

AGRICULTURE

A coconut revival

BY TAN ZHAI YUN

It is time for the local coconut industry to shine, having been overshadowed by oil palm for decades, say industry observers. This is being driven by declining palm oil prices and rising demand for coconut-derived products.

But there are many challenges. For one, local coconuts cannot compete with imports in terms of price and scale. According to news reports earlier this year, local coconut suppliers were calling for the government to regulate the import of coconuts. In their view, the influx of cheap coconuts from countries such as Thailand and Indonesia was hampering their businesses.

The lack of competitiveness and perceived insufficient supply is due to many farmers choosing to plant the more lucrative oil palm instead of coconut trees, says Dr Abdul Shukor Juraimi, dean of Universiti Putra Malaysia's (UPM) faculty of agriculture.

Coconuts are Malaysia's fourth largest industrial crop behind oil palm, rubber and rice with most of the plantations found in Sabah and Sarawak. According to a report by the Malaysian Agricultural Research and Development Institute (Mardi), the country is among the top 10 coconut producers in the world, although production fell between 2014 and 2016.

Total acreage of coconut plantations had fallen from about 120,000ha in 2005 to 85,000ha recently, says Abdul Shukor. Meanwhile, palm oil prices rose from 2006 to 2012. Then, prices went on a general downward trend (except for a spike in 2017) due to oversupply and weak demand from top buying nations.

Recently, prices were impacted by the EU's decision to avoid palm oil due to concerns of forest clearing and environmental degradation directly linked to oil palm cultivation. This had serious consequences as the region was the world's second largest importer of palm oil.

"The declining palm oil prices have caused smallholders to suffer a lot, especially those who only have 1ha to 2ha of land," says Abdul Shukor.

"On the other hand, coconuts are becoming popular as prices have gone up. It is an emerging industry and the demand is growing because 10 to 20 years ago, we mainly used the crop to produce coconut oil. Today, in addition to virgin coconut oil, it is used to produce fresh coconut milk, drinks and powder."

The current supply of coconuts is unable to meet local demand. According to Abdul Shukor's calculations, 100 million to 220 million coconuts need to be imported annually, especially during festive seasons.

"The problem with the coconut industry at this moment is that the farmers are still using the old variety, Malayan Tall. But the production yield is not that good," he says.

This variety produces 6,000 to 10,000 nuts per hectare per year. The Malayan Tall also takes a long time to grow and its height makes it difficult to harvest, he adds.

Meanwhile, better varieties of coconut seedlings already exist in the market. These are developed by Mardi and the Department of Agriculture. Companies such as United Plantations Bhd have their own variety, Matag, which farmers can buy.

"We also have the Malayan Yellow Dwarf, Malayan Red Dwarf and Pandan. The plants are smaller and shorter so they are easier to harvest. Also, the yield is very high. When the plants are smaller, you can plant more trees in an area," says Abdul Shukor.

But these varieties were not taken up because farmers were more interested in palm oil at the time. "Not many people were interested in promoting these varieties. Now that everyone is starting to see potential in the coconut industry, these varieties can be a new source of wealth because they can double the income of farmers," he says.

However, the seedlings of the new varieties are currently insufficient for all the coconut farmers in the country. They are also more expensive than traditional varieties, which may be a challenge because most of the smallholders have limited budgets.

"The Malayan Yellow Dwarf and Malayan Red Dwarf are about RM10 per seedling while the Matag can go up to RM60 because of the high demand. The three varieties produce a similar number of nuts per tree, but the Matag variety has thicker flesh, which is good for coconut oil, virgin coconut oil and coconut milk," says Abdul Shukor.

It is not easy to produce seedlings. Someone has to climb the tree and induce pollination to get the required variety. In Malaysia, there are not many with this skill, says Abdul Shukor. UPM is trying to overcome this problem by importing some seedlings of other good varieties.

The government allocated RM50 million of its budget last year to help farmers purchase seedlings and replant. The money was also aimed at helping farmers improve the maintenance of their plantations and use fertilisers to increase productivity.

"Previously, farmers did not bother to use fertiliser because they were not aware of its importance. Some just waited for the mature coconuts to fall before collecting them. In Malay, we call it the three Ts — *tanam, tunggu, tuai* (plant, wait, harvest)," says Abdul Shukor.

"It is easy, but production is very low. With the old variety, they can get 15,000 nuts per hectare if they use fertiliser. If not, they can only get 6,000 to 7,000 nuts per hectare per year. This initiative by the government encourages farmers to use fertiliser and adopt agronomic practices or proper farm management."

