

## II - E. INTERNATIONAL COOPERATION

### 1. PREAMBLE

The DSIR maintains effective coordination and co-operation 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. The Matters pertaining to the APCTT under UNESCAP are dealt with the cooperation of the Ministry of Commerce & 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, provides institutional support of US\$ 200,000 equivalent in Indian Rupees to the APCTT for meeting both the host facilities and local costs. A programme support of US\$100,000 in Indian Rupees was contributed towards APCTT Regional Programme on National Innovation Systems (NIS). Another Project support is extended to the APCTT on Capacity Development on skills for scouting and documentation of green grassroots innovations in Asia and the Pacific. This is a DSIR-APCTT-SRISTI Initiative.

The revised Statutes of the Asian and Pacific Centre for Transfer of Technology, 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 intergovernmental and non-governmental 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 the Director on the formulation of the programme of work and on other technical matters concerning the operations of APCTT and 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 2006, the Centre's activities were directed towards technology capacity building, promotion and management of innovation, regional and sub-regional networking and technology information services to enable the countries of the Asian and Pacific region to respond to the challenges that have arisen as a result of integration with the new global knowledge-based economy. The main target groups of users are small and medium-sized enterprises (SMEs) and intermediaries/SME support service providers. The activities of the Centre are SME-oriented, IT-powered, and environmentally responsible and gender conscious. The Centre's technology information and transfer advisory services are provided through A) Technology exchange services B) Technology information and transfer networks and C) Technical periodicals and publications.

#### A. Technology Transfer Through Regional And Sub Regional Networking

APCTT is facilitating the establishment of networks of technology transfer inter-

mediaries in the region to promote cross-border business cooperation among SMEs. The network members are assisted in developing partnerships with various stakeholders providing comprehensive technology transfer services. The Centre has established the following networks:

### ***Technology Transfer Network for Small and Medium-scale Enterprises in the Asia Pacific Region***

Two websites namely [www.technology4sme.net](http://www.technology4sme.net) and [www.business-asia.net](http://www.business-asia.net) have been under development to serve the SMEs and facilitate one stop facility to source information on technology for business startups. A Consultation Meeting with Network Partners for Technology4sme.net and Business Asia.net, during 15-17 March 2006, Seoul, Republic of Korea, was held in Seoul in conjunction with the Asia Conference on Technology Transfer (ACTT 2006). The meeting was attended by 15 participants from 11 member countries. During 2006, more than 50 technology offers and 30 technology requests were registered in the databank. About 900 technology queries were serviced and 150 introductions facilitated among technology seekers and technology providers for technology transfer discussions. Technology match-making and support services to the members of INTET ASIA members were also offered.

### ***Biotechnology Information Network for Asia (BINASIA)***

APCTT has implemented a project for the establishment of a Biotechnology Information Network in Asia (BINASIA) in accordance with the request of members and associate members of ESCAP. The Ministry of Science and Technology of the Republic of Korea expressed support for the project and hence APCTT developed the BINASIA project in cooperation with the Korea Research Institute

of Bioscience and Biotechnology (KRIBB). Thirteen member countries of APCTT, namely, Bangladesh, China, India, Indonesia, Malaysia, Mongolia, Nepal, Pakistan, the Philippines, the Republic of Korea, Sri Lanka, Thailand and Viet Nam are members of the network and have designated national focal points for BINASIA. So far, following BINASIA Expert Group Meetings were held:

- BINASIA Expert Group Meeting, 24-25 January 2006, Bangkok, Thailand
- BINASIA Pakistan National Workshop, 11-12 March 2006, Lahore, Pakistan
- BINASIA Philippines Forum, 27-28 April 2006, Manila, Philippines

### ***Asia-Pacific Traditional Medicine and Herbal Technology Network***

The Asia-Pacific Traditional Medicine and Herbal Technology Network (APTMNET) is a network sponsored and initiated by APCTT and its member countries for the development of traditional medicine and the promotion of information dissemination and industrial/technical cooperation on traditional medicine in the Asian and Pacific region. This initiative was taken up as a follow up of recommendation of the 16<sup>th</sup> Meeting of the Technical Advisory Committee of APCTT in November 2001 in Shanghai, which was subsequently endorsed by the Governing Board at its 16<sup>th</sup> session in November 2001.

