BACKWARD LINKAGE: A STUDY INTO THE PROSPECTS OF CLOTHING EXPORTS OF BANGLADESH

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THESIS

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ABSTRACT

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The clothing products of Bangladesh, at present, have restricted and reserved access (quota) to the readymade garment markets of developed countries, particularly, the United States. From 01 January 2005, as per the provisions of the WTO Agreement on Textiles and Clothing (ATC), **Bangladesh's garment** and textile manufacturers will have to cope with **steep competition** from such countries as **India, Pakistan, China, and Thailand, from which Bangladesh now imports raw materials to satisfy the demand of its textiles and clothing sector.** All these countries will be able to **inflate their RMG exports, now limited by quotas,** when the WTO establishes its free market in 2005. As a consequence, these countries are likely to utilize **more of their locally produced yarn and fabrics internally,** resulting in the **rise of prices** for such raw materials as Bangladesh imports from them, putting pressure on the textiles and clothing industries of the country. Again, **backward linkage** industries have already thrived in these contesting

countries, which would, presumably, let them to stay in competition in the impending free market with a better position than Bangladesh. Setting up **backward linkage** industries in Bangladesh with a complete **supply chain** to its major export earning RMG sector is, therefore, crucial.

Dedicated to

the sacred memories of my parents

none of whose burials

I could attend

being intolerably occupied

by

mandatory examinations.

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BIBLIOGRAPHY :

From the Cotton Field to the Cotton Mill; A Study of the Industrial Transition in North Carolina, Freeport, N.Y., Books for Libraries Press ,1971.

Social Change in the Industrial Revolution; An Application of Theory to the British cotton industry, Chicago, University Chicago Press , 1959.

Stages of Industrial Development in Asia; A Comparative History of the Cotton Industry in Japan, India, China, and Korea, Philadelphia, University of Pennsylvania Press ,1966

Synthetic Materials and the Theory of International Trade, Harvard University Press, 1966.

The Cotton Trade: Its Bearing Upon the Prosperity of Great Britain and Commerce of the American Republics, considered in connection with the system of Negro slavery in the Confederate States. New York, Negro Universities Press, 1969, reprint of the 1863 Ed.

Toward an Orderly Market: An Intensive Study of Japan's Voluntary Quota in Cotton Textile Exports, Sophia University in cooperation with C. E. Tuttle, Rutland, Vt., c1968.

Cotton as a World Power; A Study in the Economic Interpretation of History. New York, Negro Universities Press, 1969, Reprint of the 1916 Ed.

The Facts of the Cotton Famine, London, Cass, 1968.

The Rise of Cotton Mills in the South ,New York, Da Capo Press, 1968.

The Role of the Textile Industry in the Expansion of mployment in Developing Countries, Geneva, International Labor Office, 1973

Anderson, Kym, China and the Multi-fiber Arrangement, Australia, University Of Adelaide, Center for International Economic Studies, 1989

Anderson, Kym, editor; New Silk Roads: East Asia and World Textile Markets; Cambridge; New York: Cambridge University Press, 1992.

Blokker, Niels, International Regulation of World Trade in Textiles: Lessons for Practice, a Contribution to Theory, Boston : M. Nijhoff ; Norwell, MA, U.S.A. : Kluwer Academic Publishers, c1989.

Choi, Ying Pik; Chung, Hwa Soo; and Marin, Nicolas. The Multi-fibre Arrangement in Theory and Practice, London , Dover, NH , Frances Pinter, 1985.

Cline, William R., The Future of World Trade in Textiles and Apparel, Washington, DC, Institute for International Economics, 1990.

Export Promotion Bureau (EPB), Ministry of Commerce, Government of Bangladesh, Export Directory Bangladesh 1997-96, Dhaka.

Export Promotion Bureau (EPB), Ministry of Commerce, Government of Bangladesh, Bangladesh Export Statistics 1996-97, Dhaka, 1998.

Export Promotion Bureau, Ministry of Commerce, Government of Bangladesh, Export From Bangladesh 1972-73 to 1997-98, Dhaka.

Export Promotion Bureau, Ministry of Commerce, Government of Bangladesh, Annual Report, 1997-98, Dhaka, 1998.

Frenkel, Stephen.; Harrod, Jeffrey, editors; Industrialization and Labor Relations : Contemporary Research in Seven Countries, Ithaca, N.Y. : ILR Press, c1995.

General Agreement on Tariffs and Trade, Arrangement Regarding International Trade in Textiles, Geneva, GATT, 1974.

Hamilton, Carl, Textiles Trade and the Developing Countries: Eliminating the Multi- fibre Arrangement in the 1990s , Washington, D.C. : World Bank, c1990.

Hauser, William B. , Economic institutional change in Tokugawa Japan; Osaka and the Kinai Cotton Trade ,Cambridge, University Press ,1974.

Henderson, W. O. , The Lancashire Cotton Famine, 1861-1865, New York, A, M. Kelley, 1969.

Hodges, James A., New Deal Labor Policy and the Southern Cotton Textile Industry, 1933-1941, Knoxville ,University of Tennessee Press, c1986.

Hufbauer, Gary Clyde, North American Free Trade : issues and recommendations, Washington, DC : Institute for International Economics, 1992.

Ithaca, N.Y., Capital and the Cotton Industry in the Industrial Revolution, Cornell University Press, 1967.

Jimnez Corts, Claudia, GATT, WTO, and the Regulation of International Trade in Textiles; translated by hristopher D. Tulloch, Aldershot; Brookfield, Vt. : Ashgate/Dartmouth, c1997.

Josephson, Hannah, The Golden Threads; New England's Mill Girls and Magnates, New York, Russell & Russell ,1967.

Kim, Jongbin , The Korean Cotton Manufacturing Industry, Ann Arbor, Umi, 1966.

Koo, Shou-Eng, Tariff and the development of the cotton industry in China, 1842-1937, New York , Garland, 1982.

McGouldrick , Paul F., New England Textiles in the Nineteenth Century; Profits and Investment, Cambridge, Harvard University Press, 1968.

Ministry of Commerce, Government of Bangladesh, Export Policy of Bangladesh 1997-2002, Dhaka, 1998.

Ministry of Commerce, Government of Bangladesh, Trade and investment promotion manual for Bangladesh missions abroad, Dhaka, 1996.

Mitchell, Broadus and Sinclair, George Mitchell, The Industrial Revolution in the South, Baltimore, The Johns Hopkins Press; London, H. Milford, Oxford University Press, 1930.

Moore, Henry Ludwell , Forecasting the Yield and the Price of Cotton, New York, The Macmillan Company, 1917.

Navaretti, Giorgio Barba.; Faini, Riccardo.; Silberston, Aubrey. Beyond the Multifibre Arrangement : Third World Competition and Restructuring Europe's Textile Industry, Paris, Organisation for Economic Co-operation and Development; Lanham, Md.: UNIPUB, c1995.

Organization for Economic Cooperation and Development, Textile Industry in OECD countries, 1982, Paris, 1984

Pack, Howard, Productivity, Technology, and Industrial Development: A Case Study in Textiles, New York, Oxford University Press, c1987.

Park, Young-Ll and Anderson ,Kym; The Rise and Demise of Textiles and Clothing in Economic Development: the Case of Japan, Australia, University of Adelaide, Centre for International Economic Studies, 1989.

Poorvu, William J. , The textile Corporation Building, Boston : Harvard Business School, 1992

Rice, Albert Kenneth, Productivity and Social Organization, the Ahmedabad Experiment: Technical Innovation, Work Organization, and Management, London, Tavistock, 1970.

Sun,Mung-Chio Chao, Japanese Raw Silk and American Raw Cotton, Ann Arbor : Umi, 0000.

Suphachalasai, Suphat; Thailand's Clothing and Textile Exports, London , Institute of Southeast Asian Studies, 1994.

Statistical Year Book of Bangladesh, 1996, Ministry of Planning, Government of Bangladesh.

Taake, Hans-Helmut; Dieter Weiss, The World Textile rrangement from the Perspect of Korea, Hong Kong, Singapore, Malaysia, India, Pakistan, and Iran : a study in changing patterns , Geneva , International Labour Office, 1974.

U.S. International Trade Commission , Certain Polyester staple fiber from Korea and Taiwan , U.S. International Trade Commission, Washington, U.S. International Trade Commission, 1999.

U.S. International Trade Commission, Greige Polyester / Cotton Printcloth from China, Washington ; U.S. International Trade Commission, 1999.

U.S. International Trade Commission, Cotton Shop Towels from Bangladesh, China and Pakistan, U.S. International Trade Commission, 2000.

UNCTAD Secretariat, The; International Trade in Cotton Textiles and the Developing Countries : Problems and Prospects, New York , United Nations, 1974.

Utley, Freda; Lancashire and the Far East , London, Routledge and Thoemmes Press, 1996.

Wadsworth, Alfred P. and Mann, Julia De Lacy, The Cotton Trade and Industrial Lancashire, 1600-1780, New York, A. M. Kelley, 1968.

Ware, Caroline F., The Early New England Cotton Manufacture; A Study in industrial beginnings, Boston, New York, Houghton Mifflin company, 1931

Woods, Noel; Induced Employment in Marketed Services in Ireland, 1975 to 1990: An Input-Output Analysis, Department of Economics, University College Cork, Ireland, February 1999. Working Paper 99-2

INTERNET RESOURCES:

Overview Of The Trade And Trade Related Policies Of Bangladesh http://www.banglal.com/dcci/policy.html downloaded on October 5, 2000. Dhaka Chamber of Commerce & Industries (DCCI) homepage.

Commercial Guide (CCG) 2000-2001, US Embassy, Dhaka www.usembassy-dhaka.org downloaded on December 08, 2000

Omar Haider Chowdhury, A Review of the Fiscal Sector. Available at: http://www.bids-bd-org/haider's review.htm downloaded on 15 October,2000. Mr. Chowdhury is research Director, Bangladesh Institute of Development Studies (BIDS).

The Dailly Ittefaq, a national daily of Bangladesh in Bengali language, 12 December,2000 . Available at: http://www.ittefaq.com/ . Downloaded on 12 December, 2000

Foreign Trade Statistics of Bangladesh 90-91", published in 1994, Dhaka.http://www.techbangla.org/techbangla/ImportExport/BDImports/ImpGrB.html downloaded on October 14,2000.

Jubilee 2000 is an international movement in over 65 countries advocating a debt-free start to the Millennium for a billion people. http://www.jubilee2000uk.org/profile/bangladesh_table.html downloaded on 2000.12.16.

http://www.banglal.com/dcci/bangladesh.html downloaded on October 14, 2000. Dhaka Chamber of Commerce and Industries (DCCI)

SAPTA to SAFTA: Need for a Moratorium? by Zaid Bakht, (available at http://www.dailystarnews.com/199810/19/n8101909.htm#top downloaded on 14 October, 2000). The Daily Star, Feature Page Volume 2 Number 68 October 19, 1998.

"**Highlights of Export and Import Policy**". Available at http://www.dailystarnews.com/199808/06/n8080605.htm#BODY2 downloaded on 30 September,2000. The Daily Star, business page, volume 1 Number 344 August 06, 1998.

"**Export Policy 1997-2002**", available at http://www.epbbd.com/ExportPolicy.html downloaded on October 3, 2000. Export Promotion Bureau (EPB) homepage, Bangladesh

Overview Of The Trade And Trade Related Policies Of Bangladesh http://www.banglal.com/dcci/policy.html downloaded on October 5, 2000. Dhaka Chamber of Commerce & Industries (DCCI), Dhaka, homepage.

Bangladesh: Trade Policy Reform by Tanweer Akram http://www.dailystarnews.com/199905/08/n9050809.htm downloaded on 14 October, 2000; **The Daily Star**, Feature page, Volume 2 Number 254 May 08, 1999

"**Trade Liberalization in Bangladesh, Who Gained, Who Didn't, and Why**" by Tercan Baysan and Zaidi Sattar, available at **The Daily Star** website http://www.dailystarnews.com/200003/29/n0032909.htm downloaded on 14 October, 2000. Feature Page Volume 3 Number 209 Wed. March 29, 2000

Sources of Export Growth in Bangladesh, The Daily Star, Editorial Page, volume 1 Number 54 October 05, 1997 . Available at : http://www.dailystarnews.com/199710/05/n7100502.htm#BODY4 available

"**The New Export-Import Policy**", by Kabir U Ahmad. Available at http://www.dailystarnews.com/199808/23/n8082302.htm#BODY4 downloaded on 30 September,2000. The Daily Star(a popular national daily newspaper of Bangladesh), Editorial Page, Volume 2, Number 11 August 23, 1998.

Overview Of The Trade And Trade Related Policies Of Bangladesh http://www.banglal.com/dcci/policy.html downloaded on October 5, 2000. Dhaka Chamber of Commerce & Industries (DCCI) homepage.

"**The cotton industry in Turkey**", **Sebahattin Gazanfer**, Secretary General, Aegean Exporters' Unions General Secretariat http://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESC/ESCR/Cotton/China-e/cap52TUR.htm downloaded on 10 December, 2000

The United States Department of Agriculture homepage http://www.usda.gov/agency/oce/waob/jawf/profiles/html/arg/argcot.html downloaded on October15, 2000

http://www.fas.usda.gov:80/PECAD/remote/aus_sas/crop_information/Crop_descriptions/in_crops.htm#in_northern_cotton downloaded on December 18, 2000 USDA/ FAS website

Cotton: World Markets and Trade, *August 1997*, Uzbekistan http://www.fas.usda.gov/cotton/circular/1997/97-08/cover/uzbekistan.ht downloaded on 24 January, 2001

http://www.fas.usda.gov/WAP/circular/1997/97-09/cover/turkeycott.htm downloaded on 14 October, 2000. US department of Agriculture, Foreign Agricultural Service homepage.

"**Nylon: Miracle or Marketing?**" Wilmington, DE.,1998. The Lemelson Center for the Study of Invention and Innovation, National Museum of American History, Smithsonian Institution. http://www.si.edu/lemelson/centerpieces/whole cloth/u7sf/u7materials/sfTessay.html downloaded on 15 October, 2000)

'**Physical and Chemical Properties of Fibers: Unmercerized versus Mercerized Cotton Thread**" The Lemelson Center for the Study of Invention and Innovation, National Museum of American History, Smithsonian Institution. (http://www.si.edu/lemelson/centerpieces/whole cloth/u7sf/u7materials/sfPac5.html downloaded on 15 October,2000).

Turkish textile industry http://www.anil.com.tr/eng/turkis.htm downloaded on 13 October, 2000

Textiles Industry in Thailand", 1998 Australian APEC Study Centre, Monash University (http://www.arts.monash.edu.au/ausapec/cacthai.htm Downloaded on 2001-01-05)

"**Massive cotton seeds farming programme in 4 dists**". The Daily Star, Regional News volume 1 Number 9 August 21, 1997, available at http://www.dailystarnews.com/199708/21/n7082107.htm#BODY2 downloaded on 15 october,2000.

"**The Textile Industry**". **The Spartacus Internate Encyclopedia homepage. The British History 1700-1950** (http://www.spartacus.schoolnet.co.uk/Textiles.htm Downloaded on 11 October, 2000)

"The Textile Industry of Bangladesh" by Azizur Chowdhury http://www.ais-dhaka.net/SENIORS/textileazizur downloaded on 04 October, 2000

"A GUIDE FOR THE PLANNING, DESIGN AND IMPLEMENTATION, **OF WASTEWATER TREATMENT PLANTS IN THE TEXTILE INDUSTRY**", Water Research Commission, Pretoria, Republic of South Africa. Downloaded on 25 January, 2001 **http://www.und.ac.za/und/prg/publications/textguid/guide1**

The Lemelson Center for the Study of Invention and Innovation, National Museum of American History, Smithsonian Institution , Op. Cit. (http://www.si.edu/lemelson/centerpieces/whole cloth/u7sf/u7materials/sfPac5.html downloaded on 15 October, 2000).

Apparel Trade Promotion Network, India homepage. IndiaMART InterMESH Ltd. Downloaded on 25 January, 2001. Available at:http://apparel.indiamart.com/

"Textile industry's value-adding key to effective decision- making" http://www.ntcresearch.org/current/year8/I99-S10.htm downloaded on 14 October, 2000

Brine Reuse Saves Energy and Reduces Waste for the Textile Industry Textile industry's value-adding key to effective decision- making

http://www.ntcresearch.org/current/year8/I99-S10.htm downloaded on 14 October, 2000.

"The Textile Industry, The Spartacus Internate Encyclopedia, The British History 1700-1950". Op. Cit. (http://www.spartacus.schoolnet.co.uk/Textiles.htm Downloaded on 11 October, 2000)

"75 Years of Change in the American Textile Manufacturing Industry", by J. Richard Aspland and Edward A. Vaughn, Clemson University, Clemson, S.C. Raleigh. The American Association of Textile Chemist and colorists (AATCC) homepage(http://www.aatcc.org/magazine/may1997/p29-35/p29-35.html downloaded on 12 October, 2000).

Spartacus Educational, Cotton Industry http://www.spartacus.schoolnet.co.uk/USAScotton.htm downloaded on October 11, 2000

World Trade Organization(WTO) homepage www.wto.org

World Bank report, 1987 as cited in: "The Multi-Fibre Arrangement - A Thread of Protectionism", by Samantha Smith - Senior Sophister, Trinity College Dublin, Ireland, DEPARTMENT OF ECONOMICS, (http://www.economics.tcd.ie/SER/1998/Essay21.htm Downloaded on 16 October, 2000)

"The Agreement on Textiles and Clothing" WTO home page. http://www.wto.org/english/tratop_e/texti_e/texintro.htm downloaded on 16 October,2000

INTERIOR TEXTILES http://www.tradeport.org/ts/countries/japan/isa/isar0011.html Downloaded on 13 October, 2000

China textile sector to face challenges after WTO accession http://www.jobbankusa.com/indnews/textiles.html Available 2000-10-14

"International Hi-Tech Park for China's Textile Industry" U. C. Computer(Shanghai) Co. Ltd. 568 Ou Yang Road, Shanghai, 200081, P. R. China. http://www.sh.com/zone/other/textile.htm downloaded on 12 October, 2000

Overviews of Textile Industry of Hong Kong http://www.company.com.hk/hkencyc/hkersi47.htm downloaded on 14 October, 2000

"Overviews of Textile Finishing Industry of Hong Kong" downloaded on 14 October, 2000 http://www.company.com.hk/hkencyc/hkersi46.htm

"Information Technology Infrastructure for Textile and Apparel Industry in Hong Kong" , by Benjamin P.-C. Yen and C.J. Su, http://www.electronicmarkets.org/netacademy/publications.nsf/all_pk/87Abstract downloaded on 2001-01-05

Korea Federation of Textile Industries (KOFOTI) The Textile Industry - Korea-1999 Review, Korea Federation of Textiles Industries (KOFOTI), Seoul, Korea. http://www.kofoti.org/textile/kofoti_textile_review.html downloaded on 12 October, 2000.

"**The Multi-Fibre Arrangement - A Thread of Protectionism**", Samantha Smith - Senior Sophister, Trinity College Dublin, Ireland, downloaded on 16 October, 2000 from http://www.economics.tcd.ie/SER/1998/Essay21.htm

Textiles Industry in Thailand Australian APEC Study Centre , Monash University, (downloaded on 16 October, 2000 from http://www.arts.monash.edu.au/ausapec/cacthai.htm)

Thailand Textile Institute homepage http://www.thaitextile.org/ downloaded on 06 January, 2001

Turkish textile industry http://www.anil.com.tr/eng/turkis.htm downloaded on 13 October, 2000

Homepage of FAO UN, Economic and Social Department (ES), "The cotton industry in Turkey", Sebahattin Gazanfer, Secretary General, Aegean Exporters' Unions General Secretariat , Turkeyhttp://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESC/ESCR/Cotton/China-e/cap52TUR.htm

Indian Textile Industry http://www.fabricsourceindia.com/overview.htm downloaded on 2001.01.05

Fortieth Report on Demands for Grants (1999-2000) of Ministry of Textiles Rajya Sabha secretariat, New Delhi, April, 1999. (Downloaded on 16 October, 2000 http://alfa.nic.in/rs/book2/reports/commerce/text_rep.html

"**WTO and textile industry**" , **by T. S. Vishwanath, In:** Financial Daily, from **THE HINDU** group of publications, Friday, April 07, 2000 (http://www.hindubusinessline.com/2000/04/07/stories/040769ju.htm Downloaded on 13 October, 2000)

"**Korean Involvement in Bangladesh's Garment Industry**" American International School, Dhaka website

"**SILK: An Avenue to Poverty Alleviation", by Prof Sajjad Hussain** The Daily Star on-line archieve, Features ,Volume 1 Number 188, February 21, 1998(http://www.dailystarnews.com/199802/21/n8022109.htm) Downloaded on 14 October, 2000

"**Silk Foundation signs MOU with Caritas**", by Economic Reporter, The Independent archive, a national daily of Bangladesh, 26 September, 2000 issue

"**Dhaka needs to push for early execution of MFA for LDCs Centre for Policy Dialogue report says**" By Monjur Mahmud, The Daily Star, Business Page Volume 3 Number 402 Thu. October 12, 2000 (http://www.dailystarnews.com/200010/12/n0101205.htm#BODY1) downloaded on 2000-10-13

"BTMA decries gas, power tariff increases, Govt mulls special fund for backward linkage", The Daily Star Business Report, Business Page volume 3 Number 103 Sun. December 05, 1999 (http://www.dailystarnews.com/199912/05/n9120505.htm#top available 2000-9-30)

The Daily Ittefaq, a national daily of Bangladesh in Bengali, issue of 01 October, 2000, downloaded from its homepage www.ittefaq.com on the same date.

