



VIT University, Vellore
India

TRASTECH

(A SME Technology Transfer News Letter)
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Message from Chief Editor

Dear Stakeholders of SME
Technology Transfer,

NAM S&T Centre's
Technology Transfer and
Development for SMEs
conference held in Sri Lanka

during August 2008 paved way for intensive
deliberations among professionals and
various actors involved in SME technology
development and transfer.

One of the brainstorming sessions offered a
suggestion that a "News Letter" be brought

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out for disseminating information,
knowledge and sharing best practices
among the developing nations. We at
VIT University, Vellore, India consider
it as a privilege to take up this pleasant
task of compiling and presenting this
electronic news letter. I would request
you all to take active participation in
sustaining the momentum and to bring in
contributions relevant to this community. We
also thank NAM S&T Centre for initiating
this and for providing us this opportunity.

Message from NAM S&T Centre

It gives me great pleasure to introduce this First Issue of the 'E-Newsletter', which is being published in pursuance of the 'Colombo Declaration' adopted at the conclusion of the international conference on 'South-South Cooperation for Technology Transfer and Development for Small and Medium Enterprises (SMEs), jointly organized by the Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) and the National Science Foundation and the National Science and Technology Commission of Sri Lanka on 18-22 August 2008 at Negombo, Sri Lanka.

The Negombo Conference was a resounding success in highlighting a number of crucial issues for South-South cooperation. Small and Medium Enterprises (SMEs) being an important part of a growing economy represent about 90% of the enterprises in most of the developing countries and contributes to 40-60% of the total output to the national economy. These also have high employment opportunities and export potentials. Thus innovation activity in these enterprises is the hub of economic and social development. In recent years there has been a marked increase in the innovation activities particularly in the developing countries by linking research organizations, enterprises and financial institutions. Many companies, universities, R&D institutes and government organizations have dedicated technology transfer mechanisms to identifying research which has commercial prospects and social value, and may involve setting up of joint ventures and partnerships at

regional and intra-regional levels bringing new technologies to the market. To foster this process, networking between the stated entities is rapidly taking shape. One of the most important forms to promote this networking is through 'E-Newsletter' in order to share the knowledge, approaches and experiences on the problems and prospects on the development of SMEs and the technology transfer to improve technological competitiveness in the developing countries.

This 'E-Newsletter' intends to provide information on the available technologies within the countries, available experts and any other technical requirements that may be met through interaction among the developing countries, thus forming an important channel for mutual technical, social and economic development. I congratulate the VIT University in bringing out this first issue and wish all success to the cause for the promotion of South-South Cooperation.



(Prof. Arun P. Kulshreshtha)
Director, NAM S&T Centre

A Report: International Conference on 'South-South Cooperation for Technology Transfer and Development of Small and Medium Enterprises (SMEs)', 18-22 August 2008, Negombo, Sri Lanka

It is evident that the value of any newly generated technology considerably shrinks unless it can be transferred to a user who can apply the technology to create a tangible benefit. 'Technology Transfer' is the process by which existing knowledge, facilities and capabilities are utilised and marketed to fulfil public and private needs. It involves a range of formal and informal collaborations between technology developers and technology seekers. To facilitate technology transfer in the existing technology driven global era many governmental bodies, academic and R&D institutions and companies have opened with them an 'Office of Technology Transfer', which basically dedicates itself to identifying research with potential commercial interest and evolving strategies to exploit the same.

In order to share the knowledge, approaches and experiences regarding the problems and prospects on the development of SMEs and the transfer of technology to improve technological competitiveness of SMEs for their national economic development, the Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T

Centre) in association with the National Science Foundation (NSF), Sri Lanka and National Science and Technology Commission (NASTEC), Sri Lanka jointly organised an International Conference on 'South-South Cooperation for Technology Transfer and Development of Small and Medium Enterprises (SMEs)' at Negombo, Sri Lanka during 18-22 August 2008.



This conference brought together various stakeholders, viz. experts, policy makers, researchers, technologists and entrepreneurs to share knowledge and experiences on SMEs and issues related to technology transfer in the developing world

The proceedings of the Inaugural Session were conducted by Dr. M.C.N. Jayasuriya, Director NSF. After lighting of the traditional oil lamp, Prof. Sirimali Fernando, Chairperson, NSF made the welcome remarks and Prof. Arun P. Kulshreshtha,

Director, NAM S&T Centre gave introductory address highlighting the background of the Conference. This was followed by the release of the NAM S&T Centre's publication on 'Science and Technology Policy and Indicators for Development: Perspectives from Developing Countries' by H.E. Prof. Tissa Vitarana, Minister of Science and Technology of Sri Lanka and the inaugural speech by the Honourable Minister.