From mid-2002, APCTT and its member countries have made great efforts to establish APTMNET and considerable progress has been achieved thus far. The network [www.apctt-tm.net](http://www.apctt-tm.net) linking 14 countries of the region (Bangladesh, China, India, Indonesia, Islamic Republic of Iran, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Republic of Korea, Sri Lanka, Thailand and Viet Nam) in the area of traditional and herbal medicine technology has been established. The network

addresses issues relating to biodiversity, protection of traditional knowledge, sustainable industrial utilization of natural resources and promotion of sound agronomical practices at the grass-roots level.

Under APTMNET, an International Conclave for Traditional Medicine and Meeting of APTMNET Members, 16-18 November 2006, New Delhi, India were held.

### ***The International Network for Transfer of Environmentally Sound Technologies for Asia (INTET Asia)***

The International Network for Transfer of Environmentally Sound Technologies for Asia (INTET Asia) was established by APCTT in 1994. The objective of the network is to facilitate transfer of environmentally sound technologies (ESTs), both manufacturing and cleaning ones, to small and medium-scale enterprises (SMEs). This network is beneficial for innovative enterprises and technology transfer intermediaries interested in identifying new technology/collaboration opportunities for themselves or their clients with a particular focus on environmentally sound technologies. Members of INTET Asia enjoy various benefits including free periodicals, “matchmaking” services, subsidized participation in technology transfer events organized by the Centre, preference in obtaining consultancy contracts/subcontracts through the Network and free advertising space in APCTT periodicals. It is now planned to strengthen INTET Asia Network by utilizing advanced web-based networking and business exchange tools, and establishing an online technology trade community for ESTs. This would provide not only a platform for technology match-making but also for sharing of information and knowledge on the emerging challenges, opportunities and solutions related to ESTs as well as for facilitating adoption of best practices.

## **B. Technology Capacity-Building and Promotion and Management of Innovation**

### ***Promotion of National Innovation Systems (NIS) in Countries of the Asia Pacific Region***

APCTT has received funds from the Government of India to implement the project, “Promotion of National Innovation Systems (NIS) in Countries of the Asia Pacific Region”. This project was designed to influence policy-makers to appreciate the relevance and importance of NIS, develop policy frameworks that enable the key actors namely industries, R&D institutions and universities to adopt and participate in such a system. As part of the implementation, APCTT provides advisory services and organizes expert group meetings for senior policy-makers and national workshops for key actors in the innovation system. Networking and sharing of knowledge on NIS among member countries are facilitated through Internet based mechanisms, creation of communities and provision of on-line information services. The following are some of the activities organized in 2006:

- Forum on National Innovation Systems for the Philippines: Industry and Energy Innovations within Reach, 6-7 March 2006, Manila, Philippines
- Workshop on National Innovation Systems, 20-21 June 2006, Tehran, Islamic Republic of Iran
- Seminar on National Innovation Systems: Public Policy to Enhance Industrial Innovation Capacity, 19-20 July 2006, Jakarta, Indonesia
- Consultative Meeting on National Innovation Systems of India, 19-20 September 2006, New Delhi, India

- National Seminar on Biotechnology Innovation Systems of India: Policy Measures and Support Mechanism, 6-7 October 2006, Nainital, India
- National Workshop on Sub-national Innovation Systems and Technology Capacity Building Policies to Enhance Competitiveness of SMEs, 27-30 October 2006, Beijing, China.
- Workshop on National Innovation Systems, 14-15 December 2006, Lahore, Pakistan - This workshop is scheduled to be held back-to-back with the Technical Committee and Governing Council Meetings.
- Development of the Website on National Innovation Systems: APCTT is in the process of building up a web-based resource centre on National Innovation Systems. The following will be the main topics covered under this website: About Innovation and National Innovation Systems; Asia Pacific Forum on National Innovation Systems; Workshops and Seminars on National Innovation Systems (India, Indonesia, Islamic Republic of Iran, Philippines, Sri Lanka and Thailand); National Innovation Systems – A Case of India; Web-resources: General, Asia-Pacific Countries, Other Countries.

