

**KERATAN AKHBAR-AKHBAR TEMPATAN
TARIKH: 29 OKTOBER 2014 (RABU)**

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KERATAN AKHBAR
NEW STRAITS TIMES (PRIME NEWS) : MUKA SURAT 10
TARIKH : 29 OKTOBER 2014 (RABU)



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NATIONAL INNOVATION
CONFERENCE AND EXHIBITION
31 October – 2 November 2014
9.00 am – 5.00 pm, PWTC Kuala Lumpur

Free Admission

Technology Empowers Innovation

MOSTI
MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION

YB Datuk Dr. Ewon Ebin
Minister of Science, Technology and Innovation

Sains & Inovasi
Pemacu Transformasi
DEKAD INOVASI 2011 - 2020

MOSTI COMMERCIALISATION YEAR 2014



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The poster features a yellow background with a green border. On the left side, there are colorful illustrations of various robots and technological icons. The central text is in blue and red, providing the event name, dates, and location. A large white circle on the right contains a portrait of the Minister of Science, Technology and Innovation, YB Datuk Dr. Ewon Ebin. Logos for MOSTI, Sains & Inovasi, and MOSTI Commercialisation Year 2014 are also present. A QR code is located in the bottom left corner, and social media handles and the event website are listed at the bottom.

Innovation and the 11MP

KEY ELEMENT: A dedicated chapter could spell out the governance framework, institutional responsibilities and implementation blueprint

BEGINNING 2016, we will roll out the 11th Malaysia Plan (11MP). This is the last five-year plan before we hit 2020, the climax year of our much proclaimed destiny to be a fully developed nation.

The 11MP should, however, be designed to prepare the nation beyond 2020. We must remember that as a fully developed nation, we enter a new era of competition with the other developed countries of the world, not the league of the less-developed nations which compete on low costs. We have to beat them to have a decent share of the global economy.

Increasingly, a key factor of competition is innovation. Countries which are good at harnessing innovation tend to stay ahead. We have to do the same. It is encouraging to notice that the country's leaders have been sending a strong message on innovation in recent years. The prime minister has been especially vocal in persuading the nation to take the path of innovation seriously. Innovation was, in fact, mentioned a number of times in his recent 2015 Budget speech. He has personally

launched various programmes to spur innovation in the country. This is a good sign.

There is the "MaGIC" programme anchored by the Ministry of Finance to invigorate innovation among young entrepreneurs. Another programme is "PlaTCOM ventures", a joint innovation platform anchored by the Malaysian Innovation Agency (AIM) and SME Corp to facilitate research and development (R&D) commercialisation for SMEs.



Dr Ahmad Ibrahim
is fellow of the
Academy of
Sciences Malaysia

The Steinbeis model of technology brokering from Germany is another recent innovation enabling initiative anchored by AIM. And in the 2015 Budget, the prime minister also alluded to a Standards and Industrial Research Institute of Malaysia (SIRIM) rebranding exercise to help boost SME involvement in R&D.

The Science To Action (S2A) programme anchored by the Malaysian Industry-Government Group for High Technology (MIGHT) is also worth watching. It adopts a three-pronged attack to raise the nation's innovation prowess; science for governance, science for wellbeing and science for industry. Admittedly, our science governance is in need for constructive tweaking if we are to truly deliver societal and economic wellbeing. It cannot be business as usual.

Arguably, the command of science is an important prerequisite of innovation success. This is also why the government is also giving serious emphasis to STEM education. STEM stands for Science, Technology, Engineering and Mathematics. The PM launched a global initiative on STEM at the recent meeting of the Global Science and Innovation Advisory Council, GSIAC, in New York.

This is to address the declining interest in science among our students. The initiation of all such programmes is a clear signal from the government that it is taking the innovation agenda seriously. The challenge before us now is how all such programmes can be better coordinated and monitored in terms of progress.

In the past, one serious weakness of our science and innovation programmes has been the failure to effectively coordinate and monitor. As a result, we did not get the necessary feedback to further im-

prove the programmes or policy.

This is where many among the scientific fraternity are suggesting to include a dedicated chapter on innovation in the soon-to-be crafted 11MP. The chapter must clearly articulate the governance framework, the institutional responsibilities and the implementation blueprint on innovation.

This is where the recently established National Science and Technology Innovation Council (NSTIC) would be the right institution to provide the oversight over all the programmes.

The fact that NSTIC will also be chaired by the prime minister makes it even more relevant. But NSTIC needs an effective secretariat. Many have suggested the National Science and Research Council (NSRC) to be the secretariat for NSTIC. Chaired by the Science Advisor, NSRC has the clout for that role.

But there is a strong suggestion that it should be strongly supported by an efficient data agency. This is where the Malaysian Science and Technology Information Centre, MASTIC, should be brought under the umbrella of NSRC.