CONTINUES ON PAGE 7



A downstream manufacturer's view

The high price of local coconuts has deterred manufacturers from relying solely on domestic supply. Manufacturers that want to ensure customers can purchase their goods at affordable prices are caught in a bind as they also have to control their raw material costs.

Linaco Manufacturing (M) Sdn Bhd managing director Joe Ling says the price of local coconuts is too high. "It can be as much as 2½ to 3 times the price of coconuts from neighbouring countries."

Linaco is a family-owned business that has been manufacturing coconut-related products for 27 years. The company sources its coconuts from a neighbouring country.

To increase the attractiveness of local suppliers, the government should set up a board to regulate the coconut industry and manage prices to ensure that the difference between local and foreign coconuts is not too wide, says Ling. "It will help to regulate transactions of coconuts and prices of imports. In addition, subsidies have to come in. When the government taxes the industry, the money must always come back in a cycle to assist the upstream industry."

Government agencies such as the Malaysia External Trade Development Corporation as well as the Ministry of International Trade and Industry and the Ministry of Agriculture have supported the coconut industry through various initiatives, he adds.

"But I believe they can do better and engage the industry players more. The industry cannot grow only through contributions from the private sector. It is a joint effort."

Ling believes that there should be a comprehensive plan for the local coconut industry. "For the past 20 years, coconut trees have been felled and replaced with oil

palm and rubber. The government's planning revolved around planting whichever crop was better. But the sustainability of the business is not there."

If local coconuts are competitive, manufacturers can lower their costs by buying them to help support the local industry. This is not an initiative the private sector can undertake by itself. Acquiring new land to plant coconuts is expensive and providing farmers with new and good varieties of seedlings requires a substantial amount of capital. It will be too costly and labour-intensive for the private sector to take this on by themselves.

"But when you have a board, you can regulate the standard of seedlings and bring in seedlings from other countries. You can select members of the board and have a fund to manage it. You can also do R&D and set up a lab to create those seedlings. This would be like the palm oil board, which is very strong and able to support its farmers," says Ling.

Over the past few months, his company has been engaging with the governments of Sabah and Sarawak to expand coconut plantations. For instance, last November, the Sabah government announced plans to open between 10,000 and 25,000 acres of new coconut plantations by working with farmers in rural areas and collaborating with Linaco, including in the downstream industry.

"We told them that if there were coconuts here at a competitive price and volume, someone would take them. We need consistency of volume and prices. Our commitment to the government is that we are there if you can provide this," says Ling.

Linaco has also struck up a joint venture with a seedling expert from India to bring in new varieties.





The emergence of the industry

The demand for coconut products has risen over the past decade as a result of higher awareness of the health benefits of the fruit, observes Joe Ling, managing director of Linaco Manufacturing (M) Sdn Bhd.

Linaco's core products range from coconut water and coconut milk to desiccated coconut. The company, which started out by selling coconut powder, was founded by Ling's father 27 years ago.

"The company has changed so much since those days. In the early days, the selling point was convenience so you could keep the product longer. Now, it has moved one step ahead, whereby consumers prefer to have coconut in liquid form so they do not have to mix it. Fifteen years ago, we put it in a Tetra Pak and consumers can just cut it and pour the coconut milk into their curry or dessert," says Ling.

Some coffee drinkers are beginning to replace dairy with coconut milk, he observes, while coconut water began seeing a surge in demand about 12 years ago. This is particularly so in countries that do not produce coconuts. "The US is one of them. Also Europe, Australia, China and Japan," says Ling.

Exports account for about half of Linaco's revenue. The company exports to 40 countries, with the US and China being its biggest markets. The company is planning to tap the Middle East next. "If you look at the weather there, coconut water should be able to help them a lot. We are also looking at Eastern Europe, Pakistan and Afghanistan," says Ling.

Another product that is enjoying an increase in popularity is virgin coconut oil despite the lack of standards in the industry. "There is a lot of cannibalisation of other oil products such as soybean, olive and seed oil. People are getting alternatives for healthy oils," he says.

"Coconut oil is very stable. When you cook or deep fry using it, the body of the coconut oil does not change as much compared with olive oil. That is why people often warn you not to cook in high heat. Coconut oil has a very high tolerance to heat, so the structure and nutrients in the oil do not change with high heat."

Linaco's products include Tetra Pak Brik coconut milk, canned coconut milk, Tetra Pak Prisma coconut water and juice, coconut cooking oil and low-fat desiccated coconut. "The company has the know-how in the coconut industry and our R&D team is always innovating and developing new, top-quality coconut products," says Ling.

Dr Abdul Shukor Juraimi, dean of Universiti Putra Malaysia's faculty of agriculture, observes that virgin coconut oil is an emerging opportunity for manufacturers. There is also demand for young coconuts that can be served and consumed in restaurants.