"Sub-Saharan Africa and the U.S. Textile Industry", Economic Strategy Institute, 1401 H St., NW Suite 560 Washington, DC 20005, September 1998. (http://www.econstrat.org/ssatext.htm Downloaded on 14 October, 2000)

"Bangladesh should seek free access to US:Economists Move to avoid negative impact of new US law on exports", The Daily Star, Business Page, Volume 3 Number 391 October 02, 1998 issue. Available at (http://www.dailystarnews.com/200010/02/n0100205.htm#BODY1 Downloaded on 3 October,2000)

"Readymade Garments Industry Facing the Challenge", by Kazi Alauddin Ahmed, The Daily Star homepage, (http://www.dailystarnews.com/199911/03/n9110309.htm Downloaded on 30 September, 2000) Feature page, Volume 3 Number 72 Wed. November 03, 1999

"Call to implement accord, Garment factories violating labour laws, human rights", The Daily Star homepage, General News, Volume 3 Number 391Mon. October 02, 2000 available at http://www.dailystarnews.com/200010/02/n0100210.htm#BODY2 downloaded on 03 October, 2000

"Bangladesh Opportunity" Bangladesh Garments Manufacturers and Exporters Association, Dhaka), http://www.bgmea.com/ban.htm , Downloaded on 03 October, 2000

"Ctg port to have green channel for garments exporters", The Daily Star archives, 26 September, 2000 issue. Available at (http://www.dailystarnews.com Downloaded on 05 October, 2000)

BGMEA News letter,(http://www.bgmea.com/news.htm Downloaded on 03 October, 2000 Volume 10 October 1999 Issue 8)

Export Promotion Bureau,Dhaka, Bangladesh homepage (http://www.epbbd.com/Month22/BGMEA%20for%2010pc.htm availableon 03 October, 2000)

"Govt urged to take steps for development in textile sector" The Daily Star homepage, Business Page, Volume 2 Number 258, Wed. May 12, 1999(http://www.dailystarnews.com/199905/12/n9051205.htm#BODY3 Downloaded on 30 September, 2000).

"**Sustainable Trade and Environmental Concerns in Bangladesh**", by **Saleemul Huq, Khandaker Mainuddin and Dwijen Mallick,** The Daily Star homepage, Features , Volume 3 Number 185 Wed. March 01, 2000, http://www.dailystarnews.com/200003/01/n0030109.htm#top Downloaded on 03 October, 2000

"**Induced Employment in Marketed Services in Ireland, 1975 to 1990: An Input-Output Analysis" by Noel Woods,** Department of Economics, University College Cork, Ireland, February 1999. Working Paper 99-2 p.4

"**Garment exports face global competion, Backward linkage industries need investment woth Tk 50b**", The Daily Star on-line archieve, Business & Finance,October 05, 1999 Volume 1 Number 318(http://www.nation-online.com/199910/05/n9100503.htm#BODY2 Downloaded on 4 October, 2000)

"**Developing Backward Linkage to Face the Challenges of 2005**" by **Professor Hafiz G A Siddiqi,** The author is **Pro-Vice Chancellor, North South University, Dhaka.** The Daily Star on-line archieve, Features, Volume 3 Number 80 Thu. November 11, 1999 Downloaded on 30 September 2000 from http://www.dailystarnews.com/199911/11/n9111109.htm"

Sources of Export Growth in Bangladesh", The Daily Star on-line archive, Editorial Page, Volume 1 Number 54, October 05, 1997 http://www.dailystarnews.com/199710/05/n7100502.htm#BODY4 downloaded on January 22, 2001

Budget Speech at the National Parliament, Dhaka, Bangladesh. "**Annual Budget 2000-2001", part II, by Finance Minister** on 8th June, 2000. (Available at: http://www.gobfinance.org/budget/speech text2.htm Downloaded on 04 October, 2000)

"**Backward Linkage of Apparel Industry Shows Potential for Foreign Investment**". BGMEA, Dhaka Home page, Available at: http://www.bgmea.com/ban.htm#5 Downloaded on 03 October, 2000

"**Information Technology Infrastructure for Textile and Apparel Industry in Hong Kong", by Benjamin P.-C. Yen and C.J. Su,** http://www.electronicmarkets.org/netacademy/publications.nsf/all pk/87A bstract downloaded on 2001-01-05)

"**Importance of Textile Sector in Tamil Nadu"**
(http://www.focustamilnadu.com/tamilnadu/textile policy.htm Downloaded on 16 October, 2000).

BGMEA sees boon in new GSP provision http://www.dailystarnews.com/200008/10/n0081001.htm#BODY6 Downloaded on 30 September, 2000 **The Daily Star** On-line archive, Front Page, Volume3 Number 339 Thu. August 10, 2000

"**No policy guidelines yet to face the quota-free regime" The Daily Star** on-line archieve, (available at http://www.dailystarnews.com/200004/20/n0042005.htm available 2000-9-30 Business Page, volume 3 Number 229 Thu. April 20, 2000)

"**BGMEA calls for separate body to speed up RMG decision-making**", **The Daily Star** on-line archieve, Business Page Volume 3 Number 205 Fri. March , 2000, (http://www.dailystarnews.com/200003/24/n0032405.htm#BODY3 , Downloaded on 30 September, 2000)

"**Where is the Economy Heading For**"?, by Kabir U Ahmad, **The Daily Star** Archives, 31 August, 1997 issue.

"**Jamdani Exhibition and the State of Handloom Industry**", **by Binoy Barman** The New Nation, a national daily of Bangladesh, 22 September, 2000

"**Moving ahead with a 'patriotic' agenda**", http://www.dailystarnews.com/199905/14/n9051409.htm#top Downloaded on 30 September, 2000 Features Volume 2 Number 260 Fri. May 14, 1999

"**Country Commercial Guide, FY 1999**", US Embassy in Dhaka, Bangladesh. http://www.state.gov/www/about state/business/com guides/1999/sa/bangla99 05. html downloaded on 15 October, 2000

"**We want FDI, not ODA: Hasina**", The daily Star online archive (http://www.dailystarnews.com/199812/04/n8120401.htm#top Downloaded on 30 September, 2000)

"**Textile miniter calls for Italian investment**" (http://www.dailystarnews.com/199904/14/n9041405.htm Downloaded on 30 September, 2000), Business Page, Volume 2 Number 233, April 14, 1999

The Daily Ittefaq, a national daily of Bangladesh in Bengali, 27 September, 2000(downloaded from its homepage www.ittefaq.com on the same date).

"**Two foreign cos keen to invest in backward linkage garment**", **The Daily Star** on-line archieve, Business Page, Volume 2, Number 129 December 21, 1998 (http://www.dailystarnews.com/199812/21/n8122105.htm#BODY6), downloaded on 30 September, 2000

"**ADB chief appreciates robust growth despite difficulties. Kibria seeks funds for RMG backward linkage industries**". **The Daily Star**, Downloaded on 30 September, 2000. Business Page,Volume 3 Number 215 Tue. April 04, 2000 issue from http://www.dailystarnews.com/200004/04/n0040405.htm

"**Bond money to go for financing apparel sector backward linkage**", **The Daily Star** on-line archive, Business Page, Volume 2 Number 351 Sat. August 14, 1999(http://www.dailystarnews.com/199908/14/n9081405.htm#top Downloaded on 30 September, 2000)

"**Makeover of nine textile mills to workers likely by May 1. Govt asks union leaders to form cos**". **The Daily Star** Busines page, Volume 3 Number 175 Sat. February 19, 2000(downloaded on 03 October,2000. http://www.dailystarnews.com/200002/19/n0021905.htm#BODY2)

"**BTMA decries gas, power tariff increases, Govt mulls special fund for backward linkage**". **The Daily Star** on-line archive, Business Page ,Volume 3 Number 103 Sun. December 05, 1999 Downloaded on 30 September, 2000 from http://www.dailystarnews.com/199912/05/n9120505.htm#top

"**RMG industry still in a dilemma to work out post-2005 strategy" by Inam Ahmed** The Daily Star on-line archive, Business Page, Volume 3 Number 66 Fri. October 29, 1999 (Downloaded on 30 September, 2000, http://www.dailystarnews.com/199910/29/n9102905.htm#BODY2)

"**BGMEA plans 'garments villages' to relocate city's factories, PM for exclusive 'garment village' in northern region"** The Daily Star on-line archive, Business Page, Volume 2 Number 266 Thu. May 20, 1999 http://www.dailystarnews.com/199905/20/n9052005.htm#BODY3 Downloaded on 2000-9-30

"**India allows large-scale technology import, Textile sector heads for stiff competition".** The Daily Star on-line archieve downloaded on 30 September, 2000. Business Page, volume 2 Number 166 January 31, 1999 http://www.dailystarnews.com/199901/31/n9013105.htm#top

ACRONYMS

EPB	Export Promotion Bureau
FY	Financial Year
US	The United States
EU	The European Union
MFA	Multi-Fiber Arrangement
ATC	Agreement on Textiles and Clothing
WTO	World Trade Organization
RMG	Readymade Garments
FDI	Foreign Direct Investment
CCG	Country Commercial Guide
GSP	Generalized System of Preference
FAO	Food and Agricultural Organization
BCDB	Bangladesh Cotton Development Board
WTO	World Trade Organization
ATC	Agreement on Textile and Clothing
GATT	General Agreement on Tariff and Trade
OEEC	Organization for European Economic Cooperation
VERs	Voluntary Export Restraints
STA	The Short-Term Arrangement
LTA	The Long Term Arrangements
MFA	The Multi-fiber Arrangement
GSP	Generalized Systems of Preferences
OECD	Organization of Economic Cooperation and Development
SITC	**Standard International Trade Classification**
TMB	**Textiles Monitoring Body**
LDC	*Least Developed Countries*
NIEs	Newly Industrialized Economies
SMEs	Small-and Medium-sized Enterprises
HPCT	Hi-Tech Park" for China's Textile Industry

CAD	**Computer Aided Design**
CAM	**Computer Aided Manufacturing**
NIFT	National **Institute of Fashion Technology**
BSF	Bangladesh Silk Foundation
BOI	**Board of investment**
BSTS	Bangladesh Sanjukta Tanti Samity
OE	Open-ended FDI
ADB	*Asian Development Bank*
DEDO	**Duty Exemption Drawback Organization**

INTRODUCTION

Bangladesh trade in the international arena encounters a constant deficit as evident from the data of Bangladesh Export Promotion Bureau (EPB)[1]. As of Financial Year(FY) **1997-98**, Bangladesh export earnings can afford only 68.40% of its import costs while the condition of previous years being even worse. The country is also weak in its internal resource mobilization and industrial base. Agriculture is the backbone of the economy. Therefore, Bangladesh is dependent on foreign aid, loan, grants etc. This is, indeed, disgraceful and humiliating for an independent country. To achieve a satisfactory balance between its export income and import cost is, therefore, crucial.

Government of Bangladesh through its Export Promotion Bureau (EPB) is striving for higher export earnings to reach a balance with its import bills in the near future. Bangladesh has a large population of 128 million, the density of population is more than 900 persons per square kilometer. As the land for agricultural production is limited, rather gradually decreasing due to new habitats and various establishments, the basic need of this gigantic

[1] Bangladesh Statistics 1996-97, Export Promotion Bureau, Bangladesh, Page-21. Table 2.7 in chapter two shows the relevant data.

population is almost impossible to meet up with the agricultural production. Export oriented industrialization, preferably boosted up by backward linkages industries is, therefore, essential for the survival of the people of Bangladesh.

A commodity-wise export earnings[2] of Bangladesh for the financial FY 1997-98 shows that export of clothing (readymade garments and knitwear) accounts for 73.31% of the total export earnings of the country. Therefore, it is obvious that approximately ¾ of the country's export earnings come from clothing export that makes the sector the most important one for the economy of Bangladesh. The clothing market of Bangladesh is mainly limited in the United States (US) and the European Union (EU) and it enjoys MFA-quota facility which will be phased-out after December 2004 as per the Agreement on Textiles and Clothing (ATC) under the aegis of World Trade Organization(WTO).

Again, Readymade garments (RMG) in Bangladesh, being labor intensive, has its comparative advantage over other manufacturing sectors in the country. It might be worth mentioning that almost 90% fabrics, as would be discussed

[2] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 25

later, and other accessories are imported under various Government incentives, for instance, bonded warehouse facility, duty drawback arrangement etc. Moreover, the cheap labor, mostly women, is exploited in these factories. In spite of this advantage, RMG sub-sector in Bangladesh predominantly lacks backward linkage support as as the country's fiber, yarn and fabric production base is not robust.

Given the circumstances as above, I would like to put forward my work into the prospects of backward linkages to the clothing export of Bangladesh. There are several steps in the anticipated **backward linkage supply chain**. These are production of natural or man-made fibers, spinning of yarn, production of fabrics in textile industry, dying, printing and finishing, cloth making in garments industry and, finally, export in world market or use up domestically. Each stage adds value to the next stage. Apart from this vertical chain, there are some other factors linked horizontally to every stage in the chain (see figure 11.1) that will be discussed later.

This study, therefore, attempts to examine the possibility of such backward linkages in the textiles and clothing

sector of Bangladesh vis-à-vis the experience of other leading courtries, at present, in this sector.

With this vision in mind, I have splited the entire work into several segments. It contains twelve chapters in total. First three chapters are introductory chapters as to foster an idea of coherence to the substantive work placed successively in later chapters. These are about overall macroeconomic situation of Bangladesh, its export scenario and import overview.

Chapter Four focuses on the worldwide production of cotton and synthetic fibers and Bangladesh's position on it while Chapter Five explains some technical aspects and related terminologies, for trouble-free understanding in the succeeding chapters. Chapter Six accounts for the historical development of world textiles and clothing industries in line with the technological inventions and advancements.

Chapter Seven deals with the development of world trade in textiles and clothing from time immemorial to date to impart an impression about the currents and cross-currents of world trade in textiles and clothing including Bangladesh situation. Chapter Eight encompasses the international regimes for textiles and clothing on a

chronicle account including its impact on the exports of Bangladesh clothing sector. Chapter Nine attempts to explore the experience of leading countries in textiles and clothing and possible inputs for the same in Bangladesh. An overall picture of Bangladesh textiles and clothing sector incorporating the existing problems and difficulties could be obtained from Chapter Ten. Center of attention of Chapter Eleven would be to examine the potential of backward linkages to clothing exports of Bangladesh as to how a total value-added chain could be established in the country. Finally, Chapter Twelve will furnish some policy implications, if any, for the Government of Bangladesh in view of such backward linkages.

Again, internet resources provided bulk of the materials for this work principally because of the need for updated information as well as non-availability of adequate information in other available sources. A few on-line newspaper archives of Bangladesh were extremely helpful in exploiting the country’s current situation in the textiles

and clothing sector. In addition, for the Chapter Four, United States Department of Agriculture (USDA) homepage provided valuable information which were of great assistance for this work. Now, a **chapter summary** presents more details on the contents of each chapter.

Summary : Chapter One

Bangladesh Macroeconomy: A Glance

This chapter presents an overview of the macroeconomic situation of Bangladesh. It touches upon agriculture, industry, growth of GDP, broad money growth, exchange rate, external debt, FY 2001 budget, balance of payments, foreign exchange reserves, internal resource utilization, inflation foreign assistance, public sector performance, among others.

Country Commercial Guide (CCG) 2000-2001 of the US Embassy in Dhaka stipulates that "**agriculture** accounts for **26%** of GDP and is the primary occupation of about 70% of its population, mostly farmers or rural laborers. **Industry** contribution to the real GDP of Bangladesh is about **26%** which comprises manufacturing, construction, power, and utilities. The average annual **growth of GDP** in the ten-year period from FY 91 through FY 2000 was 4.8%; these growth rates fall short of the levels needed to reduce significantly the poverty. **Broad money growth** accelerated

to **18.6%** in the 12 months ending April 2000, compared to 10.4% in 12 months ending June 1998. The **exchange rate** in July 2000 is **taka 51 to the dollar**. Assessed on the basis of outstanding principal, Bangladesh's **external** medium and long term **debt** stands at about $15.4 billion, or about 34% of GDP, at the end of FY 2000. The **debt service** burden on this debt is about 7% of current export earnings.

The **FY 2001 budget** projects **revenues** of Taka 242 billion ($4.75 billion) and the Government's **operating budget** projects expenditure of Taka 196 billion ($3.84 billion), 6.4% higher than FY 2000. The **budget envisages a deficit** which the Government projects at 5.8% of GDP, the IMF estimates at 6.3% and other knowledgeable observers peg at 6.8%. Overall **balance of payments** demonstrates a "surplus of $158 million in the July 1999-Feb 2000 period compared to a deficit of $171 million in the comparable year-ago period. **Foreign exchange reserves** was $1.4 billion by the end of May 2000 which could maintain about two months' of import bills of the country. As of 12 December 2000, foreign exchange reserve of the country is 1359 million US dollar. Government's **internal resource utilization is increasing gradually** which stood **at 43.03%** by the end of the Plan period. **Inflation**, aided by bumper agricultural

harvests and slow industrial activity, stood at 2.72% in May 2000 on a year-on-year basis. The country had received **foreign assistance** at a rate of **6% of GDP** annually since its independence.

The disgraceful economic condition of Bangladesh is attributed to a number of reasons, for example, “a weak financial sector, an unproductive and chronically money losing public sector, poor infrastructure, lack of export diversification, and pervasive corruption at all levels of the society”, political failure to address longstanding economic problems affecting the business environment and investment climate, among others.

Summary :Chapter Two

Export Promotion Scenario of Bangladesh

By the promulgation of a Presidential Ordinance in 1977, Export Promotion Bureau (EPB) emerged as a semi autonomous body to promote export and improve plan and policies to assist the private sector. During the Fiscal Year **1997-98** export from Bangladesh in total amounted to **US$ 5161.20 million** as against **US$ 4418.28 million during 1996-97.**

During the FY 1997-98, the share of **primary commodities** was US$ 501.93 million and that of manufactured products at US$ 4659.27 million i.e. 9.73% and 90.27% respectively. Compared to the preceding year, the overall export during FY 1997-98 in US$ increased by about 16.81%[3]. In 1997-98, export earnings afforded 68.40% of import bill. **Commodity-wise export earning** of the 1997-98 FY (Table 2.2) shows that **73.31% export earnings were from readymade garments and knitwear** indicating the most import sector for earning foreign exchange for the country. Frozen food, jute goods, leather, raw jute, chemical products, tea, agricultural products etc. also assist to enhance exchange earnings for the country. In 1997-98, export earning from **leather and leather goo**ds were US$ 228 million. **Fisheries sector** contributes greatly to Bangladesh economy ----about 4.7% of GDP.

Agriculture is the backbone of Bangladesh economy. The contribution of agricultural sector in export is not prominent. Bangladesh shares 2% of world's tea production and 3% of world export, which accounts for 1.2% of foreign

[3] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page33

exchange earning [4] . Moreover, the balance of trade of Bangladesh from 1980-81 to 1996 in Table 2.12 shows always negative. In financial Year(FY) 1997-98, Bangladesh export earnings afforded only 68.40% of its import costs. It is, therefore, essential to boost up the export sector of Bangladesh.

