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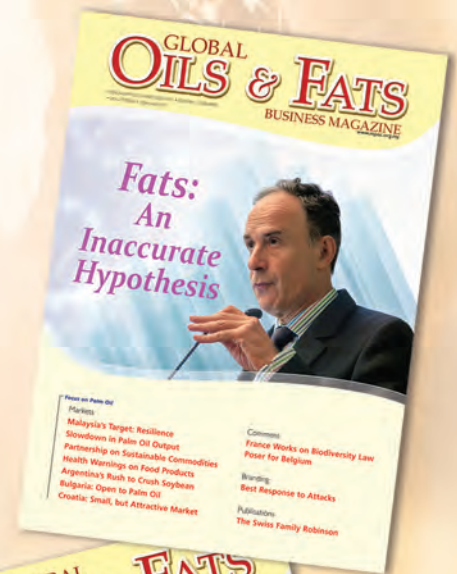
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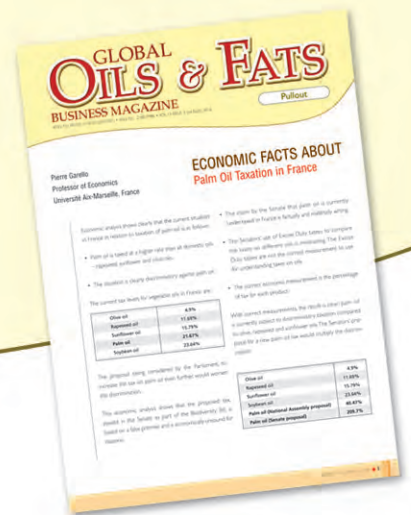


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Editor-in-chief

Dr Yusof Basiron

Editor

Belvinder Sron

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For advertising information, contact:

Razita Abd. Razak
 Global Oils & Fats Business Magazine
 Malaysian Palm Oil Council
 Tel: 603-78064097
 Fax: 603-78062272
 e-mail: razita@mpoc.org.my

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France must end bid to tax palm oil

In January this year, the French Senate proposed a new tax on palm oil and soon gained the support of some Ministers. In July, though, the government withdrew the proposal.

This was not the first act in this particular drama: such a tax had been proposed – dubbed the ‘Nutella Tax’ – in 2012, before being dropped. In the upcoming autumn parliamentary session, Deputy Environment Minister Barbara Pompili has pledged to launch yet another attempt. The aim is essentially to tax palm oil out of existence.

Malaysia is a major producer of palm oil. The continuous attempts by some French politicians to actively harm one of Malaysia’s signature exports can only be read one way: as a negative and disrespectful approach to the France-Malaysia relationship.



This is highly regrettable because relations between the two countries should be on an upward curve. Bilateral trade is certainly growing: French exports to Malaysia are worth well over 2 billion Euros annually, while Malaysian exports to France account for about 1 billion Euros.

These figures spell out clearly how trade with Malaysia benefits French companies and workers. Value comes not only in the many French companies who successfully export to Malaysia, but from imports as well. A recent study by the Europe Economics consultancy showed that French palm oil imports support over 5,000 jobs and contribute 443 million Euros to the economy.

The fact that France benefits handsomely from palm oil imports speaks to a wider truth: trade is not a zero-sum game, but rather a two-way street where everyone benefits as long as they commit to fair and equitable treatment, and respect the rules.

A positive trade relationship cannot work if there is good faith on one side – Malaysia and other palm oil producers buying electronics, aircraft, defence equipment, luxury foods and other French goods – but bad faith on the other side, when a major export is unfairly targeted for tax or some capricious regulation. It is no secret that Malaysia opposes a palm oil tax – in any form – by France.

Unilateral decisions will be resisted

Yet, the French government is moving again to introduce a ‘differential tax’ on palm oil. How would this work? First, politicians will unilaterally decide the definition of the ‘sustainability’ of palm oil. Second, all palm oil producers left

outside that definition would face a tax rise. This is a back-door effort by a minority of radical activists to impose a tax on palm oil.

The earlier parliamentary debate on the palm oil tax indicates that there are many politicians who see this as a way to protect French industry, not the environment. This is illustrated by the fact that environmental arguments against palm oil are misplaced and weak.



Malaysia currently protects over 67% of its land area as forest, and is recognised as a global leader in this respect by the United Nations. France, on the other hand, protects a paltry 31% of forest.

True progress in sustainability comes about not through unilateral taxes or punitive restrictions, but rather through leadership and the pursuit of excellence in producer countries.

Definitions of Malaysian palm oil's sustainability should not be decided in the backrooms of the French Parliament. Any such decision must fully include producer countries, and include the recognition of the Malaysian government's own sustainability work, such as the Malaysian Sustainable Palm Oil standard.

Let's be clear: this tax will not be accepted by palm oil producers and we will actively oppose any nefarious effort to impose it upon us.

Trade is bilateral, not unilateral, in concept. The European Union has made no secret of its need to grow its trade relationships in the ASEAN region. This would have positive benefits for many in both France and Malaysia.

However, French politicians must beware. Proposing new taxes or barriers to palm oil – one of the region's largest exports – is not the way to propagate a successful trade relationship.

Instead of spending time and energy on negative, harmful processes such as a differential tax on palm oil, we should focus instead on how to make both Malaysia and France more prosperous and successful by expanding trade and cooperation.

French Parliamentarians and Ministers have a choice: build on the growing France-Malaysia relationship; or continue to undermine it with yet another unwise palm oil tax plan. I fervently hope they will choose the former.

Dr Yusof Basiron
CEO, MPOC



Priorities for Malaysian Palm Oil

New hand at the helm

Malaysian Plantation Industries and Commodities Minister, the Hon. Datuk Seri Mah Siew Keong is a veteran of politics. He hails from Perak, one of the top three palm oil-producing states in Peninsular Malaysia and an area with a long history of commodity development. He grew up in his constituency, Teluk Intan, seeing at first-hand the positive impact of palm oil on the livelihood of smallholders.

He was appointed to his current portfolio in June. In an interview, he speaks on a range of issues that involve Malaysia's palm oil industry.

Could you tell our international readers about your political career?

I first entered Parliament in 1999. From 2004-2006, I held the post of Deputy Trade Minister, after which I was the Minister for Agriculture and Agro-based Industry for two years. I left Parliament in 2009. Between 2010 and 2013, I was Chairman of the Malaysian External Trade Development Corporation.

In 2014, I returned to Parliament and was appointed Minister in the Prime Minister's Department, before becoming the Minister for Plantation Industries and Commodities. So I have experience across the portfolios of both trade and agriculture.



What are your priorities for development of the palm oil industry?

Malaysia will mark its centennial of oil palm planting next year. I want to see to it that the industry expands and becomes more competitive globally, while keeping the empowerment of smallholders at its heart.

To do this, we must first counter unjustified negative and discriminatory perceptions of palm oil in European countries. Efforts must be sustained to engage with these countries, and to reinforce the many beneficial attributes of palm oil. We have to defeat anti-palm oil campaigns to ensure continued market access and to maintain our market share.

Secondly, we will have to move toward new downstream activities for further addition of value. With home-grown natural resources at hand, it will be more

cost-competitive to add value to downstream products. Higher demand for palm oil will ultimately deliver more revenue to the country and income to smallholders.

I am confident that these approaches, coupled with relevant incentives, will go a long way towards empowering smallholders and contributing to the economic growth of the country.

How important is the palm oil industry to the Malaysian economy?

The industry's significance cannot be overstated. It contributes around 8% of the national GDP and more than one-third of agricultural GDP. Palm oil exports are worth RM63.2 billion – or 8.1% of all exports.

Over one-third of the oil palm acreage is planted by more than 300,000 farmers and their families. In total,

more than 1 million people are dependent upon smallholder farming. This is an enormous contribution to the well-being and success of these families, their communities, and the nation as a whole.

Over the years, the industry has helped bring down the poverty rate from 50% after Independence to less than 5% today. Some 40% of Malaysia's oil palm acreage now belongs to small farmers. This is proof that palm oil is truly a commodity that distributes wealth throughout the population, while bringing about social and economic benefits especially in rural areas.

The benefits for Malaysia are clear. Are there advantages from the palm oil trade for importing countries?

There are positive economic impacts for countries choosing to import palm

oil. In China, for example, palm oil imports are associated with over 900,000 jobs and up to 59 billion Yuan in GDP benefits. In the European Union, downstream palm oil industries contribute up to 117,000 jobs and up to US\$2.9 billion in tax revenue.

These figures, calculated by the London-based consultancy Europe

What are your views on the current debate on the environment, in relation to palm oil production?

Let me first state that Malaysia is a world leader in environmental protection: our commitment to preserve 50% of the country's land area under forest has been recognised by the United Nations. We have also adopted Good Agricultural

growth are not mutually exclusive: Malaysia has demonstrated this with the oil palm sector.

The global market is large enough for all edible oils to compete in, but the question we need to ask is: are we able to fulfill growing demand as the world population increases? This demand is easily met by the oil palm, as it is the highest yielding oil crop. It produces 4.2



“Let me first state that Malaysia is a world-leader in environmental protection: our commitment to preserve 50 per cent of land as forest area has been recognized by the United Nations.”

Economics, show how important palm oil is as a global commodity. It is a competitive, low-cost vegetable oil that can be used in food and manufacturing, as evident in the major markets of China and India. This is a win-win situation for both producer countries such as Malaysia and for importing countries.

Practices, such as the zero-burning policy in clearing stands of old oil palm trees.

Moving forward, the Malaysian palm oil industry is giving greater attention to research in order to increase productivity and the oil extraction rate, rather than rely on expanding the planted acreage. Environmental protection and economic

tonnes of oil per hectare in contrast to 0.42 tonnes and 0.36 tonnes per hectare from sunflower and soybean respectively.

Furthermore, the oil palm is a perennial crop. It therefore provides a sustainable and steady supply of palm oil. As the world population increases, the superior productivity of the oil palm is the

solution to issues like the scarcity of land and food insecurity. In addition, palm oil has a unique composition of texture, efficiency and nutrition, which has made it popular with companies and consumers across the globe.

Are there opportunities to expand recognition of the Malaysian Sustainable Palm Oil (MSPO) standard and similar national schemes?

Yes, certainly. The MSPO standard was launched last year. It is based on Malaysia's Good Agricultural Practices for oil palm, as well as domestic laws and regulations, and our international obligations. The Indonesian Sustainable Palm Oil standard was developed by our counterparts in Indonesia. There is potential for recognition of these standards through the ASEAN mechanism.

On a recent visit to Europe, I discussed the MSPO with Members of Parliament and Ministers in different countries. The benefits of the MSPO are of great interest to many of our partners in Europe. It will require a concerted international effort to achieve recognition, but the palm oil industry will gain from this.

Regional cooperation appears to be moving forward with the establishment of the Council of Palm Oil Producing Countries (CPOPC). Where is this headed?

We are working closely with Indonesia on the major areas of operations. This is an important step forward for industry



cooperation, since Indonesia and Malaysia are the two largest palm oil producers. We are confident that the CPOPC will be an effective organisation that will communicate the benefits of palm oil globally. For example, a coordinated approach to trade policy can help producer countries to fight discrimination against palm oil.

You have spoken in favour of the Trans-Pacific Partnership Agreement (TPPA). What are the potential opportunities for palm oil from this and other trade agreements?

The TPPA – once it enters into force – will be beneficial to both Malaysia and this region, and not just for palm oil. Other opportunities will emerge from the Malaysia-EU free trade agreement, on which negotiations are resuming. We can work toward increasing opportunities for palm oil, whether through lower tariffs, pulling back non-tariff barriers or obtaining recognition of the MSPO.

Is there still a danger of France implementing a new tax on palm oil?

Yes. One tax proposal was defeated in July, thanks to strong opposition from producer countries and others. But on a visit to France recently, it was clear to me that the danger of a new tax exists. It is important that Malaysia takes a firm stance on this matter: any tax increase, in any form, is unacceptable.

France has formed a commission to review the sustainability of palm oil. Malaysia will oppose any attempt to set arbitrary sustainability criteria. We must stand ready to respond should countries impose discriminatory taxes or criteria against palm oil, as it is our key export.

In which regions do you see improved prospects for marketing palm oil?

China and India are still incredibly large export markets. The vegetable oil market in both countries remains fiercely competitive, particularly in China where there is often substitution with other oils. I do, however, think we have the opportunity to generate stronger investment and export ties with both countries when it comes to palm oil.

Africa is the other region of interest. Its countries are becoming increasingly urbanised and vegetable oil demand is rising. There are encouraging prospects for exports, as well as investment in palm oil. We have the experience and know-how to make these opportunities work.

MPOC



‘France May Revisit Palm Oil Tax Proposal’

Economist urges vigilance



Pierre Garelo

Pierre Garelo is a Professor of Economics at Université Aix-Marseille in France. During the nation's parliamentary debate on the Biodiversity Bill earlier this year, he presented a study – ‘Economic Facts about Palm Oil Taxation in France’ – outlining why the proposed new tax is ‘factually and materially wrong’.

While the proposal has since been dropped, this may not be the end of the matter, as he explains in an interview.

French Senators put forward in early 2016 a proposal for an additional tax on palm oil. As an economist, what is your reaction to a plan to increase taxes on a food ingredient such as palm oil?


As a matter of principle I am sceptical of the new trend – in France and elsewhere – that consists of using taxation

to change citizens' behaviour. There are many reasons for this.

Firstly, economists have traditionally pushed in the opposite direction, namely, they usually advise governments to look for the most 'neutral tax' – the tax that changes decisions by private economic actors as little as possible. This traditional position comes from the fact that it is impossible to predict with a reasonable degree of accuracy the social outcome of specific taxes such as food taxes.

should decide on complex scientific issues. In my opinion, our MPs do not have the required competencies. If, on the contrary, they say that each citizen must pay x Euros to finance public goods, there is no need to enter into a tricky and muddled debate.