### ***Promotion of Grassroot Innovations in Countries of the Asia Pacific Region***

APCTT was given funds by the Government of India for a collaborative project entitled, Promotion of Grassroots Innovation in Countries of the Asia Pacific Region. APCTT will work closely with the Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI), an NGO in India, as a knowledge partner in implementing the project activities that aim to enhance the capacity of governments and other

stakeholders in exploiting grassroot innovations in Asia and the Pacific. The following activities are envisaged under this project: (i) documentation of existing institutional arrangements for scouting and documentation of grassroot innovations through desk research and exploratory visits to selected countries; (ii) organization of a regional workshop to discuss conceptual issues in scouting, documentation, database development and dissemination of green grassroot innovations; and (iii) organization of four national workshops on specific issues like scouting, database development and protection of IP rights, concept of Prior Informed Consent (PIC), etc.

### **C. Technology Information Services**

The Centre endeavored to keep SMEs and policy makers up-to-date on the latest technological developments and new and emerging issues associated with the development, transfer and acquisition of technologies through its periodicals and publications. The publications have also served as an important tool to bring providers and seekers of technology together.

Asia Pacific Tech Monitor (ISSN 0256-9957), the Centre's prime periodical, with an annual circulation of nearly 6,000 copies in about 70 countries is brought out on a bi-monthly basis and serves as a guide to the new innovation-driven economy. The articles on Technological Trends, Technology Markets and Technology Transfer are mainly from leading experts in the region. The special themes covered in 2006 were Value Addition and Creation through Innovation: Concepts and Case Studies; Managing IPR: Strategies and Practices for SMEs; Innovation and Technology Financing; Managing Innovation in Clusters and Networks: Enhancing Competitiveness of SMEs; Converging Technologies; and Traditional Medicine:

Application of Modern Science and Technology. The Yellow Pages, the Business Section of APCTT's Asia Pacific Tech Monitor contains a Business Coach Section with How-to-Guides for Innovative Firms covering topics such as Start-up Venture Creation, Venture Financing, Managing Innovation, Technology Transfer and Green Productivity. The Yellow Pages also carry a section on Technology Opportunities covering Tech Offers and Requests, Investment Opportunities, and Strategic Alliances and Joint Ventures. The Yellow Pages continue to be a major contributor in facilitating and promoting the technology transfer services of APCTT.

Under the Value Added Technology Information Service (VATIS), the Centre brings out five bimonthly periodicals namely Non-Conventional Energy, Waste Management (formerly Waste Technology), Biotechnology, Food Processing and Ozone Layer Protection. The key feature of the VATIS periodicals is the packaging of information in a capsule form and facilitating direct access to information sources, wherever possible. The technological information is sourced from the print media, relevant websites and through electronic mail services. Three of the VATIS periodicals are published with the support and cooperation of specialized institutions. The production of VATIS on Ozone Layer Protection is financially supported by the Ozone Cell of the Ministry of Environment and Forests, Government of India. Furthermore, the Biotechnology Consortium India Limited (BCIL) and GTZ-ASEM (Advisory Services in Environmental Management) are co-publishers of the VATIS on Biotechnology and Waste Management respectively.

The web-based version of APCTT's technology oriented periodicals is available at [www.techmonitor.net](http://www.techmonitor.net). Started in January

2003, this website attracted more than one million "hits" and more than 75,000 specific visits in 2005. The information available in various APCTT publications, particularly periodicals, except the most recent ones, is provided free of cost on this website to cater to a wider audience.

### 3. Foreign Deputations from The Department of Scientific & Industrial Research During 2006

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

- National Innovation systems in Asia and the Pacific, 2006, held during 20-21 June, 2006, in **Tehran, Islamic Republic of Iran**.
- Training Programme on S&T Consultancy capability building of SMEs, 12-13 July 2006. Xian, **Shaanxi Province, People's Republic of China**.
- National Seminar on National Innovation Systems: Public Policy to enhance Industrial Innovation Capacity, during 19-20 July 2006 in **Jakarta, Indonesia**.
- EuroIndiaNet Workshop held during 14-15 September 2006, **Port, Portugal**
- National Workshop on Sub-national Innovation Systems and Technology Capacity Building Policies to Enhance Competitiveness of SMEs, 27-30 October 2006, **Beijing, China**
- 2<sup>nd</sup> Session of the Technical Committee and Governing Council Meeting of the Asian and Pacific Centre for Transfer of Technology (APCTT), 11-13 December, 2006 & The National Innovations System (NIS) Workshop held on 14-15 December 2006, in **Lahore, Pakistan**.