## CENTRE FOR SCIENCE AND TECHNOLOGY OF THE NON-ALIGNED AND OTHER DEVELOPING COUNTRIES (NAM S&T CENTRE)

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## INTERNATIONAL TRAINING WORKSHOP ON STI POLICY AND MANAGEMENT (ITPS) KUALA LUMPUR, MALAYSIA AUGUST 8-12, 2016

## **BRIEF REPORT**

It is well known that science and technology is a strategic driver contributing toward a shift from relatively lower end economic performance into high value added activities. Unfortunately, the governments and industry professionals as well as those in non-governmental organisations (NGOs) in a large number of developing countries face problems in meeting the challenges from the fast pace of technological changes, whereas for designing the blueprints and strategic implementation frameworks in order to provide a planned transformation within countries and organisations it is absolutely critical to have experts who understand the dynamics of science and technology within the context of economic and market development.

With the above in view, the Centre for Science and Technology of the Non-aligned and Other Developing Countries (NAM S&T Centre) in partnership with the International Science, Technology and Innovation Centre for South-South Cooperation (ISTIC), Malaysia under the auspices of UNESCO; Ministry of Science, Technology and Innovation (MOSTI) of Malaysia; United Nations Education, Science and Cultural Organization (UNESCO); and Islamic Educational Scientific and Cultural Organization (ISESCO) organised an International Training Programme on STI Policy and Management for Developing Countries (ITPS) in Kuala Lumpur, Malaysia on 8–12 August 2016, which brought various stake holders, viz. scientists, experts and professionals from various countries with emerging economies to hone up their skills on STI Policy. The main objective of the training programme was to impart necessary knowledge and skills to participants in the development and management of a national STI policy in support of social-economic transformation.

The Opening Ceremony commenced with a welcome note by Dato' Dr. Sharifah Maimunah Syed Zin FASc, Director, ISTIC. After a brief address of Dato' Dr. Samsudin Tugiman FASc, Chairman of the ISTIC Governing Board Prof. Dr. Arun P. Kulshreshtha, Director General, NAM S&T Centre addressed the audience and presented the genesis of the event touching upon the basic issues related to STI policy and technology transfer and also gave a short description of the activities of the inter-governmental organisation headed by him. Dr. Ismail Abdel Hamid Representative of Islamic Educational Scientific and Cultural Organization (ISESCO) also expressed his views on better understanding of STI Policy and Management.

The Training Programme was inaugurated by Honourable Dato' Dr. Mohd. Azhar bin H.J. Yahya, Secretary General, Ministry of Science, Technology and Innovation and Vice-President, NAM S&T Centre. He remarked about the Science and technology policies that supports the knowledge and scientific development of the country and shared his experiences with the audience..

The Training Workshop was attended by 29 senior professionals from 23 NAM countries, including Bangladesh, Cambodia, Cuba, Egypt, India, Indonesia, Iran, Iraq, Myanmar, Nepal, Nigeria, Pakistan, Palestine, Saudi Arabia, South Africa, Sri Lanka, Sudan, Suriname, Tajikistan, Uganda, Venezuela, and Zimbabwe and the host country Malaysia. The Resource Persons for the training component of the event were from Malaysia.

