

# MetroBiz

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**Fertiliser tycoon:** Plant Safe founder Ng Hock Lin.

## Planting the right mix

An ambitious SME and its inspiring leader are out to change mindsets and improve yields in Malaysian oil palm plantations, all while expanding to bigger markets. >Pg 22&23

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Photos by RAJA FAISAL HASSAN

**H**AVING already established a small but significant presence for itself in the palm oil industry in Malaysia, local fertiliser manufacturer Plant Safe Fertilizer Sdn Bhd is already eyeing a bite of the vast Indonesian plantation market.

Plant Safe has been manufacturing its own special mix of fertiliser for the local plantation industry since the 1980s and recently firmed up an agreement to set up a production site in Medan, Indonesia.

Plant Safe founder Ng Hock Lin said the company has struck up a joint venture with an Indonesian plantation owner with 17,000ha of palm oil plantation land.

"We are now in the process of forming a company in Indonesia. Our product is registered under the National Standardisation Agency of Indonesia. Once everything is approved, our product will be available there," Ng said.

Plant Safe's new venture will start with a production capacity of 50,000 tonnes, which is half its production here.

The palm oil industry is one of the key sectors in Malaysia, reportedly contributing about 8% of the country's gross domestic product or almost RM53bil of the nation's gross national income.

With some five million hectares of land covered by oil palms in Malaysia, Ng said the market for its products in Malaysia by itself is substantial and Plant Safe is merely scratching the surface of the potential here.

"The market here is big enough for us to continue growing rapidly. But if we are big enough and have the capacity, certainly we would want to expand into other markets as well," he added.

Plant Safe manufactures fertiliser in sachets that releases the nutrients to the plants slowly over a period of time, which Ng claims is the first of its kind in the world.

The company has patented the sachet concept in Malaysia, Indonesia, China and South Korea and is awaiting approval for its patent in Cambodia, Vietnam and Thailand.

The patented sachet controls the delivery rate of nutrients to plants and protects the valuable nutrients from being washed away by rain.

Ng started formulating fertiliser mixtures for the palm oil industry in 1982 after many years of blending and producing organic fertiliser for the horticulture sector.

# Growing by helping growth

## Local fertiliser manufacturer ties up deal to set up production site in Indonesia



**Packing precision:** Workers at the plant busy packing fertiliser.

Ng's brew for the palm oil industry is relatively new and is yet to be widely accepted by plantation owners.

Traditionally, fertiliser is routinely spread in plantations using manual labour, which Ng said makes fertilisation uneven and susceptible to being washed away by rain water. He added that about 50% of fertiliser is usually washed off when it rains.

"Usually, you need to do about seven to 12 rounds of fertilisation a year in a normal oil palm plantation. But the sachets

can reduce the rounds to about twice a year as the nutrients are contained in a sachet and leech out slowly," he said.

This, Ng points out, reduces labour needs in a plantation.

As it is, the industry is facing an acute shortage of labour and it is not easy to mechanise operations in a palm oil plantation given the uneven terrain they are located on.

Additionally, the sachets produced by

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Plant Safe's annual turnover:

**RM150mil**

Production capacity:

**100,000** tonnes

## Man with a clear mission

The youngest of eight siblings, Ng Hock Lin did not grow up as privileged as his older brothers and sisters.

Ng's father was a rubber dealer in his earlier days, which brought the family a modest living. But after he suffered a stroke, the family was left with few means to fend for itself.

The family struggled to afford his father's medical treatment and Ng, only nine years old at that time, had to help his family make ends meet.

Raised in Batu Kurau, Penang, Ng started selling the cleaned and destalked leaves of a plant called Simpoh Air to an abattoir. The leaves, sold at 20 sen for 100 pieces, were used to wrap meat.

Every morning, Ng woke up early and walked for miles to the jungle in Aulong New Village in search of his product before going to school. While the early morning walks were tolerable, Ng said the destalking of the leaves was a painful task.

After many years of earning a pittance from the leaves, Ng moved on to repairing and constructing drains during school holidays in his teenage years.

Fortunately, Ng was offered a scholarship to continue his tertiary education in Taiwan and had his first brush with the agriculture sector at the Tao Yuen Agricultural College.

Ng became very good at fertiliser formulation, especially the ability to get the most benefit out of phosphate fertiliser for plant growth and was noticed for his hardwork at the Taiwan Rose Centre.

In 1970, Ng was brought back to Malaysia by the Rubber Research Institute Malaysia (RRIM) to help transfer seed breeding know-how as well as to implement cash-crop intercropping in rubber estates. He eventually started his own fertiliser company and Plant Safe was born in 2009.

Now 65, Ng is still keen on contributing to the oil palm industry.

"A hectare of land planted with oil palms in optimum conditions can produce 55 tonnes to 60 tonnes of fresh fruit bunches (FFB) a year. We cannot change the weather, rainfall or soil type, but we can change our fertiliser practices," he said.

He noted that the industry is cur-



**Self-made man:** Ng has laboured many years to build his company and help the industry.

rently only touching one third of its potential and land is finite.

Thus, innovation is the key to achieving better yields and FFB quality. But, while getting the right breed of seed can take many years and much investment, Ng said feeding the right nutrients is the fastest way to

improve yields.

"We are currently sharing our knowledge on nutrients with plantation companies, each with their own sets of challenges. We just need to see more collaboration happening," Ng said, adding that he and his team are constantly looking for ideas to benefit the industry.



**Bagged to go:** bags of fertiliser sachets packed and ready to be shipped out

## 'Right fertiliser formulation can boost production'

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Plant Safe are made of biodegradable material, which reduces the need for them to be collected back for disposal after use.

Plant Safe turns in annual revenue of RM150mil and Ng said it is possible to achieve growth of 20% a year. The biggest setback to its growth here is the old-school thinking of plantation owners who are reluctant to invest in new methods.

Granted, the price of Plant Safe's fertiliser is 30% higher, tonne for tonne, compared with traditional granule-form fertilisers, but Ng said in the longer run, operational costs are lowered due to the reduction in fertilisation cycles per year and the cost-savings from reduced labour.

The fertiliser mixture in the sachets is customised to the needs of clients and can range from RM800 per tonne to RM2,300 per tonne.

According to Ng, 1ha of plantation land requires about one tonne of fertiliser a year and plantation owners could potentially save up to RM6.3mil on lower operating costs for 100,000ha of land.

"We understand that we need to keep costs low for plantation owners, so we are competitively priced as well," he said.

Plant Safe will also be completing a new facility in Bintulu in March which has a capacity of 40,000 tonnes to serve its clients in East Malaysia.

While the new facility may be small, Ng said ramping up production is a non-issue as it can double capacity within three months with minimal investment.

Plant Safe's move into Indonesia presents the company with a big opportunity to grow the business as Ng noted that palm oil plantations covers some 14 million hectares of land in Indonesia, which is three times the size of the local market.

But Ng is not just out to reap the benefits of serving the palm oil industry. He believes that the right fertiliser can help boost production and improve yields for the industry.

"The profile of nutrients used in most plantations has not changed in the last few decades. But technology has advanced and we can improve industry yields by improving the profile of nutrients.

"And this will benefit not just the industry but the country because it will boost our exports and add to our country's revenue. So plantation owners need to be open to adopting new measures and not be afraid to invest in methods that can work," Ng said.



**The right mix:** Ng inspecting the mixture of nutrients prepared at its production facility