



Expert Group Meeting on
Promotion of South-South Cooperation in Technology Transfer

**“The Role and Programme of
International Science, Technology and Innovation Centre (ISTIC) in Enhancing
South-South Cooperation”**

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An International Platform for South-South Cooperation in STI

Creation of ISTIC

- A follow up of the Doha Plan of Action which has been adopted by the Heads of States and Government of the Group 77 and China, during the meeting in Doha, Qatar, from 12 to 16 June 2005 on the occasion of the Second South-South Summit of Group 77.
- In March 2006, UNESCO approached the Hon. Dato' Sri Dr. Jamaludin Jarjis, who was then Malaysia's Minister of Science, Technology and Innovation, for Malaysia to host the Centre.
- Malaysian government agreed. After due process in UNESCO, the Hon. Dato' Sri Dr. Jamaludin Jarjis and H.E. Mr. Koichiro Matsuura, UNESCO Director-General signed the Malaysia-UNESCO Agreement in UNESCO Head Office, Paris on 21 January 2008 to establish the Centre in Kuala Lumpur.
- ISTIC was formally launched on 22 May 2008.

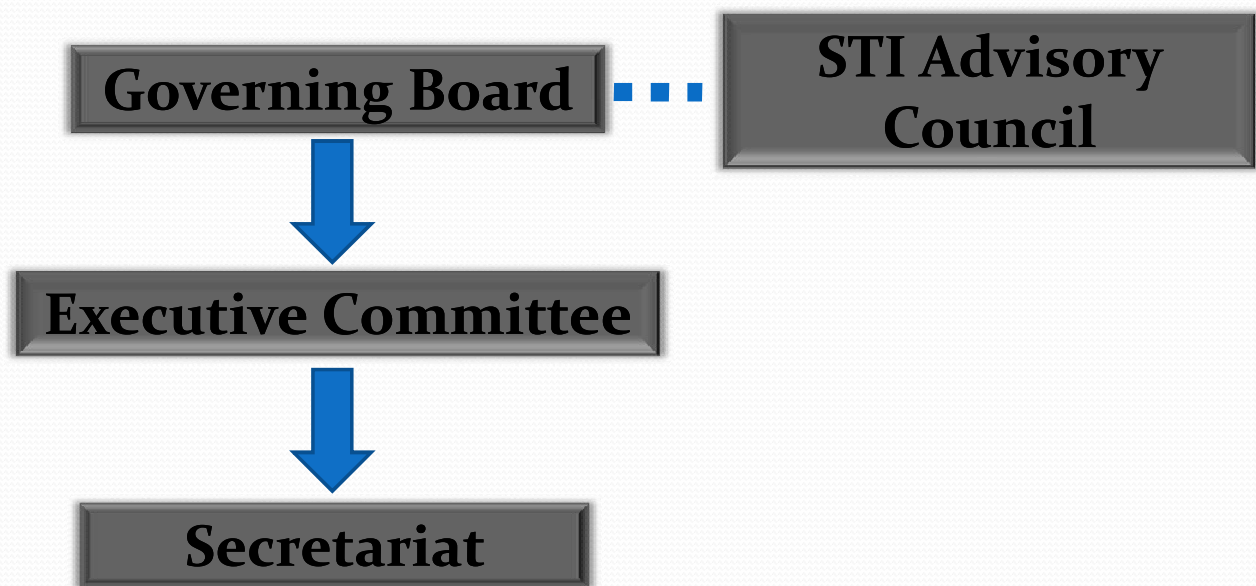
Objectives of ISTIC

1. To provide training for scientists, technologist & policy makers – STI Systems.
2. To establish links & networking between Academia & Industry.
3. To address problems of developing countries/ to set up k-based enterprise in advanced technologies.
4. To develop networking & collaboration in R&D and training program at regional & international level including linking with nodel centre.
5. To facilitate information exchange and dissemination.

ISTIC Priority Action Programme

- ❖ STI policy for development – formulation, implementation, review & monitoring.
- ❖ Capacity building.
- ❖ Foster collaboration / initiatives with existing STI networks.
- ❖ Focus on WEHAB.
(Water, Energy, Health, Agriculture & Bioversity)
- ❖ New technologies.

