

## **II-E.** International Cooperation

### 1. PREAMBLE

The DSIR maintains effective coordination and cooperation with various international organizations such as UNCTAD, WIPO, UNIDO, UNESCAP, and UNESCO at different levels and in association with other concerned Ministries on various issues related to Technology development and technology transfer. Matters pertaining to the APCTT under UN-ESCAP are dealt with the cooperation of the Ministry of Commerce and Industry and the Ministry of External Affairs. DSIR also plays an active role in APCTT's functioning, particularly relating to its programmes and policies.

India, being the host country for the centre, has been providing institutional support. During the period under report on institutional support of US\$ 2,00,000 an equivalent to Indian Rupees to the APCTT for meeting the local costs. In addition, the indirect costs related to building repairs and municipal taxes were also provided. DSIR has extended programme support towards APCTT **Regional Programmes on National Innovation** Systems (NIS) Phase I and 'Capacity development of skills for scouting and documentation of green grassroots innovations in Asia and the Pacific'. The Grassroots Innovations (GRI) project is a DSIR-APCTT-SRISTI initiative. Support to National Innovation Systems (NIS) Phase II is being encouraged.

The revised Statute of the APCTT, adopted by the Commission at its sixty-first session in May 2005, through its resolution 61/4, stipulates, among other things, that the Centre shall have a Technical Committee consisting of experts from members and associate members of ESCAP and from inter-

non-governmental governmental and organizations. Members of the Technical Committee shall be appointed by the Director in consultation with the Executive Secretary of ESCAP. The Technical Committee shall be responsible for advising on the formulation of the programme of work and on technical matters concerning the operations of APCTT. The Centre shall have a Governing Council consisting of a representative designated by the Government of India and no fewer than eight representatives nominated by other members and associate members of ESCAP elected by the Commission. The members and associate members elected by the Commission shall be elected for a period of three years but shall be eligible for re-election.

### 2. ACTIVITIES OF APCTT

During the period under report, the Centre endeavored to assist the countries of the region in responding to the challenges of integrating rapidly into the global economy by focusing on technology transfer support services for small and medium scale enterprises (SMEs), promotion of national innovation systems and green grass-roots innovations, and the provision of information, networking and the sharing of experiences relating to technology transfer. Under these thrust areas, the Centre undertook a range of programmes of immediate relevance to the region.

### Network for Technology Transfer

A major activity was the establishment of networks of technology transfer intermediaries in the region to promote cross-border business cooperation among SMEs. Under the Technology Transfer

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Network for SMEs, a comprehensive web-based technology transfer service package had been developed that was available at www.technology4sme.net. The website was designed to facilitate online transfer of technology with a view to establish it as a regional "technology transfer market service" for Asia and the Pacific. The Centre had also designed a Business-Asia website, www.business-asia.net as a one-stop business support and information website for SMEs in member countries. This website enabled users to find information on business start-ups, joint ventures and foreign direct investment (FDI) across borders in the Asian and Pacific region as well as information on new technologies and market opportunities.

APCTT received 303 technology offers and 187 technology requests from SMEs and entrepreneurs across the Asia-Pacific region. The Centre's technology transfer portal, <u>www.technology4sme.net</u>, served as an active platform for information exchange between APCTT, SMEs and business firms. This website was also used by business firms in Europe, Latin America and the United States of America.

The Centre had also developed the Asia-Pacific Technology Information Tracking and Unified Data Extraction (APTITUDE), a search engine known as APTITUDE, to enable buyers and sellers of technology to reach not only the APCTT database but also related databases from member countries that were in the public domain. Currently, 12 public domain technology databases from APCTT member countries were linked to the APTITUDE search engine.

## Capacity-building Activities on Technology Transfer

### (a) Workshop on Planning and Implementing International Technology Transfer in a Global Business Setting

APCTT, in association with the Management Training Institute and the Ministry of Science and Technology, Viet Nam, had organized a workshop, held on 26<sup>th</sup> and 27<sup>th</sup> May, 2009 in Hanoi, on Planning and Implementing International Technology Transfer in a Global Business Setting for the benefit of SME support organizations, SMEs, and entrepreneurs in Viet Nam. About 60 participants, including Government officials, trainers and consultants from Government SME support institutions, research institutes, universities, vocational training institutions and SMEs participated in this programme.