Other distinguished persons seated on the podium were Prof. Nalini Ratnasiri, Chairperson NASTEC and Mrs. Beatrice Ekanayake, Additional Secretary, Ministry of Science & Technology of Sri Lanka



. An important highlight of the Inaugural Session was the keynote address by Dr. K. Ramanathan, Head of the UNESCAP Asian and Pacific Centre for Transfer of Technology (APCTT). The Session concluded with the presentation of the Vote

of Thanks by Dr. Ranil Guneratne, Director NASTEC.

The Conference was attended by 72 senior experts and professionals from 17 countries including the host country Sri Lanka as well as the representatives of a number of inter-governmental organisations

The Conference was conducted in 11 technical sessions broadly categorised under the themes 'Technology Transfer in the Global Context', 'Technology Transfer from Around the World: Case Studies', 'Implementation of Technology Transfer: Laws and Policies and Market Development', 'Implementation of Technology Transfer: Partnership Development and IPR Issues', 'Strengths and Barriers for Effective Technology Development and Transfer', 'Technology Assimilation and Networking' and 'Entrepreneurship Development and Quality Assurance of the Product Standardization for Effective Technology Transfer'. The overall technical programme of the conference was coordinated by Dr. M.C.N. Jayasuriya, Director, NSF, Dr. R. Guneratne, Director, NASTEC and Prof. A.P. Kulshreshtha, Director, NAM S&T Centre. The Concluding Session on 'Recommendations and Sri Lanka Declaration on South – South Cooperation for Technology Transfer and Development of Small and Medium Enterprises' was

chaired by Prof. Sirimali Fernando, Chairperson, NSF when a Colombo Declaration (**can be downloaded from <http://www.idisc.net/en/Publication.352.html>**) was adopted. The conference ended with the distribution of the Certificate of Participation to the participants. The participants also had an opportunity to go for a study tour to a Vidatha Center and Two rural SME's as well as Pinnawela Elephant Orphanage, which brought

immense joy to the participants after the hectic schedule of the conference.

“Colombo Declaration” featured in the infoDev (The World Bank Group) incubator network portal www.idisc.net and the link to access the article is: <http://www.idisc.net/en/Article.38796.html>

List of Technologies available with Biotechnology Consortium of India Limited, (BCIL) for Technology Transfer

1. Anti HIV-1 active glycoprotein, Epap-1.
2. Cost effective fermentation process for producing Mosquitocidal Biopesticide and Lethal Mosquito attractant.
3. Plant extract based Biopesticide formulation 'Bollcure' effective against cotton bollworm *Helicoverpa armigera*.
4. Diagnostic technology for detection of *Chlamydia trachomatis*.
5. High value Essential Oil from *Dracocephalum heterophyllum*.
6. Production of Urokinase in Hollow Fibre Bioreactor by Human kidney cell line.
7. An analogue of Oenostacin with Potent Antibacterial Activity a strong step to combat Antibiotic Resistance.
8. US patented technology for Anti ageing protein - *Superoxide Dismutase*.
9. Technology for Natural Dyes from *Rhododendron arboreum*.
10. Technology for using rDNA construct and the expressed chimeric protein as a Vaccine against Brucellosis.

For further details, please contact: Dr.Purnima Sharma, Managing Director, Biotech Consortium India Limited, Anuvrat Bhawan, 5th Floor, 210, Deen Dayal Upadhyaya Marg, New Delhi – 110002 India, Tel.: ++91-11-23219062 (D), 23219064-67, Fax: ++91-11-23219063 Email: ceo.bcil@nic.in, Website: www.bcil.nic.in

Farmer Participatory Approach in the Development and Introduction of a Local Processed Product of Tomato to Market in Matale

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I.J.de Zoysa
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Peradeniya.**

