



Soong (left) and Gooi (right) during the ribbon-cutting ceremony.

## Keningau mill to usher extraction tech

**Clarence George Dol**

**KENINGAU:** The district's first ever palm oil mill, Desa Kim Loong, is ready to bring in new technology into the palm oil sector in Sabah which will boost the industry into a new stage.

Executive Chairman of Desa Kim Loong, Gooi Seong Lim said the technology called Palm Pressed Fibre Oil Extraction (PFOE) has been successfully developed in 2005 in collaboration with Eonchem Technology Sdn Bhd.

"Our first solvent technology plant in Johor which is also the first PFOE plant in the world was successfully commissioned in September 2007," he said.

He said the plant has since produced a total of 4,512 metric tonnes of red palm oil extract worth RM11 million, which would have been burnt and lost in the boiler of conventional palm oil mill.

"We are confident that our plant in Keningau will repeat the success achieved in our Johor plant," he said during the officiating of the new plant in Sook by state's Minister of Industrial Development, Datuk Raymond Tan on Thursday.

Malaysia and Indonesia, according to Gooi, will produce an estimated total of 37 million tonnes of Crude Palm Oil (CPO) for the year 2010.

"If the PFOE can be successfully implemented throughout Malaysia and Indonesia, 925,000 tonnes of red palm oil can be potentially recovered," he said.

He said the total value of red palm oil at today's price of RM2,700 per metric tonne is equivalent to a whopping revenue of RM2.5 billion.

According to him, the solvent extracted red palm oil, being rich in the phytonutrients like carotene and Vitamin E, is a good natural oil for animal feedmeal production as well as other downstream application.

"It has been proven that chicken fed with feedmeal enriched with red palm oil will produce eggs with bright red egg yolk very rich in carotene," said Gooi.

He said the company aimed to maximise its profit by extracting values out of CPO and palm oil mill wastage by converting biomass to bio-fertilisers.

He said other options are treating the palm oil mill effluent to generate methane gas as biofuel, as well as extracting

tocotrienol, which is a potent form of Vitamin E, from CPO.

"Our Keningau mill, which started its operation on February 2003, was awarded by the Malaysia Palm Oil Board (MPOB) as the highest Oil Extraction Rate (OER) mill in Malaysia in 2007, and also achieving OER exceeding 25 pc in 2005," he said.

He said, meanwhile, the palm oil mill in Johor also became the first registered methane emission reduction Clean Development Mechanism (CDM) project in the world for biogas generated from palm oil mill effluent.

"Based upon our research and successful implementation of many innovative technologies, we have contributed to make the palm oil industry sustainable and more competitive," said Gooi.

Meanwhile, Director of Eonmetall Group Bhd, Tan Sri Soong Stew Hoong said, the perfected PFOE technology to be implemented in Sabah is more advanced than that first implemented in Johor.

"The latest PFOE technology is found to recover the five pc residual oil content from the palm pressed fibre, which has been, and still being used as boiler fuel in the over 420 mills in the country," he said.

He said the company has devoted the past 10 years to overcome difficulties and working closely with palm oil experts to perfect the applications of the new technology.

"The acceptance of this technology by oil millers are not only focused on the extra income generated by the sales of red palm oil extracted, some millers are keen to explore the further downstream processing of the high concentration of phytonutrients in the extracted oil," he said.

In addition, said Soong, the vast quantity of the remaining 95 pc of the de-oiled mesocarp fibre can be further processed into other value added products such as fiber boards as well as eco-friendly furnitures.

"Furthermore, there are many other biomass application technology possible on using this de-oiled fibre after further drying process, like sound insulation, sheets, partition boards, etc.

"In short, the PFOE technology unleashed the vast application potentials which can be adjust and perfected by capable entrepreneurs in the country's palm oil industry," he said.