II-D. INTERNATIONAL TECHNOLOGY TRANSFER PROGRAMME

1. PREAMBLE

International Technology Transfer Programme (ITTP) is a component programme of 'Technology Promotion, Development and (TPDU) Programmes'. Utilization programme has its genesis in Transfer and Trading in Technology (TATT) scheme, which was formulated in the seventh five year plan and continued till the ninth five year plan. **ITTP** has consolidated various technology export promotion activities of the earlier scheme and aims at encouraging and supporting Indian industry for greater participation in international technology trade.

2. OBJECTIVES

Promoting transfer of technologies, projects and services from India with a view to enhance the reach of Indian industry beyond the national boundaries as well as promoting transfer of technologies from other countries to India with a view to enhance the technology export capability of Indian industry. The major activities of the programme include:

- To compile information on exportable technologies and technology intensive projects, products & services available with Indian industry and R&D establishments;
- To create awareness about our technology export capabilities among potential foreign buyers or collaborators;
- To support capability building of industries and R&D establishments for technology intensive exports;
- To support research and analytical studies

- aimed at providing inputs to the government for technology export related policy formulation;
- To promote and support Institutional Mechanisms for catalyzing international technology transfer and trade; and
- To facilitate signing of MoUs / Agreements on High Technology Cooperation and Trade between Indian and foreign industrial units.

3. PROJECTS/ACTIVITIES DURING THE YEAR 2007-08

Details of important projects/activities that were completed or were in progress during the year under report are given below:

3.1 India Fair - Melbourne, Australia *March* 29 – *April* 01, 2007

The above fair was organized by India Trade Promotion Organization (ITPO) in Melbourne over an exhibition area of 1500 sq. mtrs. in which around 80 organizations participated. Ministry of Science and Technology and Earth Sciences participated in the fair over an exhibition area of 300 sq. mtrs. DSIR participated in the fair as a constituent of Ministry of Science and Technology. Around 100 visitors visited the DSIR pavilion, with enquiries on: non-ferrous smelting technology, SPV panels and products, manufacturing of vending machines for sanitary products, chapati maker machine, minimization of damage due to earthquakes, herbal beauty products, plastic pipes for telcom cables, water purification, HVAC products, chillers, gas fired boilers, bending of rubber-wood, commercialization of device attached to a golf stick for tracking

movement, commercialization of chewable tablets that will prevent tooth decay and fire safety audits. A seminar was also organized on March 30, 2007 which included a presentation by "Austrade" that promotes the interest of Australian businessmen keen to do business overseas. The "Fair" demonstrated that there is a good potential for alliances between Australian and Indian organizations. Collaborative projects could be undertaken in areas such as IT, bio-technology, electronics, photo-voltaics, solar biodiesel, water conservation, de-salination plants, dairy and coffee processing plants etc. with potential for setting up of joint ventures in some of these areas. Business could be also established in Australia in outsourcing of hi-tech products, machinery and equipment from India.

3.2 INDIATECH 2007 (11th Technology Trade Pavilion) at India International Trade Fair, New Delhi *Nov. 14-27*, 2007

The objective of the Technology Trade Pavilion is to promote display and dissemination of information relating to technological capabilities, high value added products and technologies of companies and organisations including R&D laboratories, academic institutions, product design institutions, consultants etc. The Technology Trade Pavilion 2007 was setup jointly by Department of Scientific and Industrial Research (DSIR) and India Trade Promotion Organisation (ITPO) for the eleventh time in succession since 1997. The space in the Technology Trade Pavilion was offered free (cost shared equally by DSIR & ITPO) to the R&D laboratories / institutions and other small and medium scale enterprises engaged in technology related business. A space of 1000 sqr. mtrs. was reserved in Hall No. 18, Pragati Maidan, New Delhi for the 11th Technology Trade Pavilion.

Around 40 organisations, both from public private sectors including R&D and 11th the laboratories participated in Technology Trade Pavilion. These included Mecpro, SS Foundry, Gabsons Engineers, Dip Craft, Coral Industries, HEG Ltd., NRDC, CEL, CI Network Technologies, Senso Medi Systems etc. The participating organisations in the Pavilion displayed their technological capabilities through models, prototypes, interactive computer based displays, charts, machinery/product samples, etc. Technology Innovation Awards were bagged by M/s. CI Network Technologies, Senso Medi Systems and HEG Ltd. and best display awards were bagged by NRDC, Dip Craft and Gabson Engineers.

The 11th Technology Trade Pavilion helped in interactions promoting one-to-one and negotiations business between the participating organizations displaying their technology intensive products, technologies, machinery, services, etc. and potential customers of Indian technology and services. including interaction These interactions, between R&D organizations and industry, generated many business enquires, besides creating awareness about India's technological capabilities.