### (b) Training programme on R&D management

APCTT in association with the CSIR organized a training programme on R&D management during 16<sup>th</sup>-17<sup>th</sup> March, 2009 in New Delhi. Participants from Ministry of Education, Culture and Science, Mongolia and Center for Science and Technology Information, Mongolia attended this training programme.

## Traditional Medicine and Herbal Technology Network

In view of the interest and importance of technologies for herbal medicine, APCTT had established the Asia-Pacific Traditional Medicine and Herbal Technology Network (APTMNET) in cooperation with the Hubei Provincial Science and Technology Department in Wuhan, China. The aim of this network, which linked 14 countries of the region, was to be an information exchange centre for traditional medical and herbal medicinal technology and for the development of herbal medicines in the Asia-Pacific region.

### **Biotechnology Information Network**

APCTT had developed the Biotechnology Information Network for Asia (BINASIA) in cooperation with the Korea Research Institute of Bioscience and Biotechnology. Thirteen member countries of APCTT formed the network and had designated national focal points for BINASIA. The network had facilitated information exchange, including the sharing of experiences and lessons learnt and had served as a hub for policy-related information, the networking of experts, the promotion of R&D cooperation, industry-R&D partnerships and technology transfer in the Asia-Pacific region.

### **Renewable Energy Cooperation Network**

APCTT had initiated the project entitled "Supporting



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the development of an institutional cooperation mechanism to promote renewable energy in Asia and the Pacific". The project focused on supporting the development of an institutional cooperation mechanism for strengthening the capacity of member countries to adopt multiple approaches for promoting the utilization of renewable energy resources. As part of the cooperation mechanism envisaged, a website known as the Renewable Energy Cooperation Network for Asia and the Pacific (RECAP) was being developed. Following activities were carried out under this project.

### (a) Preparation of country studies

In consultation with national focal points of the Centre, consultants from 12 countries, namely, Bangladesh, China, Fiji, India, Indonesia, Islamic Republic of Iran, Mongolia, Nepal, Pakistan, the Philippines, Sri Lanka and Thailand were engaged to prepare country reports containing the details of the status of RET adoption and utilization, information on leading R&D institutions and national/international agencies in each country working in the area of renewable energy. The reports would also include information on indigenously developed renewable energy technologies available.

#### (b) Resource assessment manuals

APCTT engaged experts to prepare training material in their respective areas that could be used as a manual to conduct training for energy specialists from member countries on renewable energy resource assessment.

### (c) Training programme

APCTT conducted a three-day training programme entitled 'Renewable Energy Technology Resource Assessment and Planning' from 26<sup>th</sup> to 28<sup>th</sup> October, 2009 at New Delhi. The target group for the programme was officials involved in implementing energy-related programmes.

### **National Innovation Systems**

A successful programme to promote National Innovation System (NIS), APCTT has set up a webbased resource centre to share good practices in national policy formulation for an effective NIS and to provide information on trends in NIS and good practices. The resource centre is accessible on the APCTT website. The project was funded by the Government of India. APCTT has initiated action to implement the National Innovation System Phase II with DSIR support. Focus of this phase of the project would be the key components and implementation strategies and management practices of national innovation systems and their organic linkages with sub-national and sectoral innovation systems.

APCTT implemented a project funded by the Government of India to promote the Scouting, Documentation and Dissemination (SDD) of grassroots innovations in the Asia-Pacific Region. The "knowledge Partner" was the society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI), an NGO in India. Under this project, APCTT organized a workshop to provide guidelines on how to initiate SDD of grass-root innovations in countries.

