

United Malacca Berhad and Universiti Putra Malaysia collaborate in R&D to boost palm oil output.

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INDONESIA has already overtaken Malaysia as the world's largest palm oil producer, but United Malacca Berhad (UMB) is not about to let that sit.

The oil palm plantation company is establishing a professorial chair in oil palm plantation management at Universiti Putra Malaysia (UPM) in an attempt to boost palm oil output through research and development, said UMB chairperson Tan Siok Choo.

"Currently the biggest constraints faced by the Malaysian oil palm plantation sector is land and labour — commodities Indonesia has in abundance.

"To turn the situation around and not fall even further behind in terms of output, research and development (R&D) is essential. Even more so if we want to increase output with existing plantation land areas and labour quantities," she said.

Tan added that Malaysia is not a low-cost palm oil producer and improving yields will help offset the increase in wages, fertilisers and pesticides which are likely to keep going up.

"The average annual yield of fresh fruit branches in plantations is around 21 tonnes per hectare but some plantation companies have managed to push that up to 31 tonnes per hectare using tissue culture.

"Growing shorter oil palm trees is another area of research that will be helpful, because even though the trees bear fruit for up to 60 years, companies are forced to cut and replant them when they are between 25 and 30 years because of their height," she said.

Additionally, going "high tech" will help develop superior planting material, mechanise the planting and harvesting process of oil palms and identify new edible and industrial uses for palm oil, added Tan.

The areas of research the professorial chair will focus on include identifying genes that will make oil palm trees more resistant, stimulating oil palms to produce more female flowers and designing tools to ease the planting and harvesting processes.

World class R&D



Made in Malaysia: Scientists are using genome technology to create varieties of oil palm with higher yield. A major strength of Malaysia's oil palm sector is its world-class R&D by Malaysians themselves.

"The United Malacca Professorial Chair in Oil Palm Plantation Management will be set up in UPM's Faculty of Agriculture — a natural choice since UPM, formerly known as Universiti Pertanian Malaysia, has a renowned faculty in the field.

"By establishing the chair, UMB is effectively outsourcing its R&D to UPM. Instead of setting up our own R&D facilities, we're relying on UPM's up-to-date facilities and highly qualified staff to undertake the work," said Tan.

UMB and UPM signed a Memorandum of Agreement (MoA) to establish the chair on July 13. Tan represented UMB whilst the university was represented by UPM vice-chancellor Datuk Dr Radin Umar Radin Sohadi.

Under the agreement, UMB will provide an endowment fund of RM2mil to finance the activities of the chair. The money will be placed

in the UMB Professorial Chair Account, which UMB's external auditors will be entitled to audit, said Tan.

"The agreement also requires the two parties to set up a liaison committee with three representatives each to select a professor to head the chair.

"Once the committee is set up, a list of nominees will be submitted to them for approval.

"Even though the committee will be chaired by a UPM representative and the varsity will have the final decision on who gets to head the chair, the decision must be with UMB's consent," she said.

She added that the terms of the MoA also state that the committee will monitor the expenditure of the RM2mil endowment fund.

"Any payment of RM200,000 and above requires the consent of both UPM and UMB representatives in the committee before it

can happen," said Tan.

She added that the agreement also ensured that any Intellectual Property Rights (IPR) arising from research by the chair's holder would be protected and jointly owned by UPM and UMB.

"If there is any commercialisation of intellectual property (IP) by either party, the right of first refusal will be granted to the other party to participate in the commercialisation of the IP," said Tan.

Apart from promoting R&D and innovation in oil palm plantation management, UMB also aims to create greater awareness among young Malaysians about the rapidly expanding career opportunities in the sector, she added.

"We want young Malaysians to know that working in palm oil isn't limited to field work in the plantations. It involves cutting edge technology and science.

"We hope that with a little pub-



'We want young Malaysians to know that working in palm oil isn't limited to field work in the plantations. It involves cutting edge technology and science,' says UMB chairperson Tan Siok Choo.

licity on the United Malacca Chair, students will see that the sector offers high-level jobs and its scientists are on par with those working in any other field," she said.

Tan elaborated that UMB also offers scholarships to students studying in Malaysian universities.

"Many of them have since graduated in fields such as engineering and agriculture. Some are now working in our palm oil mills and estates in Sabah and Pahang.

"This is one way UMB hopes to attract the best and the brightest minds to work for the company and enhance its strategic capabilities," she said.

Tan explained that many Malaysians forget that a major strength of our rubber and palm oil sector is its world-class R&D that was conducted largely by Malaysians themselves.

"This minimises the outflow of payments overseas for IPRs.

"My belief in enhancing R&D as a critical requirement for UMB's progress stems from my father, the late Tun Tan Siew Sin. He was a staunch believer in R&D.

"Although the commercialisation of R&D may take years and possibly decades to materialise, it is still necessary to sustain the oil palm sector's long term profitability and competitiveness," she said.

THE involvement of industries in research and development is very crucial in contributing to the advancement of knowledge and technology.

They can contribute in terms of grants, provide industrial training and at the same time, invest in universities' innovative products and technology.

Universiti Putra Malaysia (UPM) vice-chancellor Datuk Dr Radin Umar Radin Sohadi said a professorial chair in Oil Palm Plantation Management will be set up under a Memorandum of Agreement (MoA) signed between United Malacca Berhad (UMB) and the university.

"UMB is generously providing an endowment fund amounting to RM2mil to support the activities of this professorial chair.

"This (professorial chair) will also promote research and development in oil palm plantation management

Oil palm the main crop

for the enhancement of and value add to the oil palm and palm oil industries in Malaysia and globally and any other area of research mutually agreed by both parties," he said in his speech at the signing of the MoA.

The objectives of the agreement, apart from collaborating in the promotion of research and development in oil palm plantation management, will also include the co-operation and collaboration of both sides. Dr Radin Umar said the UMB effort is commendable and should be emulated by other industry players as this would intensify research and development.

"Commodities have always been the main stay of the Malaysian economy.

"From the earliest days, it has been rubber and tin, and now palm oil is the pre-eminent agriculture commodity sector.

"The palm oil industry is a significant contributor to the Malaysian economy with over 4.9 million hectares of planted area," he said.

The industry, he added, has experienced steady growth over the years with exciting developments for potential growth in the downstream sector.

"There are a number of pertinent issues facing the sector today. They include improving productivity including that of planting materials, plant health, tackling labour shortage and ensuring sustainability," he said.

Research should be conducted



UPM V-C Dr Radin Umar hopes the collaboration between UMB and the university would be the beginning of a long and fruitful relationship.

in finding better solutions to overcome the various problems in the industry, such as the bunches of fruits rotting in the fields because

of a lack of workers to harvest them and the need for replanting.

Dr Radin Umar said UPM will continue to play a leading role in the "agriculture agenda".

"Agriculture and the related science will continue to be UPM's niche area.

"The importance of research is no longer confined to just producing papers but more importantly, its impact on bringing benefits to the people through new methods and technology and commercialisation," he said.

Dr Radin Umar said UPM was happy to enter into strategic partnerships with government agencies and industries both locally and globally.

"I take this opportunity to congratulate United Malacca Berhad on this collaboration. Hopefully, this will be the beginning of a long and fruitful relationship," he added.