The foreign participants were from Bangladesh [Ms. Iffat Ara, Assistant Professor, Department of Geography and Environment, Jahangirnagar University, Savar]; Cambodia [Mr. Man Pheareak, General Secretariat of National Science and Technology Council, Ministry of Planning, Phnom Penh]; Cuba [Ms. María Esther, Main Specialist, Science Technology and Innovation Division, Ministry of Science Technology and Environment, Havana]; Egypt [Prof. Zakaria Fouad Fawzy Hassan Abdalla, Professor, National Research Centre, Gizal; India [Ms. Sunaina, Research Associate, Centre for Science & Technology of Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi; Ms. Anuradha Madhukar, Principal Scientist International S&T Affairs Directorate, Council of Scientific and Industrial Research (CSIR). New Delhi; and Mr. Akhilesh Mishra, Scientist D, Policy Research & Planning Coordination & Performance Management Division, Department of Science & Technology, Government of India, New Delhi]; Indonesia [Dr. Ary Syahriar Dean, Faculty of Science and Technology, University al Azhar Indonesia, Jakarta Selatan]; Iran [Mr. Esmaeil Abdi, R&D Manager, Research Institute of Science, Technology and Industry Policy (RISTIP), Tehran and Dr. Keyvan Asghari, Manager, Commercialization and Technology Transfer Office, Isfahan Science & Technology Town (ISTT), Isfahan]; Iraq [Mr. Ali Abdulazez Ali Albeez, Head, Energy Planning and Management Center, Ministry of Sciences and Technology]; Malaysia [Mrs. Uwarani A/P Krishnan, Assistant Secretary, National Oceanography Directorate and Dr. Md. Fauzi bin Md. Ismail, Unit RSE, Strategic Planning Section, Planning Division, Ministry of Sciences, Technology and Innovation, Putrajaya]; Myanmar [Ms. Nyeint Nyeint Myat, Director, Department of Technology Promotion and Coordination, Ministry of Education, Naypyitaw]; Nepal [Prof. Jiba Raj Pokharel, Vice-Chancellor, Nepal Academy of Science and Technology (NAST), Kathmandu]; Nigeria [Dr. Mohammed Lawal Buga, Director, Technology Development Department, Raw Materials Research and Development Council (RMRDC), Abuja and Mr. Emmanuel Ochoche Peter, Senior Scientific Officer Department of Planning, Research and Policy Analysis, Federal Ministry of Science & Technology, Maitama, Abuja]; Pakistan [Prof. Muhammad Akram Shaik, Director General, Pakistan Scientific & Technological Information Center (PASTIC), Islamabad]; Palestine [Ms. Lama Qussas, Head, International & Regional Cooperation Department, Higher Council for Innovation and Excellence (HCIE), Ramallahl: Saudi Arabia [Dr. Alharbi Awadh Salim, Manager, Quality and Development Department, Saudi Quality Council, Jeddah];, South Africa [Mr. Petrus Letaba, Senior Specialist, The innovation Hub, National Advisory Council on Innovation (NACI) Secretariat, Pretorial; Sri Lanka [Dr. Muditha Liyanagedara, Director/CEO, National Science and Technology Commission (NASTEC), Colombo and Ms. P.R.M.P. Dilrukshi, Senior Scientific Officer /Head, Science and Technology Policy Research Division, National Science Foundation, Colombol; Sudan [Ms. Hind Abdelraheem Eltjani Badwi, Agricultural Engineer, Ministry of Agricultural and Forest, Khartoum]; Suriname [Mrs. Adhin Usha Premvati, Head, Bureau International Relation, Ministry of Education, Science and Culture, Paramaribo]; Tajikistan [Prof. Ilolov Mamadsho, Director, Center of Innovative Development of Science and New Technologies, Academy of Sciences of Tajikistan, Dushanbel; Uganda [Mr. Tumusiime Collins, Science Officer, International Liaison, Uganda National Council for Science and Technology (UNCST), Kampala]; Venezuela [Mr. Jorge Rodríguez Rojas, President, National Observatory for Science, Technology and Innovation, ONCTI, EDIF Forum, Caracas]; Zimbabwe [Mr. Ngoni Dupwa, Principal Science and Technology Officer, Ministry of Higher and Tertiary Education, Science and Technology Development, Harare]. The NAM S&T Centre was represented by its Director General, Prof. Dr. Arun P. Kulshreshtha and Senior Expert, Mr. M. Bandopadhyay.

Two Resource Persons, who gave the training lectures were Tan Sri Omar Abdul Rahman, Academician, President and CEO, MUST Ehsan Foundation, Malaysia University of Science and Technology, Malaysia and Mr. Adznir Mokhtar, Group Managing Director / Co-Founder & Principal Partner, PRIMA Asia Pacific Consulting (PAPC), who was the Coordinator of the Training Programme. Dato' Dr. Sharifah Maimunah Syed Zin FASc, Director, ISTIC also lectured during the training programme.

The overall programme of the Training Workshop was conducted at the Swiss-Garden Hotel in Kuala Lumpur in Group Activities and Group Projects for days 1-4. The presentations made by the Resource Persons on the first day were "The Introduction to the Essentials of STI Policy" by Acad. Tan Sri Datuk Dr. Omar Abdul Rahman and "Overview and Outline of the ITPS Training Programme" by Mr. Adznir Mokhtar. On subsequent days the topics were "Introducing the 10 Components of the Technology Management Best Practice (TMBP)", "Introduction to the STI Human Capital Pyramid", "The Holistic Human Capital Development Model", "Introducing Innovation and the National Innovation System" and "From Introduction to the Total National Capacity in STI".

The Participants of the Training Programme were divided into three groups. The Assigned topics were "Hitech Export of Bt Cotton in Nigeria", "Hitech Export of Cyber Security Software Development in India" and "Hitech Export of Nanomedicine for Cancer Patients" respectively and presentations made by the participants using the different templates such as 'The Six Components of STI Policy'. The Responses and presenter from each of the Group gave the presentation covering the topics such as 'STI for Policy', 'Policy for STI', 'STI and the Private Sector', 'STI and the Community', 'International Collaboration in STI', 'STI and Governance' and the 10 Components of 'The Technology Management Best Practice (TMBP)', 'Introduction to the STI Human Capital Pyramid', 'The Holistic Human Capital Development Model', 'Introducing Innovation and the National Innovation System' and 'From Introduction to the Total National Capacity in STI'. At the end of the session all three groups submitted their group reports.

The Plenary Session was chaired by Tan Sri Omar Abdul Rahman and Mr. Adznir Mokhtar. The Certificates of Participation were handed over to the Workshop participants by Dato' Dr. Sharifah Maimunah Syed Zin FASc, Director, ISTIC, who also gave the Vote of Thanks. All participants also thanked the local organizers for the fine arrangements made and efficiently conducting the Training Workshop.

During the workshop all the participants got an opportunity to visit Technology Park Malaysia and Petronas Twin tower in Kuala Lumpur city.