Summary :Chapter Three

Imports of Bangladesh---an Overview

This chapter presents a brief impression about the import situation of Bangladesh focusing predominantly on the items of import belonging to textiles and clothing. The **import costs** in **textiles and clothing** sector as shares of total import costs were **two-ninth** and **one-fifth** in FY **1991-92** and **1990-91** respectively [5]. In **Fiscal Year 1997 – 98** the amount of exports was US$ 5.0 billion and that Imports was US$ 7.5 billion exhibiting a clear **trade deficit of 1.5 billion**. **India** is a **dominant player** in the **import list** of the country that accounted for **13.78%** of total import in **1996-97** followed by Japan, China, Hong Kong, Republic of Korea, USA and others.

[4] Annual report 1997-98, Export Promotion bureau, Bangladesh, page 49
[5] calculated from **appendix-I**

Taka has been made **convertible into foreign exchange for import of goods. T**he government has **allowed the exporters of readymade garments to import gray clothes.** Presently, licensing is not needed for imports. **Tariff structure** has been rationalized with a rate of 40% import duty at the zenith. The **average rate of protection slumped from 100% in 1985 to 22% in 1996**[6]**.**Moreover, quantitative restriction has been **trimmed down from 42% in 1985 to only 2% percent of imports in 1996.**

Trade regime of Bangladesh **defends import-substitution inefficient** industries, which give birth to expensive but low quality consumer goods. Moreover, it is plagued with problems in import valuation and customs clearance, for instance, "voluntary pre-shipment inspection regime", smuggling induced by high tariff rates that give rise to "the protection through tariff ineffective".

Garments industries of the country are **highly import dependent**. The average annual rate of growth in this sub-

[6] **Overview Of The Trade And Trade Related Policies Of Bangladesh** http://www.bangla1.com/dcci/policy.html downloaded on October 5, 2000. Dhaka Chamber of Commerce & Industries (DCCI) homepage.

sector was 25 per cent from 1991-92 to 1995-96 that necessitated almost an equally fast rate (23.6 per cent in the same period) of **growth of imports, which are almost mandatory** in fabrics. 'Mandatory' in the sense that the country has no **backward linkage** textile industries for the garments industries. There remains considerable room for **cutting imports by** promoting domestic production.

Summary : Chapter Four

Natural and Man-made Fibers: World Production & Bangladesh Position

This chapter looks into the **fiber production of Bangladesh** in textiles and clothing sector vis-à-vis the same in **other potential countries**. Fibers are principally of two categories: **natural fibers** and **man-made fibers.** Natural fibers mainly constitute **cotton** and **wool while m**an-made fibers encompass chiefly **cellulosic fiber** and **synthetic fiber**. Man-made fibers involve **capital intensive technology**

which in Bangladesh, at present, is not feasible as its comparative advantage is headed for mainly **cotton.**

China, the United States, India, Pakistan and Uzbekistan and Turkey produced 76 percent cotton of the world total countries in 1996/97. On a **recent statistics** of the United States Department of Agriculture (USDA**)** regarding Cotton Production, Supply and Distribution by Country (see Appendix II), **China** appears with ending stock up to December 2000 (MY 2000/2001) as **2,276,000 MT**, being **the highest** all over the world. Similar estimate for the **United States** figures **3,778,000 metric** tons, being the **second highest** while **India ranks third** with a total production of **2,591,000 metric tons**, **Pakistan** being the fourth. Cotton is the **major crop** in **Uzbekistan** and it totals **936,000 metric** tons, the **fifth largest producer** of the world. Again, Turkey ranked "**sixth in cotton lint production** in **1996-97** in the world with total production 806,000 metric tons. **Argentina** , **Australia,** Thailand, Greece, Iran, Mali, Mexico, Spain, Syria, Zimbabwe, Egypt retain noteworthy position in the world share of cotton production.

Bangladesh's share in world total cotton production is **insignificant**. As of December 2000 (MY 2000/2001), an

estimate of USDA shows that Bangladesh's total production is **14,000 metric tons.** Bangladesh Cotton Development Board (BCDB) undertakes cotton promotion activities but its achievement is not satisfactory so far. **Bangladesh, therefore, is in an inconvenient position as regard to the production of both natural and man-made fiber.**

Summary :Chapter Five

Some Technical Aspects in the Field Textiles and Clothing

In order for trouble-free understanding in the subsequent chapters, I found it reasonable to incorporate some **key aspects** and **terminologies** in the field of textiles and clothing, mostly being pertinent to this work. These are **carding**, hand-cards, carding machine, comber machine, rovings, **yarn**, **spinning** , spinning jenny, roller spinning, flax spinning machine, handloom weaving, greige, mercerising, size and sizing , gray, knitting, dyeing, printing and finishing dyeing and shrinking ,**silk, fuller's earth, willowing, willowing machine, flying shuttle, polymerization, automation and computer aided design (cad), information engineering system in textile and clothing, environmental pollution by textile industries,**

Summary :Chapter Six

World Textiles and Clothing Industries: Historical Development

Present chapter focuses on the historical development of textile and cotton industries from both location and age with accompanying technological innovations. It is extensively believed that **India** is the "**birth place** of the **cotton manufacture"** and "**industrial revolution** was **mainly** the **revolution of the cotton industry** in Britain". Cotton industry in Japan also witnessed a rise in mid-eighteenth century followed by other East Asian states. Manufacturing process, in general, appeared in **Italy** in the **fourteenth** century. By the **middle of the sixteenth century** it was established in Germany, Prussia, Saxony, and the Netherlands. A little later came **England**. France followed in **seventeenth** century and **Russia** in the **eighteenth**.

Handloom was invented about 2,000 years ago and **fly-shuttle** by Mr. John Kay in 1738**, spinning jenny** by James Hargreaves in 1764**, spinning-frame** by Richard Arkwright's in 1768 that that took up the name **water-frame** in **1771.** These two machines spinning-Jenny and the water-frame initiated a **new era** in the history of cotton trade as well as cotton

manufacture, as a separate and distinct industry. With the principles of both Hargreaves' jenny and Arkwright's water-frame a machine, called **'mule', was** devised in **1779.** Dr. Cartwright invented a **power –loom in 1785.** The invention of **Cylinder printing** occured by **Bell** of Glassgow, in 1783. In **1748,** a **carding machine** was brought out by Lewis Paul of Birmingham. Mr. Roberts, in **1825,** patented the new **"self-acting mule.** An improvement on the water-frame was made and the new machine was called **Throstle.**

Since the **seventeenth century**, in **Korea**, unlike china and Japan, **merchants** were not allowed "to take part in the circulating processes of cotton fabrics. M**andarins** controlled these commodities and circulated through political channels and not by commercial processes. Again, spinning and weaving were the national industries of **India** down to the commencement of the **nineteenth century. Managing agent system** in **India** played a role of promoters. The cotton industry in **China and Japan "reached a stage"** by the middle of the **eighteenth century through a "putting out" system** in which "**merchant** could easily take a leading role in the further growth of the cotton industry by providing the operating funds. During **Opium War (1840-42)** the European industrialism and commercial activities

exerted a thrust to traditional Chinese society. **Cotton spinning** machinery in Japan commenced in the neighborhood of **1866** and **cotton-weaving industry**, in **1894, at the time of Sino-Japanese War**, opened a new era in the industrial development of Japan.

Since the **Second world War three types of technical change** have had an important impact on the textile industry. These are astounding **advancement in synthetic fiber technology, important process innovations** such as introduction of rotor spinning and shuttle looms, increased automation computerized production management and **application of microelectronics** to new machinery by the **end of 1970s**, which increased **capital-intensive** character of the textile industry.

After 1947 East Pakistan, now **Bangladesh**, came under the **hegemony of West Pakistan**. **The west** produced **more cotton than the east** and the textile **industries developed mainly in the west**. After **independence in 1971**, the government of Bangladesh **nationalized** the textile industry and Bangladesh Textile Mills Corporation (**BTMC)** was formed to cater the textile industries, which remained under the control of the BTMC **until 1982-83**

Summary :Chapter Seven

World Trade in Textiles and Clothing: Historical Perspectives

This chapter deals with the development of world trade in textiles and clothing through ages among different countries and regions. England had been importing the soft **muslins** and beautiful "**printed calicoes**", from **India since 1631.** From the **seventeenth** century up **to** the **middle** of the **eighteenth** century, the East India Company's shipments to England of **Indian cotton** cloth showed a phenomenal expansion. In **1700**, British Parliament enacted legislation prohibiting the import of printed calicoes from India and the first sample of **English muslin** entered into **Bengal** in **1783.** The export of cotton yarn from Bengal to England stopped completely in **1786.**

The **beginning of the regular cotton trade** between the **United States** and **Great Britain** dates from **1784.** American traders not only supplied cotton to Britain, they explored the **Chinese market** too in the year **1784.** Interestingly, **India's status**, **by 1820**, transformed from **cotton-manufacturing country to cotton exporting country** for reasons mentioned earlier. **India,** by **1817,** started

exporting cotton to **China**. The American civil war(1861-65) caused blockade to cotton export from the United States resulting in a **“cotton famine”** in Lancashire and English **manufactures were bound to look back on India for supplies. France** in **1858** was prominent for cotton manufacturing most of which **came from America. I**n **1784** the American merchants began their commercial operations in the **Chinese markets** with **low cost products.** Between the **1850s and 1870s,** supremacy of **the Western** industrial countries were challenged by Indian and Japanese cotton goods in the **Asian markets.**

Japanese imports of raw cotton from America were escalating especially after **1913** and “during the **1930’s American raw cotton became** the most important of Japan’s raw-cotton imports. Between **1925 and 1933** Japan further increased its share in Indian imports and in **1939** superseded that of England. Moreover, the **Japanese** cotton had **replaced** the predominance of **Indian** cotton goods in the **Chinese market**, and furthermore it appeared in **1918-19 as a competitor** in the **Indian market** itself. **Textile and clothing production** has expanded very fast in East Asia vis-à-vis the rest of the world. “It grew especially rapidly in **Japan in the**

1950s and the **1960s**, in **Korea** and **Taiwan** in the **1960s and 1970s**, and in **China** since its opening up in **1978".**

Summary : Chapter Eight

International Regimes in Textiles and Clothing and Bangladesh

This chapter touches all the developments international regimes in textiles and clothing from the time before World War II to the into World Trade Organization (WTO) under the Agreement on Textile and Clothing (ATC) along with its impacts on Bangladesh.

Japan had to conclude **Voluntary Export Restraints(VER**) arrangements under the **American threat** when Japanese textiles and clothing industry experienced a boom during the period between two world wars. After the **Second World War**, liberalized framework of **GATT** and the **OEEC** facilitated diminution in **restrictions** in international textile trade. Thus, GATT was the only multi-lateral legal framework governing world trade in textiles from its provisional entering into force in **1948 until 1961.**

The Short-Term Arrangement (STA) and the Long Term Arrangements (LTA) were concluded in **1961** and **1962** respectively to set up separate rules for international trade in **cotton textiles** and in **1973,** the Multi-fiber Arrangement (MFA) extended this special treatment to trade in textiles produced from **man-made fibers** and **wool.** The **first objective** of the 1961 arrangement [7] was to provide opportunities for exports of these products to avoid **disruptive effects** in individual markets and on individual lines of production while the **second objective** was to facilitate economic expansion and, in particular, to promote the **development of the less-developed countries** by providing increase access for their exports of manufactured products.

The MFA was launched in 1974 and terminated on **31 December 1994** followed by the emergence of Agreement on Textiles and Clothing (ATC) on **1 January 1995** under WTO. The main objectives of the MFA were **trade liberalization** and **orderly and equitable development** of trade to avoid **disruptive effects** in individual markets and on individual lines of production in **both** exporting and importing countries, to

[7] The 1961 arrangements includes both STA and LTA with a preample and two appendices.

promote the development of less developed countries. Ironically, the **MFA was used almost exclusively to protect against imports from developing countries.**

Bangladesh, regrettably, has **not been benefited from the MFA even after** the comparative advantage of abundant **cheap labor force** in the country chiefly because of the unskilled and uneducated labor force that was unable to produce quality products.

The WTO Agreement on Textiles and Clothing (ATC) has been concluded by the member states for a period of ten years (1995-2004). It is a transitional instrument to step into the quota free trade in the international market in 2004. **Bangladesh**'s the quota facility will remain no more from 1 January 2005 resulting in stiff competition from other countries, for example, China, India, Pakistan, Thailand, among others. **Backward linkage** industries have thrived in these countries that would let them to stay in competition in free market with a better position than Bangladesh. Therefore, setting up **backward linkage** industries in Bangladesh with a complete **supply chain** for its major export earning RMG sector is crucial.

Summary : Chapter Nine

Textiles and Clothing: Experience of Contemporary Leading Countries

This chapter attempts to furnish leading countries' experience in textiles and clothing.

It is notable that availability of the **girl workers** and cheap **labor** played a great role in the development of Japanese cotton industries.

Domestic adjustment processes such as shedding of excess labor and capital equipment, the demise of small plants and adoption of modern, labor-saving equipment, investment in research and development, switch in production emphasis from labor-intensive to capital-intensive products, shifting its product mix **to more technologically sophisticated items and by upgrading products** and changes in protection from imports are the **features, among others, that lend the maturity** to Japanese textile and clothing industry.

In the recent times, Japanese textile industries seems to be dwindling in terms of number of establishments, number

of employment, exports. This declining trend might be imputed to the rising force in East Asia in these industries, namely, Hong Kong, Taiwan, Korea and, more recently, China and Japan’s parallel move to even high-tech industries coupled with rising labor costs in its capital-intensive edge.

China ranks as the largest producer of cotton clothing and the second largest producer of synthetic fibers in the world. Some 80% of the fibers consumed in China in its textiles and clothing is cotton. The industry employed 12.43 million employees in 1995. The total value of output was 703.5 billion Yuan RMB in the same year.

China's textile industry is mostly in the type of **SMEs** and has rear position in technological advancement which enjoys a competitive edge in the global market owing mainly to its comparative advantages in **low labor costs, available raw materials, and low manufacturing cost. Moreover, i**ts **domestic textile market is quite large** due to 1.2 billion population. Competitiveness of China is buttressed by **great export volume and high custom tariff. M**ost of the **exported garments are of low and middle grade. T**he **government**

controls the purchase of cotton" and hence a **stable production cost** persists in **the textile industry.**

Annual production of synthetic fibers of China trebled between 1977 and 1983 even though the **imports of** synthetic fiber expanded in parallel. **Outward looking policies** during the 1980s had led clothing industries of both **China and Thailand** to expand very fast and are becoming **more dependent on imports of fibers.** Demand for natural fibers is increasing notwithstanding the huge natural fiber production. **China has already achieved the most difficult tasks required to emulate its East Asian neighbors.**

Hong Kong's foremost export earner is its **textile industry**, which accounts for 7% of total domestic exports, and employs 9% of total manufacturing workforce. Hong Kong has set up some **offshore production** bases, mainly in Asia, **Central and South America** with a view to exploit **cheap labor** and get hold of **quotas available in these countries.**

Most of the **textiles** factories are **small-scale**, with **60%** of Hong Kong's textile firms employing **less than 20 persons**. Modern machines and techniques such as **open-end spinning** are used in Hong Kong. **Shuttle less looms** are employed that

exhibit high productivity. Computerized design systems, programming equipment and knitting machines are extensively used to enhance **productivity. E**nhanced productivity of the industry is imputed to **increased application of modern, computer-aided manufacturing equipment and production machinery.**

Hong Kong's strategic location has made it as a **regional hub for sourcing garments**. **Fashion designers** of Hong Kong have earned reputation in **"quality workmanship, sensitivity to current trends, and ability to blend commercialism with innovativeness.** Quick production lead time and reliable product quality are important features of the Hong Kong industry. **Dyeing, printing and finishing** factories are able to meet **70% of the local** clothing industry's requirements for textile fabrics. Again, some **infrastructural and environmental constraints,** for instance, "lack of ample factory **space** for new and large mills, inadequate **water treatment** and discharge facilities are existent in Hong Kong's textile and clothing industries.

In the **early 1970s**, the textile industries of **Republic of Korea marked a boom** mainly with the **educated and skilled labor force** as its comparative advantage that, at a later

stage, moved towards capital-intensive end, which is still soaring up. Therefore, Korea might be contemplated as one of the **associate of Hong Kong in East Asia**. Major **facility investments in Korea,** at present, are heading "for **environment protection**, **energy conservation** and the introduction of **information technology** systems in this sector. Moreover, **Local area network (LAN), management-oriented software and computer integrated manufacturing (CIM) investment** are expected to come up more brisk.

Exports of **Thailand's textiles and clothing** industry output have expanded **dramatically in the mid-1980s** that yielded it a status of the "highest **foreign exchange earning commodity group"** contributing "about **one-quarter of manufacturing value-added" and "the highest employment share of any sub-sector in the manufacturing sector.** Thailand is following the pattern of earlier industrial development of first Japan and then Hong Kong, the Republic of Korea and Taiwan.

Long term **Government assistance** to the industry seems to underpin its growth that encompassed promotion privileges, **credit subsidies**, as well as **protectionist import barriers**, but there have been offsetting sales taxes and tariffs on intermediate inputs. In addition, the **draw-back system**,

prudent **monetary and fiscal policies**, **low inflation** helped the industries' proliferation. The establishment of **Thailand Textile Institute** to upgrade the entire textile industry to enable Thailand to become **a quality textile manufacturing country** in line with the **market** rather than a **low-cost** one.

The modern **textile industry in Turkey** is the consequence of industrialization efforts in the **sixties and seventies**. Gradually, the sector demonstrated rapid growth and during the **seventies it switched on exporting**. Presently, it is one of "the most important sectors in the Turkish economy in terms of GDP, employment and exports and Turkey's position in **1997 was 6th among** the **clothing exporters** of the world. Moreover, "as a **quality cotton-producing country**, Turkey has an **integrated and diversified production in all sub-sectors of the textile industry**, **produces and exports all types of yarn, fabric, clothing, household textiles and other**

Availability of abundant raw cotton has facilitated the expansion of Turkish **spinning and weaving** industries. The estimated amount of **cotton yarn** produced was around **790,000 tons** and **cotton fabric** production was **1455 million meters**

in 1998. Turkey has a **strong woolen textile and clothing industry** and it is the **third largest mohair producer** in the world. Turkish **home textile** export value was 807 million dollars in 1998. It is **an important sub-sector for the Turkish economy.**

The availability of **high quality cotton**, as mentioned earlier, extensive use of **CAD (Computer Aided Design) and CAM (Computer Aided Manufacturing)** and the increase in the number of **qualified personnel** has assisted the products of the Turkish clothing sector to earn a good reputation in foreign markets and the production volume of **clothing** was estimated at 260 000 tons in 1988. The **European Union** provides the "**biggest market** for Turkish **clothing** exports and the total value of Turkey's clothing exports to the EU was **4.5 billion dollars** in 1998. **Textile exports in Turkey** is a highly dynamic sector where "more than **93 percent** of the firms are **privately** owned.

The **rise** of textile and clothing industry in Turkey is attributed to "**a series of structural reforms** aimed at **liberalizing the economy** and developing exports **instead** of the previous **import-substitution** strategy"; investment by the **private sector** in spinning, weaving and clothing

industries; **liberalization of international trade;** the rapid **devaluation** of the national currency **(lira)** against the US dollar since 1990; inclusion in **customs union** with the member states of the European Community (EC) in January **1996 and so on.**

The **textile industry of India** is a **robust sector** with regard to its **socio-economic importance**, which accounts for around **5% of GDP** and over **one-third** of total exports of the country. The Indian Textile Industry has a **moderately complex structure** with **"hand spinning and hand weaving operations"** at one end of the spectrum while **"a highly sophisticated, capital-intensive and high speed manufacturing activity",** on the other. In addition, a well **established infrastructure for production, technically qualified manpower and skilled labor available at considerably lower costs, material competence and marketing expertise** are other stimulants to satisfy the demand of the one billion strong home market as well as a huge and growing volume of exports. Textile industry in India is the o**nly industry, which is self-reliant and complete in value chain from raw material (cotton) to the highest value-added products (garments and made-ups).**

Summary : Chapter Ten

Textiles and Clothing: Bangladesh Perspectives

Bangladesh textile industry accounts for 45% of all industrial employment in the country and contributes 5% of the total national income. The country does not produce enough of the **raw materials** as compared to its demand entailing its high dependence on imports. Presently, locally grown cotton can afford only 4-5% of the total requirement of this sector. On the other hand, “the production of the synthetic/man-made fibers used in the textile industry requires fairly advanced technology and investment”, which is not feasible, at present, for Bangladesh.

