

Textiles & Garments: Appendix B- Case Studies for Innovative Projects

1. Indonesia's Textile and Textile Products Machinery Restructuring Program

The Government of Indonesia since 2007 has launched Indonesian Textile Restructuring Program to help the industry alleviating some of their problems in out-of-date or obsolete machinery. The main objective is to assist Indonesian Textile Industry in modernization for their machinery and equipment as well, by providing financial assistance for them. The scheme is divided into 2 sub-schemes. The first is for the company who bought their newer machinery first (either by borrowing form bank, from supplier credits, or their own money); when they finished installing their own machinery, they were granted 10% reimbursement by the Government. The second is by facilitating a relatively soft loan to would-be applicants that intended solely to buy textile machinery. The selection of applicants is done through delicate process and involving third parties as verification agencies to guarantee accountability, non-discriminative treatment and other responsible matters.

Government plans to collect funds to help firms to update their machinery. Many companies could not replace their aging machinery as they had been saddled with huge debts and poor cash flows. Now the government is trying to collect fund to support the replacement program. It advocates local banks to recommence their credit to this sector. And some local banks had expressed interest in providing loans for the replacement project. It is reported that at least 14 banks are interested in financing the industry.

2. Technical textiles program at the Textile Research & Innovation Centre, Pakistan

The Textile Institute of Pakistan (TIP) has launched an initiative aimed to facilitate the growth and development of the textile industry of Pakistan. The Textile Research and Innovation Centre (TRIC) are expected to meet Pakistan's needs in emerging technologies but also provide a new dimension to textile education in Pakistan. This will also help the textile industry of Pakistan to manufacture new value-added products and become competitive in the changing global market.

Established in August 2007 with support from the All Pakistan Textile Mills Association (APTMA), the Textile Research & Innovation Centre (TRIC) at the Textile Institute of Pakistan (TIP) is striving to set up an infrastructure for the development of technical textiles in Pakistan. The Pakistani textile industry well understands the significance of value added textiles in enhancing export earnings.

Textile Research & Innovation Centre is currently focusing its activities on three classes of technical textiles on the basis of their importance in Pakistan. A survey in hospitals is underway to determine the scope of medical textiles and studies on the use Geotextiles in road construction are in progress in collaboration with City District Government Karachi (CDGK) to determine the cost savings aspect as well as enhancement in life of roads constructed through the use of technical textiles. Similarly, on agricultural textiles, TRIC is working with farmers in interior Sindh to develop a fabric which will help increase the yield of sun dried premium chili, free from any harmful toxins.

TRIC's staff has also been working on projects related to nanotechnology and in November 2008 they presented some of the developments in surface modification with atmospheric plasma at the 86th

Textile Institute World Conference in Hong Kong. This technique holds massive potential in research and development and can also find many applications in the development of technical textile products. While potential users are generally aware of products and their usage, concerns expressed by both consumers and producers are restricting growth. TRIC is trying to create awareness on the benefits and prospects of technical textiles as a step towards resolving such problems to encourage people to explore the sector.

3. **Fiber Innovation Incubation Facility, Japan**

Fiber Innovation Incubation Facility (FII) has been set up in Shinshu University, Japan for performing the following functions:

- Consistent production of prototypes, including raw materials, spinning, thread making, weaving, high-order processing, and finished products
- Nurturing young engineers and researchers with talent in development through collaboration with businesses (internship system)
- One-stop-solution feature for fiber development issues
- Evaluation and standardization of materials and products
- Information transmission hub functionality (such as marketing)
- Creation of local community based innovations through utilization of rental spaces of private corporations

To fulfill the above objectives, FII has so far launched several successful programmes for boosting Japanese textiles & garments industry. Some of these programmes are:

- **Construction of a pilot line (a baton exchange zone for joint development with private businesses)**
 - Installation of devices (new)
 - Transfer of existing devices
 - Restoration of existing devices
 - Shared use of large-scale machinery
 - Establishing international standards
 - Promotion of local industries
- **Development of practical and talented human resources**
 - Nurturing graduate students and young researchers
 - Internship system
 - Joint and collaborative studies with private businesses
 - Linking with a (program)
 - Human resource development program with government-academic-private collaboration
- **Creation of an informational hub function**
 - Construction of an international network in the fiber field
 - Establishment of an informational hub
 - Information analysis
 - Collection and transmission of information
 - Cooperation with other educational and research institutes (National Institute of Advanced Industrial Science and Technology, public testing and research institutes)
 - Collaborative efforts among the government, academic and private