Finally, even if this is not directly linked to economics, I see some danger in using taxes (and therefore coercion) to bring individuals' behaviour towards what a majority of citizens would judge to be 'proper behaviour'. This is not my understanding of a democracy.



“The plan to tax palm oil is still underway in Paris, and will come back in a different form. Unfortunately, the same lack of proper economic and scientific understanding may also be present.”

Consumers and producers can decide to pay a higher price for the same product (so the behaviour remains unchanged, but they buy less of other things), or to switch to another lower-taxed item, which can be even worse in terms of food habits and also mean no tax receipts.

Secondly, such taxes rely on 'scientific' assumptions such as 'palm oil is bad for the environment' or 'margarine is not as good as butter'. This is problematic because the Parliament is transformed into some sort of an academy of sciences that

As the debate progressed on the tax proposal, you provided a report on 'Economic Facts about Palm Oil Taxation in France'. Could you explain your findings and methodology?

The proposed amendment would have created an additional contribution for palm oil set at 30 Euros per tonne in 2017, 50 Euros in 2018, 70 Euros in 2019 and 90 Euros in 2020. This rate would have then increased on Jan 1 each year starting in 2021, depending on the projected evolution of consumer prices. The

tax was to be applied to palm oil only and not competing oils. This proposal was backed with various arguments that were dubious or plainly wrong.

My report focuses on the Parliamentarians' claim regarding the 'tax advantage' that the present regulation would be giving to palm oil. According to them, palm oil would currently benefit from a favourable tax treatment more than almost any other vegetable oil. This statement is plainly wrong. The mistake (whether or not it is a voluntary one is an open question) comes from the fact that the Senators use so-called 'Excise Duty tables' to compare the taxes on different oils.

Now, excise duties are traditionally given in *Euros per tonne* and if you look at those tables you note indeed that olive oil is taxed twice more heavily than rapeseed and almost twice as much as palm oil. But do those comparisons have any economic meaning? The answer is a resounding 'No'. From an economic point of view, what makes sense is not the *duties paid per tonne of vegetable oil* but the relative weight of taxation in the market price of those oils.

When you buy a Ferrari, you don't inquire about the tax per tonne; what is economically meaningful is the sales tax (or VAT). What would appear unfair to many would *precisely* be to tax all

cars according to *their weight*, since the owner of a Ferrari would in that case pay probably less tax than the owner of a poor-quality car.

So what I did in the report was simply to translate the 'Excise Duty table' where taxes are given in Euros per tonne into the equivalent *ad valorem* rates that have a clear economic meaning. And the results were completely at the opposite end of what the Senators claimed: Palm oil is already taxed much more heavily than most of its competitors.

Let me be more precise. Because the market price of olive oil is extremely high (3,852 Euros per tonne) an excise duty of 189 Euros per tonne means that the economic rate at which olive oil is taxed is as low as 4.9%. Let us compare this with palm oil. The excise duty on palm oil is at 103 Euros per tonne but the market price for one tonne of palm oil is 478 Euros (December 2015). So, the economic rate at which palm oil is taxed is 23.64% – between four and five times more than olive oil!

So, where is the unfair tax advantage given to palm oil by French law? There is clearly no such advantage and if the amendment had been voted into law, the situation would have been worse with palm oil taxed up to 209.7% by 2020.





“The economic rate at which palm oil is taxed is 23.64% – between four and five times more than olive oil! So, where is the unfair tax advantage given to palm oil by French law?”

What is your opinion of the arguments put forward by ‘Green’ Senators to justify an additional tax on palm oil?

My report leaves largely aside the questions of the impact of the palm oil industry on the environment and of palm oil consumption on health. Having worked some years ago on similar issues, I am, however, very sceptical about many claims put forward by the Senators on those questions.

What is remarkable anyway in this story is that their claim – that ‘palm oil’s competitive advantage is based only on the fact that the cost of health and environmental damage it causes is outsourced and supported by the community’ – is backed by absolutely no reference to any study or research.

We (or at least the Parliamentarians who have to vote on the amendment) are asked to take the claim as an obvious truth; as something beyond any doubt. Hence, potentially, an industry – palm oil – would be destroyed or at least badly damaged without the authors of the amendment and Parliamentarians in general providing any solid justification for their decision.

As I have said, don’t ask Parliamentarians to replace the academy of sciences, otherwise you will face trouble! A serious

argumentation would, for instance, tell us – or at least try to evaluate – what would replace palm oil if its production were to fall; where [the substitute] would be produced, how much land would be required, etc. But none of that has been offered.

After many months of intense debate, the proposal for the new palm oil tax was withdrawn by the French government. Do you agree with this decision?

Yes, I think it was a wise decision.

I also remember that during some of the discussions they were somewhat refining their approach by starting to distinguish between various types of culture. This was going in the right direction in the sense that it showed some awareness of the fact that it is very difficult to assess the global impact of any economic activity on the environment.



But it's important to realise that this is not the end of the discussion. The plan to tax palm oil is still underway in Paris, and will come back in a different form. Unfortunately, the same lack of proper economic and scientific understanding may also be present.

On June 23, 2016, during the National Assembly plenary debate on the Biodiversity Bill and while discussing the palm oil tax, MPs Hammadi and Louwagie informed the audience that they had finalised a report on the taxation of food products. Moreover, the French government has decided to review taxation on all vegetable oils in the next six months. How do you see this going forward?

This is what I referred to about the tax coming back in a different form. Revising vegetable oil taxation is a good idea, as long as it is fair and just. However it seems the new proposal will be discriminatory to palm oil from an economic perspective. It is very likely that the revision will have a chapter on oils that don't respond to certain sustainability criteria and which will then be subject to a tax.

But, as I have said, the question of sustainability is a complex one and it is to be feared that the outcome will be justified with weak scientific evidence that is disproportionate and discriminatory, and therefore unfair. This will lead to horrible consequences.

First, it will potentially lead to price rises of food products for human consumption. These price rises are regressive and will hurt consumers all over France. Second, such a proposal will widen the gap with domestic oils that will be favoured even more by the tax system. This is a violation of both WTO and EU rules.

Moreover, the suggested approach of the report by MPs Louwagie and Hammadi claims to be 'simplifying the system' by suppressing all taxation on vegetable oils. This will be compensated financially by raising the tax on sugary drinks and products. Vegetable oil taxation is complex and outdated; however, suppressing all vegetable oils will favour products such as olive and rapeseed oils that are currently the lower-taxed oils on the market and are not used in the production of sugary drinks.

The French government has indicated that it will set up international sustainability standards for vegetable oils and will very likely tax those that don't fit the criteria, which have yet to be defined. This will mark further regulation and protectionism of imported vegetable oils.

The industry and civil society should remain vigilant for this stubborn attempt to discriminate against palm oil. This approach could hurt everyone, from industry to consumers, and it will not necessarily be good news for the environment. This new report and the proposed revision of the vegetable oils taxation will need to be watched very closely.

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Food Labels that Mislead Consumers

EU court's decisions



What words should food and beverage manufacturers be required to place on the label of products? What should they be allowed to add on their own? EU law has been adopted to regulate such issues, so that consumers have enough information to make informed choices.

The Court of Justice of the European Union (CJEU) has handed down two judgments in which it interprets EU food labelling law – in the case of *Bundesverband der Verbraucherzentralen und Verbraucherverbände – Verbraucherzentrale Bundesverband e.V. v Teekanne GmbH & Co. KG (Teekanne)*; and *Neptune Distribution v the French Minister for Economic Affairs and Finance (Neptune)*.

These preliminary rulings show that, even where truthful statements are made on the labelling of food and beverage products, consumers may still be misled if the information – on aggregate or as a whole – implies and conveys another message.

Although the *Teekanne* and *Neptune* cases respectively deal with tea and mineral water labelling, the legal concepts can be applied

to other food products – in particular, those containing palm oil. The opinions add guidance to the concept of a misleading label, when considered in its entirety.

Teekanne fruit tea label

On June 4, 2015, the CJEU handed down a preliminary ruling following a request by the *Bundesgerichtshof* (BGH, or the German Federal Court of Justice) in the proceedings of a consumer protection association (*Verbraucherzentrale Bundesverband*) and tea manufacturer *Teekanne*.

Teekanne marketed a fruit tea called *Felix Himbeer-Vanille Abenteuer* (Felix Raspberry-Vanilla Adventure). The packaging had images of raspberries and vanilla flowers and the words 'fruit tea with natural flavourings' and 'fruit tea with natural flavourings – raspberry-vanilla taste'.

The ingredients were: 'hibiscus, apple, sweet blackberry leaves, orange peel, rosehip, natural flavouring with a taste of vanilla, lemon peel, natural flavouring with a taste of raspberry,

blackberries, strawberry, blueberry, elderberry'. However, the product did not contain natural ingredients or flavouring from vanilla or raspberry.

The consumer protection association alleged that *Teekanne* had misled consumers, who would expect the tea to contain vanilla and raspberry or, at least, natural vanilla flavouring and natural raspberry flavouring.

The BGH asked the CJEU for a preliminary ruling on whether the label may mislead consumers when it gives the impression that a particular ingredient is present – even though it is not, and the only way to be aware of this is by reading the list of ingredients.

Given the date of the facts in *Teekanne*, Directive 2000/13/EC on the approximation of the laws of EU member-states relating to the labelling, presentation and advertising of foodstuffs still applied. As such, the CJEU recognised that:

- Article 2(1)(a)(i) requires that consumers have correct, neutral and objective information. While they are assumed to read the list of ingredients, the CJEU did not exclude the possibility that the label may still mislead when items are erroneous, ambiguous, contradictory or incomprehensible.
- The CJEU reasoned that the list of ingredients, even though correct and comprehensive, may not sufficiently correct the erroneous or misleading impression gained from the label.
- Under Article 16 of Regulation No 178/2002 on the general food law, the labelling, advertising and presentation of food or feed – including their shape, appearance or packaging; the packaging materials used; the manner in which they are arranged; and the setting in which they are displayed – must not mislead consumers.

The CJEU does not rule on disputes from a factual perspective. It provides preliminary rulings on theoretical legal questions arising from national courts in EU member-states; and those courts are then responsible for ruling on the individual cases.

With its decision, the CJEU deviated from its previous jurisprudence in relation to the 'average consumer, who is reasonably well informed and reasonably observant and circumspect'. This change of direction could have far-reaching consequences for the food industry and the design of product packaging.

On Dec 2, 2015, the BGH, applying the CJEU's reasoning and criteria, found that the product labelling may mislead consumers.

Neptune mineral water label

The CJEU published another ruling on Dec 17, 2015, in the case of *Neptune*, a French distributor of bottled mineral water. This confirmed that a holistic approach must be taken when assessing whether food labelling is misleading.

Neptune sells two brands of natural sparkling mineral water. It made specific claims in relation to the type and amount of sodium contained. It also claimed the presence of sodium bicarbonate, and not table salt, in these products.

The Annex to Regulation (EC) No. 1924/2006 on nutrition and health claims made on foods expressly lists 'very low in sodium/salt' as a prohibited claim, with respect to natural mineral waters and other waters.

Article 9(2) and Annex III of Directive 2009/54/EC on the exploitation and marketing of natural mineral water state that indications that a product is low in sodium or salt, or is suitable for a low-sodium diet, may only be used when the total sodium content is less than 20mg/l.

Due to the language suggesting that its products contain low or very low levels of salt or sodium, *Neptune* was ordered to stop using the labels and other statements in its labelling or advertising of *Saint-Yorre* and *Vichy Célestins*. The company challenged the order.

The French Council of State asked the CJEU for a preliminary ruling on whether the sodium content must be calculated solely



on the basis of sodium chloride (table salt), or whether it must account for the total amount of sodium in all its forms (including sodium bicarbonate).

The CJEU recognised that:

- EU law prohibits the claim 'very low in sodium/salt' with respect to natural mineral water and other water unless the total sodium content is below 20mg/l.
- The EU legislature wants consumers to have appropriate and transparent information on the sodium content of drinking water. Since sodium is a component of various chemical compounds (like sodium chloride and sodium bicarbonate), the quantity present must take account of the total amount, whatever its chemical form.

The CJEU found that consumers might be misled where the packaging, label and advertising for natural mineral water suggest that products are low in sodium or salt, or are suitable for a low-sodium diet, when they actually contain 20mg/l or more of sodium.

Impact on palm oil products

The CJEU's reasoning reinforces the requirement that the potentially misleading nature of food labelling must be

considered in the context of the packaging as a whole, regardless of the technical truth of any specific statements.

With respect to palm oil, since Dec 13, 2014, the use of any vegetable oil in a food product must be expressly listed in the list of ingredients. This is a key factor in the analysis of what may mislead a reasonable consumer when confronted with a 'No palm oil' label, especially in relation to other food products available.

As observed in *Teekanne*, the images on packaging are also important. Where the 'No palm oil' label is used and if labelling emphasises the 'healthy' characteristics of a food, consumers may be misled into believing that palm oil consumption is 'unhealthy'. In reality, the nutritional characteristics of palm oil are comparable to other vegetable oils.

Whether it be in relation to tea, water or palm oil products, food manufacturers should not be allowed to mislead consumers. And the EU has rightly codified this protection in determining that statements on labels must be considered holistically.

FratiniVergano
European Lawyers

New Trade Moves against Palm Oil

Two more EU nations act

In the EU, efforts to limit the importation, distribution and sale of palm oil and products using palm oil have been intensifying. It appears as though domestic competitors of palm oil are attempting to convince EU member-states and government officials to implement discriminatory measures, as highlighted by action taken in Bulgaria and the Czech Republic.

