

### **2.1 Measures for Promoting R&D Activities in Malaysia**

It is widely recognised that R&D activities are needed to boost the nation's competitiveness in the global arena. R&D can increase quality of products and services, improve production processes as well as enhance the image of the nation's technological level. However, experience from leaders in R&D shows that research activities can no longer be carried out at random but must be conducted in a systematic manner, i.e., it must have a sound scientific and methodological basis.

Various initiatives and mechanisms have been introduced by the Government to promote the development of high technological, knowledge-based, high value-added and capital intensive industries. Such initiatives should lead to stronger S&T alignment with the national development needs and goals aimed at attaining a fully developed country status by the year 2020.

#### **2.1.1 Mechanisms for R&D**

A fundamental pre-condition for the success of the new strategies for technology advancement for the government to continue to provide improved fiscal and financial incentives. The following mechanisms, which come under the purview of the National Council for Scientific Research and Development (MPKSN) have been introduced:

##### **(i) IRPA (Intensification of Research in Priority Areas) Fund**

The purpose of IRPA programme is to support R&D activities in the public sector on areas, which address the need of Malaysian industry for the enhancement of the national socio-economic position. Under the 5<sup>th</sup> Malaysia Plan (1986 – 1990), the IRPA fund was launched with an allocation of RM414 million and increased to RM589 million in the 6<sup>th</sup> Malaysia Plan<sup>3</sup> (1991 – 1995). Under the 7<sup>th</sup> Malaysia Plan (1996 – 2000) the allocation for R&D was increased further to RM1 billion. The IRPA programme was extended to

the private sector through the industry R&D Grant Scheme (IGS), Multimedia Super Corridor R&D Grant Scheme (MGS), and the Demonstrator Application Grant Scheme (DAGS).

**(ii) Industry Research and Development Grant Scheme (IGS)**

The purpose of IGS is to increase private sector R&D and promote closer co-operation between the private sector and public sector institutes as well as public sector universities through collaborative linkage. IGS will encourage Malaysian companies to be more innovative in using and adopting existing technologies and creating new technologies, products and processes which benefit the national economy.

**(iii) Multimedia Super Corridor (MSC) Research and Development Grant Scheme (MGS)**

The purpose of the MGS is to help innovative local companies, including joint venture, companies, developing relevant multimedia technologies and applications that will contribute to the overall MSC's development.

**(iv) Demonstrator Applications Grant Scheme (DAGS)**

The purpose of the DAGS is to encourage Malaysian to adapt and customise existing IT and multimedia technologies in applications compatible with local culture and to promote the development of local software and content industries for greater competitiveness in global market.

**(v) Malaysia Technology Park**

The Malaysian Technology Park, established in 1988, was aimed at assisting the development of indigenous technologies and the commercialisation of R&D findings. Its main role is to support industrial entrepreneurship especially the growth of high technology industries, promote industrial competitiveness, encourage reverse engineering and accelerate technology and provide a meaningful link between industry, the government, research and development, institutions and universities.

**(vi) MTDC (Malaysia Technology Development Corporation)**

The aim of this Government-industry joint venture, established in 1992, is to focus on the commercialisation of local research findings, introduction of strategic technologies to the country, and manufacture of products widely used as industrial inputs. MTDC also acts as a catalyst to the development of venture capital and as a centre for growing technology-based companies. MTDC manage the commercialisation of technology fund.

**(vii) Human Resource Development Scheme**

Under the Human Resource Development Scheme include Science and Technology Human Resource Development Fund (S&T HRD Fund), National Science Fellowship (NSF) and Postgraduate and Postdoctoral Program. The S&T HRDF was set up to create a pool of skilled and trained S&T manpower among the professional as well as supporting staffs of Government department, public research institutions, universities and Government corporatised research institutions. The NSF scheme are created to enhance the number of skilled and qualified R&D researchers in the selected fields and to create a pool of “critical mass” in less researchers fields, as well as to encourage bright graduates to be involved in S&T research. The Postgraduate and Postdoctoral Program under the National Action Plan for Industrial Technology Development is to increase human resource skills and expertise in advanced technology areas to support and enhance R&D excellence of the Public Institutions of higher learning.

**(viii) Other mechanisms**

- **ITAF** (Industrial Technical Assistance Fund). This Fund was established in 1990 with the aim of providing financial assistance to small and medium-scale industries in the form of matching grants for consultancy studies, product development and design, quality and productivity improvements and market development
- **MiGHT** (Malaysian Industry Government Group for High Technology). This Government-private sector initiative, established in 1993, is responsible for exploiting research and technology for new business opportunities. The setting up of MiGHT provides for a consultative approach to technology prospecting.

**2.1.2 Incentives for R&D**

Various fiscal incentives packages have been introduced to promote hi-tech and R&D activities.

**(i) Incentives for Hi-Tech Industries**

A special Pioneer Status/ Investment Tax Allowance is granted. That is, full income tax exemption for a period of 5 years or Investment Tax Allowance of 60% on qualifying capital expenditure for 5 years for hi-tech projects. The Allowance can be offset against 100% of the statutory income for each assessment year.

**(ii) Incentives for Non-Hi Tech Industries**

Companies granted Pioneer status would be given partial exemption from the payment of income tax. The current corporate tax rate is 30%. They will have to pay tax on 30% of their statutory income. The period of tax exemption is 5 years.

A Company given 'Investment Tax Allowance' will be granted an allowance of 60% in respect of qualifying capital expenditure incurred within 5 years from the date of approval of the project. This allowance can be utilised to set-off against 70% of the statutory income in the year of assessment.

**(iii) Contract R&D**

Full income tax exemption (Pioneer Status) for a period of 5 years or Investment Tax Allowance of 100% on qualifying capital expenditure incurred within a period of 10 years is granted to 'Contract R&D companies' which provide R&D services in Malaysia to companies other than their related companies. The allowance will be granted at the statutory income level and abatement for each year of assessment will be limited to 70% of statutory income.

**(iv) R&D for Associate Companies**

Investment Tax Allowance of 100% on qualifying capital expenditure for a period of 10 years is granted for R&D companies which provide R&D services in Malaysia to their related companies, i.e., holding/affiliate/associate companies or any other company. The allowance will be granted at the statutory income level and abatement for each year of assessment will be limited to 70% of statutory income.

**(v) In-house R&D**

Investment Tax Allowance of 50% on qualifying capital expenditure related to R&D is granted for a period of 10 years for companies carrying out in-house research. The allowance will be granted at the statutory income level and abatement for each year of assessment will be limited to 70% of statutory income.

**(vi) Other Incentives**

- Double deduction of expenditure, not being capital expenditure incurred on approved research projects undertaken by a company either in-house or contracted to research companies and institutions.
- Double deduction of expenditure, not being capital expenditure incurred by companies for the use of services provided by approved research companies or institutions.
- Double deduction for contributions in cash to approved research institutes

- Capital allowances for plant and machinery used for purposes of approved research
- Exemption of import duty, excise duty and sales tax on equipment, machinery, raw materials and samples used for approved research projects and by research companies or institutions.
- Industrial Building Allowance for buildings used for purposes of approved research projects and buildings used by approved research companies or institutions carrying out research.