The estimated production capacity of the spinning sub-sector **is in the region of 183 million kg per year. However, only 125.16 million kg, or 67.3% was produced in 1997-98 and** under production **is imputed to the fact that about 38% of the spinning mills in the country are more than** twenty-five years **old. Frequent** power failures**, a** shortage of raw materials**, a high import duty on raw materials and a high percentage of** wastage constitutes the ground for the low output of the spinning sub-sector.

Only **21% of the total demand for yarn** is met locally in Bangladesh. The **shortage in supply from the spinning** sub-sector is also **negatively linked** to the amount of **gray** produced. The **yarn gap** is filled by **imports of 3.15 billion meters of gray per year. T**he weaving sub-sector lacks **organization and coordination** because small-scale manufacturers remain scattered all over the country, which breeds "**replication** and a **lack of specialization**

Knitting/hosiery factories have shown significant **improvements in quality** in recent times and knitting has become another **rapidly growing textile sub-sector.** But **i**t needs **modern facilities** for manufacturing quality fabrics suffers from **shortage of raw materials** and **working capital. Some 179 textile mills are laid off at present.**

With regard to employment, **hand-loom sector** stands as second largest source of rural employment. **Irregular supply** of the yarn, dyes, and chemicals, poor access to **transportation,** dependence on **brokers are some of the problems of the handloom sector. M**ost export oriented garment factories **reject the gray produced by the rural handlooms because of** inferiority **in uniformity, quality and**

narrower width than power looms. Over **one million** persons were employed in handloom sector in 1990.

The final steps in the textile industry i.e. dyeing, printing, and finishing has **improved dramatically** despite **deficiency of modern equipment and facilities.** This sector depend highly on imported gray.

The RMG industry i.e. the clothing industry has grown at a blistering pace since 1978 largely due to the simple level of technology needed by the industry. Moreover, relatively inexpensive and easily available machinery, requirement of smaller premises compared to the textile industry, abundant supply of cheap labor consisting mostly of women, incentives such as liberal trade policies, low tariffs on imported machinery, and bonded warehouse facilities and, most significantly, benefit of reserved markets by MFA Quota have spurred the growth of the garment industry. Around **85% of the total requirement of woven fabric** and around **35% of the total requirement of knit fabric** are imported by the export oriented RMG industry.

To stimulate the economic growth and promote stability in Africa, one of the world's poorest regions, and the **Caribbean countries, US Trade and Development Act of 2000 (USTDA 2000)** has come in effect from 01 October, 2000. Experts envisage that **Bangladesh will have detrimental affect from this measure**.

Again, **"SAARC Cumulation"** facility, under which fabrics might be imported from any SAARC countries for using in RMG factories before exporting to EU countries, has emerged controversial. Lack of enforcement of **labor laws, human rights,** frequent labor problems at the sea-port, **stock lot** due to **political disturbances and port problems, paucity of credit from banks, currency devaluations** some of the neighboring countries are, among others, problems of RMG sector in the country.

To introduce a **specialized bank for providing loans to export-oriented industries ,** to set up some **textile parks** with similar facilities as in the export processing zones **(EPZs),** to establish a **Apparel Board** are some of the **demands of RMG sector**.

Summary : Chapter Eleven

Backward Linkages to Clothing Export of Bangladesh : An Appraisal

This chapter attempts to **scrutinize the prospects of establishing the backward linkage industries in the textiles and clothing sector of Bangladesh** through looking at the pertinent factors at different stages of the chain, as mentioned earlier, encompassing the likely experiences of other countries. Discussions, therefore, incorporate concepts of linkages, the rationale behind the necessity of backward linkages in the textiles and clothing industries, compatibility of standard trade theory for Bangladesh textile and clothing sector with specific examples, different vertical stages in the chain, examining the horizontal factors linked to every stage in the sector, relevant backward linkage issues in general, sorting out the possible steps to be taken at every such stage, among others.

At stage-1, in view of the **global market in clothing after MFA** phase-out in 2005, **Bangladesh** need to find “market niche”. **At stage 2,** decision on **'SAARC cumulation'** is required immediately. Moreover, **shortening lead period,** up-

grading the quality of product, **separate authority under direct supervision of the prime minister** to speed up decision-making for **garment sector,** establishment of an Apparel **Board, access to credit, power supply, rule of law, depoliticization of the labor force, continued policy support of the government, improved management capacities and excellence in fashion designing** to help local entrepreneurs face the challenges of the post 2004 global market etc., are the demands of the RMG sector which need immediate attention of all quarters.

Again, working and living condition in the garments are really **abysmal,** as mentioned earlier, even though **low labor cost prevails. Moreover, stock lot** situation, Dhaka-Chittagong **dual carriage way, telecommunication, banking, insurance, customs, port labor turmoil,** the neighboring countries' **devaluation** etc. are the unresolved issues posing **threat to the prospects of backward linkage** in the sector of the country. **Human rights** and **environmental** issues, **BGMEA** representation in government bodies**, lowerin**g bank **interest rate, income tax free** textile products, lifting **double insurance** system, **special bank** for export-oriented industries, **textiles park** similar to EPZ etc. are important issues for which country's **RMG sector** is **not**

fully prepared that would affect the backward linkage initiative for the 2005 competitive quota free global trade. Again, RMG factories require relatively **inexpensive machinery** and **smaller factory space** which is good for this prospects to bring to reality.

At stage 3, i.e. finished fabric making, finishing industry in Bangladesh is **not ready to lend or induce backward or forward linkage supports** to the relevant segments of the textiles and clothing chain.

At stage 4 i.e. gray fabric making (weaving, knitting, looms), Bangladesh weaving mills, as mentioned earlier, constantly fall short of production owing to chain link shortage of yarn production in spinning sub-sector. The **knit gray demand is met by local production**. The handloom sector faces a lot of difficulties as stated before. Moreover, as a result of the **closure of the handlooms**, the yarn mills of BTMC are also being closed. Because the weavers of the handloom industry were the real and main **customers of the yarn mills of BTMC. P**resent status at this stage, **doesn't indicate** that it has **backward linkage** potential as envisaged in **the Textiles and clothing chain.**

At stage 5, i.e. production of yarn through spinning also faces problems**, for example,** as mentioned earlier, 38% of spinning obsolete machines, technician shortage, power crisis, shortage of raw materials, **leakage** from warehouse, closure of mills, i**nability to pay back bank loans, shortage of capital, non-profitability and so on.**

Again, extensive natural fiber production, mainly cotton, is not feasible owing to growing demand for food to feed a gigantic population as well as paucity of cotton growing land, already mentioned. The spinning sub-sector imports (95%) of cotton. Therefore, at **stage-6, Bangladesh textile sector is again, not prepared to provide back up support as anticipated in the production chain.**

Other factors involving the backward linkage industries **in Bangladesh** are: **colossal amount of fund (3 billion dollars), human resource development, neighboring competitors of Bangladesh, power crisis** , growing **non-tariff barriers** like **workplace code of conduct, eco-labeling, human rights and social and safety requirements,** flaws in the textile policy etc. would, no doubt, impair seriously the backward linkage efforts in the clothing exports of Bangladesh. In view of the post-MFA era in 2005,

Bangladesh badly needs to streamline its textiles and clothing sector with backward linkage to its clothing export in 2005 as well as addressing constraints discussed above.

Summary : Chapter Twelve

Policy Implications: Backward Linkages to Clothing Exports of Bangladesh

In this chapter, **some implications** has been laid down to expedite establishment of such backward linkage chain **at every stage**. Moreover, it also indicates that the prospects of Bangladesh textiles and clothing sector to emerge as **'a new generation' in South Asia**, despite presence of potential neighbors in this sector, not unlikely, specially in view of the rise and fall of the comparative advantages in textiles and clothing industries in East Asian countries.

CHAPTER ONE

BANGLADESH MACROECONOMY: A GLANCE

1.1: PROLOGUE

Bangladesh, the erstwhile East Pakistan, detached from Pakistan in 1971 through a gory civil war with a view to achieve political and economical independence for its citizens. Unfortunately, the country didn't achieve this objective even after twenty-nine years of independence. This failure is imputed to several fundamental aspects. Most significant of these are: political instability coupled with lack of vision, unbridled pervasive corruption, floods and cyclones, weak industrial base, gigantic size of population leading to massive unemployment, lack of natural resources, high illiteracy rate, weak revenue base, meager domestic savings and investments etc. Bangladesh is, therefore, one of the poorest countries of the world which received a bulk of foreign assistance from various donors since her independence. But significant economic attainment is still far away. It is, therefore, imperative to explore the loopholes of such failure.

1.2: AGRICULTURE

Bangladesh's geographical location is labeled as the semitropical climatic region. It is a land of numerous rivers and their tributaries that make up its soil

exceptionally productive. Agriculture is the spine of the economy of Bangladesh vis-à-vis its inadequate and feeble industrial sector. Approximately 85% of the total population of the country inhabits in rural areas and they earn their living from agriculture. The country is **now self-sufficient** in food grains. Natural disaster, mainly flood almost every year and ruinous cyclone intermittently, results in colossal amount of damage to the economy of Bangladesh. However, "agriculture accounts for 26% of GDP, down from about 40% in the 1980's, and is the primary occupation of about 70% of its population, mostly farmers or rural laborers. The growth rate of agricultural production accelerated from 5.0% in FY 99 to 7.0% in FY2000"[8].

1.3: INDUSTRY

According to the CCG, 2000-2001 of US Embassy Dhaka, Industry contribution to the real GDP of Bangladesh is about 26% which comprises manufacturing, construction, power, and utilities[9]. **Industrial activity in the private sector** remains constrained as consumer demand is weak, domestic and foreign investment is slow, import demand is

[8] **Commercial Guide (CCG) 2000-2001**, **US Embassy, Dhaka** www.usembassy-dhaka.org downloaded on December 08, 2000
[9] Ibidem

slack, letter of credit openings are slow, and lack of confidence in business conditions among businessmen. The culture of **'hartals[10]'** and strikes pose serious threat to the Foreign Direct Investment (FDI) flow and impairs severely the industrial activity of Bangladesh.

1.4: OVERALL ECONOMIC GROWTH

A moderate growth was spectacular in Bangladesh economy over the last decade which the US Embassy guide recorded meticulously as placed below[11]:

> "Bangladesh has experienced fairly robust economic growth during the last decade, which saw restoration of a democratically elected government and a steady, albeit slow, liberalization of the economy. The average annual growth of GDP in the ten-year period from FY 91 through FY 2000 was 4.8%; the preliminary estimate for FY 2000 economic growth is 5.5%. However, these growth rates fall short of the levels needed to reduce significantly the poverty that afflicts one in three Bangladeshis".

It is righteous to say that the country voted for two free and fair general election in 1991 and 1996 to place in power two democratic governments which might have positive impact on economic growth of the country. Moreover, liberalization of the economy commenced in the year 1992. Table 1.1 below shows the GDP growth rates of different

[10] hartal is the strike called by opposition party when every normal activity remains virtually stopped.

11 Country Commercial Guide (CCG), 2000-2001, US Embassy, Dhaka. www.usembassy-dhaka.org available on December 08, 2000

five-year and two-year plans[12] prepared by the Ministry of Planning of government of Bangladesh:

Table 1.1: Plan Size, actual Expenditure and GDP Rate of Past Plans (at respective base year prices)

(in million Taka)

Plan	Plan Size			Estimated actual expenditure			Growth Target (%)	Realized Growth (%)
	Total	Public	Private	Total	Public	Private		
1	2	3	4	5	6	7	8	9
First Five Year Plan	44,550	39,520	5,030	20,740	16,350	4,390	5.50	4.00
Two year Plan	38,610	32,610	6,000	33,590	24,020	9,570	5.60	3.50
Second Five Year Plan	172,000	111,000	61,000	152,970	103,280	49,690	5.40	3.80
Third Five Year Plan	386,000	250,000	136,000	270,110	171,290	98,820	5.40	3.80
Fourth Five Year Plan	620,000	347,000	273,000	598,480	274,083	324,397	5.00	4.15

Source: The Fifth Five Year Plan 1997-2002, Ministry of Planning, Government of the People's Republic of Bangladesh, Table 1.1, p.2

It is obvious from the table that the average annual growth rate during the fourth Plan period was 4.15 per cent, which appears as the maximum among the earlier plans. This low growth has been attributed to almost stagnant agricultural production in the country[13].

Table 1.2. provides some insights about the sectoral growth rates during the Fourth FFY Plan.

[12] Bangladesh Government introduced several five-year and two-year plans since the country's independence in 1971. These are: First Five Year Plan (1973-78), Two Year Plan (1978-80), Second Five Year Plan (1980-85), Third Five Year Plan (1985-90), Fourth Five Year Plan (1990-95), Two Year Plan Holiday (1995-97) and the present Fifth Five Year Plan (1997-2002).

13 The Fifth Five Year Plan 1997-2002, Ministry of Planning, Government of the People's Republic of Bangladesh, p.2

Table 1.2: GDP composition and Growth Rate During Fourth Five Year Plan Period (at 1984/85) prices).

(in million Taka)

Sector	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	Annual Growth Rate (%)	
							Target	Achieve -ment
1	2	3	4	5	6	7	8	9
Agriculture	190,354	193,421	197,662	201,230	201,915	199,822	3.42	0.98
Industry	49,322	50,503	54,211	59,140	63,786	69,302	9.02	7.05
Elect., gas, and natural resources	5,561	6,704	7,876	8,933	10,184	11,339	9.28	15.31
Construction	29,749	31,087	32,471	34,032	36,074	38,593	5.86	5.34
Transport and Communication	59,024	60,840	63,349	66,416	70,089	74,203	5.39	4.68
Trade and other services	105,124	110,237	115,780	122,041	129,516	140,115	5.00	5.92
Housing	38,030	39,316	40,656	42,187	43,792	45,457	3.62	3.63
Public services	20,363	22,334	24,184	26,240	28,484	30,962	10.65	8.74
Total GDP	497,527	514,442	536,189	560,219	583,840	609,793	5.00	4.15

Source: The Fifth Five-Year Plan 1997-2002, Ministry of Planning, Government of the People's Republic of Bangladesh, Table 1.2, p.3

The table indicates that agricultural sector attained poor growth because this sector experienced trouble in "fertilizer distribution and lack of adequate public procurement of food grain at support prices"[14].

1.5: GOVERNMENT BORROWING AND MONEY SUPPLY

The Country Commercial Guide[15], 2000-2001 of the US Embassy in Dhaka stipulates that "the most dramatic macroeconomic development in Bangladesh during the first half of FY 2000 has been the country's skyrocketing monetary expansion, fueled by unprecedented government borrowing from the

[14] Ibidem, p. 2
[15] Op. Cit.

banking sector through sale of treasury bills. Broad money growth accelerated to 18.6% in the 12 months ending April 2000, compared to 10.4% in 12 months ending June 1998". Haider's report[16] explicates the grounds on such borrowing by the Government:

> "Increasing public expenditure coupled with stagnating revenue yield has forced the government to borrow both from the foreign and domestic sources… The rising size of the government in the early nineties (up to 1992/93) was increasingly financed by tax and non-tax revenues(….). Contribution of net foreign financing towards meeting total public expenditure, on the other hand, declined from around 37 per cent in FY91 to around 18 per cent by FY 99.In fact, increased domestic resource mobilization(i.e. tax and non-tax revenues) in the early nineties more than compensated for the decline in net foreign financing during the period. As a consequence, borrowing from domestic sources declined from 5.7 per cent in FY91 to only 1.6 per cent in FY 93. However, the contribution of revenue yield stagnated since FY 95 while financing from foreign saving (net foreign financing) continued to decline. Consequently, **borrowing from domestic sources (banking and other) rose sharply from less than 2 per cent of total public expenditure in FY 93 to around 15 per cent in FY 99**. Thus the government was found to depend increasingly on domestic borrowing to finance its ever increasing public expenditure".

Haider also points out that "borrowing from domestic sources have adverse implications on the economy ranging from inflationary tendencies to crowding out of public investment" and it brings about "increased repayment burden in terms of interest payment on revenue expenditures". Government is now under denigration from different corners for such disproportionate borrowing from

[16] Omar Haider Chowdhury, A Review of the Fiscal Sector. Available at: http://www.bids-bd-org/haider's_review.htm downloaded on 15 October,2000. Mr. Chowdhury is research Director, Bangladesh Institute of Development Studies (BIDS).

domestic banks. Table 1.3 demonstrates the financing figures of public expenditure by net domestic borrowing and vis-à-vis net foreign financing.

Table 1.3: financing Public Expenditure (percent share of public expenditure)

Year	FY96	FY97	FY98	FY99
Net foreign financing	20.8	21.1	18.3	17.6
Net domestic borrowing	12.6	11.0	11.8	14.7

Source: Omar Haider Chowdhury, A Review of the Fiscal Sector, table 10, p.12

1.6: EXCHANGE RATES

Government of Bangladesh altered exchange rates during last few years with necessary **devaluations** of **"Taka"** against major currencies of the world for mainly two reasons. **Firstly**, to augment export earnings and **secondly**, to counter similar devaluation neighboring countries. Again, the US Embassy report makes the following comment:

> "The exchange rate in **July 2000 is taka 51 to the dollar**. The average annual exchange rate was 40.84 taka per dollar in FY 96, 42.70 taka in FY 97, and 45.4 taka in FY 98, 47.95 taka in FY 99, and 50.32 in FY2000. The Bangladesh Bank follows a **semi-flexible exchange rate policy** of valuing the currency on the basis of the real effective exchange rate, taking account of the nominal exchange rates and inflation rates of major trading partners. The taka's market value has been bolstered by the large sums of **foreign exchange** Bangladesh receives every year through **aid transfers and through remittances from overseas workers**. The taka is now **almost fully convertible on the current account**, but capital account convertibility, although promised for some time, has not yet happened".

It is apparent that "taka" is being depreciated every year making dollar dearer. Again, the convertibility on current

account has made the business transaction easier which illustrates liberal foreign regime of Bangladesh.

1.7: EXTERNAL DEBT

As regards the country's external debt, The Fifth Five Year Plan[17], 1997-2002 of the Government of Bangladesh stipulates that "the country's debt obligation consists mainly of the public sector debt which increased in nominal terms from $ 10.61 billion in 1989/90 to $ 16.77 billion in 1994/95 showing a growth rate of 9.60 per cent a year." An updated statistics for the FY 2000-2001 is presented in the US Embassy report[18] excerpt as below:

> "Assessed on the basis of outstanding principal, Bangladesh's external medium and long term debt stands at about $15.4 billion, or about 34% of GDP, at the end of FY 2000. Because virtually all of the country's outstanding external debt has been granted on highly concessionary terms (e.g., one or two percent interest, 40-year maturity, and a 10-year grace period) by donor nations and multilateral lending institutions, the net present value of the debt is far lower than the face value. The debt service burden on this debt is about 7% of current export earnings".

It is overt that country's debt burden is enormously high and only a sense of relief is that the debts are 'concessionary' in nature. Presently, Government has

[17] Ministry of Planning, op. cit., p.8
[18] The US Embassy, op. cit.

embarked on a move to negotiate with the donors for debt relief directly or indirectly, for instance, PL-480 debts with the United States. Again, a considerable amount of foreign exchange is depleted every year for debt servicing and this trend, apparently, doesn't sound good for the economy of Bangladesh.

1.8: BUDGET 2000-2001

The budget figures for the FY 2000-2001 could be harvested from the Embassy's[19] report. It says:

> "The **FY 2001** budget projects **revenues of taka 242 billion ($4.75 billion)**, 13.3% higher than the FY 2000 actual revenue. On the spending side, the **Government's** operating budget projects **expenditure** of **taka 196 billion ($3.84 billion**), 6.4% higher than FY 2000. Most of this increase is due to the increased cost of interest on domestic and foreign loans, although continuing subsidies for poorly-run state-owned enterprises also add to the fiscal burden. The **Government's capital spending budget** has been fixed at **taka 175 billion ($3.43 billion)**, 13% higher than the FY2000 figure. The biggest winners in the new capital spending budget are health and education".

The repercussions of state-run fatty enterprises and borrowing from domestic and foreign sources is obvious from the above statement. Moreover, the budget envisages a deficit "which the Government projects at 5.8% of GDP, the IMF estimates at 6.3% and other knowledgeable observers peg at 6.8%"[20].

[19] The US Embassy, Dhaka, op. cit.

