

Attend to R&D woes at varsities

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Article

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University researchers were delighted when Deputy Prime Minister Datuk Najib Razak recently said procedures putting a strain and constraints on R&D at the universities should be reviewed.

LIKE a breath of fresh air, Malaysian scientists were treated to a very refreshing viewpoint (bordering on a directive) by Deputy Prime Minister Datuk Seri Najib Razak recently.



The event took place during a ceremony to recognise the achievements of our scientists, including for exceptional performance at the international level.

No less than 100 researchers and scientists were singled out, based on their achievements in the various scientific meetings in Geneva, Pittsburgh, Nuremberg, London and Seoul.

What was more meaningful was that these were innovation and invention expositions where researchers and inventors the world over participated to display their creative inventions for competition.

The expositions could be regarded as one of the international benchmarks to judge the level of creativity and inventiveness of our researchers and scientists from institutions of higher learning.

Although it is different from the usual benchmark of getting research papers published in high-impact international journals, it is nevertheless a good precursor to such quality publication.

Apart from the adage "publish or perish" that the academe is used to, "do or perish" is gradually becoming another adage that is becoming increasingly relevant.

The fact that our scientists and researchers are doing well speaks volumes for their capacity to innovate and be creative, especially in areas of research and development.

It is just that their achievements are often drowned by issues deemed more pressing such as unemployment and the like, leaving many of them feeling unappreciated.

Thus, the acknowledgement by Najib is indeed an important gesture, more so what he had to say in his address.

This is clear from the round of applause he unexpectedly received from the crowd. This is an indication that he has struck the nail squarely on the head on issues that are long overdue.

For example, when he mentioned that the procedures and regulations that put a strain and constraints on R&D

at the universities be reviewed, the audience was appreciative.

This is something they have been griping about for some time but little was seen to have been done thus far.

This includes the elimination of bureaucracy in R&D-related activities such as the application for research grants, presentation of research findings at conferences overseas, and so on.

The idea is to remain competitive by not only retaining existing capacity but, more so, by enhancing it since universities have, by and large, been the largest generators of innovative ideas in the country.

A comparison with many universities in the US was made on the ability to generate gross domestic product which can be higher than that of sovereign nations.

The Massachusetts Institute of Technology (MIT), for example, would rank number 24 in the world on the basis of GDP.

This is what is implied by "do or perish" where R&D is seen not only as a source of knowledge but also as a driver to the development of a knowledge-based economy.

This is hardly surprising in view of the fact that the US encourages research as a way to build its capacity as a knowledge economy by opening its doors to students worldwide.

For instance, in 1997, the number of foreigners who earned doctoral degrees in engineering was 45.8 per cent, 43.9 per cent in mathematics and computing, and 30.6 per cent in natural sciences, according to a 2002 study.

Some stayed on even longer. Of the 1990-1991 American doctoral recipients from China, 88 per cent were still working in the US in 1995.

In 2000, more than 50 per cent of doctoral students from China and India studying in the US indicated that they had "firm plans" to stay upon completion of their studies.

This trend is also true, to a lesser extent, in British, Canadian and Australian universities.

In short, unless and until R&D is featured attractively in Malaysia, there is little hope that it will flourish, let alone attract the best researchers, even Malaysians who are abroad, to our shores.

On the last point, this is evident from the country's rather dismal record of attracting home its sons and daughters who are abroad under its "Brain Gain" initiatives.

This point was also acknowledged by Najib in his address.

It was reported that in 2001, only 665 applications were received. Some 279 of them finally came home but few stayed for good.

Brendan Pereira, in his column (NST, Aug 28), mentioned "the difficulty in fitting back into the culture and lifestyle here".

In a way, this is ironic because "the culture and lifestyle" of the academe is very similar in most parts of the world, especially where R&D is concerned.

Many local academics, a number of whom have had extensive interaction with their colleagues in almost all parts of the globe, will testify to this.

Where it is "difficult to fit back" is precisely in areas highlighted by Najib in his address. It is by no means limited to scientists and researchers from abroad.

Almost all those trained overseas find that while doing their R&D training abroad, they are nurtured to be independent and left on their own to decide and be accountable for how R&D should be undertaken.

While broad guidelines are normally provided, there is a tendency to micromanage on the part of the central agencies and the ministries.

More often than not, such attempts will stifle creativity and innovation — the two key concepts that are yet to fully blossom in our local institutions.

Therefore, Najib's verbal assurance is very much welcome.

On top of this, he also outlined three main components that would further facilitate the expansion of R&D in Malaysia.

First is the ability of universities to generate income for their own operational costs and the development of the institutions.

Second is the creation of technopreneurs based on innovation that would help to create new enterprises which in turn would be involved in commercialisation of R&D products through their own funds or that raised by venture capital.

Third is for the Malaysian public sector to be among the first users of locally produced R&D products. This proactive move will help to instil confidence in the global commercialisation and marketing of local R&D products.

Every so often, Najib spiced his address with the word "*mesra inovasi*" with reference to the workplace, procedures and also the people involved.

This certainly is a relevant point to keep in mind, though unfortunately to be "innovation-friendly" is easier said than done after being conditioned to a mindset of command-and-control for such a long time.

Like it or not, Najib has chosen to speak out on behalf of the R&D community. We are delighted that he did and we resolve to do our utmost for Malaysia. Thank you, sir.

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