On Nov 3, 2015, Bulgaria's Ministry of Agriculture and Food issued a Decree Amending and Supplementing Decree No. 9 of Sept 16, 2011 (the Decree) on specific requirements for safety and quality of foodstuffs offered in kindergartens and schools, as well as for foodstuffs offered during events organised for children and schoolchildren.

Article 21(2) of the Decree prohibits foods containing fats, except for butter derived from cow's milk; sunflower oil and olive oil; hydrogenated fats of plant origin; and fats of plant origin,

the labelling of which does not mention the type of their processing.

There is no doubt that the move will affect food products containing palm, coconut and rapeseed oils, as well as cocoa. In this respect, the relevant legal aspects must also be considered.

Bulgaria acceded to the World Trade Organisation (WTO) on Dec 1, 1996, and to the EU on Jan 1, 2007. As such, it is subject to legal obligations at the multilateral and regional levels, including various regulations prohibiting unjustified discrimination.

Violation of EU rules

The EU maintains a Technical Regulations Information System (TRIS). Under the notification procedures, member-states must submit draft technical measures so that they may be examined by the European Commission (EC) as well as other member-states.



According to the TRIS database, the EC received notification of a draft of the Decree from Bulgaria on Feb 11, 2015. It included a brief statement of grounds for the measure, in particular that '[s]ince there is a direct link between the safety and quality of foodstuffs consumed by children and their health and welfare, the safety and quality requirements of the main groups of foodstuffs need to be perfected'.

In addition, the notification states that 'the draft has no significant impact on international trade' with respect to technical barriers to trade, and that 'the draft is neither a sanitary nor phytosanitary measure'.

Substantively, the Decree arguably violates rules established in the Treaty of the Functioning of the EU on the free movement of goods, due to the lack of scientific justification for its public health objective; and thus acts as an arbitrary discrimination or disguised restriction on trade.

Inconsistency with WTO law

Bulgaria's measure also appears to be inconsistent with WTO law, including the General Agreement on Tariffs and Trade 1994 (GATT), the Agreement on Technical Barriers to Trade (TBT Agreement) and the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

It appears that the Decree provides less favourable treatment to imported oils

and fats in a discriminatory manner, which consequently protects the domestic dairy, sunflower oil and olive oil industries.

There is also no evidence that Bulgaria has gathered scientific evidence or conducted a risk assessment – as is required – regarding the exclusion of palm, coconut and rapeseed oils, and cocoa.

Start of sanctions

The Decree entered into force on Nov 3, 2015, but includes 'transitional and conclusive provisions' allowing non-conforming goods to be offered until available quantities are depleted. Any contracts between suppliers and schools concerning non-conforming food, concluded before Nov 3, 2015, have one year to be brought into conformity with the measure.

Enforcement of the Decree has begun; some food suppliers have recently been subject to sanctions for offering products with palm, coconut and rapeseed oils, and cocoa.

Bulgaria has notified the EC of the Decree, but there is no evidence that it has informed the TBT Committee or the SPS Committee, as required under WTO rules on transparency. Nor does it appear as though any WTO members have raised any relevant 'specific trade concerns' in the context of such committee meetings.

The next meetings of the SPS Committee and TBT Committee are scheduled from Oct 27-28, 2016 and Nov 10-11, 2016, respectively. Stakeholders must act quickly so that relevant 'specific trade concerns' are included in the meeting agendas and that statements can be prepared. Affected businesses in the EU may consider legal options as well.

Ambivalence in Czech Republic

The Czech Ministry of Agriculture has had to field complaints and attempts to encourage it to prohibit the sale of products containing palm oil. At a press conference on Feb 5, 2016, Agriculture Minister Marian Jurečka said the Ministry would not prohibit the sale of products containing palm oil, noting that there is no evidence regarding negative health effects.

He indirectly referenced Regulation (EU) No. 1169/2011 of the European Parliament and of the Council of Oct 25, 2011 on the provision of food information to consumers. He recognised that, as of December 2014, all products containing palm oil must be labelled as such in their lists of ingredients.

However, on March 15, 2015, a seminar on palm oil – themed 'Defend palm oil!' – had been held in the Chamber of Deputies within the Parliament. It was organised by Olga Havlová, Member of the Chamber of Deputies and Vice-President of its Committee on Agriculture.

At a press conference afterwards, Havlová stated that she intended to table a bill to prohibit the sale of products with palm oil in schools and hospitals. She cited alleged (though unsubstantiated) health risks associated with palm oil consumption.

There may be an ulterior motive, as the Czech Republic has a major dairy industry. Reports suggest that margarine containing palm oil has increasingly replaced butter in many food products.

On May 13, 2016, the Czech Republic notified the EC, using TRIS, of its 'Draft implementing decree of 2016 on requirements for foods for which advertising is permitted and which can be offered for sale and sold in schools and school facilities'. It allows 'foods that do not contain caffeine or trans-fatty acids from partially hydrogenated fats, and are not energy drinks or stimulating beverages'.

The English translation of the Draft implementing decree does not expressly single out palm oil by name. However, if it were to be adopted by the Parliament, it would likely raise the same potential inconsistencies with regional and multilateral legal obligations as the Bulgarian decree, due to the potential *de facto* discrimination against palm oil and derived products.

At the EU level, such discrimination would almost certainly violate rules on the free movement of goods. At the

multilateral level, the Czech Republic would likely be in violation of its WTO obligations, in particular with respect to the GATT, the TBT Agreement and the SPS Agreement.

Generally speaking, WTO members may not discriminate against foreign products, and technical regulations must be supported by scientific evidence and risk assessments. There is no evidence that Havlová or any government official has commissioned or conducted such studies.

In countering the moves by both countries, the palm oil industry must make it clear to government representatives at the national and EU levels that such measures will not be tolerated. In this, the rules of the EU and the WTO are on the industry's side.

FratiniVergano
European Lawyers



Indian Edible Oil Imports ‘Excessive’?

Claim laid bare



Indian trade and industry bodies such as the Solvent Extractors Association (SEA) and Soybean Processors Association (SOPA) have shed copious tears for domestic oilseed growers and made shrill noises against the ‘excessive’ import of edible oils.

The associations have from time to time demanded that the government should immediately hike the Customs duty on imported oils (read: palm oil) rather steeply, or create a larger differential between refined and unrefined oils so as to ‘save’ oilseed farmers. How valid are these recommendations and is there justification for the associations to say what they are saying?

Before examining the merits of the patently self-serving recommendations, let us look at some background data.

India’s oil year runs from November of one year to October of the following year.

We are now talking about oil year 2015-16. Vegetable oil imports in July 2016 (the latest available at the time of writing) were recorded at 1.12 million tonnes. In the last nine months – November 2015 to July 2016 – imported oil arrivals were 10.8 million tonnes, marginally up from 10.2 million tonnes during the corresponding period in the previous year.

Projected imports for the entire oil year 2015-16 are about 13 million tonnes, valued at about Rs 60,000 crores (about US\$9.3 billion). This will be less than the aggregate imports for oil year 2014-15 at 14.4 million tonnes, valued at approximately Rs 65,000 crores (US\$10 billion). In 2013-14, the import volume

aggregated 11.8 million tonnes. The numbers are really big.

Without doubt, palm oil dominates India’s import basket, and why not? It is most economically priced and well accepted by consumers. Additionally, origin to destination transit time is short.

Over the last several months, in unison, the SEA and SOPA and possibly many others have alleged that India is being used as a dumping ground for unloading the excess supplies in the world market.

‘This has put tremendous pressure on local prices’, they complain, as well as assert that current prices are at levels where Indian farmers are in distress and losing interest in the oilseed crop. This is far from true as evidenced by the following data.



“As at Aug 26, Kharif oilseed planting for the 2016-17 season was 17.8 million ha, higher compared to 17.4 million ha last year and the previous year’s acreage of 17.2 million ha.”

Numbers don't lie

As at Aug 26, Kharif oilseed planting for the 2016-17 season was 17.8 million ha, higher compared to 17.4 million ha last year and the previous year's acreage of 17.2 million ha. Are growers losing interest in oilseeds? Far from true; the numbers do not lie.

Look at another set of numbers. Vegetable oil stocks at port and in pipeline are currently estimated to total over 1.6 million tonnes. According to the SEA, India's monthly requirement of edible oil is 1.6 million tonnes which translates to total annual consumption demand of 19.2 million tonnes.

How the demand estimate is derived is anybody's guess. The apex body, the Central Organisation for Oil Industry and

Trade, has estimated domestic production in 2015-16 at 7.2 million tonnes, unchanged from the previous year:

In the light of the data, I find the representations for a steep hike in duty or for creating wider duty differential between unrefined and refined oils as somewhat amusing and a joke on consumers.

It is unclear what constitutes 'excessive' imports. One is not sure if the trade bodies have any benchmark for 'normal' and 'excessive' imports. Is there a cut-off point to decide if the import volume is normal? As public bodies, the associations owe us an explanation.

Again, there is nothing new in the demand of the trade bodies that seeks a

hike in Customs duty on imports. They have been routinely complaining about excessive imports for many years; but who cares?

The associations want the government to raise import duty; and policy makers have, by and large, remained unmoved. It is possible that the government's priorities are not in sync with trade demands; alternatively it may be that the trade has not been able to convince or make out a strong-enough justifiable case for a duty hike.

Absence of self-regulation

But I want to come from another angle. Why do these large national-level bodies (some proclaim themselves as premier associations) that claim to enjoy clout in the corridors of power (the claim is highly

suspect, though) want the government to do everything or solve every problem of the trade and industry, including the so-called excessive imports? What have these bodies done to put their own house in order or 'discipline' their members?

Come to think of it, all vegetable oil importers – certainly the big boys and everyone knows who they are – are members of these associations. What has prevented the associations and their enlightened leadership from talking to these big boys and directing them to reduce imports 'in order to save the Indian oilseed farmer'? One is not sure if the leadership of these trade bodies has thought of this step or even has the courage to propose such a move.

Indeed, I have reason to believe, senior officials in New Delhi pose the same question to the delegations of these associations seeking a duty hike. 'What have you done as a trade association to reduce/regulate import or discipline your members?'

Clearly, in the concerned ministries in New Delhi, no important functionary is ready to take representations for a duty hike seriously. Sure, the officials will be polite to delegations that visit; but the outcome is something all of us know well.

Avoidable trade practices

The tragedy is this: it stands to reason to believe that India is becoming a dumping ground for palm oil. A part of our imports is merely stock transfer from origin to destination; and we have in this country a few accomplices to play along with overseas suppliers.

Importantly, there is a massive amount of stock building in the country in anticipation of a duty hike, in the hope that policy makers will at some stage succumb to pressure brought on by the trade bodies. If the duty is hiked, it is these speculative interests who will win and reap windfall gains. It is possible that the associations are being guided from behind by these speculative interests.

Importantly again, one does not hear noises against undesirable and wholly avoidable trade practices. Take for instance, the long credit period importers enjoy. The period of 90-150 days is exploited to the hilt to create an unending chain of imports and payments.

Many of the importers here are actually falling into an 'import debt trap'. Hypothetically, if edible oil imports on credit are stopped today, most importers will face a deep payment crisis; some may go bust.

Last but not the least, it is sad that trade bodies try to extract favours from the government by talking about farmers or using their name. Farmers know to look after themselves and policy makers know how to look after the farmers.

Trade associations must ask themselves what they have done for farmers' welfare or whether they have done enough.

G Chandrashekar
Global Agribusiness and Commodity
Sector Specialist
India



Sarawak Model of Co-existence

Orang utan and oil palm



The iconic *orang utan* is a protected species in Malaysia, found only in the states of Sarawak and Sabah on the island of Borneo. In Sarawak, the known *orang utan* habitats are located in two main areas.

At the Batang Ai National Park and Lanjak Entimau Wildlife Sanctuary, their numbers are estimated to be around 1,600; they roam freely in these contiguous protected areas. The other areas – where the population is smaller – are the Ulu Sebuyau National Park and Sedilu National Park.

The *orang utan* habitats in all four locations have been designated as Totally Protected Areas (TPAs). Put another way, all the known habitats in Sarawak are under the protection of state laws. This is demonstrated, for example, in procedures for access to TPAs.

To enter a national park, one requires a permit from the Controller of National Parks and Nature Reserves; to enter a wildlife sanctuary, one requires a permit from the Controller of Wildlife. To conduct research in a TPA, one must

obtain a research permit from the State Secretary; only then will the respective Controllers issue a permit.

In the global context, Malaysia is a signatory to multiple multilateral treaties on environmental protection – from the Rio 1992 Earth Summit to the Conference of Parties on climate change in 2015. Malaysia continues to uphold its 1992 pledge to preserve 50% of its land as forest. This commitment has been recognised by the United Nations and the World Bank, among others.

Between 2010 and 2015, Malaysia's forest area rose by an annual average of 14,000ha. In other words, its forest area is increasing, not decreasing.



It also illustrates that Malaysia is among world leaders in forest protection. The UN Food and Agriculture Organisation's report – 'Global Forest Resources Assessment 2015' – measured Malaysia's forest area as 22,195,100 ha or 67.6% of the land area.

This decreased only slightly over the past 25 years, and at a rate of decrease that is lower than that of developed countries like Australia or Canada. Between 2010 and 2015, Malaysia's forest area rose by an annual average of 14,000 ha. In other

words, its forest area is increasing, not decreasing.

Conservation projects

For a holistic approach to management and protection of *orang utan* habitats, the Sarawak government collaborated with the Wildlife Conservation Society (WCS) in 2015 to draw up a 'Strategic Action Plan'. Among other measures, this will extend the Batang Ai National Park boundary to the area around Ulu Sungai Menyang, where surveys estimate the presence of 200 *orang utan*.