Management Structure of ISTIC



Governing Board

ISTIC Governing Board of 19 members is chaired by Academician Dato' Ir. Lee Yee Cheong FASc.

The Governing Board formulate, strategize and approve the long-term and medium-term programmes of the Centre; Annual work plan & budget; issues rules & regulations and examine annual report.

ISTIC Executive Committee

The Executive Committee is entrusted with day-to-day management of the Centre.

ISTIC Executive Committee comprising five (5) members is also chaired by Academician Dato' Ir. Lee Yee Cheong FASc. Other members are representatives of UNESCO, MOSTI, ASM & the Director of ISTIC.

STI Advisory Council

STI Advisory Council comprising 25 members representing different STI organizations.

STI Advisory Council provides the Governing Board with technical advice for planning, execution, review & monitoring of the programmes of the Centre.

The Secretariat

The Secretariat headed by a Director is responsible for the management of the Centre & implementation of programmes approved by the ISTIC Executive Committee & the ISTIC Governing Board.

Focus of ISTIC Programmes 2010-2012

Since its establishment, ISTIC has played its role as an international platform for South-South Cooperation in STI through its programmes as follows :-

- Capacity Building in Science, Technology and Innovation (STI)
- Development of STI Policy and Implementation.
- Development of Science, Technology, Engineering and Mathematics (STEM) Education Policy and Inquiry Based Education (IBSE)
- Technopreneurship Development and Commercialization of STI.
- Collaboration with Designated Nodal Centres in STI in South-South Countries.

ISTIC Programmes 2010

1. ISTIC-ESCI Training Workshop on Maintenance of Infrastructures, 31 May 2010 - 4 June 2010, Hyderabad, India
2. ISTIC-ISESCO Training Workshop on Science, Technology Innovation (STI) Policy Development: Assessment of Industry Needs, 21 - 25 June 2010, Kuala Lumpur, Malaysia.
3. 4th ISTIC Executive Committee Meeting, 22 June 2010, Kuala Lumpur, Malaysia.
4. UNESCO-ISTIC Round Table Planning Meeting, 23 - 24 June 2010, Kuala Lumpur, Malaysia.



Participants of ISTIC-ESCI Training Workshop on Maintenance of Infrastructures, Hyderabad, India.

Participants and the organiser of the ISTIC-ISESCO Training Workshop on Science, Technology and Innovation (STI) Policy Development: Assessment of Industry Needs. Kuala Lumpur, Malaysia



ISTIC Programmes 2010

5. ISTIC Training Workshop on Technopreneurship for South-South Countries, 1 - 7 September 2010, Penang, Malaysia.
6. ISTIC-TWAS Workshop on “Innovation in Science and Technology in Developing Countries”, 6 - 7 September 2010, Penang, Malaysia.
7. Workshop for Policy Makers of Mongolia Innovation for Development, 20 - 23 September 2010, Ulaanbaatar, Mongolia.
8. Forum of Scientists, Engineers and Industrialist, 16 October 2010 in conjunction with World Engineering Congress and Exhibition on Technology, Innovation & Production for Sustainable Development, 18 - 20 October 2010, Buenos Aires, Argentina.

Participants and the organiser of the ISTIC-TWAS Workshop.



Workshop for Policy Makers of Mongolia
“Innovation for Development”

20 – 24 September
2010, Ulaanbaatar,
Mongolia.

ISTIC Programmes 2010

9. 3rd ISTIC Governing Board Meeting and 5th ISTIC Executive Committee Meeting, 17 October 2010, Buenos Aires, Argentina.
10. World Engineering Congress and Exhibition on Technology, Innovation & Production for Sustainable Development, 18 - 20 October 2010, Buenos Aires, Argentina.
11. UNESCO/CAST/ISTIC International Conference on Chinese History of Science and Its Interaction with other Civilizations, 10 - 11 November 2010, Beijing, China.
12. ISTIC-KISTEP R&D Management Programme for High-Level Policy Makers, 7 - 12 November 2010, Cairo, Egypt.
13. International Conference on Science Education Policy and Inquiry-Based Science Education (IBSE) for Development, 6 - 10 December 2010, Kuala Lumpur, Malaysia.