[20] Ibidem

1.9 BALANCE OF PAYMENTS

The US Embassy's report[21] says that "the current account is expected to improve in FY2000". The report also specifies that "the current account deficit grew from $253 million in FY 98 to $393 million in FY 99, but as of February-end 2000, the current account is showing a surplus of $402 million". This **positive sign** in current account is, as the report says, imputed to "increased workers' remittances and a drop-off in food grain imports". It is added that overall balance of payments demonstrates a "surplus of $158 million in the July 1999-Feb 2000 period compared to a deficit of $171 million in the comparable year-ago period". The statistical position of the balance of payments during this Plan period is apparent from underneath table 1.4.

Table 1.4: Overall Balance of Payments position over the Fourth Five Year Plan, 1990-95 (at 1989/90 prices):

(in million US $)

Category	Projection	Actual	Achievement (%)
Import payments	(-) 22,668	(-) 22,735	100.30
a. Goods (c.i.f)	(-) 19,811	(-) 19,681	99.34
b. Services	(-) 2857	(-) 3054	106.90
Export Receipts	13,528	13,138	97.12
a. Goods (f.o.b)	10,792	10,392	96.29
b. Services	2,736	2746	100.37
Balance of Goods and services	(-) 9,140	(-) 9,597	105.00
Remittance	4,326	4,296	99.31
Current Account Balance	(-) 4,814	(-) 5,301	110.12
Medium and long term debt repayments	(-) 1,343	(-) 1,140	84.88
Balance of payments gap	(-) 6,157	(-) 6,441	104.61
Aid Flow	8,338	7,564	90.72

[21] Op. cit.

Source: The Fifth Five Year Plan 1997-2002, Ministry of Planning, Government of the People's Republic of Bangladesh, Table 5.1, p.91 Note: c.i.f= cost, insurance and freight; f.o.b= Free on board

1.9.1 RESERVES

As mentioned in the US Embassy (Dhaka) commercial report, the foreign exchange reserves was $1.4 billion by the end of May 2000 which could maintain about two months' of import bills of the country. It also adds that "**weak industrial activity** has restrained the demand for non-food imports, while **bumper harvests** truncated food imports". **Worker remittances** from overseas, which have increased each year since FY91, is certainly an added advantage for the balance of payment of the country. An **overall** approximation of the **remittance** during the **Fourth Five Year Plan** has been stated in the next Plan[22] as:

> "**Total** home remittance during the **Plan period** amounted to **$4.30 billion**, lower by only 0.69 per cent than the target of $ 4.33 billion. The annual growth of private transfer was slow, 4.80 per cent against the projection of 5.10 per cent. …….**Annual remittances** increased from $ 761 million in 1989/90 to $ 1.09 billion in 1994/95."

As of 12 December 2000, foreign exchange reserve of the country is 1359 million US dollar[23] which is less than the two months import bill for the country.

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[22] Fifth Five Year Plan. Ministry Of Planning, Op.cit., p.8

[23] **The Dailly Ittefaq**, a national daily of Bangladesh in Bengali language, 12 December,2000 . Available at: http://www.ittefaq.com/ . Downloaded on 12 December, 2000

1.10 FISCAL SECTOR

Haider[24] points out that "management of the fiscal sector has assumed an important role in dictating the performances of the macroeconomy of a country in the context of the globalized economy". The same is valid for the economy of Bangladesh. Regrettably, the **fiscal sector management is poor and inefficient** as has been laid down in the Country Commercial Guide (CCG), 2000-2001 of US Embassy, Dhaka:

> "There was a significant deterioration in Bangladesh's fiscal position in FY2000, a result of accelerated government borrowing and an unabated increase in expenditures. The budget deficit increased to 6.1% of GDP in FY2000, compared to 4.8% in FY 99 and 4.1% in FY 98. …… Tax revenues fell 12% short of expectations in FY2000, reflecting an overly ambitious revenue increase target of 22.5%, and **weakness in industrial recovery after the flood** of 1998. Other factors contributing to this revenue shortfall were delays in implementing several new revenue-enhancing initiatives, including a **pre-shipment inspection** system of customs valuation, establishment of a large taxpayer unit within the income tax division, and introduction of a taxpayer identification number".

It is anticipated that with these new initiatives revenue collection of Bangladesh would be better than previous years. Table 1.5 demonstrates the share of public expenditure in GDP for the previous financial years. Apparently, the share hovers around 13% of GDP.

Table 1.5 Share of Public Expenditure in GDP
(Percent)

Years	Percent Share
1995-96	11.9
1996-97	13.1

[24] Omar Haider Chowdhury, Op. Cit.

1997-98	12.8
1998-99	13.3
1999-00	n.a.

Source: Ministry of Finance and BBS. Cited in: Chowdhury, op. cit, Table 2, p.2

Budgetary expenditures of Bangladesh are provided under two major heads. These are development expenditures and revenue expenditures. **Table 1.6** shows these data below.

Table 1.6: Share of Development and Revenue Expenditures in GDP (per cent)

Years	Development Expenditure/GDP	Revenue Expenditure/GDP
1995-96	6.0	5.9
1996-97	6.1	6.9
1997-98	5.5	7.2
1998-99	5.7	7.6
1999-00	n.a.	n.a.

Source: IMED[25], Ministry of Planning, Budget Estimate, Ministry of Finance and BBS. Cited in: Chowdhury, op. cit. table 3, p.3

In 9996, both the shares in GDP were almost same at 6 per cent where as in 1999 development expenditures slashed and the that of revenue expenditure increased to around 8 per cent. Again, **Table 1.7** below shows the contribution of **internal resource** used by the Government for the country's annual development program. It is optimistic that the Government's **internal resource utilization is increasing gradually** which stood **at 43.03%** by the end of the Plan period. It certainly reduces the Government's dependency on foreign funds for its development purpose.

[25] Implementation, Monitoring and Evaluation Department under Ministry of Plannig, Government of Bangladesh

Table 1.7: ADP Allocation and Government Contribution during Fourth Plan (at Current prices[26])

(In million Take)

Fiscal Year	Total ADP Allocation	Government Contribution	% of Total Allocation
1	2	3	4
1990/91	61,210	12,980	21.21
1991/92	71,500	17,870	25.00
1992/93	81,210	20,530	25.28
1993/94	96,000	34,400	35.83
1994/95	111,500	47,980	43.03

Source: The Fifth Five-Year Plan 1997-2002, Ministry of Planning, Government of the People's Republic of Bangladesh, Table 1.6, p.5

1.11: INFLATION

Bangladesh economy is not let off from the repercussion of inflation. However, **inflation was curbed** by admirable agricultural output and sluggish industrial activity, which is evident the report of US Embassy in Dhaka:

> "Inflation, aided by bumper agricultural harvests and slow industrial activity, has continued to plunge in 1999 and 2000, after peaking in December 1998 at 13%; inflation stood at 2.72% in May 2000 on a year-on-year basis".

Inflation rate was seemingly contained during the last financial year and it didn't have severe impact on the life of people.

1.12: FOREIGN AID

Since the independence of Bangladesh in 1971, it has accepted foreign assistance every year that constitutes a considerable part of its GDP. The Embassy report[27] reads as:

[26] March, 1998

> "The country historically had received annually the equivalent of close to 6% of GDP in foreign assistance disbursements, but this figure has declined to around 3-4% in recent years as GDP has increased while aid utilization has leveled off".

But this aid has not been utilized in an efficient way heading to sustainable development. At present, aid flow has shrunk by significant amount. The Fifth Five Year Plan[28], 1997-2002 outlines few reasons behind so:

> "The **global recession** after the **Gulf war**, the emergence of independent states in the **former Soviet Union**, and above all, newly **emerging donor priorities** adversely affected the availability of external assistance and caused a **decline** in the flow of **foreign aid** to Bangladesh. **Implementation problems** also adversely affected aid disbursement".

The report also adds that "during the Plan period[29], the total aid disbursement fell short of the target by 9.28 per cent to $ 7.56 billion and accounted for 47.64 per cent of development expenditure at 1989/90 prices." This indicates that development works was excessively depended on foreign aid during this time (1990-95).

1.13: EMPLOYMENT SITUATION

Unemployment is a constant problem of the country as it feeds a gigantic population of 128 million, the most densely populated country of the world. During the Fourth

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[27] The US Embassy in Dhaka, op. cit.

[28] Ministry of Planning, Government of Bangladesh, Op. cit. p. 8

[29] Fourth Five Year Plan, 1990-95

Plan period the situation seems to be improved as the Fifth Plan[30] reads:

> "The fourth Plan (1990-95) laid specific emphasis on employment generation to alleviate poverty. The labor force has almost doubled since independence growing at a rate faster than the population. Against this, **employment on man-year basis has more than doubled resulting in a reduction of unemployment rate** (including underemployment) from 38.78 per cent in 1972/73 to 31.23 percent in 1994/95. "

1.14: GOVERNMENT'S ROLE IN THE ECONOMY

Government of Bangladesh has put together its **privatization efforts** to divert from the constantly inefficient State-owned enterprises. But still it has **not gained full momentum**. The Country Commercial Guide (CCG), 2000-2001 of the US Embassy, Dhaka stipulates as:

> "Although over the past decade the Bangladesh government has enacted policies to diminish bureaucratic requirements and open the economy to private sector development, these efforts at market-based reforms have only been partly successful. Trade has been liberalized and new sectors opened to private sector development; …… **privatization, encounter stiff opposition from vested interest groups**, such as **public sector labor unions**, **bureaucrats or opposition political parties**. …… The state, a major participant in Bangladesh's industrial sector, owns 40% of industrial capacity, primarily in jute, textile milling, steel, and chemicals. According to the World Bank, the state-owned enterprises (SOE's) accounted for over 25% of total fixed capital formation, but only 6% of GDP. **Gross losses** of these **SOE's** cost the government several hundred million dollars each year, and continue to burden the budget and are a major drag on the economy".

Strengthening **private sector** is, therefore, crucial for the country's economy.

[30] Ministry of Planning, Government of Bangladesh, Op. cit. p. 9

1.15 : MACROECONOMIC INDICATORS SINCE INDEPENDENCE

Table 1.8: Macroeconomic indicators (in million taka)

Items	1972773	1977778	1979780	1984785	1989790	1994795	1995796	1996797 (P)
1	2	3	4	5	6	7	8	9
GDP (at 1984785 prices)	264,555	323,015	341,298	406,933	497,527	609,793	642,441	678,753
GDP (at current prices)	49,853	145,194	196,050	406,933	737,571	1170,261	1301,600	1402,580
Ext. resource balance	2,459	14,650	25,572	43,172	74,329	97,428	126,554	116,027
Import	5,484	22,855	39,588	74,361	135,751	263,133	310,913	329,328
Export	3,025	8,205	14,016	31,189	61,422	165,705	184,359	213,301
National Resources	52,312	159,844	221,622	450,105	811,900	1267,689	1428,154	1538,218
Consumption	50,811	142,674	191,646	397,438	717,473	1073,038	1206,954	1294,532
Investment	1,501	17,170	29,976	52,667	94,427	194,651	221,200	243,686
Domestic Saving	-958	2,520	4,404	9,495	20,098	97,223	94,646	108,048
National Saving	-1,383	5,407	7,755	18,414	42,628	153,245	154,288	205,171
Current Account Balance	2,884	11,763	22,221	34,253	51,799	41,406	66,912	38,515
Tax Revenue	1,866	9,842	14,363	28,070	57,120	113,640	122,330	140,740
Overall fiscal deficit	4,656	10,436	19,412	29,960	58,100	79,700	74,500	74,800
Rate of Inflation (% change in CPI)	47.40	12.74	18.85	11.20	9.33	5.22	4.07	3.91
Real GDP growth rate	-	7.03	1.50	3.93	6.63	4.44	5.35	5.65
Exchange rate (Tk/US$)	7.7808	15.1215	15.4777	26.0600	32.9323	40.2005	40.8400	42.7008
As % of GDP (at Current Prices)								
Ext. resource balance	4.93	10.09	13.04	10.61	10.08	8.33	9.72	8.27
Import	11.00	15.74	20.19	18.27	18.40	22.48	23.89	23.48
Export	6.07	5.65	7.15	7.66	8.32	14.15	14.17	15.21
Consumption	101.92	98.26	97.75	97.67	97.28	91.69	92.73	92.30
Investment	3.01	11.82	15.29	12.94	12.80	16.63	16.99	17.37
Domestic Savings	-1.92	1.74	2.25	2.33	2.72	8.31	7.27	7.70
National Savings	-2.77	3.72	3.96	4.52	5.78	13.09	11.85	14.63
Current Account Balance	5.78	8.10	11.33	8.42	7.02	3.54	5.14	2.75
Tax Revenue	3.74	6.78	7.33	6.90	7.74	9.71	9.40	10.03
Overall Fiscal Deficit	9.34	7.19	9.90	7.36	7.88	6.81	5.72	5.33

Source: The Fifth Five Year Plan 1997-2002, Ministry of Planning, Government of the People's Republic of Bangladesh, Table 1.12, p.12, where it has been reproduced from Bangladesh Bureau of Statistics (BBS). Note: P= Preliminary, World Bank's definition of tax differs from that of the Ministry of Finance.

The macroeconomic indicators of Bangladesh from 1972/73 to 1996/97 as shown in **Table 1.8** indicates that **current account balance** and GDP growth rate exhibit oscillating fashion over the period. Rate of **inflation** shows a

declining trend while almost all **other indicators** show **escalating** figures over the same period.

1.16: CONCLUDING REMARKS

The US Embassy report points out that Bangladesh economy is vulnerable to "a weak financial sector, an unproductive and chronically money losing public sector, poor infrastructure, lack of export diversification, and pervasive corruption at all levels of the society". It also supplements that "the failure of the political system to address these longstanding economic problems has adversely affected the business environment and investment climate". Truly speaking, these comments are not exaggeration of the actual macroeconomic situation of the country. Chowdhury [31] elucidates the financial sector weakness in an excellent way. He says:

> "The share of public expenditure in the economy appear to be increasing. The share of development expenditure has been declining and that of revenue expenditure increasing in total public expenditure. Share of directly non-productive sector in the revenue expenditure has been increasing, that of infrastructure in development expenditure declining and that of social sector in total public expenditure has also been declining. Such a change in the composition of public expenditure is neither conducive for generating growth nor for promoting equity in the economy".

He also extends that "developmental and regulatory functions" by the Government entail "to generate ever increasing resources from domestic sources while the

[31] Omar Haider Chowdhury, op. cit. p.12

revenue effort is stagnating and the tax system is also not congenial for development of the economy.

Although in Fifth Plan [32] stipulates that the country's "microeconomic management has achieved successes" during the Fourth Plan (1990-1995) due to, as it says, increase in GDP growth rate, reduction in dependence on foreign aid, suppression of inflation, considerable growth of exports and remittances from expatriate nationals, domestic resource mobilization through tax efforts and reforms, there are still a long way to go as Chowdhury's review and the commercial report of the US Embassy in Dhaka envisaged.

With this overall macro-economic review of Bangladesh, **attention would be paid** to the **country's export situation** as outlined in the title of this work. **Chapter two**, therefore, encompasses the **data and other information** relevant to recent export situation in Bangladesh.

SUMMARY OF CHAPTER ONE

This chapter presents an overview of the macroeconomic situation of Bangladesh. It touches upon agriculture,

[32] Fifth Five Year Plan, 1997-2002, Ministry of Planning, Bangladesh. P.12

industry, growth of GDP, broad money growth, exchange rate, external debt, FY 2001 budget, balance of payments, foreign exchange reserves, internal resource utilization, inflation foreign assistance, public sector performance, among others.

Country Commercial Guide (CCG) 2000-2001 of the US Embassy in Dhaka stipulates that **"agriculture** accounts for **26%** of GDP and is the primary occupation of about 70% of its population, mostly farmers or rural laborers. **Industry** contribution to the real GDP of Bangladesh is about **26%** which comprises manufacturing, construction, power, and utilities. The average annual **growth of GDP** in the ten-year period from FY 91 through FY 2000 was 4.8%; these growth rates fall short of the levels needed to reduce significantly the poverty. **Broad money growth** accelerated to **18.6%** in the 12 months ending April 2000, compared to 10.4% in 12 months ending June 1998. The **exchange rate** in July 2000 is **taka 51 to the dollar**. Assessed on the basis of outstanding principal, Bangladesh's **external** medium and long term **debt** stands at about $15.4 billion, or about 34% of GDP, at the end of FY 2000. The **debt service** burden on this debt is about 7% of current export earnings.

The **FY 2001 budget** projects **revenues** of Taka 242 billion ($4.75 billion) and the Government's **operating budget** projects expenditure of Taka 196 billion ($3.84 billion), 6.4% higher than FY 2000. The **budget envisages a deficit** which the Government projects at 5.8% of GDP, the IMF estimates at 6.3% and other knowledgeable observers peg at 6.8%. Overall **balance of payments** demonstrates a "surplus of $158 million in the July 1999-Feb 2000 period compared to a deficit of $171 million in the comparable year-ago period. **Foreign exchange reserves** was $1.4 billion by the end of May 2000 which could maintain about two months' of import bills of the country. As of 12 December 2000, foreign exchange reserve of the country is 1359 million US dollar. Government's **internal resource utilization is increasing gradually** which stood **at 43.03%** by the end of the Plan period. **Inflation**, aided by bumper agricultural harvests and slow industrial activity, stood at 2.72% in May 2000 on a year-on-year basis. The country had received **foreign assistance** at a rate of **6% of GDP** annually since its independence.

The disgraceful economic condition of Bangladesh is attributed to a number of reasons, for example, "a weak financial sector, an unproductive and chronically money

losing public sector, poor infrastructure, lack of export diversification, and pervasive corruption at all levels of the society", political failure to address longstanding economic problems affecting the business environment and investment climate, among others.

CHAPTER TWO

EXPORT PROMOTION SCENARIO OF BANGLADESH

2.1: FOREWORD

During the last decade the world experienced remarkable rise in openness to trade and investment flows. It was partly because of the fall of communism and the old ideas of self-sufficiency, partly because of the liberalization agreed upon during the Uruguay Round and partly because of spread of new information technology. Although globalization and openness to trade were taking a shape, the financial crisis and its contagion affect, which hit south-east Asian economies, has spread over other parts of the world during the year 1998 causing a drastic fall in commodity prices. Given this global economic turmoil, Bangladesh economy has overcome this crisis by the farsighted economic and fiscal policies of the government.

Given the circumstances as above, Bangladesh export sector has achieved considerable growth during the year 1997-98 despite the world wide downward trend. As a result, depletion of foreign exchange reserve did not occur during

the year. Devaluation of currencies did occur to boost export but it was less in comparison with the neighboring countries, for instance, India and Pakistan.

2.2: EXPORT PROMOTION BUREAU (EPB)

By the promulgation of a **Presidential Ordinance in 1977, EPB** emerged as a **semi autonomous** body with a view to promoting export and improving plan and policies to assist the private sector[33]. Honorable Minister for Commerce is the ex-officio chairman of the Board of Management, which comprises of a Vice-Chairman, a Director-General, four private sector members and six high officials of the Ministry of Commerce, Industry, Agriculture, Jute, Textile and Foreign Affairs. Vice Chairman acts as the Chief Executive of the EPB.

2.2.1: THE MAIN FUNCTIONS OF EPB

To suggest the Government for efficient, adequate, economic and coordinated plans and policies for the promotion of exports; to assess the export potential of Bangladesh products and services and ensure appropriate quality control with regard to export goods; to coordinate the

[33] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 11

export efforts of Bangladesh private and public sector organizations and provide necessary advice, information and assistance to such organizations so as to enable them to maximize their export potential; to explore and examine markets of other countries with a view to promote export of raw, semi-finished and finished products from Bangladesh to such countries[34], among others.

2.3: OBJECTIVES OF THE EXPORT POLICY[35]

Increase of export in regional and international markets with a view to achieve optimum national growth is one of the main objectives of the Export policy 1997-2000. For this attainment, narrowing the gap between import payments and export earnings is extremely important. Export policy aims at timely production of exportable items at competitive price because it is essential for sustaining existing markets and further expansion. It also aims at reaping the benefits by taking advantages of liberalized and global international trade after the Uruguay round environment. The objectives of the Export Policy 1997-2000

[34] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 11 & 12

[35] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 14

also incorporates such agenda as product diversification, quality improvement, establishment of **backward linkage to export-oriented industries** and service sectors, introduction of newer products for export, exporting **high value added** products, developing infrastructure for export performance, creating **skilled man-power** in the export sector, among others.