The pledge to conserve the animal and its habitats was reinforced by Chief Minister Datuk Patinggi Tan Sri Adenan Satem at the 'For Animals Conference' held in Kuching in December 2015. This added to earlier initiatives that year:

- In July, at the Great Apes Survival Partnership meeting in Kota Kinabalu, Sabah, he indicated that Sarawak would embark on an *orang utan*-led environment and biodiversity policy.

Malaysian law is very clear when it comes to oil palm cultivation. Permits are only issued for cultivation in logged-over areas or areas planted with other crops.



SARAWAK



FORESTRY

- In August, he launched the Research for Intensified Management of Bio-rich Areas of Sarawak project. One objective is to provide a platform for international collaborative research in developing intensive, practical conservation management procedures for bio-rich areas. These will include conservation of the *orang utan*.

In addition, the Sarawak Forestry Corporation set up a Centre of Excellence for *Orang Utan* Conservation at the Batang Ai National Park in 2015. Data and findings from research will be used to draw up a comprehensive management plan.

Sarawak's stance on conservation of the *orang utan* has won praise from WCS Director of Malaysia Programme Dr Melvin Gumal. He told *The Borneo Post* (Aug 7, 2015) that he is not aware of any other jurisdiction that has set this kind of focus.

Oil palm in the mix

Malaysian law is very clear when it comes to oil palm cultivation. Permits are only issued for cultivation in logged-over areas or areas planted with other crops – or, in the case of Sarawak, on land to which Native Customary Rights (NCR) are exerted, in joint ventures with landowners.

The state government therefore ensures that virgin jungles are not cleared for oil palm cultivation and that the TPAs are not affected. The current oil palm acreage in the state is about 1.5 million ha, involving smallholders and NCR landowners; collaboration between private sector and government agencies; and private sector initiatives.

Most of the estates and smallholdings are found along coastal areas, in lowlands and riverine basins. These are far away from TPAs that are *orang utan* habitats. The plantations and the protected areas therefore co-exist, which is essential for the development of Sarawak.

It is generally accepted that development and raising the standard of living of the people is the fundamental right of any nation. Sarawak too aims to bring prosperity to the people, especially the rural population, by encouraging them to cultivate oil palm – the most

productive 'golden crop' of this era. With infrastructure and funding, rural areas can be developed into thriving hinterlands that promote socio-economic growth.

Oil palm cultivation also provides the best opportunity for NCR landowners to make full use of idle land. The state government supports – through various schemes and incentives – the conversion of NCR land into smallholder plots for oil palm planting, so that families and communities can improve their standard of living.

The industry has experienced dynamic progress and assumed a prominent role in steering Sarawak's economic growth. It has become the main thrust of the agriculture sector and has contributed significantly to the social and economic development of the rural population. From 2010-2015, it paid about RM1.9 billion in sales tax revenue to the state government.

The sector has also acted as a catalyst for rural growth. Wherever sizable concentrations of estates emerge, the surrounding towns are energised through gainful employment and the opportunity to profit through the provision of services. The influx of workers into estates and mills has enhanced the demand for goods and services in these areas, again benefitting locals and entrepreneurs.

Strategic planning

Sarawak's policies for conservation and economic growth are well planned and carried out systemically.

The Wildlife Masterplan 1996 guides the state government in balancing the need for conservation of wildlife and natural resources, with the need for economic and social development. It is committed to a policy that allows for land development for agriculture (including oil palm), as well as forest protection and conservation.

Currently, there are 30 national parks, four wildlife sanctuaries and 10 nature reserves covering 602,035.8 ha (excluding bodies of water). This clearly shows the extent of the state government's commitment in ensuring that natural habitats and the ecosystem are conserved.

Since the establishment of Bako National Park in 1957, Sarawak has continuously extended the areas under conservation and protection, by creating national parks, wildlife sanctuaries and nature reserves. The intention is to increase the size of TPAs to 1 million ha by 2020.

There is no conflict between oil palm development and *orang utan* habitats in Sarawak. This has been ensured by strategic planning and management of natural resources and land. *Orang utan* populations live in areas that have been gazetted as conservation areas. Oil palm plantations are located in other rural areas.

Allegations that palm oil from Sarawak 'endangers' *orang utan* habitats are therefore without foundation. The state government's commitment to conservation is clear, and it has the

support of the Sarawak palm oil industry. Concrete plans are in place to ensure that this commitment is implemented. This is the Sarawak model of conservation and sustainable development.

Sarawak Oil Palm Plantation Owners Association

This is an edited version of a press statement.





Cyprus: A Study in Contrasts

Tiny market for vegetable oils

The island of Cyprus is located in the eastern Mediterranean Sea just 50km south of the coastline of Turkey and 95km west of Syria.

The former British colony gained independence in 1960. Shortly afterward, violent conflicts broke out between Greek and Turkish groups inhabiting the island. When Greece supported a *coup d'état* in an attempt to bring Cyprus under its control, Turkey intervened militarily in 1974.

Today the island is still divided. The southern part makes up the Republic of Cyprus and is dominated by Greeks. The north, now called the Turkish Republic of Northern Cyprus (TRNC) internationally, is accepted as a separate entity only by Turkey.

Of about 1.2 million Cypriots, some 300,000 live in the northern part of the island. It is considered to be poorer than the south and, by and large, depends on aid from Turkey.

In 2004, the whole of Cyprus formally became a member of the European Union (EU). However, the body of common EU law applies only to the southern part. In 2014, leaders of the two main ethnic groups agreed to initiate negotiations on a shared future for Cyprus.

The discussions were scheduled to begin on Oct 8, 2014. However, on Oct 4, Turkey announced that an exploration vessel would conduct seismic investigations in waters off the island's Exclusive Economic Zone, which belongs to the Republic of Cyprus.

This action occurred against the backdrop of disagreement over the use of oil and gas reserves in this part of the Mediterranean. As a consequence, Cypriot President Nikos Anastasiades called off the negotiations. Since then no formal talks have been held.

Vegetable oil demand

The market economy of the Republic of Cyprus experienced trouble in the wake of the EU financial crisis in 2009. As much of the economic activity revolves around Cyprus being a financial centre for the Middle East and Russia, it was particularly vulnerable to volatility. In addition, many banks were exposed to Greek debt.

Table 1: Comparison of Key Economic Indicators

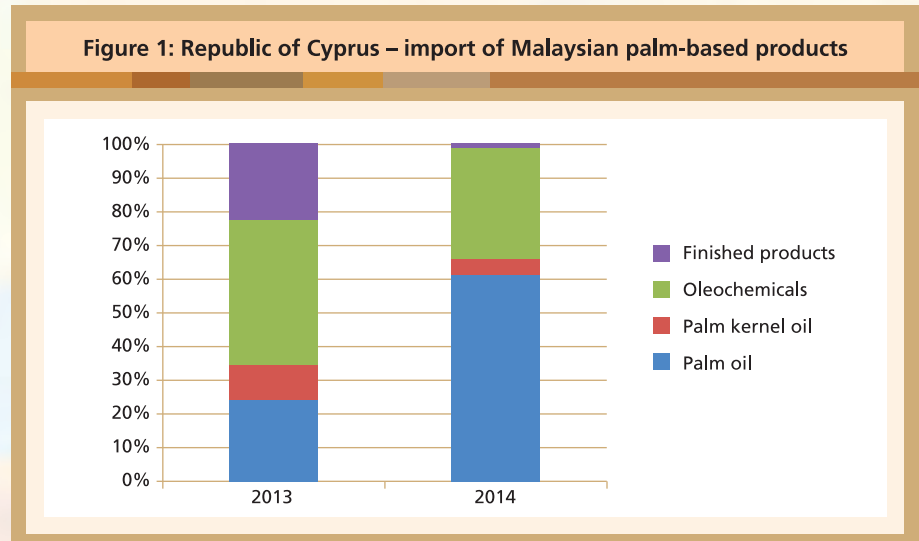
	Republic of Cyprus	TRNC
GDP per capita	US\$30,900 in 2014 (down from US\$33,400 in 2012)	US\$11,700 (2007 est)
GDP growth rate	2.3% in 2014 (down from 5.4% in 2013)	2.3% (2014 est)
Unemployment rate	16.1% in 2014	9.4% (2005 est)

Source: CIA World Factbook

In June 2012, the government had to ask for international financial aid. Alongside banking, tourism is the most important economic sector. Britons and Russians make up the two largest tourist groups. About 2.4 million tourists visited Cyprus in 2014, a relatively small figure compared to Croatia, with more than 11 million visitors per year.

The only vegetable oil produced in the Republic of Cyprus is olive oil. In 2014, its production reached 5,600 tonnes. That year, it imported 41,200 tonnes of vegetable oil, mainly sunflower, soybean and rapeseed oils. Palm oil accounted for 1,100 tonnes.

According to the MPOB, exports of Malaysian palm-based products to the republic equalled 1,132 tonnes in 2014. Based on the volume of palm oil imports, Malaysia supplied 100% of the demand.



Source: MPOB

Figure 1 compares the import volume in 2013 and 2014.

The tiny population of the republic – about 900,000 people – limits opportunities for expansion of palm oil use. The scale of the processing industry

is also small, although the food and beverage sector has a dominant role in it. Still, demand for palm oil has been reasonably stable over the past five years.

MPOC Brussels



Game Changer for Oil Palm

DNA discovery

An American start-up is on the brink of saving millions of dollars for companies that grow oil palm in Malaysia — all through the science of DNA.

Orion Genomics, based in St. Louis, Missouri, has discovered how to tell during the oil palm tree's infancy if a seedling — which takes nearly 30 years to grow to become harvest-ready — will yield the right type of fruit.

The oil palm fruit can come in three forms: with a thick shell, a thin shell or with no shell at all. The three forms all give different amounts of palm oil.

Thin-shelled fruits yield 30% more palm oil. But until now, during their three decades of growth, it was unclear which trees would produce that type of fruit. That was a major headache for Malaysia, one of the world's largest palm oil exporters, as well as a waste of land and water.

Orion has found a way, through examining early-stage samples, to ensure that only thin shell seeds with the maximum amount of palm oil are planted, saving growers huge amounts of time and money.

Orion's technique allows growers to weed out the bad trees before they take up valuable resources; to increase the yield; and to make plantations more efficient.

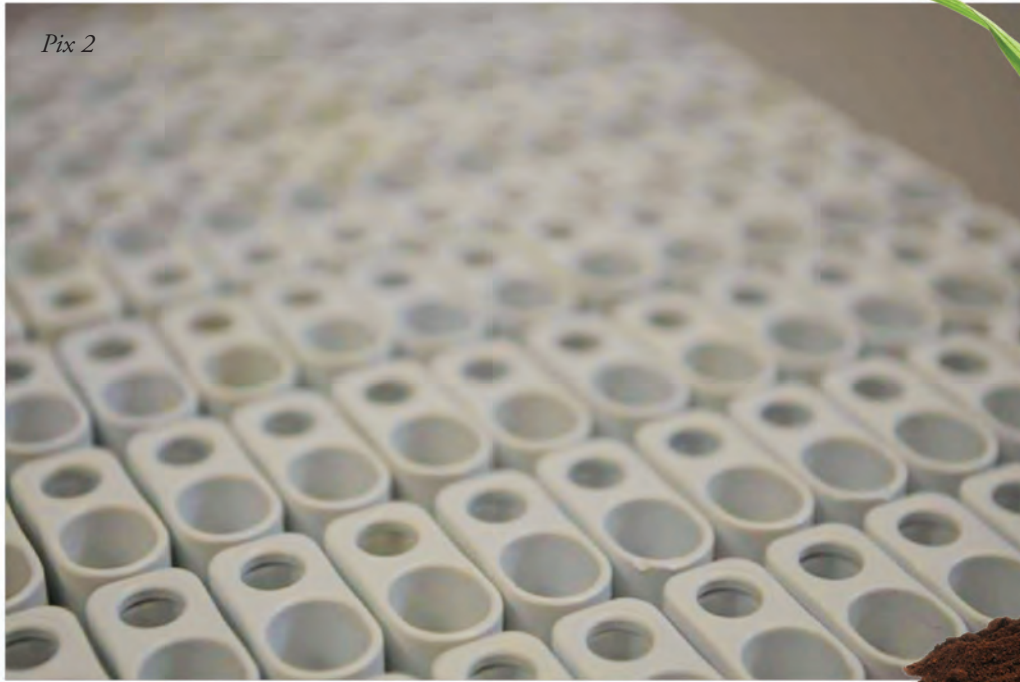
The list of products that use palm oil is incredibly long: toothpaste, dish soap, beauty products, soda, crackers, chips, cosmetics, cookies and ice cream. Palm oil alone provides half of the edible vegetable oil sold worldwide.

Orion Genomics President and CEO Nate Lakey (*Pix 1*) says most Americans use palm oil throughout their entire day without even knowing it.

"A lot of people don't know what palm oil goes into. There's a lot of palm oil in daily things. The *New York Times* wrote once that it touches you all day. When you wake up and brush your teeth, guess what? Then you put on make-up, guess what?" he says.



Pix 1



Pix 2



That means Orion's discovery has major repercussions.

"[...] only 5% of the world's oil [crop] lands have oil palm planted on them. But that 5% provides 40% of the world's oil," Lakey says. "Already, this tree is crazy productive, and that's given that 10% will be duds. And we're increasing the yield."

Lakey has been developing Orion's technique since 2003. Oil palm was just one of the many crops the company was working on at the time. In late 2011, he discovered the gene that controls the shell thickness of oil palm fruit, the company's most successful find yet.

Orion only recently moved into the distribution phase, which sends Lakey to Malaysia on a recurring basis. But most of his work takes place in St Louis.

