

From among the people

LOCAL GOODS: Science ministry reaches out to grassroots with ambassador programme

ZULITA MUSTAFA
zulita@nst.com.my

SCIENCE, technology and innovation (STI) is critical for socio-economic development in today's knowledge-intensive, innovation-led economy.

As the world becomes more competitive and globalised, countries that have embraced the knowledge paradigm with high proficiency in STI undoubtedly command success and prosperity.

As Malaysia aspires to become a high-income and developed nation by 2020, STI is a key enabler to enhance productivity, competitiveness as well as to catalyse inclusive growth if the government is on track towards realising envisioned outcomes.

The Ministry of Science, Technology and Innovation (MOSTI) Social Innovation Programme, or MSI, is the ministry's outreach programme towards realising envisioned outcomes.

Under one of the MSI initiatives is the Duta Sains programme implemented by the Academy of Sciences Malaysia (ASM) to strengthen the community through STI established last year.

ASM's acting chief executive officer, Hazami Habib said: "It is a programme designed to empower the community to mobilise, coordinate and implement solutions or course of action to address local community needs."

She said its main objective is to enhance the community's well-being through the implementation of projects, services, skills upgrading or innovations using existing technologies that can be implemented in a sustainable manner.

"The Duta Sains are individuals from within the community that will be identified and trained by STI experts. They can be anybody, from local youth leaders to teachers or university students but most importantly, they must have interest in STI and want to contribute to the community.

"Their task is to strengthen and cultivate social license through STI and encourage, promote and innovate via science, technology, engineering and mathematics (STEM).

"The scientists and experts come in to educate, train, and empower the community in addressing specific concerns or needs of each constituency.

"The identified Duta Sains in the community will then be responsible to train others and ensure the continuity and the sustainability of this programme," said Hazami.

In the initial phase, the Duta Sains programme is implemented in four constituencies — Jerlun, Kedah; Tangga Batu, Malacca; Tuaran, Sabah; and Setiu, Terengganu.

ASM Council member Professor Datin Paduka Dr Khatijah Mohd Yusoff, who chairs the Duta Sains programme committee, said that the Academy is in



MOSTI deputy minister **Datuk Dr Abu Bakar Mohamad Diah** tasting some of the passion fruit products from PARUJAS during a Duta Sains programme.

collaboration with experts from Universiti Kebangsaan Malaysia, Universiti Teknikal Malaysia Melaka, Universiti Putra Malaysia and UniKL for the Duta Sains programme.

The Tangga Batu constituency focuses on increasing the commercialisation value of local industry products, namely passion fruit from Kg Paya Rumpit Jaya (PARUJAS), Sg Udang. Also included in the Tangga Batu constituency are keris, bamboo fireworks, and traditional cakes and crackers.

"We assist the small entrepreneurs in Tangga Batu to increase the commercial value of their products through branding, packaging, processing, promotion and transfer of technology to improve the quality and production of these products.

"In addition, training and courses on business and commercialisation are also provided for entrepreneurs and startups involved.

"We organised a workshop on Business Ecosystem and Commercialisation in April. This workshop was conducted for the participants from the Tangga Batu constituency on how to go about commercialising and building their own brand.

"The workshop also provided an avenue for the participants to interact with the experts from universities, government agencies and private companies to seek advice and guidance to improve the quality and commercial value of their products.

"We want to improve science literacy and awareness among communities, create knowledgeable community that is equipped with skills and knowledge, and increase interest among the younger generation to choose education and career in science," said Khatijah.

UPM senior lecturer Dr Siti Sarah

Othman and UKM's Professor Dr Kalaivani Nadarajah who are involved in the Tangga Batu projects, said that for the passion fruit projects, the team had worked closely with the community to promote and improve their products.

"Passion fruit is a crop that has few problems with disease and insects, making it the crop of choice for a community project."

"Thus, the PARUJAS community has been cultivating passion fruit since 2008 with 30 homes involved in its initial phase.

"Two varieties of the fruit, *Passiflora edulis flavicarpa* (yellow skin) and *Passiflora edulis fedulis* (purple skin) have been cultivated," said Siti Sarah.

In 2014, PARUJAS was awarded the Desa Sejahtera 1 Malaysia that provided funds to further advance the passion fruit industry.

"By engaging the community we hope to improve the commercial value of the products and therefore, increase the income of local communities.

"To date, in addition to fresh fruit, they are also producing juice, puree, cakes, puddings and ice creams with a unique sweet sour flavour," said Kalaivani.

Some other activities implemented in Jerlun, Setiu and Tuaran include "Inquiry-Based Science Education" (IBSE) Programme, which provides training for teachers on IBSE approach through residential and three weekend workshops. A science carnival was also organised in Jerlun and Setiu to stir the local community's interest in STEM.

Khatijah said the Duta Sains programme should be expanded to other states as well, "because if we don't explore we would never know the potential that they have.

"ASM believes that if we work together with many other parties we

would be able to achieve our objectives.

"Funding is also important to ensure the sustainability of these programmes and ensure long-lasting positive impact on the communities," said Khatijah.



Dr Siti Sarah Othman



Hazami Habib



Professor Dr Kalaivani Nadarajah



Professor Datin Paduka Dr Khatijah Mohd Yusoff