"These are quite expensive, costing RM5 to RM6 each. If we promote our coconuts well, it can be a good opportunity. I would suggest that farmers use the Malayan Yellow and Red Dwarf varieties because they can get more returns if they sell young coconuts," says Abdul Shukor.

The other parts of the coconut tree can be used for various purposes. The trunk, for instance, can be used to build furniture, the young leaves for ketupat and the fibre, which is the outer layer of the coconut, can be used in the agricultural sector.

"The sector can use it to make cocopeat. It is a medium for plants to grow. It is used in Cameron Highlands for strawberry production," says Abdul Shukor.

Innovation from Santanku

The local coconut industry has its fair share of players, from the big listed companies and decades-old businesses to small and medium enterprises (SMEs) and even micro-businesses that sell coconut milk in wet markets.

In the SME space, Silas Ling and Michael Lu have brought technology and innovation to the process of producing and delivering coconut milk with their company, Santanku Sdn Bhd.

They became interested in the business when they realised that the process of extracting coconut milk in wet markets was not very hygienic. They also found that there were ready solutions in the market to address this problem.

"The model for our business is like the one in Singapore, where traditional methods are no longer used to produce coconut milk. The traditional method [using manual labour] creates coconut milk that tastes good, but does not meet hygiene and other food safety requirements," says Ling.

He and Lu worked with engineers to come up with a custom-designed machine for the pasteurisation of coconut, which kills bacteria and eliminates contamination that can come from human hands. The traditional method requires a person to open a coconut, grate it using a machine and pack the grated coconut by hand.

For Santanku's process, only the opening of the coconut to remove the shell requires manual labour. "The moment it goes into the machine for the milk to be extracted from the meat, there is no human contact. It goes through pasteurisation, then it is chilled very quickly so the bacteria does not really multiply during that period," says Ling.

He and Lu also observed that micro-business owners, such as those who sell nasi lemak or cendol, had to buy coconut milk from wet markets in the morning and store it throughout the day, thus risking spoilage. "Fresh coconut milk is sensitive. Once it is exposed or not stored well, it will start to spoil four or five hours later," says Ling.

For cendol sellers whose business can be dependent on the weather, purchasing coconut milk ahead of time can lead to losses if they are unable to use it that day.

This led Ling and Lu to set up a factory that mechanises coconut milk production in Batu Pahat, Johor, seven years ago. This innovation lengthens the storage time through pasteurisation, a method commonly used in many industries to sterilise food and extend shelf life.

In January, they launched an app that enables their customers to order coconut milk on-the-go from 4am to 6pm, which will be delivered by a Santanku rider. "We serve a lot of small stalls, such as those that sell nasi lemak and cendol, not to mention mamak restaurants," says Ling.

"Cendol sellers find us handy because if it is a rainy day, they can cancel their order. They do not have to bear the risk of wasting coconut milk.

"If they purchase it from the market in the morning and it rains in the afternoon, they cannot keep it overnight. Most of them do not even try to keep it refrigerated overnight because it will not be fresh. But when they deal with us, they find it very convenient because we deliver it whenever they need it."

They just have to order three hours before Santanku's final delivery time.

The market for coconut milk is huge. It is heavily used in delicacies in the Malay and Indian communities, Ling points out. Santanku does not see itself capturing the whole market either, since "some of them still prefer to buy coconut milk produced using the traditional method in wet markets".

But he is not fussed about this. "Those sellers have their market and we have ours. We are targeting those who want convenience at no extra cost," he says.

According to the founders, they are the first in the market to offer an app-based delivery service. Now, the service is available in Kuala Lumpur, Selangor, Johor, Melaka and Penang.

"The app was our biggest success. It was not cheap to develop it, but we took a risk and it is starting to pay off.

Our aim is to cover the whole of Malaysia. If you have a restaurant anywhere in the country, as long as you need santan (coconut milk), we can reach out to you through the app," says Ling.

They hope that in six months, all their orders can be made via the app. "Our customer base is huge at the moment. I think across Malaysia, we have about 1,500 customers. That is quite a large number considering that we have just started," he says.

This year, the company will be expanding to Alor Setar. Every day, a fresh supply of coconut milk is delivered from its factory in Johor to all the other locations to be kept in cold storage.

"We try to keep it as fresh as possible. But because of the way we produce the milk, it can maintain its freshness for three to four days. We have invested heavily in the technology to make sure our customers get a really good product," says Ling.

Santanku does not intend to compete with the big coconut manufacturers. Instead, Ling wants to focus on serving the micro, small and medium enterprises, particularly the stalls and mamak restaurants.