He says it is important to have Orion in the Midwest, and to be close to the

McDonnell Genome Institute at Washington University.

"We are the heart of agriculture in the United States. We wanted to be in an area where agriculture was really the primary economic focus. All these massive food companies... it's a big food economy."

Lab tests

So how does it work? Growers will put a new seedling into a pot, instead of the ground. When it sprouts its first leaf, the growers will use one of Orion's punch tabs (Pix 2) to collect part of the leaf and send it to Orion's labs.

There, the lab technicians take the hundreds of samples and determine if they have the thin shell strain that will provide high yield. They send back the results, and the growers know which trees to put in the ground and which to throw out. There is an almost perfect accuracy in this process, Lakey says.

Orion is now in the process of selling its methods to growers in Malaysia. It's estimated that if even 1% of the low-yielding trees can be eliminated, Malaysia's annual Gross National Income would increase by US\$251 million.

Not surprisingly, the breakthrough has garnered the local company some international attention. Orion was named a 'disruptive company' by the BBC, meaning its innovation is likely to change the rules of an industry.

"Our one and only commitment is to DNA technologies and to utilise them to improve healthcare and food production," Lakey says.

Kavahn Mansouri
River Front Times, Aug 1, 2016

This is an edited version of the article.

Growing the Palm Phytonutrient Sector

Moves in Malaysia



Malaysian palm oil producers should focus on developing palm phytonutrient-based products, which have attracted good demand in the global nutraceuticals market.

The proven scientific health benefits of palm phytonutrients, such as tocotrienols and carotenoids, augur well for growing health awareness and food safety concerns. More consumers and manufacturers are now looking for natural products that are free of preservatives and genetically modified organisms.

Hovid Bhd managing director David Ho said demand for palm phytonutrients in the nutraceutical segment is increasing but is still in its infancy.

The global tocotrienols (mainly palm tocotrienols) market was an estimated 45-55 tonnes in 2015. However, it is projected to grow by about 8-12% over the next three years, to about 70-80 tonnes (worth US\$28-32 million).

This is in contrast to the conventional Vitamin E alpha-tocopherol and beta-carotene markets, which are already well developed.

Global consumption of tocopherols stood at an estimated 10,900 tonnes in 2013, compared to 10,300 tonnes in 2012. By 2020, the volume is projected to grow to 18,100 tonnes, thereby generating a compounded annual growth rate of 7.3% between 2012 and 2020.

Ho said: "These numbers show a significant potential for palm tocotrienols provided that hurdles such as regulatory approval, clinical studies and consumer awareness are addressed immediately."

Carotino Sdn Bhd executive director UR Unnithan said the health properties of palm phytonutrients are unique. Crude palm oil (CPO) and refined red palm oil (RPO) are the richest sources of natural carotenoids.

He said the invention of a patented process for refining CPO to RPO based

on pioneering work by the Malaysian Palm Oil Board (MPOB) – and commercialised by Carotino Group in the early 1990s – had led to the extraction of palm phytonutrients.

Today, natural palm carotenes in 20% and 30% concentration, and palm tocotrienols in 50%, 70% and 92% concentrations, are sold in the main markets including the US, Japan and the European Union.

Last year, the global nutraceutical market was estimated at a value of US\$182.6 billion. This is expected to rise to US\$278.96 billion by 2021.

'Crown jewels' of palm oil

Ho and Unnithan agreed that the oil palm industry would have to step up educational and nutritional information as well as clinical trials, to expand the use of phytonutrients.

Ho described palm tocotrienols and carotenes as the crown jewels of palm oil in promoting health benefits.

Unnithan said that Carotino is able to offer palm nutraceuticals that are certified as Mass Balance and Identify Preserved by the Roundtable on Sustainable Palm Oil. The Malaysian Sustainable Palm Oil standard adds credibility to the commodity.

With multinational manufacturers such as Nestle, General Mills and Kraft reformulating food products with natural colours and flavours, Ho noted that palm carotenoids have great potential as a natural food colour.

Hovid, being the pioneer and largest producer of palm nutraceuticals, is working with the MPOB to get palm carotenoids approved by the US Food and Drug Administration as a food additive and colourant.

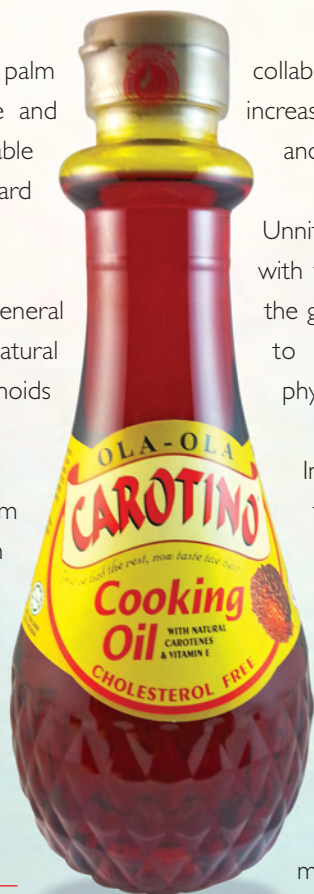
The value of the natural food colourant market is projected to increase to US\$1.7 billion in 2020, from US\$1.14 billion in 2014.

Collaborative efforts

On public-private sector collaboration, Ho cited the example of the Tocotrienol Industry Consortium set up by the MPOB and relevant manufacturers.

It is developing a comprehensive dossier on analytical data on the palm tocotrienol complex. This will be submitted to *Codex Alimentarius* for review and approval, to enable palm tocotrienols to obtain global status as a safe food and supplement ingredient.

Efforts are also underway to get palm tocotrienols registered in China, as this would open up a big market. In the US, Hovid is



collaborating with the Malaysian Palm Oil Council to increase awareness of palm products including tocotrinols and carotenoids.

Unnithan said Carotino has good R&D collaboration with the MPOB. Partial funding has been obtained via the government's National Transformation Programme, to commercialise projects involving palm phytonutrients.

In addition, funding has been received for clinical trials at selected universities and research institutions worldwide.

Ho said such funding is important, to develop demand for palm phytonutrients.

"Unlike large pharmaceutical companies, smaller palm phytonutrient companies do not have the funds to support large-scale clinical trials or marketing campaigns," he noted.

Under the 11th Malaysia Plan, RM280 million worth of grants will support downstream development of palm-based oleo derivatives, food- and health-based products and clinical trials, with RM50 million set aside for small- and medium-scale enterprises.

Source: Star Online, June 27, 2016

This is an edited version of the article.

Under the 11th Malaysia Plan, RM280 million worth of grants will support downstream development of palm-based oleo derivatives food- and health-based products and clinical trials

KL, Jakarta to appoint palm oil 'envoy'

Malaysia and Indonesia plan to appoint an 'Ambassador of Palm Oil' to promote the benefits of consuming palm oil products in the international market.

Datuk Seri Mah Siew Keong, the Malaysian Minister of Plantation Industries and Commodities, said misrepresentations spread by the anti-palm oil lobby have led to non-tariff barriers in major importing countries.

"These include the 'No palm oil' label [on food products] and proposals to impose a high import tax on palm oil products. This is a form of discrimination to us," he said.

Mah said this after co-chairing the Ministerial Meeting of the Council of Palm Oil Producing Countries (CPOPC) with Indonesia's Coordinating Minister of Maritime and Resources, Luhut Binsar Panjaitan, in Putrajaya on Aug 30.

Luhut Binsar said the ambassador must be a person who is influential and that some names are in hand, but that these will have to be discussed with Datuk Seri Mah.

He said the two countries have also agreed to cooperate in promoting the use of biodiesel in other countries, especially China.

"China is looking to overcome environmental problems and we are trying to convince [its] government that B5 or B10 biodiesel can bring [about a] good impact," he said, referencing the blends of 5-10% palm methyl ester and 90-95% regular diesel.

Datuk Seri Mah also said both countries have agreed to contribute US\$5 million each initially to operate the CPOPC secretariat.

The secretariat, he said, will organise ministerial missions to major importing countries, including those in the European Union, to address current concerns about palm oil.

Palm Oil Refiners Association of Malaysia chief executive Mohammad Jaaffar Ahmad has been appointed deputy executive director of the CPOPC.

"He will represent Malaysia [...]. We will appoint the other two representatives in a couple of weeks. They will be tasked with taking care of smallholders' interests and global palm oil stock management," Datuk Seri Mah said.

Earlier this month, the Indonesian government had appointed Benny Wachyudi as the CPOPC executive director. The secretariat structure is such that four directors will report to the executive director and his deputy – two from Indonesia and two from Malaysia.

Indonesia has appointed Fadhil Hasan the CPOPC director in charge of standards and sustainably issues. His duties are mainly to harmonise the certification criteria of the Indonesian Sustainable Palm Oil and Malaysian Sustainable Palm Oil standards.

Eight other palm oil producers – Thailand, Nigeria, Colombia, Papua New Guinea, Ivory Coast, Honduras, Guatemala and Brazil – have expressed interest in joining the CPOPC to date.

Sources: Compiled from reports by Bernama, Aug 31, 2016, & New Straits Times, Aug 30, 2016

Global oil palm acreage could double without damaging forests

The area covered by oil palm plantations worldwide could double without damaging protected areas or sensitive forests, according to recent research.

Researchers from the Austria-based International Institute for Applied Systems Analysis (IIASA) studied satellite maps from Southeast Asia, Africa and Latin America to determine where the crop used to make vegetable oils and other consumer products could be expanded sustainably.

The findings follow criticism by campaign groups who say the expansion of oil palm plantations has destroyed rainforests and displaced native people from ancestral lands.

More than 18 million ha are covered by oil palm plantations, up from 6 million ha in 1990, IIASA said.

Expansion of the crop, which accounts for about 30% of all vegetable oil used worldwide, has been concentrated in biodiversity-rich Malaysia and Indonesia.



The industry could grow sustainably if the right policies are put in place, the researchers said.

"Currently, 'no-deforestation' pledges are being formulated and eventually implemented on different scales – from palm oil traders to provincial governments," IIASA researcher Johannes Pirker told the Thomson Reuters Foundation.

"As a co-benefit of these initiatives, improved land-use planning and tenure clarification, smallholder inclusion and improved production practices might come about, which will ultimately also benefit the land rights of traditional communities."

Satellite data shows an area of up about 19 million ha on which the industry could grow without damaging forests that are particularly valuable for biodiversity or storing carbon as means of combating climate change, IIASA said.

Globally, an estimated three million small farmers work in the oil palm business and this could rise above seven million if the industry is expanded sustainably, it added.

Source: Reuters, July 27, 2016

Red palm oil reduces Vitamin A deficiency in China project

Malaysia has provided an assurance that it will continue to offer high-standard edible oil to meet health needs.

Plantation Industries and Commodities Minister Datuk Seri Mah Siew Keong said Malaysia has invested in financial and human capital to better understand the effects of palm oil on human health.

This was proven by findings from the 'red palm oil programme' mounted by the Palm Oil Research and Technical Service Institute of MPOB in Gansu, China. Under this, 2,000 school children were given biscuits made with red palm shortening to fight Vitamin A deficiency.

"The results [...] show that deficiency fell from 21.6% to 6%. This clearly indicates that palm oil plays a big role in China's oils and fats market [...]," Datuk Seri Mah told reporters in Tianjin.

He noted that Vitamin A deficiency is a significant public health issue in developing countries and is a major cause of blindness as well as overall mortality.

Red palm oil has been studied as a supplement and as part of food fortification to boost Vitamin A levels, he said.

Over the past 30 years, Malaysia has partnered leading biomedical and nutritional research institutions around the globe, including China, to carry out clinical studies related to palm oil, he said.

"Today there is a wealth of scientific evidence that supports the fact that palm oil is a wholesome and nutritious edible oil," Datuk Seri Mah said.

Source: Bernama, Aug 12, 2016

'Carbon neutral' urban centres for Malaysia

Malaysia hopes to have a city or township with zero carbon emissions in all states by 2026.

To date, Malacca City and Iskandar Malaysia in Johor have been earmarked to become the country's first 'green technology' cities by 2020, said Natural Resources and Environment Minister Datuk Seri Dr Wan Junaidi Tuanku Jaafar.

Malaysia had promised to reduce its overall greenhouse gas emission intensity by 45% by 2030, during the United Nations Climate Change Conference (UNCCC) in Copenhagen in 2009.

Prime Minister Datuk Seri Najib Abdul Razak had reiterated the stand at last December's Paris conference.

Datuk Seri Wan Junaidi said the federal government is scouting for potential cities or new townships where it can implement a Low-Carbon Cities Framework (LCCF) – currently being developed in Malacca and Johor – in a bid to drive down CO₂ emissions.

The LCCF is a town planner for local governments and developers to calculate the CO₂ emission baseline of cities and how to reduce this in four key areas: transportation, environmental quality, buildings and energy, and waste and water management.

Malaysia's report to the UNCCC in 2011 put the country's net total emission of CO₂ at 27.28 million tonnes. The energy sector accounted for 76% of this, while the waste sector contributed 12%.

Datuk Seri Wan Junaidi said Malaysia had reduced an estimated 8.57 million tonnes of CO₂ emission in these sectors by cutting down processes that result in greenhouse gases, and by planting 13 million new trees since 2011.

Source: New Straits Times, July 26, 2016

Malaysia committed to B10 biodiesel policy

The Plantation Industries and Commodities Ministry is working to implement the use of B10 biodiesel in Malaysia this year.

Its Minister, Datuk Seri Mah Siew Keong, said discussions are going on with various parties and that the ministry has received a lot of feedback.

"We have met car-makers [and] petrol station operators, and I think we will have a few more meetings," he told reporters, adding that their concerns would be studied and addressed.