Participants and the organiser of the KISTEP-ISTIC Training Programme on Research and Development Management for High Level Policy Makers.



International Conference on Science Education Policy and Inquiry-Based Science Education (IBSE) for Development.

Programmes Supported By/ Associated with ISTIC in 2010

14. Public Lecture "Copenhagen and Beyond" by Dr Rajendra K. Pauchauri, 6 January 2010, UNITEN, Malaysia.
15. Workshop on Research Performance Evaluation and Support & Symposium two days hands-on workshop to train the attendees to conduct the analyses, 25 - 27 January 2010, Manila, Philippines.
16. Meeting with Dr Faiq Billal on collaboration between ISTIC and ISESCO, 27 January 2010, Kuala Lumpur, Malaysia.
17. Public Lecture Prof Dr Balazs Gulyas on the topic The Past, Present and Future of the World Science Forum, 29 January 2010 Institute for Medical Research, Kuala Lumpur, Malaysia.
18. Meeting with Dr Yoslan Nur, UNESCO Paris, 2 February 2010, Kuala Lumpur, Malaysia.

Programmes Supported By/ Associated with ISTIC in 2010

19. Conference on "Delhi Sustainable Summit" and meeting between Chairman of ISTIC with Jeff Sachs, Dr Rajendra K. Pauchauri and Prof Dr Walter Erdelen, 4 - 8 February 2010, New Delhi, India.
20. Round Table Meeting for Revival on STI System, 3 - 4 March 2010, Khartoum, Sudan.
21. Symposium "Perspectives on University Performance Evaluation", 14 - 16 March 2010, Yokohama, Japan.
22. National Economic and Social Council (NESC) Meeting, 8 - 10 April 2010, Nairobi, Kenya.
23. UNESCO Mission to China, 26 - 29 April 2010, China.

ISTIC Programmes 2011

ISTIC has planned to carry out the following programme in 2011

1. ASEAN Training Workshop on Maintenance of Infrastructures under the auspices of the ISTIC sponsored International Network for Professional Engineers Development Institute (INPEDI) to be hosted by ISTIC and IEM Training Centre in collaboration with Institution of Engineers Malaysia (IEM), Boards of Engineers, Malaysia and Engineering Staff College of India, 28 March - 1 April 2011, Kuala Lumpur, Malaysia.
2. 4th ISTIC Governing Board Meeting and 6th ISTIC Executive Committee Meetings in conjunction with the 22nd Pacific Science Congress 2011, 13 June 2011, Kuala Lumpur, Malaysia.
3. ISTIC-ISESCO-UNESCO Training Workshop on Science, Technology and Innovation (STI) Policy - Embracing Structured Innovation for Socio-Economic Transformation, 13 - 17 June 2011, Kuala Lumpur, Malaysia.

ISTIC Programmes 2011

4. Training Workshop on Natural Disaster Mitigation. ISTIC-ISESCO-SCJ-JICA Training Programme on Waterborne Natural Disaster Mitigation Guide, July 2011, Kuala Lumpur, Malaysia. (TBC)
5. African Training Workshop on Maintenance of Infrastructures under the auspices of the International Network for Professional Engineers Development Institute (INPEDI) to be hosted by Engineers Registration Board Kenya in collaboration with ISTIC and Engineering Staff College of India, 18 - 23 July 2011, Nairobi, Kenya.
6. Kenya/UNESCO/ISTIC International Conference/Exhibition on "UN Millennium Development Goals (MDGs): Impact of Science, Technology and Innovation (STI) to 2015 and beyond", August/September 2011, Nairobi, Kenya. (TBC)
7. UNESCO/ISESCO/ISTIC International Seminar on "Empowering Women in Muslim Countries", 22 - 25 September 2011, Kuala Lumpur, Malaysia. (TBC)

ISTIC Programmes 2011

8. Training Programme on Technopreneurship for South Countries, 26 - 30 September 2011, Penang, Malaysia.
9. Training Workshop on Maintenance of Infrastructures under the auspices of the International Network for Professional Engineers Development Institute (INPEDI) to be hosted by ISTIC and ESCI, 9 - 11 October 2011, Hyderabad, India.
10. Training Workshop ISTIC-KISTEP R&D Management Programme for High-Level Policy Makers with KISTEP, 6 - 12 November 2011, Seoul, Korea.
11. 7th ISTIC Executive Committee Meetings, December 2011, Kuala Lumpur Malaysia.