A project to encourage policymakers and key actors of national innovation systems to focus on the application of new and emerging technologies to enhance the competitiveness of SMEs, with an emphasis on innovation and the formation of global partnerships was implemented. The following programmes were organized under this project:

(a) Fostering Innovation through Strengthening of Hi-tech Clusters. A workshop on "Fostering Innovation through Strengthening of Hi-tech Clusters" was held during 9<sup>th</sup>-10<sup>th</sup> November, 2009. The overall objective of this workshop was to enable key actors of the national innovation system network of Viet Nam to understand the role and importance of hi-tech clusters in promoting innovation.

(b) Promoting innovation in nanotechnology and fostering its industrial application: an Asia-Pacific perspective. A regional consultative meeting entitled "Promoting innovation in nanotechnology and fostering its industrial application: an Asia-Pacific perspective" was held on 2 and 3 December 2009 in Colombo to focus on the need to develop and strengthen nanotechnology innovation systems to promote

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nanotechnology application to enhance the competitiveness of industry, with specific emphasis on SMEs.

### Value Added Information Services

APCTT's periodicals continue to play an essential role in dissemination. The periodicals, the Asia Pacific Tech Monitor and the Value Added Technology Information Services (VATIS) in the areas of Ozone Layer Protection, Waste Technology, Biotechnology, Food Processing and Non Conventional Energy are distributed in the Pacific region. The web versions of the Centre's technology-oriented periodicals are available at www.techmonitor.net.

### Human Resource Development Programme

- a) APCTT organized a training programme on R&D management for the officials from the Ministry of Education, Culture and Science, Mongolia, and from the Center for Science and Technology Information, Mongolia during March 16-17, 2009 in New Delhi in partnership with the CSIR.
- b) An expert group meeting was held on 20<sup>th</sup>-21<sup>st</sup> July, 2009 in Bangkok, to brainstorm issues related to renewable energy cooperation by APCTT member countries. The participation of experts from Bangladesh, Fiji, Mongolia, Nepal and Vanuatu had been supported by the Centre.

### APCTT Technical Committee and Governing Council

The fifth meeting of the Technical Committee was held on 30<sup>th</sup> November and 1<sup>st</sup> December, 2009 in Colombo, Sri Lanka. The fifth session of the Governing Council (GC) of the Asian and Pacific Centre for Transfer of Technology (APCTT) was held on 18<sup>th</sup> December, 2009 in Bangkok, Thailand. During the period under report, the Centre received contributions from Bangladesh, China, Indonesia, Iran (Islamic Republic of), Malaysia, Macao (China), Pakistan, Papua New Guinea, the Philippines, the Republic of Korea and Thailand in varying amounts ranging from US\$ 5,000 to US\$ 35,000 totaling US\$ 1,47,450, excluding the support received from Government of India. An amount of US\$ 2,00,000 was contributed towards institutional support of the Centre from the host country (India).

### 3. FOREIGN DEPUTATIONS FROM DSIR

Senior Officers of DSIR were deputed as Resource Persons/Participants to various events as below:

- a. 13<sup>th</sup> Session of WIPO's Standing Committee on Law of Patents during 23<sup>rd</sup> to 27<sup>th</sup> March, 2009 held at Geneva.
- b. Workshop on Technology Commercialisation held during 8<sup>th</sup>-18<sup>th</sup> September 2009 at IC<sup>2</sup> Institute at the University of Texas at Austin, U.S.A.
- c. 5<sup>th</sup> Meeting of the Technical Committee (TC) of the APCTT during 30<sup>th</sup> November 1<sup>st</sup> December, 2009 in Colombo, Sri Lanka.
- d. Two-day Consultative Workshop on Promoting Innovation in Nanotechnology and Fostering its Industrial Applications: an Asia and Pacific Perspective held during 2<sup>nd</sup>-3<sup>rd</sup> December, 2009 in Colombo, Sri Lanka.
- 5<sup>th</sup> Session of Governing Council (GC) of the APCTT held on 18<sup>th</sup> December, 2009 in Bangkok, Thailand.
- f. Workshop on Consultancy Needs and Services in Disaster Management held during 21<sup>st</sup>-22<sup>nd</sup> December 2009 at Dhaka, Bangladesh.