Earlier reports had said that the implementation of B10 biodiesel (blending of 10% palm methyl ester with 90% petroleum diesel) had been delayed due to inadequate data.

The new standard will raise the minimum bio-content of biodiesel from the current 7%, taking up more palm oil supplies and supporting local prices.

Blending to the new standards is expected to consume 709,000 tonnes of palm oil annually versus estimates of 500,000 tonnes under the current biodiesel mandate.

"The implementation of both the B10 and B7 programme requires coordination and cooperation from all petroleum companies, including Petronas, Shell, Chevron, Petron and BHP," said the ministry in an e-mail reply to *Reuters*.

State-owned Petronas, Royal Dutch Shell, Chevron, Petron and BHP are responsible for blending diesel with PME at 35 blending depots throughout Malaysia, according to the ministry.

Current facilities at the depots are able to handle blending of up to 10%, the ministry said, as the infrastructure had been designed to take into account the upgrading of the biodiesel mandate.

"The petroleum companies only need to reset the blending ratios to B10 and B7 respectively," the statement said.

Construction of the blending facilities was funded by the government through the Malaysian Palm Oil Board.

Palm oil traders, plantation companies and analysts had earlier questioned the feasibility of the government's B10 programme, citing low crude oil prices and weak implementation policies as barriers to the mandate's effectiveness.

Malaysia has 18 biodiesel plants in operation with 2.3 million tonnes in annual capacity, the ministry said.

The biodiesel programme will help stabilise palm oil prices, and the government will as well look for other strategies to support prices, such as accelerating re-planting activities, the ministry said.

Sources: Compiled from Bernama & Reuters reports, July 26, 2016

CPO average price forecast for 2016



The crude palm oil price is seen averaging RM2,678 per tonne this year, up nearly 18% from last year. This is due to higher demand from top consumer India and replenishment of stocks by China, according to the Malaysian Palm Oil Council (MPOC).

Benchmark palm oil prices on the Bursa Malaysia Derivatives Exchange had surged 11.3% up to Aug 22, on the back of tight supplies and improving export data.

"In 2016, palm oil prices will average at RM2,678 per tonne, stabilising in a range between a low of RM2,162

and a high of RM3,195," said Tan Sri Dr Yusof Basiron, the MPOC chief executive, in remarks posted online for a palm oil seminar.

The forecast price, up from the year-to-date average of RM2,528, is on the back of strong demand from the world's two largest consumers, he said.

India will maintain its position as the world's largest consumer and importer of palm oil, he said, while China is expected to import more oils and fats for the rest of the year.

"The utilisation of the high carryover stocks in China caused it to import less oils and fats especially in the first half of 2016, but imports will be increased to replenish stocks in the second half of 2016," said [Tan Sri] Yusof.

Palm oil shipments from Malaysia, the world's second-largest producer after Indonesia, rose 26.5% in the first 20 days of August from the same period in July on improving exports to India.

[Tan Sri] Yusof also pegged Malaysia's output at 19.1 million tonnes this year and Indonesian production at 32.8 million tonnes.

"[Malaysian output] from August onwards is expected to be higher as the dryness associated with effects of *El Nino* in early 2016 [will] no longer hamper production," he said.

Rapidly rising palm oil prices, however, could narrow the spread with rival soybean oil, reducing its competitiveness.

The share of palm oil in India's edible oil imports is already seen falling to a record low in this marketing year, as the price rally slashes its discount versus soybean oil.

The palm oil discount to soybean oil is about US\$110 (RM441), compared to a spread of US\$140 a year ago.

Source: Reuters, Aug 22, 2016

Technique found to double oil palm yield on peatland

Oil palm yield on peatland can be doubled by undertaking mechanical soil compaction, according to scientific research by the Sarawak-based Tropical Peat Research Laboratory.

Sarawak Chief Minister Tan Sri Adenan Satem said this has changed the economics of agriculture on peatland.

"Mechanical compaction has also brought the unintended benefit of reducing susceptibility to peat-fire outbreaks," he said when opening the 15th International Peat Congress in Kuching, Sarawak.

Tan Sri Adenan said the laboratory had also established that the carbon dioxide (CO₂) emission from peatland with oil palm plantations was half that claimed by some parties; and that such emission was actually lower than that from undisturbed peatland or forests.

He said these scientific facts, combined with proper enforcement and good governance, have enabled the Sarawak government to formulate informed and sound policies pertaining to agriculture on peatland.

The laboratory, which was set up under the Chief Minister's Department in 2008, is aimed at developing scientific and technical knowledge, and clear understanding of the sustainability of oil palm cultivation on tropical peatland.

At the same event, Plantation Industries and Commodities Minister Datuk Seri Mah Siew Keong said the laboratory was given RM39.1 million from 2008-2015 for research activities in collaboration with the Malaysian Palm Oil Board (MPOB), including best practices to ensure the suitability of oil palm development to peatland.

Tan Sri Adenan said about 1.6 million ha, or 66% of Malaysia's 2.43 million ha of peatland, is located in Sarawak, and that many rural farmers are involved in small-scale oil palm cultivation on peatland.

Datuk Seri Mah said about 27.5% of the country's peatland has been used to grow oil palm. However, the practice has come under scrutiny from environmental organisations and ethical consumer advocacy groups for various reasons.

These include allegations of degradation of peatland, deforestation, loss of biodiversity, increase in greenhouse gas emissions and global warming.

"In order to address these issues, the government will continue to ensure that the industry complies with existing rules and regulations, including Good Agricultural Practices and adopting a sustainable approach in development."

The Minister said the MPOB has come up with guidelines on a standard operating procedure for oil palm cultivation on peatland. Malaysia now has 5.64 million ha under oil palm estates.

Source: Star Online, Aug 16, 2016

Indonesia's new moratorium on oil palm concessions

Indonesia plans to issue a five-year moratorium on new oil palm plantation concessions through a presidential instruction. This is in line with President Joko Widodo's priorities for a healthy and sustainable environment.

It also follows international criticism of weak environmental policies that had heightened due to devastating fires in Kalimantan and Sumatra, as well as the spread of toxic haze to other parts of Southeast Asia between June and October 2015.

San Afri Awang, Director-General of Spatial Forestry Planning at the Environment Ministry, said the moratorium will include plantation concessions that are not used in accordance with the prevailing stipulations; plantation concessions transferred to a new owner; and plantation concessions that include productive forested areas.

Indonesia is the world's largest producer and exporter of crude palm oil (CPO); therefore, the industry is a key foreign exchange earner and provides employment to millions of Indonesians.

President Joko had previously emphasised that he does not want to weaken palm oil output by curtailing the establishment of plantations. Instead, he wants to boost productivity of existing plantations by using more efficient farming techniques and seeds, as well as the replanting of new trees (rejuvenation).

Indonesia – Palm Oil Production and Exports									
	2008	2009	2010	2011	2012	2013	2014	2015	2016
Production (mil tonnes)	19.2	19.4	21.8	23.5	26.5	30.0	31.5	32.5	31.0 ¹
Exports (mil tonnes)	15.1	17.1	17.1	17.6	18.2	22.4	21.7	26.4	25.0 ¹
Exports (US\$ billion)	15.6	10.0	16.4	20.2	21.6	20.6	21.1	18.6	17.0 ¹

Sources: Indonesian Palm Oil Producers Association; Indonesian Ministry of Agriculture, July 16, 2016
¹ forecast

The planned moratorium on new palm oil concessions is one of a series of such moves. In May 2011, a two-year moratorium was placed on the issuance of new permits to clear rainforests and peatland. This has been extended twice and is still in effect.

Chief Economics Minister Darmin Nasution said the government will make use of its

'Single Map Policy' – a single reference map that harmonises all maps from different state agencies to a scale of 1:50,000 – to prevent overlapping land concessions. By taking this map as a point of reference, it will be known whether new plantations are added over the next five years.

A side-effect of the five-year moratorium is that existing palm oil plantations will become more valuable.

Meanwhile, a recent study published in *Scientific Reports* says the fires in Sumatra and Kalimantan in late 2015 had released about 11.3 million tonnes of carbon each day (exceeding the 8.9 million tonnes of daily carbon emissions in the European Union).

More than 100,000 man-made fires destroyed 2.6 million ha of land within a five-month period. This was among the worst natural disasters ever recorded. According to the World Bank, Indonesia lost IDR 221 trillion (about US\$16 billion) or 1.9% of the GDP.

Traditionally, Indonesian farmers use slash-and-burn practices to clear forests for the expansion of oil palm, as well as pulp and paper plantations. Although such practices are illegal, weak law enforcement has enabled them to continue.

Source: www.indonesia-investments.com, July 16 & 19, 2016



Hazards of the 'Low-fat' Dogma

Link to obesity and diabetes

According to the World Health Organisation (WHO), obesity worldwide has more than doubled since 1980. In 2014, over 1.9 billion adults (18 years and older) were overweight – 600 million of them were obese.

That means 39% of adults aged 18 years and over were overweight in 2014, and 13% were obese. Furthermore, 42 million children under the age of 5 were overweight or obese in 2013.

Those figures and statistics are extremely worrisome. They take the obesity issue to a whole new level: obesity is an epidemic. As such, it should be considered a global emergency for many reasons, including:

1. Most of the world's population lives in countries where being overweight or obese is a substantial killer.
2. The cost of these illnesses will be "astronomical", as stated by Marion Nestle, who chairs the Department of Nutrition and Food Studies at New York University.

But, as is elegantly put in the summary of the fact sheet on the WHO website, 'obesity is preventable'. The WHO goes on to explain the fundamental cause of obesity. Far from being unexpected, the assumption is that there is an energy imbalance between calories consumed and calories expended. Globally, there has been:

- an increased intake of energy-dense foods that are high in fat; and
- an increase in physical inactivity due to the increasingly sedentary nature of many forms of work, changing modes of transportation and increasing urbanisation.

Unfortunately, the answer to this global public health issue is not even close to helping patients. The WHO's answer as to what causes the obesity epidemic is part of the reason why we inefficiently try to deal with it.

To me, it is very clear by now that the energy imbalance between calories consumed and calories expended is to blame. However, the concept of calories

is most likely wrong and cannot explain obesity alone.

In this, the work of Dr Robert H Lustig (Professor of Paediatrics in the Division of Endocrinology; and Director of the Weight Assessment for Teen and Child Health Programme at the University of California, San Francisco) is more than noteworthy.

But more importantly, WHO's answer pointing towards fat as the main issue ('increased intake of energy-dense foods that are high in fat') needs to be reassessed. Evidence clearly shows that such foods are not solely responsible for the obesity epidemic. Fat alone cannot explain obesity.

Rising incidence of diabetes

According to the WHO, the number of people with diabetes has risen from 108 million in 1980 to 422 million in 2014. The global prevalence among adults over 18 years of age rose from 4.7% in 1980 to 8.5% in 2014 and has been rising more rapidly in middle- and low-income countries.

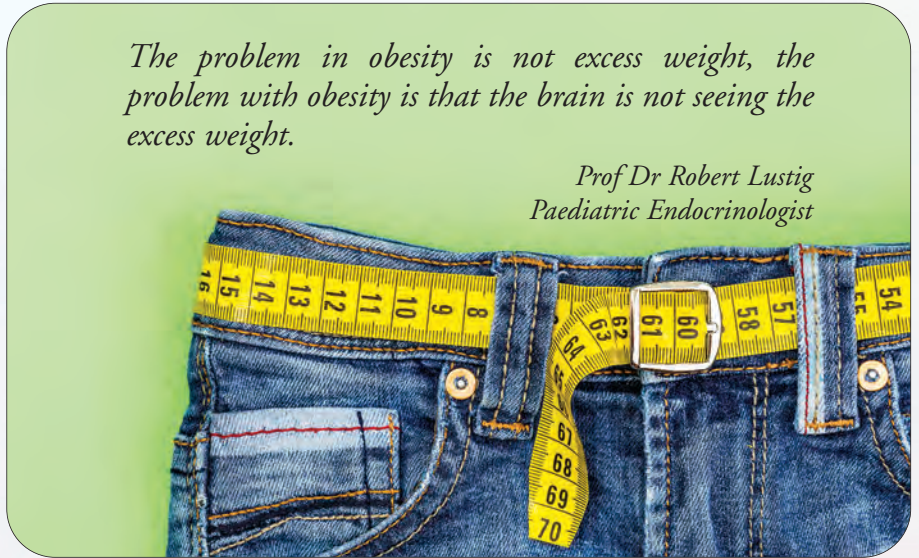
Diabetes is a major cause of heart attacks, stroke, blindness, kidney failure and lower limb amputation. One death every six seconds can be attributed to Type 2 diabetes.

Worldwide, approximately 1 in 10 adults has Type 2 diabetes mellitus. A significant fraction of the population has some degree of insulin resistance – approximately 40% in the US. The projection the WHO makes is that diabetes will be the seventh leading cause of death in 2030.

The incidence of diabetes is expanding extremely quickly and is a legitimate

The problem in obesity is not excess weight, the problem with obesity is that the brain is not seeing the excess weight.

*Prof Dr Robert Lustig
Paediatric Endocrinologist*



cause of worry. This is particularly because – as the WHO fact sheet reminds us – diabetes can be prevented or delayed with a healthy diet, regular physical activity, maintaining a normal body weight and avoiding tobacco use.

The WHO is actively promoting diabetes prevention and care management. There even is a World Diabetes Day. However, as surprising as it may seem, sugar is still not a definite target in the fight against diabetes.

Fat, sugar and prevention behaviour

With preventable diseases, patients can actually be part of the prevention behaviour. That is one of the most interesting aspects of nutrition as a field of study. Patients are in control of what food they purchase and consume. Provided they understand the consequences of their choices, they can be responsible. They need to understand the impact that the food they eat has on their health.