2.4: INCENTIVES PROVIDED BY THE GOVERNMENT TO SUPPORT ENHANCED EXPORT[36]

Government provides some incentives to the 100% export oriented industries, for example, tax exemption, bank credit. The annual contribution of **leather sector** of Bangladesh to its total export is highly significant. To boost up export activities, Government has declared that **leather** manufacturing firms **exporting at least 80%** of their products will receive similar benefits as that of 100% export oriented industries. Other industries exporting 80% also reap like benefits except those customs and taxation incentives as meant for 100% export oriented industries. In addition, these industries are allowed to sell 20% of their products in the local market, subject to paying normal

[36] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, 17-22

duties and taxes. Moreover, the **leather** industries are provided with supervised bonded warehouse facilities.

To promote export of **software**, Bangladesh Telegraph & telephone Board takes immediate steps for installation of adequate number of high speed dedicated lines to facilitate the export of 100% export-oriented software and data entry service industries. The Government also offers supervised bond facility for duty free import of computers and other accessories. Moreover, 50% of the income arising out of any export business is **exempted from income tax**. Under the provision of **Duty Drawback** system, all duties paid can be pulled back subject to repatriation of sale proceeds in the form of foreign exchange for all exports other than deemed export through the commercial banks. **Civil Aviation Authority** has withdrawn the **royalty** on the landing of **cargo flights** of the foreign airlines to facilitate the transportation of air borne export goods at competitive prices.

Moreover, Government provides **bonded warehouse** facility for import-depended export industries, treats small and medium export oriented agricultural firms (minimum size of 5 acres) as industries, provides import facility for packaging materials, facilities for handicrafts through

establishment of craft village, boosts jewellery export,among others.

2.5: REVIEW OF EXPORT PERFORMANCE DURING FY 1997-98 COMPARED TO PRECEDING YEARS

During the Fiscal Year 1997-98 export from Bangladesh in total amounted to US$ 5161.20 million as against US$ 4418.28 million during 1996-97 showing an increase of US$ 742.92 i.e. 16.81%. A picture of total export earning for other years might be obtained from the **Table 2.1** below:

Table 2.1: Total exports earnings over the years since fiscal year 1988-89 (million US $)

Fiscal Year	1988 -89	1990 -91	1995 -96	1996 -97	1997 -98
Export Earn -ings	1291.56	1717.55	3882.42	4418.28	5161.20

Source: Export Promotion Bureau, Govt. of Bangladesh[37].

Table 2.2: Commodity-wise export earning of the 1997-98 FY (Million US $)

Commodity	Export earning (m US$)	% of total earning
Readymade garments	2843.33	55.09
Knitwear	940.31	18.22
Frozen food	293.84	5.69
Jute goods	281.42	5.45
Leather	190.26	3.69
Raw Jute	107.77	2.09
Chemical products	74.22	1.44
Tea	47.47	0.92

[37] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 23

Agricultural products	39.14	0.76
Others	343.44	6.65
Total	5161.20	100.00

Source: Export promotion Bureau, Govt. of Bangladesh[38]

The principal commodities marked an increase in the export earnings during the year 1997-98 in respect of agricultural products (36.61%), tea (24.46%), handicrafts (5.80%), knitwear (23.19%), readymade garments (27.05%), engineering products (21.84%), and other products (21.23%) [39] . The commodities which caused **recession** in export earning are frozen food (8.38%), petroleum by products (33.56%), chemical products (31.58%), leather (2.67%), raw jute (7.35%) and jute goods (11.46%) [40] . Export target for FY 1997-98 was set at US$ 5020.00 million[41].

As against this target, the actual export earnings stood at **US$ 5161.20 million** showing an increase of US$ 141.20 million i.e. 2. 81%. Out of the total export earnings of US$ 5161.20 million during the FY 1997-98, the share of

[38] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 25

[39] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 24

[40] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 24

[41] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 23

primary commodities was US$ 501.93 million and that of manufactured products at US$ 4659.27 million i.e. 9.73% and 90.27% respectively as against US$ 526.43 million and US$ 3891.85 million i.e. 11.91% and 88.o9% respectively during the FY 1996-97. A statement of total export earnings and its share of primary and manufacturing commodities from FY 1982-83 to 1997-98[42] are given in **Table 2.3**

Table 2.3: Share of primary products and manufacturing commodities in total export over the years

Fiscal year	Total export (million US$)	% share of primary products	% share of manufactured commodities
1982-83	686.60	35.42	64.58
1985-86	819.21	36.54	63.46
1990-91	1717.55	17.82	82.18
1995-96	3882.42	12.26	87.09
1996-97	4418.28	11.91	88.09
1997-98	5161.20	9.73	90.27

Source: Export Promotion Bureau, Govt. of Bangladesh

Export earnings from the traditional items amounted to US$ 433.83 million(8.41%) and that of non-traditional items stood at US$ 4727.37 million (91.59%) during the FY 1997-98 as compared to 10.59% and 89.41% respectively during the FY 1996-97. Table 2.4 provides the chronological data in this regard:

Table 2.4: Share of traditional items and non-traditional items in total export over the years

Fiscal year	Total export (million US$)	% share of traditional items	% share of non-traditional items
1982-83	686.60	68.99	31.01
1985-86	819.21	54.67	45.33
1990-91	1717.55	25.15	74.85

[42] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 27

1995-96	3882.42	11.56	88.44
1996-97	4418.28	10.59	89.41
1997-98	5161.20	8.41	91.59

Source: Export Promotion Bureau, Govt. of Bangladesh43

Out of the total export earnings of US$ 5161.20 in the FY 1997-98, the share of jute sector was US$ 389.19 million (7.54%) and the share of non-jute sector was US$ 4772.01 (92.46%). Dividing the total export into Jute and Non-jute products, we get a chronological data series as stated in table 2.5 below:

Table 2.5: Share of jute and non-jute items in total export over the years

Fiscal year	Total export (million US$)	% share of jute items	% share of non-jute items
1982-83	686.60	62.56	37.44
1985-86	819.21	50.91	49.09
1990-91	1717.55	22.98	77.02
1995-96	3882.42	10.81	89.19
1996-97	4418.28	9.83	90.17
1997-98	5161.20	7.54	92.46

Source: Export Promotion Bureau, Govt. of Bangladesh[44]

Compared to the preceding year, the overall export during FY 1997-98 in US$ increased by about 16.81%[45]. But the export price index in this fiscal year increased by 3.98% indicating a volume wise increase during FY 1997-98 was 12.83%. Again, export in primary commodities sector in terms of US$ decreased by 4.65% in this year as against the

[43] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 29
[44] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page 31
[45] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page33

increase of price index by 14.63%. This indicates that volume wise primary commodities sector marked a decrease by 9.28%. Alternately, export in manufacturing commodities sector in terms of US$ demonstrated an increase by 19.72% during 1997-98 as compared to the preceding year. In this case, the unit price index of the manufactured items increased by 8,16% resulting in volume wise increase of 11.56%[46].

As we look into the export pattern according to the destination during the FY 1997-98, USA appears first followed Germany and U.K as the second and third. France, Italy, Netherlands, Belgium, Japan, Canada, Hong Kong, India, Spain, China, Sweden, Pakistan, Denmark, Australia, Iran, U.A.E and Singapore are also importers of Bangladeshi products as evident from **Table 2.6**.

Table 2.6:Bangladesh Export according to the destination
(value in million US$)

Countries	1993-94	1994-95	1995-96	1996-97	1997-98
U.S.A	734.82	1184.28	1197.54	1432.15	1929.21
Germany	275.21	300.26	369.18	428.29	510.93
U.K	259.26	318.31	417.70	437.69	440.00
France	157.72	192.93	272.88	312.65	369.07
Italy	170.61	211.26	207.10	203.62	270.47
Netherlands	104.90	136.66	183.22	208.59	236.08
Belgium	98.41	128.58	186.93	210.57	211.40
Japan	61.02	99.65	120.80	114.05	112.00
Canada	57.23	69.38	69.09	69.12	106.84
Hong Kong	72.10	107.07	104.46	109.18	87.39
India	16.81	45.17	72.48	46.25	65.64
Spain	29.56	53.16	58.74	55.01	60.56
China	13.22	45.29	26.38	55.59	48.51

[46] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page33

Sweden	14.63	24.89	35.96	38.13	48.27
Pakistan	21.06	26.74	43.08	38.97	44.67
Denmark	34.68	39.24	53.00	51.24	43.77
Countries	1993-94	1994-95	1995-96	1996-97	1997-98
Australia	21.35	16.50	23.40	28.48	35.76
Iran	34.26	30.98	33.88	53.00	35.43
U.A.E	13.32	16.17	14.37	11.55	28.52
Singapore	52.90	38.02	22.87	30.00	26.05
Others	290.83	388.02	369.36	484.15	450.63
TOTAL	2533.90	3472.56	3882.42	4418.28	5161.20

Source: Export promotion Bureau, Government of Bangladesh[47]

If we compare the import figures of Bangladesh of different years with those of export, **trade deficit** appears to be a permanent feature although it varies from year to year. This indicates that export promotion is crucial to boost the country's economy. In 1997-98, export earnings afforded 68.40% of import bill. Export showing as a percentage countries import over the years from 1982-83 to 1997-98 is furnished in Table 2.7:

Table 2.7 Export as percent of import (value in million US$)

Fiscal year	Export	Import	Export as percentage of import
1982-83	687	1923	35.73%
1985-86	819	2120	38.63%
1990-91	1718	3511	48.93%
1995-96	3882	6827	56.86%
1996-97	4418	7150	61.79%
1997-98	5161	7545	68.40%

Source: Export Promotion Bureau, Government of Bangladesh48

We can now look into the **export of Bangladesh** to out-side world focusing on **different regions.** It is evident from the

[47] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page34

16 Annual report 1997-98, Export Promotion bureau, Bangladesh, page 36

data of the EPB that the EU countries **topped the list** registering 43.47% of the total export of Bangladesh in Fiscal Year in 1997-98. American region and Asian region appeared as the second and third importing region of Bangladesh's export, which accounts for 40.00% and 8.95% respectively in the same year. Bangladesh export by major regions is shown in Table 2.8:

Table 2.8: Export by major region (value in million US$)

Regions	1997-98	1996-97	% share of total export in 1997-98	% share of total export in 1996-97	% of annual change
EU countries	2243.78	1946.92	43.47	44.97	(+) 12.93
American region	2064.31	1527.02	40.00	34.56	(+) 35.19
Asian region (excluding ME)	462.00	490.82	8.95	11.11	(-) 5.87
Middle East region	143.55	145.10	2.78	3.28	(-) 1.07
African region	52.75	69.08	1.02	1.56	(-) 23.64
East European Region	51.11	47.50	0.99	1.08	(+) 7.60
Oceania region	39.43	34.40	0.76	0.78	(+) 14.62
Other countries	104.27	117.44	2.02	2.66	(-) 11.21
Total	5161.20	4418.28	100.00	100.00	(+) 16.81

Source: Export Promotion Bureau, Government of Bangladesh[49]

[49] Same report, page38

Countries from Organization of **Islamic Countries (OIC)** plays also an important role in the export earnings of Bangladesh. During the financial years 1996-97, 1995-96 and 1994-95 export earnings from these countries was US$ 244.00 million, 216.42 million and 203.20 million respectively. FY 1996-97 contribution was 5.52% respectively [50] . If we consider Bangladesh export to **SAARC**[51] countries, we find a **frustrating** picture. In FY 1996-97, this earning was only 2.10% of the total export[52].

2.6: PRODUCT AND SERVICE DEVELOPMENT ACTIVITIES OF THE EPB:

To promote export earnings, Government of Bangladesh has undertaken product and service development activities. Recognizing that software development and data entry services is a potential sector for export from Bangladesh, Government has constituted a Standing committee to formulate policies, strategies and action plans to promote export of software. In addition, it has withdrawn all duties and taxes on imported computer hardware and software. Bangladesh Telegraph & Telephone Board is presently

[50] Bangladesh Export Statistics 1996-97, EPB, Government of Bangladesh

[51] South Asian Association for Regional Cooperation (SAARC) consists of Bangladesh, Bhutan ,India, Maldives, Nepal, Pakistan, Sri Lanka and it was formed in 1985 under the aegis of Government of Bangladesh.

[52] Bangladesh Export Statistics 1996-97, EPB, Government of Bangladesh

providing dedicative data transmission facility to this sector. Government has taken initiative to establish a **Software Technology Park**. A law relating to **copyright in Computer Program** is under process to be approved the Parliament. Moreover, government has created a **fund to provide working capital** to the entrepreneurs.

In 1997-98, export earning from **leather and leather goo**ds were US$ 228 million. Three factors contribute to this process---- latest-in-leather technology, plenty of raw materials, and inexpensive skilled labor. Bangladesh can produce 180 million square feet every year 80% of which is exported worldwide as semi-finished/ finished leather, footwear and accessories[53]. There are 15 large-scale high quality modern shoe factories, 2500 smaller footwear units in the country. Moreover, more than 50 manufacturers are engaged in producing leather items such as travel goods, suitcase, briefcases, and fashion accessories, along with belts, wallets, handbags, cardholders etc.

Fisheries sector contributes greatly to Bangladesh economy ----about 4.7% of GDP. It is also a source of protein for the country's people, employment opportunity. Approximately, **12 million people directly and 10 million people indirectly**

[53] Same report, page 44

are involved with this sector. It is being treated **thrust sector** by the Government. Bangladesh export of fisheries product has been augmented remarkably during the last few years. Table 2.9 below presents export of fisheries data on the basis of value and quantity.

Table 2.9: Export of fisheries

Year	Value (million US$)	Quantity (million pound)
1993-94	210.52	55.51
1994-95	305.64	78.36
1995-96	313.69	75.07
1996-97	320.73	76.05
1997-98	293.84	76.05

Source: Export promotion Bureau, GOB, Annual report 1997-98, pp-45

Fisheries product is exported to about 35 countries of the world. U.K, Hong Kong, India, China, Malaysia, USA, Singapore, Saudi Arabia, Japan and Oman are the main importing countries of these products. Because of freshness and natural character, **shrimp** of Bangladesh is highly demanded abroad especially in the **EU countries**. **Frozen shrimp** is currently being exported to about 30 countries including USA, Japan, Belgium, U.K, The Netherlands and Germany as the leading importers. **Table 2.10** provides some data on **shrimp export** during the last few years.

Table: 2.10 Export of shrimp

Year	Value (million US$)	Quantity (million pound)
1993-94	197.67	48.62
1994-95	260.70	57.93
1995-96	270.51	55.75
1996-97	279.22	56.75
1997-98	260.41	41.07

Source: Export promotion Bureau, GOB, Annual report 1997-98, pp-46

Agriculture is the backbone of Bangladesh economy. The contribution of agricultural sector in export is not prominent because export is mainly limited to expatriates from the Indian subcontinent. Table 2.11 provides some insight in this connection.

Table 2.11: Export in Agricultural products

Name of products	Export in 1996-97 (million US$)	Export in 1997-98 (million US$)
Vegetables	24.97	32.47
Fruits	0.57	0.01
Tobacco	1.24	2.01
Betel leaf	1.72	4.63
Others	0.21	0,02
Total	28.65	39.14

Source: Export promotion Bureau, GOB, Annual report 1997-98, pp-47

It is seen that export in 1997-98 in this sector has been increased by 36.61% in comparison with the previous year. Government has taken certain measures to promote export of this sector. Duty free facility of importing reefer-van for the vegetable and fruit exporters to facilitate the transportation of export commodities. In addition, Bangladesh shares 2% of world's tea production and 3% of world export, which accounts for 1.2% of foreign exchange earning[54]. In 1997-98, the export earning from tea was 47, 46, 700 US$.

2.7: HUMAN RESOURCE DEVELOPMENT ACTIVITIES BY EPB

[54] Annual report 1997-98, Export Promotion bureau, Bangladesh, page 49

In order to update knowledge of the exporters and officials engaged in export related activities as well as to inform the new and established exporters about the export strategies and the policies of the Government, EPB conducts every year National Export Training Program (NETP) since 1978-79. In 1997-98 it conducted 37 seminars/workshops on 23 subjects in 25 places where a total number of 1599 representatives from exporting firms and export related organizations participated[55].

2.7.1: OTHER ACTIVITIES OF EPB

Least developed and developing countries are given Generalized System of Preference (GSP) facilities by 27 developed industrialized countries through imposing **reduced or zero rate tariffs** on imports from these countries. This GSP facility was envisaged to help achieve economic growth and accelerate the pace of industrialization and export development of the LDC countries. As a member of the LDC group, now chairman of LDCs, Bangladesh is receives this benefit. Government has entrusted the responsibility of issuing GSP certificate of origin to EPB. In the wake of

[55] Annual report 1997-98, p-51

the rapid development of the garments industries in Bangladesh, a **textile cell** was created in EPB in 1985. Textile cell implements the **Textile trade and Quota administration** rules in line with the guidance of the Ministry of Commerce.

Table 2.12: Export, Import and Balance of Trade of Bangladesh value in million dollars)

Year (July-June)	Export	Import	Balance of trade
1980-81	709.85	2281.97	-1572.12
1985-86	819.20	2120.27	-1301.07
1990-91	1717.55	3510.55	-1793.00
1995-96	3882.42	6827.00	-2944.58
1996-97	4418.28	7150.00	-2731.72

Source[56]: 1. Export Promotion Bureau, Government of Bangladesh
2. Bangladesh Bureau of Statistics (for import figures)
3. Bangladesh Bank (for import figures from 1990-91 to 1996- 97)

It is evident from the table that Export earning never met the import bills since FY 1978-79. Rather a constant **trade deficit** was always present. Therefore, to boost up export earnings far-reaching government plan and new strategy is extremely necessary.

2.8: ROLE OF THE COMMERCIAL REPRESENTATIVES ABROAD

In a world of globalization and stiff competition, world economy takes a shape of continuous transformation. Therefore, accurate information is essential for the success of export promotion activities. Information is

[56] Bangladesh Export Statistics 1996-97, Export Promotion Bureau, Bangladesh P-21

crucial also to determine the best possible direction, objectives, policies and measures of country's foreign trade and export production and marketing. Commercial representatives abroad assists in all these matters. Trade creation and trade expansion are the main targets of Commercial Representatives abroad.

2.9: EXPORT OF JEWELLERY FROM BANGLADESH

With a view to **diversify the export items** to broaden the export base, Government of Bangladesh has undertaken crash program to develop a few non-traditional high potential items for export. Jewellery is one of them. Artistic design, craftsmanship, quality, reasonable price, prompt delivery -----all these criteria has already started to pick up the jewellery export from Bangladesh.

2.10: CONCLUDING REMARKS

Every country of the world **has to import** different types of commodities in order to meet up its production and development demand. For this import foreign currency is required which is normally afforded by export earnings. **If export earning** is **not enough** to meet the import demand, alternate solution is to **seek foreign aid or loan** which is not a permanent solution and, of course, humiliating for an

independent country. As **Bangladesh** always face **trade deficit**, rise in export earnings is crucial for the country.

Now, as export of a country is related to its import, the next chapter, therefore, addresses the import situation of Bangladesh.

SUMMARY OF CHAPTER TWO

By the promulgation of a Presidential Ordinance in 1977, Export Promotion Bureau (EPB) emerged as a semi autonomous body to promote export and improve plan and policies to assist the private sector. During the Fiscal Year **1997-98** export from Bangladesh in total amounted to **US$ 5161.20 million** as against **US$ 4418.28 million during 1996-97.**

During the FY 1997-98, the share of **primary commodities** was US$ 501.93 million and that of manufactured products at US$ 4659.27 million i.e. 9.73% and 90.27% respectively. Compared to the preceding year, the overall export during FY 1997-98 in US$ increased by about 16.81%[57]. In 1997-98, export earnings afforded 68.40% of import bill. **Commodity-wise export earning** of the 1997-98 FY (Table 2.2) shows that **73.31% export earnings were from readymade garments and knitwear** indicating the most import sector for earning foreign exchange for the country. Frozen food, jute goods, leather, raw jute, chemical products, tea, agricultural products etc. also assist to enhance exchange earnings for the country. In 1997-98, export earning from **leather and leather goo**ds were US$ 228 million. **Fisheries sector** contributes greatly to Bangladesh economy ----about 4.7% of GDP.

Agriculture is the backbone of Bangladesh economy. The contribution of agricultural sector in export is not prominent. Bangladesh shares 2% of world's tea production and 3% of world export, which accounts for 1.2% of foreign

[57] Annual Report 1997-98, Export Promotion Bureau, Government of Bangladesh, page33

exchange earning [58] . Moreover, the balance of trade of Bangladesh from 1980-81 to 1996 in Table 2.12 shows always negative. In financial Year(FY) 1997-98, Bangladesh export earnings afforded only 68.40% of its import costs. It is, therefore, essential to boost up the export sector of Bangladesh.