3.3 Profiles of Exportable Technologies from SMEs – State-wise

The objective of the project is to compile information on exportable technologies and projects from SMEs and disseminate it through internet, documentation, conferences, etc. with a view to enhance international technology trade. The compilation of profiles of exportable technologies and projects from SMEs in the states of West Bengal & North Eastern States (through WEBCON), Gujarat & Rajasthan (through GITCO), UP, Uttaranchal, Bihar and Jharkhand (through Sycom Consultants) and Madhya Pradesh,

Chattisgarh and Orissa (through MPCON) were completed during the year. comprehensive web enabled searchable database of profiles, containing 578 profiles was also prepared during the year. This was disseminated to foreign embassies, Indian missions and other international trade bodies. Positive feedback has been received from the embassies and missions and it is expected that this will facilitate technology trade between India and other countries.

3.4 Technology Export Development Organisation

The main objective of the Technology Export Development Organization (TEDO) - a cell jointly setup jointly by DSIR and CII is to promote and support technology technology intensive exports through collaborative efforts of government, industry, research & academic institutions, financial institutions and other export promotion agencies. In the second phase during 2005-07, TEDO focused on capability building and export promotion of around 40 companies in the process plant and machinery sector and the tooling sectors. **Profiles** of these companies, highlighting their exportable technologies, projects and hi-tech products were prepared. Unit level assessment of companies in the tooling sector was carried out. TEDO participated in the Hannover Fair, 2006 and Achema Fair in Germany in May. 2006 and Euromould Exhibition in Germany in November, 2006. The TEDO website was re-designed and a virtual exhibition was hosted on the website.

The second phase of the TEDO project (2005-07) was concluded during the year so as to initiate a focused and result oriented project.

The project on Capability Building to Enhance Export Competitiveness & Facilitating Market Access for Indian Technologies and Technology Intensive

Products was started during the year. The project shall be implemented by CII and Centre for Promotion of Imports from Developing Countries (CBI), Netherlands with the support of DSIR and Department of Commerce. The project aims at capability building for enhancing the competitiveness and global market reach of SME's in six identified sectors, viz. Auto Components, Tools & Dies, Casting and Forgings, Process Plant and Machinery, IT Enabled Engineering Services and Agro / Food Processing. The output expected from the project is 30 trained consultants in the chosen sectors and 120 trained SMEs with capability to export to the EU and other markets.

3.5 Centre for International Trade in Technology

The main objectives of the Centre for International Trade in Technology (CITT) in IIFT, New Delhi are: to sensitize policy makers regarding the importance technology trade and the need for establishing an enabling and proactive policy regime; to support the corporate sector by providing information regarding relevant global opportunities market commercial and potential in priority markets; and to develop a cadre of experts and trainers to provide specialized training to the industry and policy makers. A study on exportable R&D services from the ICMR system was completed during the year. The study highlights the core competencies of all the ICMR laboratories as well as the infrastructural facilities present in them. It describes the contract R&D services and consultancy services that can be provided by the ICMR labs for exports. During the year, three new projects were also sanctioned to CITT. One was a study on technology branding in SMEs and other two were MDPs on "Global Marketing of Technologies" and "Global Sourcing of Technologies".

3.6 Promoting high Technology Co-operation and Trade between India and CIS Countries

The objectives of the project are: to identify specific Indian suppliers of technologies, projects and high tech products; to identify specific collaborating agencies and business partners in the CIS region; and to facilitate one-to-one interaction, signing of MoUs, etc. target countries are Uzbekistan, The Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Ukraine, Azerbaijan, Russian Federation, Belarus, Armenia, Moldova and Georgia. The project is being funded jointly by DSIR and Department of Commerce under their Focus CIS Programme and MAI scheme. During the year, the consultant (MITCON) identified the parties from the Indian side as well as from the CIS side for signing MoUs on technology related projects. MoUs were signed during the Technology Summit, held in Pragati Maidan, New Delhi on 15th November, 2007.

3.7 International Awareness – cum - Training Programme on Packaging Technologies and Machinery including Quality Assessment Systems for Packaging Materials and Equipment (for Food Processing Sector)

The main objectives of this programme are: to share and exchange information on the packaging technologies and related machinery in the food processing sector, used in various countries; to discuss the various quality assessment systems for packaging materials and equipment; to promote and catalyze the

extensive use of these technologies and machinery for mutual benefit; and to evolve collaborative R&D and technology related projects, joint ventures etc. in the area of packaging technology for the food processing sector. The programme, scheduled in February, 2008 would invite international and national participants and pave the way for export of packaging machinery in the food processing sector from India.

3.8 Trans-nationalization of SMEs

Three Studies on trans-nationalization of SMEs in the pharmaceuticals sector, machine tool sector and auto-components sector were sanctioned during the year. The objective of the studies are: to understand the major factors that help or hinder the process of trans-nationalization of SMEs; to suggest specific capability development programmes that would promote trans-nationalization of SMEs; and to define the catalytic role that the government can play to accelerate the process of trans-nationalization of SMEs. The on pharmaceuticals sector completed and the studies on the other two sectors were likely to be completed during the year. The studies would discuss the companies that have been able to transnationalize as well as come up with a list of SMEs that can possibly trans-nationalize with catalytic support from the government or other sources. The studies would also suggest specific programmes and mechanisms, that need to be organized for the SMEs that would enhance their trans-nationalization potential.