In previous papers and articles, we have shown that scientific evidence does not support the theory that was seen as the truth for so long. For ages, fat has been

considered the cause of metabolic disease – but it obviously is not.

The fact that we have believed it for so long has led to room for concepts like that of Ancel Keys to grow and prosper. This destroyed perfectly good food habits that we used to have, leading to what we might now call the worst food epidemic ever known.

Those beliefs have driven us to take fat off our plates over time. That in itself is not the issue (although the body needs fat to work properly). But since fat and flavours are very closely related, fat-free or low-fat products were literally not edible. Neither were they satiable.

With close to no fat in our food, we had to find a solution; something to replace it in order to make food products palatable. And if that solution could be affordable, then the food industry would thrive.

Sugar was the answer everyone was looking for at the time. It replaced fat, made the food taste good and was inexpensive. It may even have been the easiest and cheapest solution at the time.

More importantly, it generated that strong positive reward in your brain – such a reaction in fact, that one can be addicted to sugar and crave it more and more.

Contrary to popular belief, fat does not make you fat; sugar does. The more sugar we ingest, the fatter we become. We then look for dietary solutions and end up consuming more low-fat, diet-food products. This adds to the problem by providing fewer fats and even more sugar to the body. All the sugar consumed stresses the pancreas; this, in turn, has an effect on insulin resistance.

The assumption that fat is unhealthy is therefore erroneous, as is the assumption that we consume too much of it. As a case in point, palm oil is a healthy source of lipids and vitamins, and is also free of trans fats. Yet, it has suffered a smear campaign over the last few years. As with many 'low-fat' products, we have found 'palm oil-free' products on shelves.

Fat in general, and palm oil in particular, is not – and never was – the culprit it was made out to be. Palm oil has a balanced composition that makes it one of the healthier options among oils and fats.

Studies published over the last 10 years show precisely that we should not worry about palm oil, as it can be part of a balanced diet.

Sugar is not as easy to defend. Fructose – one of the dozens of forms of sugar – has always been present in fruit; but other kinds of sugar added to just about every food product have no particular metabolic benefit. Over-consumed, sugar does more harm than good. It promotes obesity and is responsible for diabetes, two epidemics that are among the leading causes of mortality.

Solutions at hand

Let me be straightforward: you should cut added sugars in order to reduce the amount consumed. But sugar is often hidden in food products; and since it has so many different names, it is difficult to identify. Low-fat products in particular, are riddled with hidden sugars.

We should move away from the low-fat dogma, and governments and regulators should absolutely support that shift. We should be looking to restore food habits we once had, where fat was considered healthy and sugar was not so frequently

found in food. Those in charge of publishing dietary guidelines should recognise the scientific evidence supporting fat over sugar and take immediate action.

A healthy balance of fats should always be a key component of the diet. Palm oil is a prime example of this – it is good and healthy; and its balanced composition of saturated and unsaturated fat makes it also ideal for cooking.

Furthermore, it is very difficult to over-consume fat, as it is very satiating. Consuming fat in a low-carbohydrate diet also makes it easier for the body to access fat for energy.

Consumers are able to decide what they eat. However, they should be guided by the best available science. Moving away from added sugars and other carbohydrates, while adding more natural fats like palm oil, will rapidly improve health. It is time that regulators recognise, and endorse, this fact.

Dr GuyAndré Pelouze
Cardio-thoracic Surgeon
France

Sugar is cheap. Sugar tastes good. Sugar sells. So companies will have little incentive to change.

*Prof Dr Robert Lustig
Paediatric Endocrinologist*



New Study on Cardiovascular Risk

Rigorous look at causes

Debate about food and health is never-ending, as different diets, theories and speculation abound. The only way to test hypotheses is to study them rigorously.

The study of fats and health – in particular saturated fats – is currently much in the news as what-we-thought-we-knew is being challenged by recent research. A new collaborative study, known as the European Prospective Investigation into Cancer and Nutrition – Cardiovascular Disease (EPIC-CVD), aims to bring clarity to this debate.



Why do this study now? Because important questions need to be cleared up.

While nutrition is considered a cornerstone of reducing cardiovascular risk, the quantity and quality of various whole food and nutrient groups are still being debated. This is of particular relevance to fatty acids, with previously-held theories now being challenged.

The supposedly unfavourable role of total dietary saturated fatty acids, and the claimed beneficial role of omega-3 fatty acids on coronary heart disease (CHD) and cerebrovascular outcomes, have both been questioned by recent research. However, interpretation from dietary studies has been complicated by a number of problems:

1. There is potential misclassification in the questionnaires used to assess fatty acid consumption, which also lack the ability to reliably compute intake of specific fatty acids.
2. Recent epidemiological evidence indicates that, when individual fatty acids are examined, associations between specific fatty acid subtypes and disease risk may vary importantly within each family of fatty acid group considered.

In this respect, biomarkers (for example, circulating plasma fatty acids) may provide a more accurate assessment of consumption, instead of questionnaires.

Although several studies have examined the associations between circulating blood fatty acids and CHD risk – including one that my colleagues and I conducted and which was published in the *Annals of Internal Medicine* in 2014 – they were importantly limited by some critical factors:

- Inadequate power to investigate both composite and individual fatty acids
- Involving populations with diverse baseline health
- Inadequate adjustments for potential confounding (or mediating) factors
- Inability to characterise the shape of any dose-response relationship
- Insufficient detail to enable reliable assessment of the nature of any independent association with CHD across various individual characteristics
- Use of varying fatty acid assay methods or lipid fraction

What does this mean in practice? It means we need to do further study – with more real people, in real-life situations – that is properly monitored. This is how we can help to resolve the existing scientific uncertainties around saturated fats.

This should be undertaken as a comprehensive assessment of the relationship between total and individual fatty acids with subsequent incident CHD risk in a large, free-living general population.

Scientific value

An exciting new project is underway to do just that, and hopefully to help answer some of the outstanding questions. The EPIC-CVD component is a multi-centre prospective cohort study designed to investigate the relationships of nutrition with cancer and other major chronic disease outcomes.

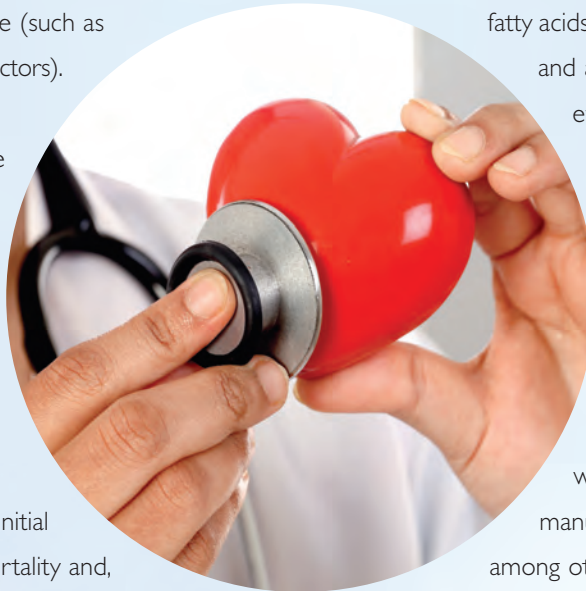
The overall objective of EPIC-CVD is to make best possible use of the data and biological samples available in order to advance understanding about the separate and combined influences of lifestyle (especially dietary), environmental, metabolic and genetic factors in the development of CVDs, including coronary disease and stroke. In other words, with this EPIC-CVD work, we can look at a much wider range of factors, in more detail, in order to reach more reliable and specific conclusions.

The EPIC-CVD resource differs from many previous epidemiological investigations of CVDs in several ways that should increase its scientific value:

- It is large, involving over 500,000 adults, mostly aged 35-70 years, thereby enabling precise estimates of the impact of suspected risk factors.



- It is geographically diverse, with participants recruited from 23 centres in 10 European countries, providing an opportunity to investigate the impact of contrasts in various dietary and other exposures (as well as in CVD rates).
- It involves over 350,000 female participants, thereby enabling detailed analyses in women, which has not always been the case previously.
- It involves prospective monitoring of participants, the great majority of whom reported no history of cardiovascular or other recorded diseases at the initial examination, thereby minimising the influence of disease itself on the characteristics recorded at baseline (such as on dietary habits and biochemical factors).
- It contains information on a range of lifestyle and other exposures (notably dietary intake); as well as, in about three-quarters of participants, stored biological samples, enabling biochemical and genetic analyses.
- It monitors participants, after the initial examination, for cause-specific mortality and, in a large subset, for major cardiovascular morbidity.



This combination of features will enable EPIC-CVD to make a substantial contribution to the prevention and understanding of CVD by elucidating its determinants.

Intensive analysis

With respect to the circulating fatty acids component in the EPIC-CVD study, 37 specific circulating plasma fatty acids have currently been measured in a subset of about 30,000 participants (over 15,000 coronary heart disease cases and 15,000 common controls) from 10 countries in Europe.

This provides an excellent individual participant-based analytical platform to assess the relationships of composite and individual circulating blood fatty acid composition with coronary risk.

The principal aims of the ongoing work are to do more reliable characterisation than previously performed. This all relates to two key questions:

1. What are various determinants of individual fatty acids (including lifestyle, dietary and hereditary characteristics recorded in the EPIC-CVD study population)?

2. What are the associations between circulating plasma fatty acids (measured both as a composite group and as individual subtypes) and risk of first-ever CHD, incorporating consistent controlling for various factors that may distort the true relationship?

The results will be of fundamental importance for the understanding of this area of public health – but also for many economic actors, whether palm oil producers, food manufacturers and healthcare providers among others.

This study is being conducted across Europe right now, and we anticipate that some of the results will be available in early 2017. The decades-old paradigm in relation to fats is being challenged: the more research we undertake, including this important new study, the better informed we will be on the truth about fats and nutrition.

Dr Rajiv Chowdhury
Senior Research Associate in Global Cardiovascular Health
University of Cambridge, England

Brand RENOVATION

When less is more

When people think of managing a brand, they generally get excited about the dramatic and innovative steps of building a new one and knocking down an old one. It's very much like building or knocking down a physical building. However, few focus on the numerous benefits of renovation, where an old building is modified or refurbished here and there.

Using the metaphor of a bricks-and-mortar building for a brand is useful in many ways. Both of them take a lot of time (years) to build. Equally, both of them can be knocked down in a remarkably short period of time (hours).

The same goes for personal reputation, as many politicians can tell you: a reputation takes years to build, but with one short mishap, it's all over... and very quickly too. This can happen with brands as well.

When it comes to branding, a great question is: how does one best strengthen a brand? The principle objectives being that the brand has a long life, and will withstand the knocks and bumps that inevitably happen in the turbulent world of today.

In the case of the oils and fats industry, branding falls into three distinct categories:

- The brand of the industry as a whole
- The brand of specific companies
- The brand of specific products, like those on supermarket shelves

The metaphor of a bricks-and-mortar building applies to all three, with a particular emphasis, up to now, being on products. This is partly because the branded product is tangible – you can see, touch it and, if you want to, smell it.

Additionally, companies focus on specific supermarket items because this is where the world of branding has mostly had its focus since the 1950s, when brands became an important part of people's lives.

That era heralded people asking for Coca Cola rather than Pepsi, and wanting a Big Mac rather than any old hamburger. By
s t a r k

contrast, a hundred years earlier, a sausage was just a sausage, and a cup of coffee was just that. Whatever branding existed back then was partly the reputation of the company, but mostly it was a personal reputation with the seller.

But the world of branding is catching up with the world of physical buildings. This wasn't always the case. Buildings were the result of professions with years of training in skills areas such as engineering and architecture, while branding was done more or less on a whim.

Now there is more complexity in branding. There are more experts, and managers and workers are putting far more effort into it. Now, more than at any time in the past, the metaphor of brands being like buildings works well. But there is one big question: do you knock it down or do you renovate?

It's not an easy question to answer. People generally get more excited about putting up a building, rather than renovating an old one. But the much less dramatic option of renovation is often better for a brand for these main reasons:

1. Cost


Launching a new brand will be expensive if it is to have a reasonable level of visibility. Brand modification – through a flanker brand introducing a bar of soap with a different scent or a detergent powder that is phosphate free – has a cost which is tiny by comparison.

2. Risk

Small changes to an existing brand are low risk. Often they don't affect the main brand at all. A good example is that of 'light' beers. When the Miller brewing company introduced Miller Lite in 1973, sales of the original Miller mostly ticked along just fine.

It often happens that the original brand plus the flanker brand have a combined volume much higher than the original single brand. Within two years, Miller Lite was a hit and the company's total sales grew from 12.8 million barrels to 24.2 million.

Unfortunately this isn't always the case, as experienced with the Pepsi Blue flanker brand launched in 2002. By 2004 the brand was all but finished – oddly enough



But there is one big question: do you knock it down or do you renovate?



*“If you know your enemy and know yourself, you need not fear the result of a hundred battles.”
Sun Tzu and ‘The Art of War’*

surviving in Indonesia but not in neighbouring Malaysia. After Pepsi Blue was withdrawn in America, Pepsi enjoyed double-digit growth.

That could well be an affirmation of the old maxim ‘there’s no such thing as bad publicity’, as news of the ups and downs of Pepsi Blue gave the company quite a lot of free advertising. So, even with a failed flanker, the downside risk can be zero.

Play to your strengths

Strengthening a brand starts with a long, hard look at strengths and weaknesses. These aren’t always what you think they are. A good example is the case history of Coca Cola and the role of the distinctively shaped bottle.

Shortly after the inception of Coca Cola by John Pemberton in 1887, the focus was on the drink and how good it tastes. The next big upgrade in sales and profits came from the innovation of bottling it – previously, it was only sold on draught and consumed on the premises.