The founders of the company are determined to provide a consistent supply of high-quality fresh coconut milk to these businesses at no extra cost. This means that regardless of the fluctuations in coconut prices in the market, the company will sell its products at the same price.

"Our target is to supply to the majority of people at no extra cost or lower if we can. But of course, we have our challenges too. Sometimes, we may have a season when the local coconuts are too expensive. Then, we have to look for coconuts elsewhere," says Ling.

They also need to control the cost of raw materials to ensure that the price of the end product stays the same and the quality is not compromised, he adds. "If everything can be sourced in Malaysia, why not? Our aim is to help our people. If the government has a big push for the coconut industry, I am quite sure we will be able to see a big change in three to five years. Then, we can source only local coconuts."

Ling hopes the government will support coconut growers in adopting new technology in farming practices to bring costs down so that downstream players like him can source more coconuts from local farmers. He also hopes that the government can educate those who have been producing coconut milk using traditional methods so they can improve the process.

"A lot of people still rely heavily on labour. This is where foreign labour is needed. But when the government tightens its control of foreign labour, the cost will be passed on to the consumer. They need so much manpower because the technology and education are not there," says Ling.

They have tried speaking to some players, but some of them are wary because it is a new technology. That is why it will take a government initiative to promote it on a wider scale, he says. "Hopefully one day, we can be as good as Singapore, where the milk is clean and of good quality and the cost is not high."

Apart from fresh coconut milk, customers can buy *kerisik* and other coconut products via the app. Ling and Lu are considering adding other products, such as *cili giling*, upon requests from their customers.

Ling envisions being able to utilise this network to deliver local delicacies produced by micro-businesses throughout the country. "You can see a lot of farmers or makciks with very good quality products, such as *sambal* made in a unique way. But they may not be good at selling it. We want to help them by allowing them to use our network. But we prefer to work with SMEs," he says.

Elevating the livelihood of rural growers

FROM PAGE 4

Good farm management practices are especially important today as the trees are facing threats from pests such as the rhinoceros beetle and red palm weevil. “The red palm weevil is actually from the Middle East and could have come when people brought in date palms for ornamental purposes. It is quite devastating. You can see the whole plant collapse because the weevil will eat the inside of the tree trunk. The Department of Agriculture is monitoring this very closely,” he says.

TIME FOR A REVIVAL

To accelerate the growth of the local coconut industry, the government will have to play a big role in ensuring that consumers get a consistent and affordable supply of coconuts while also improving the livelihood of farmers.

Abdul Shukor believes that the government is trying its best to strike that balance, especially during festive seasons, when the demand for coconuts usually soars. However, if the government can align its efforts to increase the local supply of coconuts and reduce the reliance on imports, this problem can be solved to a large extent.

“I think it is very important for the government to take this seriously. If we want to elevate the incomes of rural farmers, we need a good strategy, standards of procedures and proper monitoring by the relevant agencies,” he says.

“Many people in the market are complaining that their coconuts cannot be sold and I think it is not because of oversupply but a lack of strategy on how to market them. We need to have downstream factories and distribution strategies for young coconuts, for example.”

The budget allocation last year was a good move, but the amount was not enough, says Abdul Shukor. “If you want to replace all the old coconut trees with new ones, we will need a bigger budget. This is a good opportunity for bodies such as Felda [Federal Land Development Authority] and Risda [Rubber Industry Smallholders Development Authority] to get involved because they already have systems to monitor and manage plantations. With a large number of farmers working under the management of those entities, it can be easy to manage in terms of harvesting and to venture into the downstream sectors.”

He adds that there should be a comprehensive strategy covering the entire value chain, from the production of seedlings and increasing the number of plantations to education to improve farm management and encouraging the use of fertilisers.

In Abdul Shukor’s view, the government will have to play a leading role in providing assistance to farmers for at least five years. While the private sector also has a role to play, the initial stages will have to be funded by the government.

When asked whether coconut farmers can get financial assistance from entities other than the government, Abdul Shukor feels the chances are slim as the coconut industry is only just emerging.

“I know Agrobank is trying its best to help entrepreneurs because we work alongside it. But it cannot help everyone as it also has [qualification] criteria. With projects involving high-value crops such as rock melons, it is able to help. But I have not heard anything regarding coconuts yet. It will take some time,” he says.

After all, it takes three years for a coconut plant to produce a yield, compared with merely three months for rock melons.

“That is one of the problems farmers face and it is why the government has to step in,” says Abdul Shukor.

He adds that farmers can supplement their income by planting bananas, chillies, water morning glory and okra, which have a short harvesting period, while waiting for their first harvest.

