# **Country Report of Malaysia**

by The Honourable Dato' Sri Dr. Jamaludin Mohd. Jarjis Minister of Science, Technology and Innovation (MOSTI)

Mr. Chairman Distinguished Delegates Ladies and Gentlemen

1. It gives me great pleasure to congratulate you, Mr. Chairman, your colleagues and the Government of Japan for organising the Fifth Forum for Nuclear Cooperation in Asia (FNCA) in Hanoi, Vietnam this year. On behalf of the Government of Malaysia, my delegation and I officially thank the Government of Japan for kindly inviting us to this forum and the Government of Vietnam for hosting this meeting. It is indeed an honour for us, and gives the opportunity to share with you our experience and recent initiatives to enhance the development and application of Science, Technology and Innovation in Malaysia.

## Mr. Chairman

2. The global economy to which we are greatly dependant and exposed becomes more volatile and unpredictable. Change is rapid, market shifts, uncertainty dominates, technologies proliferate, competitors multiply, products and services become obsolete rapidly. As the world becomes more competitive and advanced, success and prosperity increasingly go to those who add value in the global value chain. Thus knowledge becomes the main driver for economic growth. The changes that are taking place today demand that government and industries to be innovative and creative to improve our competitive edges. With the shift towards knowledge-based economy, the ability of a nation to continuously enhance proficiency in science, technology and innovation is becoming more important. The rapid development of capability and capacity in S&T is therefore needed by Malaysia to sustain and enhance its economic growth in the future in line with our Vision 2020.

## Ladies and gentlemen

3. The government of Malaysia has undertaken a review of the S&T policy and launched the Second National Science and Technology Policy and Plan of Action in June 2003. The policy addresses seven key priority areas focused on: strengthening research and technological capacity and capability; promoting commercialisation of research outputs; developing human resource capacity and capability; promoting a culture for science, innovation and techno-entrepreneurship; strengthening institutional framework and management for S&T and monitoring of S&T policy implementation; widespread diffusion and application of technology, leading to enhanced market-driven R&D to adapt and improve technologies, and; to build competence for specialisation in key emerging technologies. Various initiatives have been put in place to implement these strategic thrusts by the various ministries and agencies. Central to all these strategic thrusts is the need to bring government, industry, universities and public research institutions together in a synergistic partnership.

4. In supporting R&D and commercialisation of research outputs, the government will increase public and private sector investments in R&D including infrastructure development targeting for gross national R&D expenditure level of at least 1.5% of GDP by 2010 through the provision of various grant schemes such as the Intensification of Research in Priority Areas (IRPA) and Industrial Research Grant Scheme (IGS). In addition, the government will continue to encourage private sector R&D and to promote closer cooperation between private and public sectors through collaborative linkage in line with Malaysian Incorporated Policy.

5. In April this year the government has launched the establishment of National Innovation Council (NIC) to formulate a comprehensive innovation agenda and instituting a national innovation system to enhance our competitiveness and resilience through science and technology. The Council is chaired by the Right Honourable Prime Minister himself, and the members represent both the government and private sectors. The Council will focus in 3 to 4 selected key technology areas as well as providing a strong connectivity between researchers and end-users to increase the rate of commercialization. In addition, a Centre for Creative Ideas will also be established. This centre would provide relevant skills, such as mentoring, and resources such as prototyping facilities.

## Ladies and Gentlemen

6. With regard to developing human resource capacity and capability, Malaysia will intensify development of critical mass for S&T through various initiatives such as higher ratio of students pursuing science, technical and engineering disciplines in upper secondary schools and universities, increasing number of post-graduates students in universities and post-doctoral fellowships, brain pool and brain gain programmes and others. Thus Malaysia requires much more S&T personnel to drive her economic growth.

7. As an interim measure to overcome the shortage of researchers to undertake R&D and innovation in the country, the Government has recently embarked on a "brain gain" programme. This is to attract Malaysian and foreign scientists who are working abroad to carry out R&D in research laboratories in Malaysia for a certain period of time or to collaborate with the Malaysian laboratories on specific projects. We believe that such programme will provide strong linkages and networking between the Malaysian laboratories with world renown laboratories abroad, thus enhancing our R&D capacity and capability. This is very important for us to be a global player.

8. We have also adopted a new approach on R&D activities. Research activities are focused on market/demand driven, and should contribute towards economic development and social well-being. Therefore any R&D projects shall take into consideration of market demand, where it begins from market and ends at the market. The technology outcomes must reach the end users and this requires effective communication and close collaboration or cooperation between researchers and end-users. The government is currently reviewing our R&D funding mechanisms with the aim to enhance market-driven R&D as well as to allow greater participation of the private sector in the national R&D programme. This will involve greater allocation of fund for R&D and matching grant for the private sector. The current focus of R&D areas are in biotechnology, information and communication technology (ICT), advanced materials and advanced manufacturing.

## Mr. Chairman

9. May I now turn to our regional cooperation under the FNCA framework. In this regards, let me from the very outset express our sincere gratitude with the steady progress and achievement made so far. Malaysia has participated in almost all activities conducted under FNCA framework and has benefited in strengthening our capability and capacity in nuclear technology. In this respect we will continue to support and actively participate in all FNCA programmes and activities in the future. We are very pleased that all activities of the FNCA were carried out as scheduled. This year, we have hosted two FNCA activities namely the Workshop on Radioactive Waste Management and Workshop on Human Resource Development. As for the future, Malaysia would like to host two FNCA activities in 2005 i.e. Workshop on Mutation Breeding and Project Formulation Meeting on Medical Application and Usage of Positron Emission Tomography, Cyclotron and Radioisotopes. In addition, Malaysia will host the seventh FNCA Meeting and I take this opportunity to invite the Honourable Ministers and delegates to Malaysia in 2006.

Mr. Chairman

10. In conclusion, I would like to express our sincere gratitude to the Government of Japan for it's tremendous effort in making this event a success. Let me assure you once again our continual support and commitment to ensure the success of the regional nuclear cooperation under the FNCA framework.

Thank you for your attention.