In the 1970s, the focus was on making popular TV adverts (one of the biggest being the one with the famous song: ‘I’d like to buy the world a Coke’), and that

was soon to be followed by the ‘Pepsi challenge’ with the focus on taste.

Then came one of the best ever marketing decisions – the move to not just use any old bottle, but one with a unique shape. The management got the message that the bottle was one area where Coke had something that Pepsi couldn’t match.

Along with the Harley Davidson motorbike, Elvis Presley and the Corvette, the Coke bottle is a piece of classic Americana. Even plastic Coke bottles have the curvy shape, when standard plastic bottles would be much cheaper.

Next, there is that standard philosophical question that applies to life in general: is it better to play to your strengths, or is it better to strengthen where you are weak?

In any business where the resources of time and effort are limited, the key is to focus on which one gives the highest returns on time and energy invested. Almost always, that means playing to your strengths.

But before you can make any headway, it’s a good idea to be clear on exactly

what your strengths are. Most people and organisations may not know themselves and their organisations well at all. To quote Sun Tzu and *The Art of War*: “If you know your enemy and know yourself, you need not fear the result of a hundred battles.”

A repeating lesson from history books is that, in military situations, so many nations lost battles because of poor knowledge of the opponents, or poor knowledge of themselves, or both.

What are the oils and fats industry’s strengths? That’s a question that really needs more investment and market research than has been done so far. All too often, folks in the industry focus on reacting to a newspaper report here or a government import duty there, rather than seeing the total picture.

I’d suggest the following strengths as a starting point for palm oil:

- Taste: people like food cooked with it
- Health: humans need fats in their diet for survival
- Social benefit: helps low income families in developing countries
- Environment: needs less land for production than other oil crops

Choose your battles

Again quoting Sun Tzu: "If fighting will not result in victory, then you must not fight." Branding battles have often been lost because organisations fought for a slightly silly reason: because they could. Just because you have the capability and inclination to fight a battle, it doesn't mean that it's in your best interests to do so.



The first problem with having a fight is that someone has to lose – and nobody likes to lose. That applies whether it's a debate, an argument or a public relations war. Secondly, as a general rule: people don't like changing their minds – which is very much the case with branding where consumers tend to stick with brands they like. Consequently, it is all too easy to end up in a fight where both sides end up with a net loss.

Fortunately for the oil crop industry, there is a series of valuable lessons to be learnt from another large, intensively farmed crop – tobacco. People used tobacco for centuries without being aware of any health negatives. Then, after World War II, studies started to appear – the most famous being in 1950 in the UK, with Sir Richard Doll's publication linking smoking with cancer.

The first mistake the tobacco industry made was to go into denial – they pretended that there wasn't a problem. Their second mistake, and a much bigger one at that, was to attack the studies – anything from discrediting the researchers, to funding their own studies with contrary conclusions.

What has happened to the tobacco industry since? The companies are still highly profitable; with annual sales of around US\$400 billion worldwide. More significantly it has been decades since any tobacco company even fought the health lobby.

Now they adopt a position of: 'Yes smoking is bad for you, just like eating sugary food is bad for you or driving a car could get you killed. You are an adult, and these are life choices. You weigh up the risks with how much you like consuming the product.'

The renovation approach has worked well for the tobacco industry. Instead of getting into dramatic battles with the anti-

smoking lobby, it has adopted smaller changes in position which appears to have worked better for it.

These lessons are particularly useful for the palm oil industry for the following reasons:

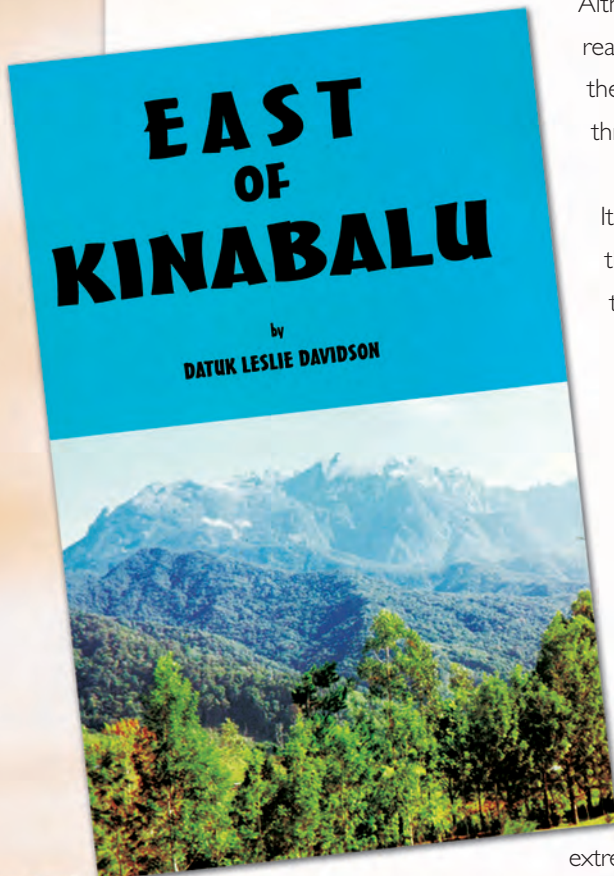
1. The tobacco industry has been, and still is, the focus of many negative campaigns, both by NGOs and consumer groups.
2. Tariffs and taxes make a cigarette one of the most highly taxed items in the high street.
3. The tobacco industry has been taken to court many times over health issues, and has often had to pay multi-million dollar settlements.
4. Tobacco companies are viewed as big faceless corporations, hungry for profits.
5. The tobacco industry has over 4 million ha of intensively farmed land, which would otherwise be the natural habitat of indigenous species.

If the tobacco industry could handle these challenges with the strategy of renovation – rather than knocking something down to build something new – then there is a lot of hope for the palm oil industry in weathering its own storms.

Dr Ian Halsall
Author & Researcher

Life in the Jungle

Settling in



Although I thought I had done as much as I could to make everything ready for the family's arrival, things were still fairly primitive. There was the persistent rat, or rather family of rats, which kept swimming up through the pipes into the bowl of the toilet.

It could be somewhat disconcerting to see a large rat popping up into the bowl just as you were about to sit down. Kong Miew had virtually to dismantle the sanitation system before we tracked down their nest in the septic tank. Then there were the smaller insect pests.

A few nights after the family arrived, I was awakened by a piercing scream. Something, Olive said, had run across her face and chest, in the darkness. She had brushed it off and it disappeared. I thought it might be a snake or a rat and I searched the bedroom thoroughly by the light of my torch, but I found nothing.

I tried to persuade her to get back under the mosquito net. She was still uneasy, however, and to put her mind at rest, we stripped the bed. Under her pillow was the biggest centipede I had ever seen. It was a vicious red creature with a bite which could be extremely poisonous. It was lucky that she had brushed it off in the direction it was crawling, since if brushed off backwards centipedes can sometimes leave a nasty weal on the skin.

It became a drill every night thereafter to search all the beds very thoroughly and to spray insect repellent under the children's mosquito nets, before they went to bed; and then, after they were settled in, to tuck the net in firmly all round, so that nothing could get at them.

And it was an absolute rule that all shoes must be examined in the morning before being put on, to check that there were no scorpions or centipedes in them. I had been bitten on the ankle by a scorpion a month or two earlier, and it had left me with a painful and badly swollen leg for a few days.

The girls lived charmed lives. Like everyone on the estate, they were given *Paludrine* every day. This kept malaria at bay. During our stay in West Africa, Catriona and I had both suffered bouts of malaria which tended to recur when we were back in UK, and Olive had attacks of dengue fever and phalaria.

However in Borneo, in spite of the primitive conditions, we all remained remarkably healthy. The children's only problem was the odd tummy upset. Olive dewormed them every few months. There were also, of course, the odd insect bites and stings, which Olive treated with the tube of *Anthesan* which was never far from her reach.

The family settled down quickly to their life in the jungle. It became a routine for them to walk up along the riverside path through the wood, to meet me in the office in the late afternoons. It must have been an amusing sight for anyone passing on the river to see the procession walking along the river-bank: Olive in the lead, followed by Catriona, Fiona, the two bull-mastiffs, the horse, and finally the two geese taking up in the rear.

Encounters with wildlife

The family had some interesting encounters with Borneo wildlife. On one occasion Catriona, riding on her horse with the groom Tahir in attendance, came across an angry hamadryad which reared up almost as high as the pony's face. Tahir was able to control the terrified pony and fortunately the snake did not attack.

The wildlife encountered was not all bad of course. There was a large squirrel which I used to see almost every day in Ibrahim's guruh tree, between the house and the office. It was black with an orange belly. Urut Turut had called it a *Sampuan Merah*.

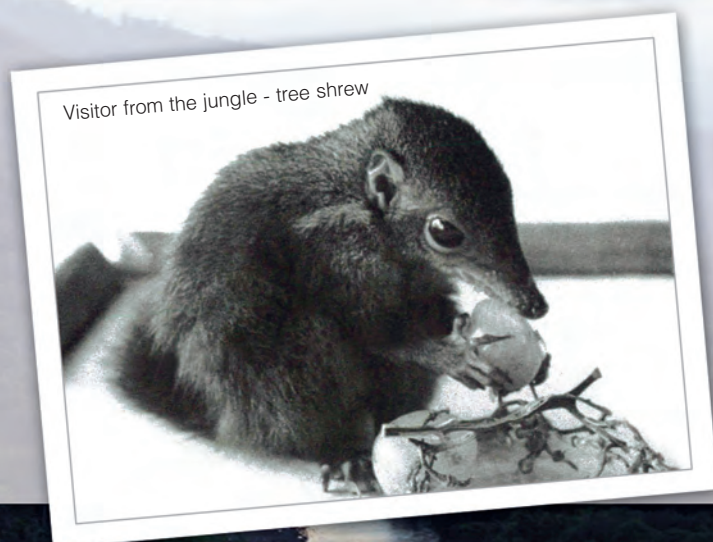
One evening as I was returning home, I noticed it behaving in a peculiar fashion. It ran down a branch which trailed in the water. Reaching the river it seemed to dip its paws in, as if it was testing the temperature, and then climb back up the tree. It did the same thing two or three times.

I stopped and watched carefully from a distance of only a few yards. Eventually the squirrel sprang into the river and began to swim, heading for the far bank. I had never seen a squirrel swimming.

Our canoe was tied up at the jetty, and Catriona was playing nearby. I called her and we paddled out swiftly into the river after the squirrel. It swam slower and slower. Halfway across it stopped swimming and we caught up with it. I picked it up. It was stone dead. I suppose it had drowned.

When I examined it, I found that its paws were covered with a nasty fungus which must have been causing it pain. Catriona was in tears. We wondered if the squirrel had committed suicide because it could no longer climb properly, or if it went into the water instinctively, to cool its paws.

Some of our jungle neighbours used to drop in (literally) from time to time. One evening a beautiful flying squirrel glided in from a nearby tree and landed with a plop on our camphor-wood floor. On another occasion a tiny tree-shrew turned up. It decided to stay and to share our house with us. It became completely tame and it used to curl up on Olive's lap as she sat reading on the veranda. It would jump on to her hand and eat grapes. (see photo).



Some time later, another orphan was brought to Olive to bring up. This was a baby bear. The children named it Belinda. Olive reared it very successfully on the bottle. It was a marvellous pet until it grew rather large and was successfully returned to the jungle.

A less welcome visitor to our compound, which we saw very rarely but noticed frequently by its smell, was the moon rat – a large white rodent which deposited an odour like a skunk, when it was disturbed.

Suburban feel

After the departure of the redoubtable James Lloreno, Kong Miew had married Vazeline and moved out to a house in the village. Thereafter we had a series of Chinese cooks who came and went with monotonous regularity.

Finally, after the arrival of the Cocos Islanders, we were lucky that one of them agreed to come and cook for us. This was Mahid. He and his family were to become a permanent feature of our household for the rest of our time in Sabah. In addition to being an excellent cook, Mahid was also the Cocos Islanders' *Imam*. He was responsible for officiating at the rites of passage of all the Cocos Islanders, and he was an important man in the community.

For some months after the family arrived, we employed a Bugis amah, Jarah. Her husband worked in our sawmill. They had a young daughter Athi, who became a great friend to Catriona and Fiona. She was a pretty child but sadly, she was deaf and dumb.

The three children were inseparable. When, in the monsoon, the river spilled over its banks and flooded our compound, to the depth of a foot or so, the three children played happily in their small dug-out canoe for hours. They could soon swim like fish.

Young John Wyngarten next door, at 12, was too old to play childish games. However, his father started up a scout troop among the youngsters in the area, and he soon made friends of his own age.

Olive could speak Malay of course, from our days in Johore, as could Catriona; and it was only a matter of weeks before Fiona was chattering away in Malay as well, with a strong Cocos Island accent. With Athi being completely deaf and dumb, it was a source of continual amazement to us how they all managed to communicate with each other.

With the horse and the two puppies and the geese, the compound became a rather busy place. Sadly, our first gardener, my friend Urut Turut moved back upriver to plant his padi, and he never came back to work for us again. I missed his cheerful face.

The next family to come up the river on the *Puyoh*, was Kenganathen's wife Geck Moi, and their children. Geck Moi was our dear friend from our days at Kluang, and the whole family was pleased to see her.

With the arrival of Olive, Jean Wyngarten and Geck Moi and their young families, I felt we had now entered phase two of the project. Tungud was becoming quite suburban.

Datuk Leslie Davidson
Author, *East of Kinabalu*

Former Chairman, Unilever Plantations International

This is the second part of an edited chapter from the book published in 2007. It can be purchased from the Incorporated Society of Planters; email: isphq@tm.net.my



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