Tomato (*Lycopersicon esculentum* Mill) is one of the popular vegetable crops in Sri Lanka. Because of its popularity both as fresh and processed form, there has been a tremendous increase in tomato production in Sri Lanka during the recent years. The increase in production is leading to glut in the market causing price drop. The industry is expected to absorb the excess supply for processing purpose there by ensuring fair prices to growers avoiding distress sales during the peak seasonal market gluts. Besides, such a diversion towards processing also help in increasing space and time utility reduces the post harvest losses and creates value addition. However, such inter linkages of tomato cultivation with marketing and processing is not common at the farm level. In view of this, a technology transfer activity was initiated during 2007 Yala season (dry season) and Maha 07/08 (Wet season) in Matale district, which is one of the major tomato growing districts in Sri

Lanka, to develop a processed product of tomato through farmer participatory approach. Twenty five farmers from each village covering 06 villages were selected. The technical guidance from nursery sowing to harvest and field supervision to solve the problems were given to the farmers by the research and extension members. The farmers cultivated the “Tharindu” variety which is recommended by Department of Agriculture for processing purpose. The guidance given by the Department of Agriculture helped these farmers get a good yield with low cost of production and high quality produce. At the beginning of the activity, the owner of a small and medium entrepreneur named Hasuna and the farmers involved in the programme made an agreement on the purchasing of tomatoes at the rate of 15 Rs/Kg. The harvests of farmers were purchased from the field itself by the company members, this adopted procedure helped the farmers to sell their harvests with fewer problems in transportation, marketing and selling. The technology for the production of processed product of tomatoes was given by the research division. The workers were given a good training in this area.

Two hundred bottles (175ml) were produced daily and introduced in to the market in Matale. The product was labelled as “Hasuna”. The quality of the product was highly accepted by the consumers and there

was a big demand for this product by the consumers in Matale. At present, the farmers are still supplying their tomato harvest to this company.

However, many constraints were faced by the small medium businessman. They need credit facilities/loan system to improve their storage facilities and to purchase more advanced equipments/machineries to operate the processing centre in a larger scale. The present facilities available are not enough to operate this process in a huge manner.

Therefore, the present investigation revealed that there is a great potential to improve processing industry in Sri Lanka. Since the government of Sri Lanka is spending a substantial amount of money to import processed product of tomato it is worth to pay more attention on this area to improve the living standards of tomato farmers and processing industry in Sri Lanka.

India:

VIT-Technology Business Incubator (VITTBI) offers Soft Landing Support to SMEs from foreign countries:

VITTBI is the first business incubator in India to commence the Soft Landing initiative. Under this program foreign SMEs wanting to set up facilities in India can seek support from VITTBI. VITTBI offers a

complete range of business incubation service that includes an office space, shared office resources, assistance in local liasioning and networking in identifying land, getting statutory clearances, recruitment & training a host of other services. A German MNC (SME) in the precision engineering segment entered in an MOU with VITTBI during January 2008. The company's ground breaking ceremony was performed in the Company's factory site in Vellore during September 2008. The operations will commence from April 2009. This venture will invest around Rs.120 millions in the next three years and will provide direct employment to more than 100 persons.

Two more German companies have shown interest and are discussing with VITTBI for soft landing of their proposed ventures in India.



VIT Chancellor Mr.G.Viswanathan (left) with the Kramski CEO Mr.Wietstaw Kramski (second from right) during the ground breaking ceremony

A New Zealand based business incubator "Ice House" is also seeking cooperation with VITTBI for providing soft landing facility mutually.

Technology Transfer News from Belarus

The Republican Centre for Technology Transfer (RCTT) was founded in May 2003, under the auspices of the State Committee on Science and Technologies of the Republic of Belarus (SCST), the National Academy of Sciences of Belarus, the United Nations Development Programme (UNDP) and the United Nations Industrial Development Organization (UNIDO)

RCTT OFFERS ITS SERVICES TO

- innovation activity agents in Belarus,
- Foreign companies and investors.

RCTT's SERVICES

- Search of technologies, professionals, business partners and investors in Belarus and abroad; assistance in establishing of joint ventures.
- Assistance in development of innovation and investment projects; placing the project-related information in the UNIDO and IRC formats on RCTT's e-portal, in the specialized databases, particularly in the *UNIDO Exchange* network system, Russian Technology Transfer Network (RTTN), European IRC network, yet2.com Network (USA), in foreign agencies, media and published editions.
- Development of business plans.