CHAPTER THREE

IMPORTS OF BANGLADESH---AN OVERVIEW

3.1 FOREWORD

[58] **Annual report 1997-98, Export Promotion bureau, Bangladesh**, page 49

As a **founder member** of World Trade Organization **(WTO)**, Government of **Bangladesh** has trailed institutional and policy transformations towards a free market economy matching the prevailing trend of the globe. WTO emerged as a world trade body in 1995 integrating its predecessor GATT into itself. Government of Bangladesh started off liberalization in 1992, even before the WTO came into being. It adopted 'an outward looking **export-led industrialization** strategy' in early eighties and has maintained the same to suit the persisting free trade regime and achieve a faster growth of GDP.

3.2 IMPORT STATISTICS

Officially published data in "Foreign Trade Statistics of Bangladesh 90-91", published in 1994, collected from Technobangla websit[59] is placed in **appendix-I**. It contains a comprehensive data set of imported commodity groups of Bangladesh arranged in descending order of price for the financial year (FY) 1990-91 and 1991-92 displaying value in 'Taka' (Tk.). Import values of commodities in line with

[59] http://www.techbangla.org/techbangla/ImportExport/BDImports/ImpGrB.html downloaded on October 14,2000. The information contained in this table has been collected from " **Foreign Trade Statistics of Bangladesh 90-91", published in 1994, Dhaka.**

this work are placed in **Table 3.1** dragging from the main table in Appendix-I.

Table 3.1 : Imported commodity groups in textiles and clothing sector of Bangladesh (arranged in descending order of price)

HS CODE	COMMODITIES	JULY/91 TO JUNE/92 VALUE (in Taka)	JULY/90 TO JUNE/91 VALUE (in Taka)
	TOTAL IMPORT	**132,755,972,744**	**111,876,843,031**
52	**Cotton**	**11,799,289,155**	**8,530,672,526**
55	Man-made staple fibers	7,483,393,071	5,880,201,311
54	Man-made filaments	4,781,762,572	4,262,947,997
60	Knitted or crocheted fabric	1,576,625,410	819,829,753
58	Special woven tuft textile fabric Trimming	1,497,657,306	1,220,415,841
32	Tanning/dying extract dye Pigment etc	1,249,883,589	1,120,237,089
63	Made up textile article worn cloth rag	309,494,419	234,247,753
53	Vegetable textile fiber other paper yarn &	170,954,643	106,385,619
50	Silk	54,187,272	43,433,166
56	Wacong felt spl yarn twin cordge. etc.	51,456,311	58,538,498
11	Products of the milling industry	47,867,983	56,607,903
51	Wool fine/coarse animal hair & fabric	40,755,985	33,543,360
57	Carpet other textile floor covering	185,833	2,916,722
Total import (textile and clothing sector)		**29063513549**	**22369977538**

Source: Extract from appendix-I

Among the import values above, the price of **cotton import** is the **highest** in both financial years. Moreover, it is also evident from the table that the **import costs** in **textiles and clothing** sector as shares of total import costs were **two-ninth** and **one-fifth** in **FY 1991-92** and **1990-91** respectively. It might, therefore, be added that approximately **one-fifth of the total import** cost is

attributed to the importation of materials that falls under the commodity groups in **textiles and clothing.**

The **Commidity groups** that secured the first **ten positions** in FY 1991-92 in that import list are: mineral fuel/oil/product mineral wax; Nuclear reactor boiler machine & part; **Cotton;** Electrical machinery equipment parts; animal/vegetable fat/oil, edible fat, wax; m**an-made staple fibres;** Cereals; Salt sulphur earth/stone/cement; Iron and steel and **Man-made filaments.** Import bills of **cotton, man-made staple fiber and man-made filaments** attained **third**, **sixth** and **tenth** positions respectively in the FY 1991-92.

Import figures in US$ for the years from **1980 to 1998** are placed in **Table 3.2** which indicates that total import cost is **gradually increasing** every year and the same has increased more than **three times** since 1980.

Table 3.2: Bangladesh exports and imports

US$ million	1980	1987	1990	1994	1995	1996	1997	1998
Export value	1,174	1953	2731	4293	5490	5907	6,663	7,495
Import value	**2,622.0**	**3033**	**4346**	**4871**	**6652**	**7802**	**7,860**	**8,240**

Source: Jubilee 2000 homepage[60].

[60] http://www.jubilee2000uk.org/profile/bangladesh_table.html downloaded on 2000.12.16. **Jubilee 2000** is an international movement in over 65 countries advocating a debt-free start to the Millennium for a billion people. Jubilee 2000 in the UK is a coalition of over 100 organisations, calling for a one-off

3.3: IMPORT FIGURES, DHAKA CHAMBER OF COMMERCE AND INDUSTRIES (DCCI)[61]

Dhaka Chamber of Commerce and Industries (DCCI) is a private business organization in Bangladesh. The available material from its website shows that in **Fiscal Year 1997 – 98** the amount of exports was US$ 5.0 billion and that Imports was US$ 7.5 billion exhibiting a clear **trade deficit of 1.5 billion**. It also shows figures of imports into Bangladesh from top twenty countries, which is put in **Table 3.4** below. **India** shares border with Bangladesh in the east, west and north, is a **dominant player** in the **import volume** of the country that accounted for 13.78% of total import in 1996-97 followed by Japan, China, Hong Kong, Republic of Korea, USA and others. From the **regional perspective**, Indian exports take up the biggest share among the SAARC [62] countries while Bangladesh emerges as the forerunner in the intra-regional imports. This is perceptible from the following citation[63]:

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cancellation of the unpayable debts of the world's poorest countries by the end of the year 2000, under a fair and transparent process.

[61] http://www.bangla1.com/dcci/bangladesh.html downloaded on October 14, 2000 . Dhaka Chamber of Commerce and Industries (DCCI)

[62] South Asian Association for Regional Cooperation (SAARC), founded in 1985 under the aegis of Government of Bangladesh, comprises of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

[63] **SAPTA to SAFTA: Need for a Moratorium? b**y Zaid Bakht, (available at http://www.dailystarnews.com/199810/19/n8101909.htm#top downloaded on 14 October, 2000). The Daily Star, Feature Page Volume 2 Number 68 October 19,

"India is the dominant player in the **intra-regional trade** flows accounting for 57 per cent of intra-regional export in 1990. On the other hand, Bangladesh dominated the scene with respect to intra-regional imports. Bangladesh accounting for nearly 36 per cent of all intra-regional imports flowed into Bangladesh. Between 1985 and 1996, Bangladesh's import from South Asia increased at a compound rate of 27 per cent annum. For 1990-96, this rate was 30 per cent per annum. Bangladesh's overall import grew at a lower rate during the corresponding periods. As a result, the share of imports from South Asia in Bangladesh's total import raised from 3.5 per cent in 1985 to 17.5 percent in 1996".

Table 3.4: Bangladesh's import from top twenty countries in fiscal year 1996-97 (values are in million US$)

SL No.	Country	1996-97	% of Total Import (1996-97)	1995-96	1994-95
1	India	922.18	13.78	1100.05	688.54
2	Japan	592.00	8.84	273.97	586.89
3	China	575.21	8.59	639.10	420.40
4	Hong-Kong	409.04	6.11	389.69	399.33
5	Korea, Rep	359.79	5.38	365.50	339.83
6	USA	302.21	4.52	277.13	273.96
7	Taiwan	300.22	4.49	216.11	117.57
8	Singapore	296.61	4.43	343.19	275.07
9	Malaysia	196.62	2.94	68.54	41.66
10	U.K	178.96	2.67	139.35	167.08
11	Australia	164.94	2.46	91.58	63.58
12	Germany	164.40	2.46	134.48	229.00
13	France	130.30	1.95	93.54	63.37
14	Indonesia	128.42	1.92	71.72	63.76
15	Netherlands	117.66	1.79	52.85	72.84
16	Russia	90.30	1.35	70.62	114.06
17	Saudi Arabia	89.84	1.34	70.98	95.09
18	U.A.E	78.27	1.17	40.10	50.59

1998. SAPTA stands for South Asian Preferencial Trading Agreeement while SAFTA is the acronym for South Asian Free Trade Agreeement.

19	Thailand	77.47	1.16	61.51	85.86
20	Canada	76.32	1.14	61.08	89.73

Source: Source: Bangladesh Bank (1996-97) and Compiled by: DCCI[64]

As mentioned by DCCI in the list of commodity-wise principal imports, **textile and textile articles** import value stays at the **peak** in FY 1997-98 followed by machinery, minerals, chemicals and others as evident from the **Table 3.5**. Textiles and its articles added up a value of 1732.25 million US$ accounting for 31.90% of the total import in the same year.

Table 3.5: Major Commodity Wise Imports into Bangladesh, (July – May 1997-98)

Commodities	Value in million US$	% of total Import
Textile and Textile Articles	**1732.25**	**31.90**
Machinery & mechanical appliances	642.93	11.90
Mineral products	639.39	11.80
Products of the chemical or allied industries	491.43	9.10
Base metal and articles of base metal	436.53	8.00
Vehicle, air-craft, vessels and associated transport equipment	315.46	5.80
Vegetable products	286.21	5.20
Animal or vegetable fats and oils and their cleavage products	217.75	4.00
Plastics and articles thereof rubber and articles thereof	181.57	3.30
Prepared food stuff and beverage	132.39	2.40

[64] Dhaka Chamber of Commerce and Industries

Pulp wood or of other fibrous cellulose material	125.78	2.30
Others	223.47	4.30
Total	5425.15	100.00

Source: Bangladesh Bank (1996-97) and Compiled by: DCCI

3.4: HIGHLIGHTS OF IMPORT POLICY[65]

Government of Bangladesh announced its Import Policy (1997-2002) on **05 August 1998**, which envisages, inter alia, "simplification of import restriction to provide more facilities to **export-oriented** industries, import of capital machinery and raw material **without L/Cs**, withdrawal of the compulsion of **country of origin certificate** in only for importing raw materials by export-oriented industries that enjoy bonded warehouse facilities". In addition, "expatriate Bangladeshis and foreign investors from their part of equity share would be able to send capital machinery and raw materials".

Government has permitted the import of capital machinery without letter of credit (L.C.) to "export-oriented industries and perishable goods for eventual re-exportation irrespective of value ceiling".

[65] **"Highlights of Export and Import Policy".** Available at http://www.dailystarnews.com/199808/06/n8080605.htm#BODY2 downloaded on 30 September,2000. The Daily Star, business page, volume 1 Number 344 August 06, 1998.

Moreover, **"Taka** has been made **convertible** in the current account" facilitating earnings from the trading account to be readily **convertible into foreign exchange for import of goods** except a few banned items[66]. This liberalization in exchange regime would help reduce barriers to trade as long as under invoicing does not assume an unbridled shape.

One significant step adopted to encourage **backward linkage industry** to the clothing exports in this policy, although petite, is to "allow the exporters of readymade garments to import gray clothes" to use after dyeing and finishing in their export-oriented apparel industries. This could be readily understood from the following statement[67]:

"So long this facility used to be given only to the dyeing, printing and finishing factories. Since **value addition** in the readymade garments sector did not take place up to its potentialities in spite of this facility, the government has **allowed the exporters of readymade garments to import gray clothes".**

While this value addition initiative seems to be beneficial, the matter could bring more satisfaction **if the said gray clothes were produced** in the country through the establishment of backward linkage textile industries.

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[66] **"Export Policy 1997-2002",** available at http://www.epbbd.com/ExportPolicy.html downloaded on October 3, 2000. Export Promotion Bureau (EPB) homepage, Bangladesh

[67] Ibidem

Presently, licensing is not needed for imports. T**ariff structure** has been rationalized with a rate of 40% import duty at the zenith. The **average rate of protection slumped from 100% in 1985 to 22% in 1996**[68] **.**Moreover, quantative restriction has been **trimmed down from 42% in 1985 to only 2% percent of imports in 1996.** All these lead to the fact that Bangladesh's import regime has significantly been liberalized. But the real benefit is yet to be cropped up. The next paragraph focus into this reality.

3.5: IMPORT SCENARIO IN REALITY, THE OTHER SIDE

The trade regime of Bangladesh defends import-substitution inefficient industries, which give birth to expensive but low quality consumer goods[69]. It is, moreover, plagued with "problems in import valuation and customs clearance". Valuation database and methods of the customs department of the country generates disapproval among the clients. While the "voluntary pre-shipment inspection regime" was envisaged to reinforce the revenue base, significant loss

[68] **Overview Of The Trade And Trade Related Policies Of Bangladesh** http://www.bangla1.com/dcci/policy.html downloaded on October 5, 2000. Dhaka Chamber of Commerce & Industries (DCCI), Dhaka, homepage.

[69] **Bangladesh: Trade Policy Reform by Tanweer Akram** http://www.dailystarnews.com/199905/08/n9050809.htm downloaded on 14 October, 2000; **The Daily Star**, Feature page, Volume 2 Number 254 May 08, 1999

of revenue is anticipated as the “importing firm can select the agency that would provide the lowest valuation”. To improve the situation, frequency of inspection should be amplified. Another obstacle to the smooth importation “procedural delays and hassles” of the authority that causes slump, especially in the capital machinery, in the development of infrastructure of the country.

It is true that smuggling is induced by high tariff rates, which essentially renders “the protection through tariff ineffective”. But, as customs duty on imports constitutes an important part of internal resource mobilization, the Government remains silent to lower tariff rates on imported goods. Moreover, “p**rocedural obstacles** of importation” in the Government channel leads to “**large-scale petty smuggling”**. C**attle and foodstuff** are the main smuggling **goods from India**. It has some positive impacts as well because the **hides** of the smuggled cows form the staple raw materials for the export-oriented **leather industry, which** is booming in recent times. The Government of Bangladesh, therefore, legitimates these smuggled cows after retaining some tax from the persons who bring the same.

In addition, quantitative restrictions on import impart an opportunity to "the authorities to arbitrarily allocate **permits to favored interest groups"** which is utterly unfair. Again, some incidents relating to importation of hazardous wastes and **environmentally** harmful goods and substances has already been happened in the country, which, in turn pose serious threat to public health.

3.6: IMPORTS VS. EXPORTS – A NEXUS

As mentioned in chapter two, Bangladesh's import cost is always higher than its exports earnings. In recent years "exports have increased at double-digit rates, and imports have increased in parallel, leaving the trade balance largely unchanged - if not, improved - in dollar terms"[70]. This parallel fashion could, apparently, be attributed to the highly import dependence of garments industries of the country. This garments and knitting sector fetch roughly 75% of the export earnings of Bangladesh. Because of the country's gross deficiency in supplying fabrics and other accessories to feed these export-oriented clothing industries, it has to spend almost 75% of foreign exchange

[70] **"Trade Liberalization in Bangladesh, Who Gained, Who Didn't, and Why" by** Tercan Baysan and Zaidi Sattar, available at The Daily Star website http://www.dailystarnews.com/200003/29/n0032909.htm downloaded on 14 October, 2000. Feature Page Volume 3 Number 209 Wed. March 29, 2000

earned through garments exports for importing fabrics and relayed items. This matter could more easily be understood from the following[71]:

> "It is important to realize that the fast rate of growth of exports (average annual rate being 25 per cent from 1991-92 to 1995-96) has necessitated almost an equally fast rate (23.6 per cent in the same period) of **growth of imports, which are almost mandatory"**.

'Mandatory' in the sense that the country has no backward linkage textile industries for the garments industries.

3.7: CONCLUDING REMARKS

Import bills of the country could significantly be **trimmed down** through developing **backward linkage** industries specially in the textiles and clothing sector as evident from the paragraph 3.2 above that around **20%** of the import value constitutes **imports of textile and textile machinery**. The same has been alluded to by an eminent columnist of the country[72] as below:

> There seems to be considerable room for **cutting imports by** promoting domestic production of some items like edible oil, yarn, fabric, cattle and milk etc. Some of these are matters of **developing backward-linkage** industries like integrated textile mills for yarn

[71] **Sources of Export Growth in Bangladesh, The Daily Star,** Editorial Page, volume 1 Number 54 october 05, 1997 . Available at : http://www.dailystarnews.com/199710/05/n7100502.htm#BODY4 available

[72] **"The New Export-Import Policy", b**y Kabir U Ahmad. Available at http://www.dailystarnews.com/199808/23/n8082302.htm#BODY4 downloaded on 30 September,2000. The Daily Star(a popular national daily newspaper of Bangladesh), Editorial Page,Volume 2, Number 11 August 23, 1998.

> and fabric by importing raw cotton and producing yarn or finished fabric……..Such measures will create employment as well as save precious foreign exchanges.

The government of Bangladesh should, therefore, embark on the establishment of backward linkage industries in textiles and clothing sectors. Now, with this three introductory chapters (1,2,3), we can turn into the substantive part of the thesis. As I have mentioned earlier that **textiles and clothing export constitutes around 75 percent of the total export earnings** of Bangladesh, discussions in the subsequent chapters would hover around the textiles and clothing sector of the country. **Chapter Four** is, therefore, aimed at the **production of fibers**, the first raw material of the supply chain in textile and clothing area.

SUMMARY OF CHAPTER THREE

This chapter presents a brief impression about the import situation of Bangladesh focusing predominantly on the items of import belonging to textiles and clothing. The **import costs** in **textiles and clothing** sector as shares of total import costs were **two-ninth** and **one-fifth** in FY **1991-92** and **1990-91** respectively[73]. In **Fiscal Year 1997 – 98** the amount of exports was US$ 5.0 billion and that Imports was US$ 7.5 billion exhibiting a clear **trade deficit of 1.5 billion**. **India** is a **dominant player** in the **import list** of the country that accounted for **13.78%** of total import in **1996-97** followed by Japan, China, Hong Kong, Republic of Korea, USA and others.

[73] calculated from **appendix-I**

Taka has been made **convertible into foreign exchange for import of goods. T**he government has **allowed the exporters of readymade garments to import gray clothes.** Presently, licensing is not needed for imports. **Tariff structure** has been rationalized with a rate of 40% import duty at the zenith. The **average rate of protection slumped from 100% in 1985 to 22% in 1996**[74]**.**Moreover, quantitative restriction has been **trimmed down from 42% in 1985 to only 2% percent of imports in 1996.**

Trade regime of Bangladesh **defends import-substitution inefficient** industries, which give birth to expensive but low quality consumer goods. Moreover, it is plagued with problems in import valuation and customs clearance, for instance, "voluntary pre-shipment inspection regime", smuggling induced by high tariff rates that give rise to "the protection through tariff ineffective".

Garments industries of the country are **highly import dependent**. The average annual rate of growth in this sub-sector was 25 per cent from 1991-92 to 1995-96 that

[74] **Overview Of The Trade And Trade Related Policies Of Bangladesh** http://www.bangla1.com/dcci/policy.html downloaded on October 5, 2000. Dhaka Chamber of Commerce & Industries (DCCI) homepage.

necessitated almost an equally fast rate (23.6 per cent in the same period) of **growth of imports, which are almost mandatory** in fabrics. ‘Mandatory’ in the sense that the country has no **backward linkage** textile industries for the garments industries. There remains considerable room for **cutting imports by** promoting domestic production.

CHAPTER FOUR

NATURAL AND MAN-MADE FIBERS: WORLD PRODUCTION & BANGLADESH POSITION

4.1 FOREWORD

In the domain of textile and clothing, various types of fibers are used. Theses are principally of two categories: **natural fibers** and **man-made fibers**. Natural fibers mainly constitute **cotton** and **wool**. Others might be alluded to as jute fibers, hairs etc. On the other hand, Man-made fibers encompass chiefly **cellulosic fiber** and **synthetic fiber**. Cellulose fibers (e.g. rayon) are products of naturally

occurring cellulose (usually cotton and wood) whereas synthetic fibers (e.g. polyester, nylon) are petrochemical derivates. Again, man-made fibers involve capital intensive technology for which Bangladesh, at present, is not in an appropriate position as its comparative advantage, so far, is headed for labor-intensive products, obvious reason being the abundant cheap labor available in the country. The production of natural fiber, mainly **cotton**, would be, therefore, be the focus of this chapter.

4.2: LEADING COTTON PRODUCING COUNTRIES OF THE CONTEMPORARY WORLD

A report[75] of the Economic and Social Department (ES) of the Food and Agricultural Organization (FAO) of the United Nations for the year 1996/97, names of the top six cotton producing countries as **China, the United States, India, Pakistan and Uzbekistan and Turkey.** 76 percent[76] cotton of the world total was harvested by these countries in 1996/97.