ISTIC Programmes 2011

12. ISTIC-STI Policy Consultative Unit (ISTIC-SPCU) Consultative Services to G77 countries upon request. Through ISTIC-STI Policy Unit (ISTIC-SCPU) – A follow up programme with G77 countries on relevant aspects of STI Policy formulation , implementation, monitoring and evaluation.
 - i. ISTIC-STI Policy Consultative Unit (SPCU) Mongolia – Follow up on Phase II (tentatively September 2011)
 - ii. ISTIC-STI Policy Consultative Unit (SPCU) – Sri Lanka
13. ISTIC-Science, Technology, Engineering and Mathematics Education Unit (ISTIC-STEM Education Unit) - ISTIC is mandated to assist UNESCO to develop in UNESCO member countries the capacity to formulate and implement a sound STEM Education and IBSE policy in support of national development objectives. ISTIC will undertake this task through its ISTIC-STEM Education Consultative Unit.
 - i. Forum on Curriculum Design for the History and Contribution of Science and Technology in/ of/ from Muslims Countries in 5-9 December 2011, Kuala Lumpur, Malaysia.

Programmes Supported by ISTIC in 2011

14. UNESCO/ICSU Climate Change Seminar March 2011 Itaipu, Brazil.
15. UNITEN/TERI Seminar on Green Transportation, March/April 2011, Kuala Lumpur, Malaysia.
16. 22nd Pacific Science Congress 2011, Congress Asia Pacific Science in the 21st Century: Meeting the Challenges of Global Change, 14 - 17 June 2011, Kuala Lumpur, Malaysia.
17. First Ghana Science Congress, 27 - 30 June 2011, Ghana.
18. ISTIC-CONACYT Training Workshop on Technopreneurship for South-South Countries, September 2011, Tampico, Mexico.
19. ESCI "International Conclave on Climate Change" (ICCC-1) 2011, 12 - 14 October 2011, Hyderabad, India
20. Fifth Islamic STI Conference during the 18th Islamic World Academy of Sciences (IAS) Conference 22 - 24 October 2011, Doha, Qatar.

ISTIC Programme 2012

1.0 STI Policy for Development

- 1.1 ISTIC Training Workshop on Science, Technology & Innovation (STI) Policy - Embracing Structured Innovation for Socio-Economic Transformation, 18 - 22 June 2012, Kuala Lumpur, Malaysia.
- 1.2 ISTIC-SPCU: STI Policy formulation, implementation, monitoring and evaluation, 28 Mei - 1 June 2012, Sri Lanka.
- 1.3 ISTIC-KISTEP R&D Management Programme for High Level Policy Maker, 5-9 November 2012, Seoul, Korea.

ISTIC Programme 2012

2.0 ISTIC-STEM Education Consultative Unit

- 2.1 Training programme on IBSE for Master Teachers from developing countries, 19 - 23 March 2012, Penang, Malaysia.
- 2.2 ISTIC–Science, Technology, Engineering and Mathematics (STEM) : Policy formulation and Inquiry Based Science Education (IBSE) for Development, 15 - 19 October 2012, Ghana.

3.0 Capacity Building

- 3.1 ISTIC-IEM Training Workshop on Maintenance of Infrastructure, 20 - 24 February 2012, Yangon, Myanmar.
- 3.2 ISTIC-ESCI Training Workshop on Maintenance of Infrastructure, 16 - 20 April 2012, Hyderabad, India.

ISTIC Programme 2012

- 3.3 ISTIC-Institution of Engineers and Engineers Registration Board, Nigeria Training Workshop on Maintenance of Infrastructure, 9 - 13 July 2012, Nigeria.

4.0 Technopreneurship

- 4.1 ISTIC Training Workshop on Technopreneurship for South-South Countries, 10 - 14 September 2012, Penang, Malaysia.

5.0 Executive Committee Meeting and Governing Board Meeting

- 5.1 8th ISTIC Executive Committee Meeting, 19 June 2012, Kuala Lumpur, Malaysia.
- 5.2 5th ISTIC Governing Board Meeting & 9th ISTIC Executive Committee, Meeting, 19-23 November 2012.