More importantly, it must be empowered with the necessary resources to collect the relevant data to support innovation. In fact, this would jive very well with the recent calling by the government to pay more attention to data analysis. The 11MP is the right platform to spell all this out.

Linking up the value chain

How Biotech Corp is employing a holistic, end-to-end approach to nurture the Malaysian bio-economy.

By NATALIE HENG
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MALAYSIA aims to be a serious player in the global wellness industry. But critical factors – such as problems in the research ecosystem, multiple R&D funds, overlapping portfolios among government agencies, keen competition for resources and a shifting landscape of policies and research priorities – hinder that ambition, as highlighted in our feature *Work smart, research smart* (Star2, May 28).

Science Advisor to the Prime Minister Prof Emeritus Datuk Dr Zakri Abdul Hamid said recently that a special task force had been set up to work through these problems.

Yet there is also the serious underlying issue of a mismatch between supply and demand.

For one thing, the country is heavily dependent on imports for raw materials and processed herbs, according to a 2004 report on the Malaysian Herbal Industry Outlook issued under the ambit of the Prime Minister's Department – a major limitation when catering to a growing industry.

In addition, there have been accounts of farmers – overly reliant on middlemen and often subjected to fluctuating prices – who have destroyed their crops in protest at low market prices.

Then there is the lack of standardised farming prices and Good Agriculture Practice certificates to cater to the requirements of high-value herbal supplement manufacturers.

With the bulk of farming for such materials done by fragmented smallholders, it also means relatively high production costs.

These problems are by no means new, and it seems to have taken a long time to address them.

Given the slow movement of the herbal supplements industry as a whole, however, perhaps this is no big surprise. Recently, things have been coming together, as the increasing number of BioNexus companies in play has created a fresh urgency for us to smooth-out kinks in the value chain. (Companies awarded BioNexus status by the Malaysian Biotechnology Corporation – Biotech Corp for short – are those undertaking value-added biotechnology and/or life sciences activities. There are more than 220 such companies to date with an investment of RM3.2bil, according to the corporation's website.)

Malaysia is being pitched as a prime biotechnology development centre for its potential to provide a full herbal industry-conducive ecosystem, complete with infrastructure for R&D, farmland for raw material supply, as well as incentives for locating manufacturing, processing, packaging and distribution facilities. A number of ini-



The big valley: J-Biotech CEO Wan Amir-Jeffery Wan Abd Majid says there are plans to develop Johor into a regional marketing and clearing house for raw materials-based products.



Some of the products under the Bioshoppe umbrella label.



Dr Nazlee says Biotech Corp recognises that a total value chain approach is the best way to ensure that every stage in the industry is connected, from raw material supply to processing and the logistics of getting the final products to market.

atives have started paving the way for the fulfilment of that potential.

Kinks in the links

Solutions to the supply chain issues have also been in the pipeline for years: offer farmers buy-back guarantees, and consolidate farming activities through cooperatives that are better positioned to get discounts.

Now, it appears that these are a step closer to becoming reality. Biotech Corp CEO Datuk Dr Mohd Nazlee Kamal addressed the issue at the San Diego Bio International Convention in June when he led a Malaysian delegation to showcase its achievements. "We recognise that we must attack the whole process through a total value chain approach, which means making sure every stage in the chain is connected, from raw material supply to processing and the logistics of getting the final products to market," he said.

"So now, we are campaigning for community development, requesting a budget from the Government for financial aid to set up cooperatives."

His idea was to enable rural communities to invest in modern farming practices such as greenhouses, because a controlled environment is needed to supply disease- and



Datuk Seri Syed Zainal Abidin Syed Mohamed Tahir, the chairman of BioAlpha – the first Malaysian herbal supplements player to be in control of its full supply chain from R&D through raw materials farming and manufacturing, to marketing and distribution.

pesticide-free raw materials for high-value herbal products.

The other plan was to reduce the role and influence of middlemen by increasing the number of contract farmers, matching them up with BioNexus companies that would act as guaranteed buyers.

The third approach planned by Biotech Corp addresses the tail end of the value chain – the Bioshoppe concept, which Dr Nazlee launched in San Diego.

Bioshoppe is an umbrella label for an array of made-in-Malaysia items which were showcased at the Malaysian pavilion – pills, powders and other herbal supplements and products.

Bioshoppe's first retail presence followed a few weeks later, in IOI Mall in Puchong, Selangor, and showcases over 80 types of products (including beauty and aromatherapy) from 15 BioNexus companies.

By year end, Biotech Corp hopes to open a second outlet in Alor Star, Kedah, expanding the participation of BioNexus companies to 30, and stocking about 200 products.

