

R&D needs urgent reform

THE nation's R&D is at a crossroads. At 1% of GDP, total spending is still lingering at the low end by global standards. The more developed nations spend on the average 3% of GDP on R&D. Our earlier target to increase spending to 2% of GDP has been dashed by recent further cuts in R&D allocation. The universities have been hardest hit.

The momentum set by University Malaya's High Impact Research programme has consequently largely fizzled out. It is now back to square one. Yet with the fast emerging 4th Industrial Revolution, many countries look to a strong R&D investment to raise their level of competitiveness in the new economy. An economy where technology and knowledge will dominate global business. At the same time our close neighbours such as Indonesia, Vietnam and Thailand are doing the opposite.

Instead of cuts, all three countries have increased their investments in R&D. Many see Vietnam as an emerging force in technological innovation among the Asean 10.

It is time to revisit our earlier decision on R&D spending. We should invest more. There must be new strategies to persuade the industry and business sector to put more money in R&D. The sector has for a long time been lagging behind the government in supporting R&D.

This is unlike the developed economies where the biggest chunk of R&D spending comes from the private sector. But the R&D community must also do their bit to get close to the industry. Despite various push by the government in terms of initiatives and policies, universities are still unapproachable by the business communi-

ty. The design of university campuses must incorporate elements of accessibility by industry. For example, all universities must have a front office which is convenient for public access. The parking restrictions are especially problematic.

A more urgent issue concerns the governance of Malaysia's R&D itself. Despite the many studies and various recommendations made, nothing much has changed.

A few years ago, a study was undertaken through MIGHT in consultation with the New York Academy of Science to evaluate the R&D governance here. A key recommendation of the report is to bring together all the R&D entities in the country, especially those involved in applied research, under one roof.

Not unlike the very successful German Fraunhofer model. The aim is to improve coordination and promote collaboration among the research scientists in the country.

This is sorely lacking. The report has suggested the establishment of a Research Management Agency, RMA, to be the central governing body for applied R&D. Basic R&D is still left with the universities. This was accepted by the government. Subsequent to this, a consultancy firm was appointed to develop the operational plan for RMA.

We have been informed that this has all been done. But till today, after two years, RMA is still non-existent. The scientific community is getting restless.

Rumours have surfaced that there is tussle for control of RMA. This does not augur well for the future of R&D in the country. Many have

suggested for the RMA to be placed with the Academy of Sciences Malaysia, much like the situation in China.

Over the years, much have been spent on the nation's R&D. Unfortunately, studies have shown that the achievements have been below par. Not commensurate with the investments. The amount of duplication has also far exceeded the limits allowed to instil competition. Collaboration between institutes has been minimal.

The traditional turf mentality is still a big obstacle to real cooperation. RMA would have made a difference if managed well, free from the institutional infighting. There is no denying that the nation's R&D system is in dire need of reform. It is time to formalise the operation of the RMA.

Many among the scientific community believe that the establishment of the RMA will do wonders to the country's R&D governance. The RMA can put in a place an attractive job scheme for researchers in the country. Under the proposed R&D Service Scheme, researchers can move among the member institutes depending on the needs for expertise. That way, their promotional opportunities will expand, incentivising more to join the profession. In fact this may be the move that we need to attract more students to take up science. It is time to reform the nation's R&D if we are to truly capture the emerging opportunities in the global technology business.

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