- Carrying marketing research in the Republic of Belarus.
- Organizing RCTT clients' participation in exhibitions, conferences, seminars and other events in the innovation activity domain.
- Organizing and delivering refresher, upgrading and advanced training courses, seminars and workshops for the personnel of research institutions, higher-education institutes and universities, SMEs.

RCTT's SERVICES OFFERED TO FOREIGN COMPANIES AND INVESTORS

- Search of technologies, partners and appropriate specialists in Belarus; assistance in preliminary arrangements related to contracts; support of establishment of joint ventures in the country.
- Provision of information about projects initiated by Belarusian organizations;
- Carrying marketing research in the Republic of Belarus.
- Putting information about projects being offered by RCTT's foreign partners in the UNIDO, IRC and yet2.com formats on the e-portal of RCTT, on the RTTN and yet2.com networks.
- Organizing negotiations with Belarusian business partners.

- Preparing personal sojourn programs for people of business coming to Belarus.

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Technology offer: (more to come in subsequent issues)

Tubular Perforated Adamantine Drills

Brief description:

There has been developed production technology used to fabricate tubular perforated adamantine drills of a family of standard types.

Average diamond consumption per drilling depth when treating technical glass is 0.4 mg/cm max for a drill with diameter up to 3 mm and 0.9 mg/cm max for a drill with diameter over 3 mm The main dimensions (Specifications 2-037-68-85): the drill operative section diameter is 1.5...26 mm. The material treated: technical glass (GOST 7132-78).



The cooling medium: water.

Development stage

Currently in use / production

Cooperation proposals

License transfer, Transfer of technical documentation and Delivery in batches.

Direct Link to the Offer:

<http://80.94.168.54/ShowRequests/ShowTitlesOff.aspx?loc=1&ru=0&id=247>

News You Can Use:

The **International Network for Small and Medium Sized Enterprises-INSME** is a non profit Association open to international membership.

Its mission is to stimulate transnational cooperation and public and private partnership in the field of **innovation and technology transfer to SMEs**.

This is justified by the challenges posed by globalisation, that force **SMEs** to strive to be more competitive through accessing innovation and technology. **Policy Makers** and **Intermediaries** play a crucial role in assisting SMEs in this respect

More Details from the following web link:

<http://www.insme.info/page.asp>

APCTT: Asian and Pacific Centre for Transfer of Technology – Asia Pacific

The Asian and Pacific Centre for Transfer of Technology

· Type of Institution

It is a United Nations regional institution under the ESCAP (Economic and Social Commission for Asia and the Pacific) to promote transfer of technology to and from SMEs in Asia and the Pacific

· Members

- Selected Technology Transfer Intermediaries
- Technology Information Centres, Transfer Agencies and Networks
- Chambers of Commerce, Industrial Associations, Business Development Agencies and Periodicals in the field of technology transfer

· Year of Establishment

The Centre was established in 1977 in Bangalore, India

· Address

APCTT Building, P.O. Box 4575, Qutab Institutional Area, New Delhi - 110 016

Tel. :+91-11-26966509, Fax: +91-11-26856274

Web site:<http://www.apctt.org/>

E-mail: infocentre@apctt.org

<http://www.technology4sme.net/aboutus.htm>

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Supersizing and downsizing: the impact of changing packaging and portion sizes on food consumption

When it comes to packaging, size matters. In a research paper, INSEAD Associate Professor of Marketing [Pierre Chandon](#) and co-author [Nailya](#)

[Ordabayeva](#), an INSEAD PhD student, found that changes in the shape of packaging or portions can have a big impact on our consumption patterns.

As consumers, we tend to buy bigger packages or order bigger portions because we believe we're getting better value. However, this phenomenon leads to overeating and obesity because we fail to notice just how big these portions and packages are and hence underestimate how much we consume. The size and the shape of packaging play a key role in these misperceptions.

According to the [recent study](#), forthcoming in the *Journal of Marketing Research*, volume changes appear smaller when all three dimensions (height, width, and length) of a product are changed, compared to when only one dimension (say, height) changes. This is because, to double the volume of any object, you can either double the size of one of its dimensions — and then people will notice — or you can just increase each dimension by 26 per cent — and then people will underestimate how big the change is.

Please visit the link given below for more information:

<http://knowledge.insead.edu/SupersizingDownsizing080901.cfm?vid=90>

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