4. Initiatives of Joint Apparel Association Forum (JAAF), Sri-Lanka

Realizing the importance human capital, Joint Apparel Association Forum (JAAF), Sri-Lanka has undertaken several schemes to improve the skills and productivity of their workforce. To being with, JAAF in collaboration with International Labor Organization (ILO) and The Employers' federation of Ceylon launched a launched the Factory Improvement Program (FIP) in 2002 with funding from the U.S. Department of Labor and the Swiss Secretariat for Economic Affairs. FIP was a training program that aimed to help factories increase competitiveness, improve working conditions, and strengthen communication and collaboration between managers and workers. Other initiatives that have been taken by JAAF are:

- **To strengthen the marketing competencies**, the JAAF, in collaboration with the Chartered Institute of Marketing, initiated an industry-specific professional marketing qualification
- **To strengthen design capabilities**, the JAAF (with the support of the Sri Lankan government) initiated a Fashion Design and Development program, a four-year degree course conducted at the Department of Textile & Clothing Technology at the University of Moratuwa in collaboration with the London College of Fashion.
- **To increase firm productivity**, the JAAF (with the support of the Sri Lankan government) initiated the Productivity Improvement Program in 2004. The objective was to promote “leaner” and more effective organizations, which would result in higher productivity, lower costs, better quality, and on-time delivery
- **To strengthen technical capacity**, the JAAF entered into an agreement with the North Carolina State University (NCSU) College of Textiles in 2004 to deliver an NCSU-affiliated diploma in collaboration with the Clothing Industry Training Institute and the Textile Training & Service Centre. The Sri Lanka Institute of Textile and Apparel also organizes the following:
 - The Apparel Industry Suppliers Exhibition, a biannual exhibition for machinery suppliers to show new technology to support technology transfer in Sri Lanka
 - The Fabric and Accessory Sourcing Exhibition, a fabric and accessories supplier exhibition showcasing new technology developments in fabric and textiles around the world and improving the awareness of the local textiles manufacturers about global trends
 - A magazine (Apparel Update)
 - A conference (Apparel South Asia)
- Several programs have been established in the context of the MFA phase-out, supported by donors. For instance, USAID created four model training centres within the 31 vocational training centres, which provide training for the textile and apparel sectors (out of a total of 189 vocational training centres).

5. Development of Textiles Standards in Egypt

In order to promote Egyptian exports and to cope with international competition, government of Egypt realized the importance of having textile products conform to International Standards.

Accordingly, the Egyptian Organization for Standardization and Quality (EOS) was keen to implement, in collaboration with the Industrial Modernization Center (IMC), a project which aims at harmonizing Egyptian Standards (ESs) with international counterparts so that Egyptian products can compete in foreign markets.

The harmonization process is based on ISO/IEC Guide 21-1:2005 Regional or national adoption of International Standards and other International Deliverables -- Part 1: Adoption of International Standards, ISO/IEC Guide 21-2:2005 Regional or national adoption of International Standards and other International Deliverables -- Part 2: Adoption of International Deliverables other than International Standards, European Directives, and Egypt's commitments toward WTO Agreements and in particular the TBT Agreement.

Through the program aimed at harmonizing Egyptian Standards, EOS has been able to achieve:

- Harmonization of 391 standards for textiles
- Development of Guides and Manuals
 - Development of the "Harmonization Strategic Plan" which aims at ensuring sustainability and continuity of the harmonization process. This plan has been developed with the support of the Ex-President of AFNOR (standards body of France) and Ex-Vice President of ISO.
 - Development of the "Harmonization Manual" based on ISO Guide 21/2005.
 - Development of "Technical Regulations Guide" in the framework of the New Approach Directives.
- Translation of standard & guides
 - Translation of ISO Guide 21/2005 and ISO Guide 59/1994
 - Translation of 30 harmonized mandatory standards, the rest being in the process of translation.
- Automation activity
 - Upgrading EOS web site and inclusion of a link for harmonization
 - Transference to the electronic format for distribution of draft standards in the elaboration process and to EOS Board members in addition to an electronic store of harmonized standards.

Some of the Egyptian standards developed by EOS are: Medical Dressings (ESS 114/2005), White Lint (ESS 120/2005), Cotton Cloth (raw) ESS 278/2005, Cotton Cloth (raw white) (ESS 278/2005), Cotton textiles (raw), Open-ended weaving method used (ESS 2209/2005) , Cotton textiles (white), open-ended weaving method used (ESS 2211/2005) etc.