



First place winner, Kok Ka Ket from SJK (C) Siew Ching.



Third place winner, Goh Jin Rou from SJK (C) Yuk Choi.



Third place winner, Rievell Anessah from SMK Sepagaya.

Bio-Art to push Sabah's oil palm agenda

THE headlines in the newspapers are encouraging. "Rapid growth seen for biomass sector", said a headline in a national daily. A Sabah-based newspaper proclaimed "Biomass industry can help Malaysia".

Indeed biomass has become front and centre in the economic agenda since the National Biomass Strategy (NBS) 2020 was launched in 2011. NBS envisaged that biomass will contribute RM30 billion to the gross national income (GNI) by 2020. There is also a bio-economy agenda being promoted by a myriad of government agencies from Agensi Inovasi Malaysia (AIM), Malaysian Biotechnology Corporation and, closer to home in Sabah, state-owned POIC Sabah Sdn Bhd which is promoting the development of Malaysia's first bio-refinery cluster at the Lahad Datu palm oil industrial cluster (POIC Lahad Datu).

Biomass is essentially waste, and comprises mainly of agriculture and food industry residue, timber industry wastes and municipal solid waste. But the current discussion in Malaysia, and more so in Sabah, is centred on biomass from the oil palm industry simply because the industry is a big part of the national economy, and the roughly six million hectares of oil palm produce will produce close to 100 million tons of biomass by 2020.

Sabah is Malaysia's biggest palm oil grower with about 1.5 million hectares. NBS identified Sabah as having the biggest potential in the development of a biomass processing sector, particularly in the production of second generation biofuel (meaning through the use of non-oil feedstock) and bio chemicals.

The ginormous economic potential in biomass is estimated at RM100 billion. Coupled with another RM100 billion if the estimated six million tons of crude palm oil produced in Sabah could be retained for value-adding, the oil palm industry in the state could easily anchor Sabah's future.

While policy makers pondered over why more than 80% of CPO is exported and what is slowing the biomass take-off, moves are underway to generate awareness and preparing the younger generation to be meaningful and participative stakeholders.

POIC Sabah has, since its inception 10 years ago, embarked



(Left) Second and third place winner entries for Primary School category.



(Left) Second and third place winner entries for Secondary School category.

The winning entry by Kok Ka Ket encapsulates all the elements of biotechnology from the perspective of the 11-year-old from SJK (C) Siew Ching.

on a yearly career awareness programme trying to enlighten secondary students on career opportunities related to the oil palm industry. All major secondary schools in the Lahad Datu District, the centre of Sabah's oil palm industry, are covered, and the programme occasionally covered neighbouring Kunak.

"Our career talk programme began as an awareness exercise to make more people aware of what the government is trying to do through POIC Lahad Datu," said POIC Sabah spokesperson Lynette Hoo, a Senior Manager of Corporate Affairs. "But it soon dawned on us that most of the students, though they lived near oil palm plantations and have family members in jobs related to oil palm, did not see that it makes sense therefore that their education path and their career path be linked to oil palm."

The company, in collaboration with the Malaysian Biotechnology Corporation, Sabah Education Department and Sabah State

Library, introduced the Bio-Art Competition last May as another attempt to generate awareness about oil palm, this time centred on biomass and resource optimisation.

"We in POIC Sabah have been aggressively promoting the development of a biomass industry," explained Hoo. "We are promoting waste to wealth by utilising biomass, and everywhere people are talking about sustainability and optimisation of natural resources, and our aim was to try to strengthen such mind-sets which are already part of youth language."

Lahad Datu, for obvious reason, was chosen as the launching pad for the project which organisers hoped to eventually organise state-wide. Sixty-three students, aged 9-17 from seven primary and eight secondary schools, took part in a drawing competition with the theme "Kita dan Bioteknologi berkaitan dengan minyak kelapa sawit dan biomass".

According to Hoo, the panel of judges comprising representatives from the organisers were impressed with the quality of the interpretation of the theme.

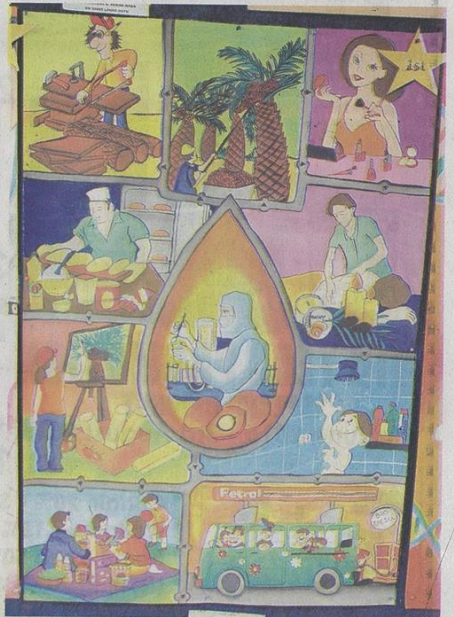
"The judges concluded that the students, most of them had little knowledge other than the fact that the paper on which they were to draw on was made of biomass fibre, showed a high level of enthusiasm by researching into elements to reflect the theme."

The final results:
 Primary section (aged 7-12):
 1st Place: Kok Ka Ket from SJK (C) Siew Ching
 2nd Place: Wee Xin Ru from SJK (C) Siew Ching
 3rd Place: Goh Jin Rou from SJK (C) Yuk Choi

Secondary section (aged 13-17):
 1st Place: Chua Jia Qi from SM Cina, Lahad Datu
 2nd Place: Adryan Alan from SMK Sepagaya
 3rd Place: Rievell Anessah Bukita from SMK Sepagaya.



First place winner, Chua Jia Qi from SM Cina, Lahad Datu.



The winning entry by Chua Jia Qi encapsulates all the elements of biotechnology from the perspective of the 15-year-old from SM Cina.