to sustainability, Dr David Ross Appleton, Chief Research and Development Officer of SD Guthrie Berhad, one of Malaysia's leading palm oil producers, elaborated on the critical role of palm oil in sustainability and global food security:

- Shifting to less efficient vegetable oils may worsen environmental issues like deforestation and biodiversity loss due to higher land use.
- Emphasised SD Guthrie's net-zero emissions goal by 2050 and commitment to circular economy practices.
- Emphasised the initiatives to improve worker conditions through ethical recruitment and transparent wages.
- Focused on enhancing food safety and quality with autonomous harvesting systems and advanced processing techniques to reduce contaminants.

WATCH THE VIDEO HERE:

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