



## The 'Knowledge' Thrust in the Ninth Malaysia Plan

By : *Engr. Dr Lim Wai Tat, M.I.E.M., P.Eng*

### INTRODUCTION

The Ninth Malaysia Plan that was unveiled in 2006 charts the development agenda that we, as a nation, will have to implement towards building a developed country by 2020. The plan emphasises on the concept of a balanced plan encompassing five key thrusts. These five key thrusts essentially guide the formulation of specific programmes and action-oriented projects to be implemented for the five-year period from 2006 to 2010. This article examines the constructs, focus and implication of the second key thrust, which is known as the 'Knowledge' thrust throughout the content of this article.

### THE FIVE KEY THRUSTS

The challenges and impact of globalisation have transformed the global economic landscape from labour and capital-intensive modes to a productivity and knowledge-based growth economy [1; 4]. Thus, the Malaysian population must pursue policies and programmes to enhance its capability to compete globally while improving national integration and ensuring a better distribution of wealth [5]. In pursuit of this ambitious national agenda, the Ninth Malaysia Plan outlines five key thrusts, which set out to achieve a stronger economy while focusing on socio-economic development and uplifting the quality of life. The five key thrusts are:

- 1) To move the economy up the value chain
- 2) To raise the capacity for knowledge and innovation, and nurture 'first class mentality'
- 3) To address persistent socio-economic inequalities constructively and productively
- 4) To improve the standard and sustainability of quality of life
- 5) To strengthen the institutional and implementation capacity

In essence, the above-mentioned five key thrusts emphasise a balanced development plan which aims to create a productive, highly competitive and caring nation with a 'first class mentality'.

### CONSTRUCTS AND FOCUS OF THE 'KNOWLEDGE' THRUST

In the context of a modern economy, knowledge remains one of the most valuable resources and plays a prominent role as the most critical factor of production [2]. Thus, one of the key constructs of the 'Knowledge' thrust is to increase the country's capacity for knowledge and innovation. The rationale for this construct is evident because Malaysia faces some important deficiencies compared to other developed countries in the region in areas such as low total expenditure on R&D and lack of knowledge-skilled workers in its workforce [6]. Furthermore, the innovative capacity in Malaysia is particularly worrisome with a comparatively low number of scientists and engineers per million people compared to other countries in the region [7]. To address this worrying issue, the main focus in the 'Knowledge' thrust is to establish a holistic human capital development framework encompassing knowledge, skills, progressive attitude and thinking, and strong moral and ethical values. Additionally, emphasis is in place to nurture top-quality R&D and innovation, and to advance women in science and technical fields. In a nutshell, the ultimate aim of the 'Knowledge' thrust is to raise the capacity and quality of the nation's human capital in order to drive a knowledge-based economy, while uplifting strong society values, particularly among youths.

### IMPLICATION OF THE 'KNOWLEDGE' THRUST

As knowledge is an abstract construct [3], it is important to understand that

only knowledge-related actions and practices can be made operational. Recognising this fact, the 'Knowledge' thrust encompasses practical measures and programmes that will be implemented within the Plan period to develop high quality human capital. In this regard, a higher priority has been given to the development of education, skills training and R&D. In line with the greater focus in these sectors, a total of RM45.1 billion will be allocated to implement various education and training programmes, while an allocation of RM5.3 billion will be provided for science, technology and innovation (STI) initiatives [5]. In fact, greater emphasis in the development of education and skills training is in line with the nation's aspiration to increase the capacity and capability of the R&D talent pool. This is because good quality education and skills training form the basic building block for human resource development and lay the foundation for the attainment of a scientific and technologically advanced society as well as nurture an adequate supply of a knowledgeable and multi-skills workforce. During the Plan's period, emphasis will be placed on targeted R&D in areas such as biotechnology, information and communications technology, advanced materials and manufacturing, and nanotechnology. To support the growth of these R&D areas, higher education programmes will be given greater emphasis to provide the support for targeted R&D projects and activities by uplifting the quality of science and engineering curriculum. In addition, efforts will be intensified to promote and encourage collaboration between higher learning institution and industry players to fully harness the benefits of technology development in targeted growth areas. In this regard, it is the view of the author that there are great potential and opportunities for

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practising engineers to increase the uptake of commercialisation of R&D findings and downstream development of R&D initiatives. Towards this end, an allocation of RM1.8 billion to expedite the rate of commercialisation of research will definitely come in handy for enthusiastic technopreneurs [5].

### CONCLUSION

It is evident in the Ninth Malaysia Plan that greater emphasis has been placed to accelerate the national aspiration in developing a knowledge-based economy and achieving a technology competent nation by the year 2020. In this regard, the 'Knowledge' thrust in the Ninth Malaysia Plan has set up a strategic plan to develop knowledgeable, skilled and innovative human capital to drive a knowledge-based economy. Various measures and initiatives outlined in the plan, such as education and skills training programmes as well the

priority given to R&D will bring the nation's capacity and capability in STI to greater heights. ■

### REFERENCES

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### QUOTES

#### **Three Types of Engineers:**

*My grandfather, who was an engineer, once told me that there were three types of engineers; those who work with inspiration, those who work for remuneration and those who work in desperation. He told me to try to be in the first group as there was less competition in that group.*

*(J.H. Maycock)*