ISTIC Programme 2012

6.0 Year of Science 2012

6.1 An Exhibition on 1001 Inventions: Muslim Heritage in Our World in 2012.

6.2 An Exhibition and Competition in Science and Mathematics Education for schools in Malaysia in 2012.

7.0 Programme supported by istic

7.1 United Nation Conference on Sustainable Development (UNCSD) RIO+20, 14 - 16 May 2012, Brazil.

INTERNATIONAL COLLABORATION

ISTIC has currently established networking relations with 32 international and national organizations including UNESCO, ISESCO, KISTEP, ESCI, WFEO, RECSAM, NatCom, ASM, MOSTI etc.

IMPACT OF ISTIC PROGRAMMES

ISTIC Programmes in the last two years have managed to benefit 70 South-South Countries who have sent participants (International 305, Malaysian 215) to ISTIC programme and activities.

In the area of STI Policy, 79 participants (International 46, Malaysian 33) from 34 countries have benefited from two training workshops conducted in 2009 and 2010. Malaysia was able to carry out its Foresight Studies on a better footing with MIGHT collaborating with KISTEP and Egypt and AMCOST countries have also benefited in using the knowledge gained to develop their national STI Policy formulation and STI infrastructure development.

IMPACT OF ISTIC PROGRAMMES

On the programme of STI Policy formulation and management, ISTIC through its ISTIC-SPCU unit was able to assist UNESCO, Beijing to conduct the workshop on “Innovation for Development of Mongolia” which will enable Mongolia to implement its National Innovation System accordingly.

On the programme of maintenance of infrastructures, the ISTIC-ESCI programmes have resulted in the formation of the network-International Networks for Professional Engineers Development Institutes (INPENDI) and under INPENDI three countries namely Malaysia, Kenya and India will conduct similar programmes in 2011 which will have tremendous impact on the knowledge, culture and practice of maintenance in developing countries.

IMPACT OF ISTIC PROGRAMMES

From the programme on Training Workshop on Technopreneurship for South-South Countries, ISTIC was not only able to train 17 scientists to have knowledge on Technopreneurship, but also was able to motivate for a similar programme be done in Tampico, Mexico and hosted by Mexico. Six Malaysian Scientists who won Innovation Award attended the programme.

In the area of Science Education, ISTIC was able to enhance capacity building in STEM Education Policy formulation and implementation and IBSE to participants from 20 South-South countries. A working paper initiated by ISTIC on IBSE has been given to Science Advisor for a paper on the way forward for IBSE for Malaysia

IMPACT OF ISTIC PROGRAMMES

Through ISTIC programmes South-South countries can learn from each other's policy, strategies and implementation of its national development plans.

ISTIC has to date established networking with 32 International and National organizations and has signed MOU's with UNESCO Paris, ISESCO, ESCI, KISTEP, UNESCO Beijing, UNESCO Jakarta, National Commission of UNESCO and MUST.

The Way Forward to enhance South-South Cooperation and Technology Transfer

- 1) Develop national innovative technology transfer mechanism and structure in South-South countries.
 - i. Commodity based technology transfer mechanism
 - Oil palm and rubber in Malaysia
 - ii. Natural Resources
 - Petroleum & Gas (in OPEC countries), Timber (Timber Board) etc
- 2) Develop innovative mechanism for networking between and among organizations and nodal centres in STI in South-South countries.
 - i. ISTIC & ESCI on Technology Maintenance of Infrastructures
 - ii. ISTIC & UNESCO on Capacity Building
- 3) Have management structure that involve representatives of industry, funding agencies and government agencies for South-South countries.
 - i. Governing Board Members
 - ii. STI Advisory Board
 - iii. Executive Committee

The Way Forward to enhance South-South Cooperation and Technology Transfer

- 4) Develop innovative funding mechanism for technology transfer – Commercialization Fund etc.
- 5) Develop & implement programme that enhance the learning experience of successes & failures of South-South countries programme. Programme should focus on STI for economic and national development – Case studies: Establishment of commercialization unit at Universities & R&D Institutes.
- 6) Document successful technology transfer programmes & innovations in South countries that can be used as a reference for South-South countries.

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