Essentially, Bioshoppe gives buyers a way of recognising products manufactured by BioNexus companies, directing them to credible brands and avoiding the myriad of potentially bogus products (see our May 28 story, *Untapped treasures in herbal products*, at <http://bit.ly/1rs-tosX>).

"Without revenue, they (the manufacturers/BioNexus companies) cannot pay the farmers. So the danger, if we were to have a break in the value chain, is that the whole system will collapse," Dr Nazlee said.

Projects on the ground

Contract farming has been taking shape through pilot projects under a Bioeconomy Community Development Programme.

The programme also covers other types of agricultural projects relevant to the National Key Economic Area of Agriculture, such as oyster farming in Balik Pulau on Penang island, and bee farming in Kuala Linggi, Malacca.

The projects relevant to herbal supplements involve strategically located tracts of land in Pasir Raja in Terengganu and Kota Tinggi in Johor, both close to integrated industrial zones. The contracts come with buy-back guarantees from BioNexus companies.

These BioNexus companies will then process the raw materials into high-value products, some of which will be marketed through Bioshoppe.

Three herbal companies will be involved, including supplements company BioAlpha Holding Berhad – the first Malaysian herbal supplements player to be in control of its full supply chain from R&D through

raw materials farming and manufacturing, all the way to marketing and distribution.

Its subsidiary BioAlpha International Sdn Bhd will enter into direct contract farming with 15 farmers within an area known as the Herbal Integrated Cluster Development in the Eastern Corridor Economic Region (ECER).

Its other subsidiary, BioAlpha (Johor Herbal) Sdn Bhd, together with another herbal company called Pure Circle Sdn Bhd (which processes stevia into natural sweeteners), will grow herbs in a specialised farming zone known as the Bio Desaru Organic Food Valley – a project that state corporation Johor Biotechnology and Biodiversity Corp (J-Biotech) wants to fit into a wider conceptual model that will create further synergy along the local value chain.

At the San Diego convention, J-Biotech CEO Wan Amir-Jeffery Wan Abd Majid said the company had an 8ha plot of land it wanted to develop into a regional marketing and clearing house.

The on-site facilities would include infrastructure for cold chain management services (for perishables) and spaces to manufacture, process, label and package. This is to ensure that all stages of the value chain – as well as the eventual value itself – are retained in Malaysia.

For now, however, the focus is on getting the farming projects up and running.

Biotech Corp is in the process of identifying eligible and interested farmers, and quantifying demand from BioNexus companies to iron out the agreements between the parties.

The farmland is located in Kota Tinggi, Johor. Biotech Corp and J-Biotech will collaborate on developing an existing cooperative, Pemuafakatan Kota Tinggi Berhad, involving about 20 contract farmers to produce honey, milk, herbs and stevia on roughly 198ha of land (only the herbs and stevia will supply BioNexus companies).

CLIMATE CHANGE

I mentioned tornadoes long time ago

THE video clips of mini-tornadoes shown on news channels recently are proof that such phenomenon is common in this country, especially during the thunderstorm season.

Although some of the mini tornadoes did not display the characteristic of a funnel cloud, the debris that were seen spinning above damaged buildings are proof of their existence.

For those who are interested in this phenomenon, the British Broadcasting Corporation has an animated webpage explaining the development of tornadoes and their categories.

The weakest category, also called a mini-tornado, is the F0 and this type usually lasts for a few minutes and causes minimal damage, such as broken branches, toppled trees and damaged roofs.

The strongest category, the F5, are those that are shown on American TV, where whole neighbourhoods are devastated, trees uprooted and cars sent flying for several

hours along a trail that can stretch for kilometres.

The mini tornadoes that occurred here seem to be of the F0 type, which follow a typical thunderstorm.

Since thunderstorms are aplenty during the inter monsoon season, these mini-tornadoes have occurred throughout the country, but their existence has been reported as freak storms by the media.

When their existence were raised in the media by me more than a decade ago, the **Meteorological Department** denied that such a phenomenon could occur. They even referred to such events as "downbursts", "microbursts", "land spouts" and "squalls".

However, with video technology, the days when the department can hoodwink the public are over.

Perhaps the National Security Council should conduct public safety programmes on this phenomena, since several deaths have occurred as a result of public ignorance.

Just like lightning, the onset of a nearby mini tornado can be recognised and people should take shelter to protect themselves from it.

Mini tornadoes deserve more attention than tsunamis, which have affected only the north-western peninsula states. Its presence has also been acknowledged by the Meteorological Departments in neighbouring countries.

Hence, we should acknowledge their presence, too, if we are to be regarded as scientifically literate as the rest of the world.

"The National Security Council should conduct public safety programmes on this phenomena."

Z.A. Hartono, Kuala Lumpur