[75] **"The cotton industry in Turkey", Sebahattin Gazanfer**, Secretary General, Aegean Exporters' Unions General Secretariat http://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESC/ESCR/Cotton/China-e/cap52TUR.htm downloaded on 10 December, 2000

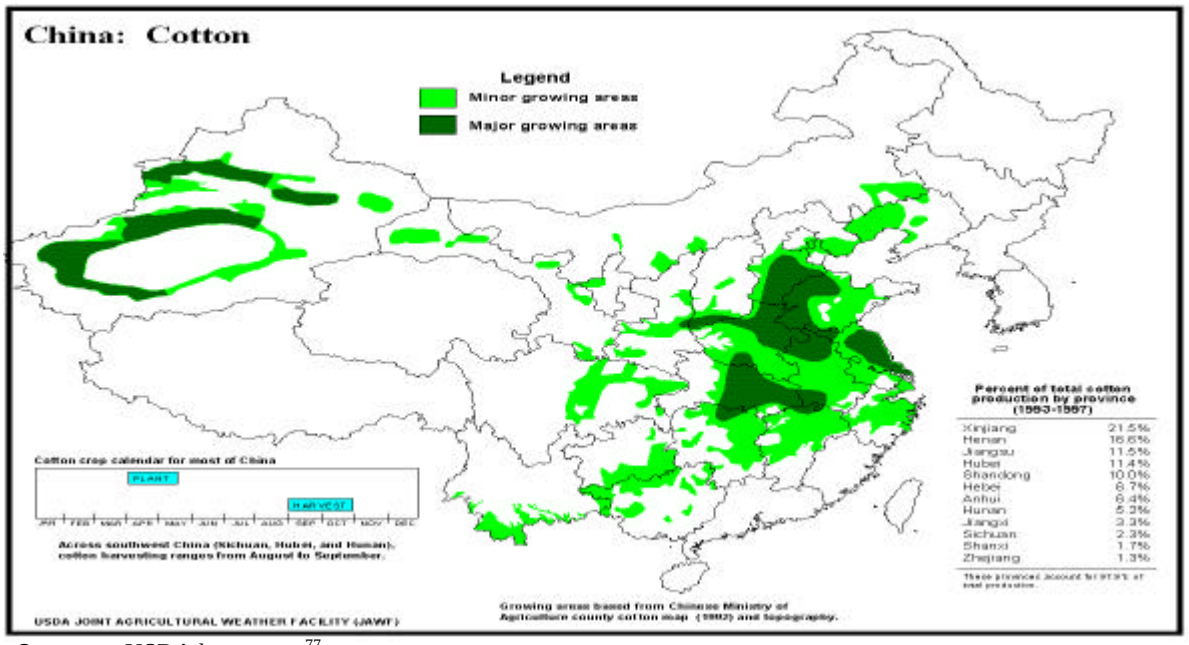
[76] Ibidem

Apart from these countries' production, cotton is also produced in significant quantity by some other countries, for example, Argentina, Brazil, Egypt, Australia, Thailand, Greece, Iran, Mali, Mexico, Spain, Syria, Zimbabwe and so on. Worldwide figures by country could be conceived of from the table placed in Appendix-II.

4.2.1: Cotton Production in China

As shown in the map of USDA Joint Agricultural Weather Facility **(figure 4.1)**, western and mid-eastern parts of the country comprise the major cotton growing areas of China that cover provinces such as Xinjiang, Henan, Jiangsu, Hubei, Anthui, Jiangxi, Sichuan, Zhejiang etc.

Figure 4.1: Cotton Production of China on the map



Source: USDA homepage[77]

The contribution of each province to the total cotton production of China on five years average (1993-97) is shown on the map in which Xinjiang province turns up at the apex. Table 4.1 illustrates that both total cotton production and cultivating area of China stepped up during the period from 1980 to 1995 after which it slumped down to some extent while the yield (tons /hectares) exhibits a uninterrupted escalating fashion. High yield may reduce farming area with attending production declined.

Table 4.1: Historical Cotton Production Statistics of China

[77] **The United States Department of Agriculture** homepage http://www.usda.gov/agency/oce/waob/jawf/profiles/html/arg/argcot.html downloaded on October15, 2000.

Year	Area ('000 Hectares)	Yield (Metric Tons/Hectares)	Production ('000 Metric Tons)
1980	4,920	0.55	2,700
1985	5,140	0.81	4,137
1990	5,588	0.81	4,507
1995	5,422	0.88	4,768
1996	4,722	0.89	4,202
1997	4,500	1.02	4,594

Source: Joint Agricultural Weather Facility (**USDA/NOAA**) (**explain**) website.
Note: USDA historical production estimates subject to revision. In the above table, 1997 corresponds to the crop that was harvested from Aug-Oct 1997.

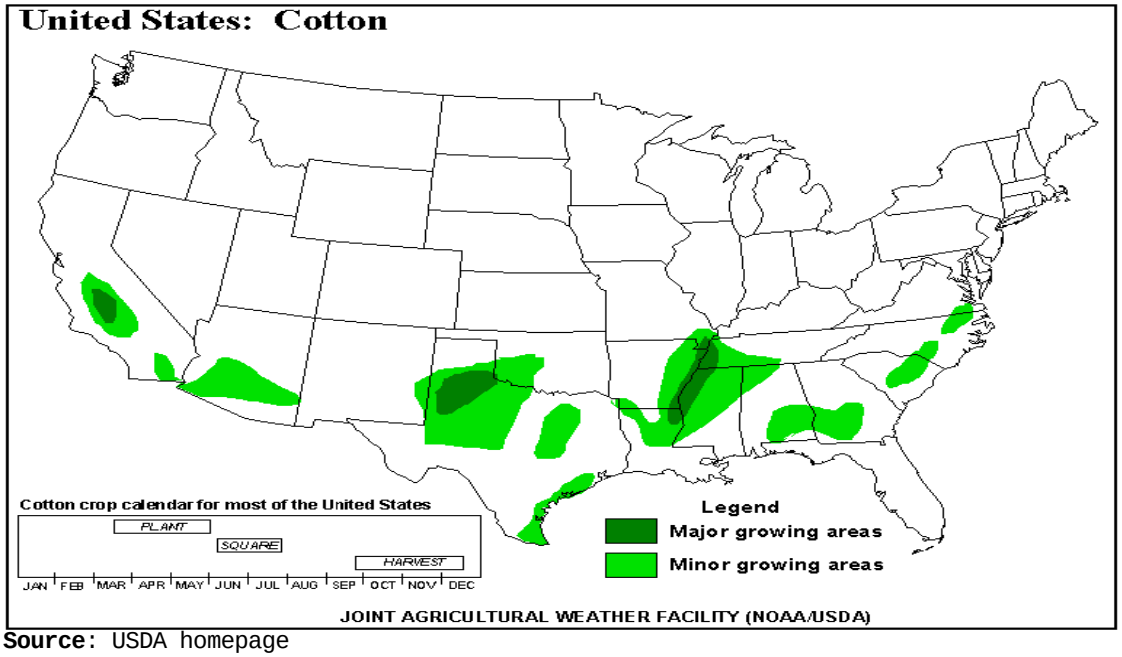
Chinese raw cotton production, even earlier, during the period 1975-79 was 14.8 per cent of world total by volume and the same was 5.2 per cent for raw wool[78]. This obviously demonstrates China's continued dominant position in world fiber production from a past far-off. As mentioned earlier, in the year 1996-97, China topped the list as cotton lint producing country[79]. On a **recent statistics** of the United States Department of Agriculture (USDA) regarding Cotton Production, Supply and Distribution by Country (see Appendix II), it is shown that China's ending stock up to December 2000 (MY 2000/2001) was 2,276,000 MT being **again the highest** all over the world.

[78] Kym Anderson (1992), table 3.1, p.31
[79] Sebahattin Gazanfer, Op. Cit, (http://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESC/ESCR/Cotton/China-e/cap52TUR.htm downloaded on 10 December, 2000)

4.2.2: Cotton Production in the United States

From figure 4.2, it appears that southern part of the country is the area for cotton cultivation in the United States.

Figure 4.2: Cotton Production of the United States on the map



Source: USDA homepage

This area comes up as a historical location of cotton production of the country, which, in turn, is corroborated by the literature in Hammond (1897) as[80]:

> "Of the original thirteen states of the American Union, the only two which have become great cotton producing regions are South Carolina and Georgia."

[80] **The Cotton Industry: An Essay in the American Economic History**, by M. B. Hammond, Ph. D., Macmillan Company, New York, 1897p.11

As of December 2000 (MY 2000/2001), an estimate of USDA shows that country's total production of cotton is 3,778,000 metric tons (see appendix-II), being the **second highest** of the world. In addition, as revealed by the time series data in Table 4.2, US cotton has augmented its production in the late 1990s although a decline is noticed in 1998/99. Again, country's import figures are very less as compared to those of exports. **Bangladesh** imports cotton from the United States every year.

Table 4.2: United States Cotton Production, Yield, Supply And Utilization

(In Thousand 480-Lb. Bales, MY 1966/67-2000/01)

Marketing Year	1,000 Hectares	Yield Kg/Ha	Beginning Stocks	Production	Imports	Total Supply	Consumption	Loss	Exports	Ending Stocks
1966/67	3,866	538	17,028	9,555	105	26,688	9,574	(62)	4,832	12,344
1970/71	4,514	492	5,843	10,192	37	16,072	8,204	(232)	3,897	4,203
1975/76	3,560	508	5,708	8,302	92	14,102	7,250	(140)	3,311	3,681
1980/81	5,348	453	3,000	11,122	28	14,150	5,891	(335)	5,926	2,668
1985/86	4,140	706	4,102	13,432	33	17,567	6,413	(154)	1,960	9,348
1990/91	4,748	711	3,000	15,505	4	18,509	8,657	(285)	7,793	2,344
1995/96	6,478	602	2,650	17,900	408	20,958	10,647	27	7,675	2,609
1996/97	5,216	791	2,609	18,942	403	21,954	11,126	(8)	6,865	3,971
1997/98	5,425	754	3,971	18,793	13	22,777	11,349	41	7,500	3,887
1998/99	4,324	701	3,887	13,918	443	18,248	10,401	(436)	4,344	3,939
1999/2000[1]	5,433	680	3,939	16,968	97	21,004	10,240	92	6,750	3,922
2000/01[2]	5,463	693	3,922	17,399	75	21,396	9,900	(4)	7,600	3,900

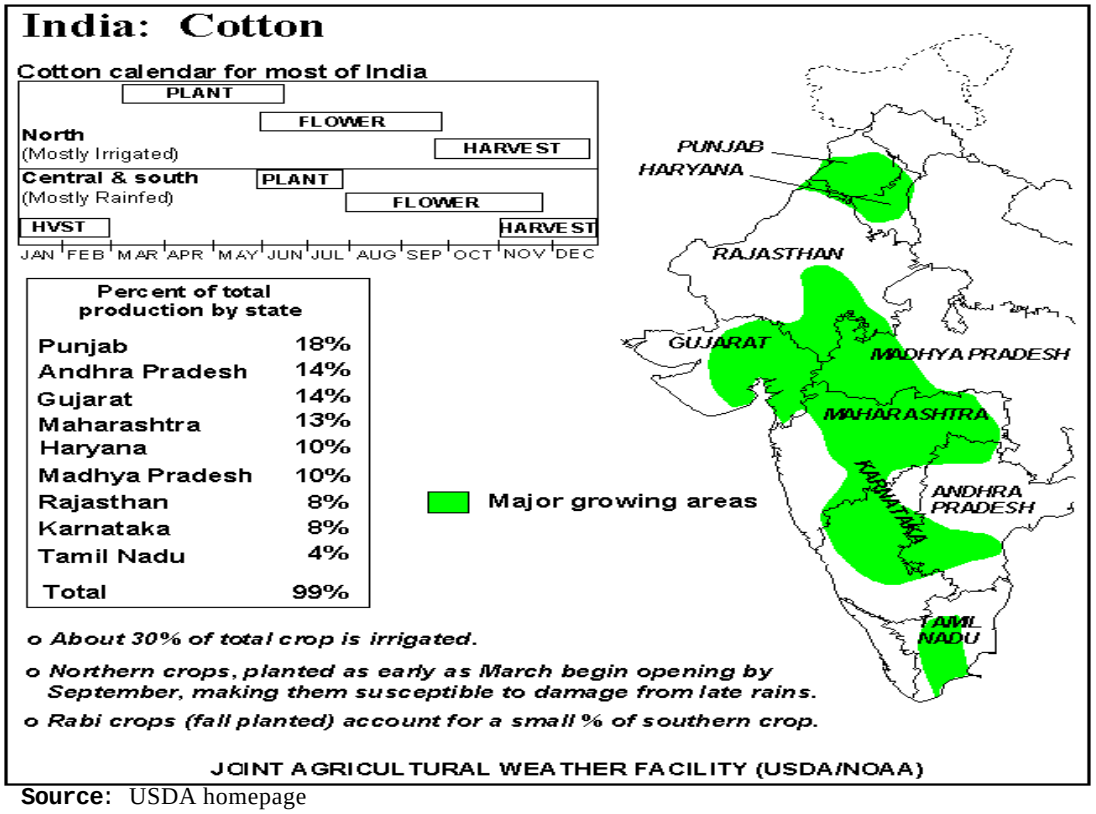
Source: USDA, Foreign Agricultural Service homepage, as of December 2000, Table 11

Note: [1] Estimate, [2] Forecast

4.2.3: Cotton Production in India

In India, cotton grows in **monsoon season** (khaki crop). As shown in figure 4.3, northern states of **Punjab, Haryana and Rajasthan** grows medium **and short** staple;

Figure 4.3: Cotton Production of India on the map



Source: USDA homepage

the central states of **Gujarat, Maharashtra and Madhya Pradesh** grow mostly **medium and some long staple** cotton and Southern states of **Andhra Pradesh, Karnataka and Tamil Nadu** grow the bulk of the country's **long staple** and

extra long staple (ELS) cotton[81] . These productions has raised the status of India as third highest, as mentioned earlier, cotton producing country over the globe. Although the government of India provides annually a **"minimum support prices (MSP) for cotton",** its cotton-growing sector is beset with some problems as well that has reflected in the following citation[82]:

> "Due to the **lack of widespread irrigation**, limited supplies of **quality seeds**, and **poor management** practices relating to **pest control**, cotton yields in India are quite low relative to other countries. The all India average **yield** in 1996/97 is estimated at 308 kg/ha, up 1.3 percent from 1995, and the highest since 1992".

Now, if we look at the Table 4.3 it is apparent that cotton producing land of India is almost stagnant while the yield and total production figures show escalating trend although drop in 1997.

Table 4.3: Historical Cotton Production Statistics of India

Year	Area ('000 Hectares)	Yield (Metric Tons/Hectares)	Production ('000 Metric Tons)
1988	7,343	0.24	1,788
1990	7,440	0.27	1,989
1995	9,063	0.32	2,882
1996	9,122	0.33	3,030
1997	8,850	0.30	2,669

Source: United States Department of Agriculture (USDA) website
Note: 1997 corresponds to the crop that was harvested Feb-Jul 1998.

[81] http://www.fas.usda.gov:80/PECAD/remote/aus_sas/crop_information/Crop_descriptions/in_crops.htm#in_northern_cotton downloaded on December 18, 2000
USDA/ FAS website

[82] Ibidem

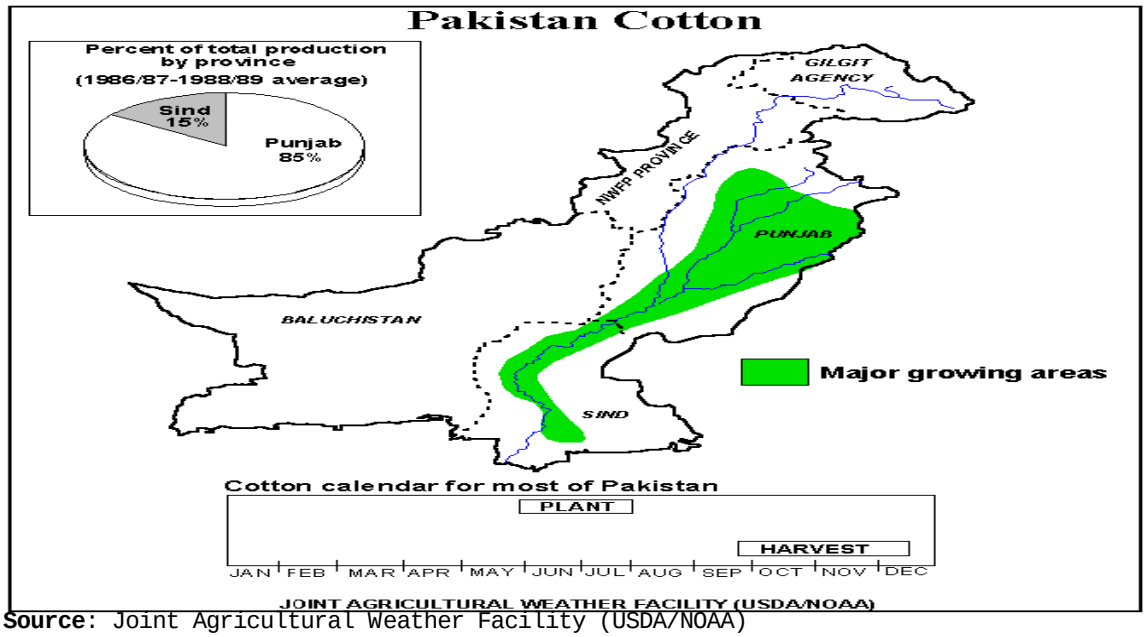
Bangladesh is one of the destinations of Indian raw cotton, principally because India faces quota in EU market, thus having the surplus cotton for its exports.

As of December 2000 (MY 2000/2001), an estimate of USDA shows that India's total production of cotton is 2,591,000 metric tons (see appendix-II), being the **Third highest** of the world.

4.2.4: Cotton Production of Pakistan

Two provinces, Punjab and Sindh, in Pakistan produce cotton as exhibited in figure 4.4. The figures of average over the years 1986/87-1988/89 appear as 85% for Punjab and only 15 % for Sindh. As of December 2000 (MY 2000/2001), an estimate of USDA shows that country's total production of cotton is 1,807,000 metric tons (see appendix-II), being the **fourth highest** of the world.

Figure 4.4: Cotton Production of Pakistan on the map



Source: Joint Agricultural Weather Facility (USDA/NOAA)

Pakistan Produces high quality of cotton on the plea of which then East Pakistan (before 1971), now Bangladesh, cotton sector and related industries was not considered to flourish by the rulers of the West, thus being a historical reason for lagging cotton textile sector of Bangladesh. The time series data for Pakistan in Table 4.4 demonstrates that country's total production in the late 1990s remains almost same even though the growing area increased.

Table 4.4: Historical Cotton Production Statistics of Pakistan

Year	Area ('000 Hectares)	Yield (Metric Tons/Hectares)	Production ('000 Metric Tons)
1988	2,508	0.57	1,426
1990	2,662	0.62	1,638
1995	3,048	0.59	1,785
1996	3,148	0.51	1,594
1997	2,959	0.51	1,524

Source: US Department of Agriculture website

4.2.5 : Cotton Production of Uzbekistan and former Soviet Union

Cotton is the **major crop** in Uzbekistan. In the year 1996, it accounted for 40 percent of the value of all exports[83]. As of December 2000 (MY 2000/2001), an estimate of USDA shows that Uzbekistan's total production of cotton is 936,000 metric tons (see appendix-II), being the **fifth highest** of the world. In recent times, Government of Uzbekistan has taken up a **diversified program to reform** cotton production and export sector but the **state control persists** which could be grasped from the following statement[84]:

> "Despite the announced program of reform, the state continues to play a major role in the production and marketing of cotton. The **state owns most of the land** and all of the cotton is produced on **state farms**. The state determines cotton area, sets production targets and prices, supplies all inputs, and purchases the bulk of the crop".

Moreover, cotton production sector of Uzbekistan also faces some **difficulties** as[85]:

> "Infrastructure and input **problems** persist, including outdated and inefficient irrigation systems, poor weed and insect control, inadequate machinery, poor crop rotation practices, and, perhaps most important, the continued widespread use of low-quality seeds".

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[83] **Cotton: World Markets and Trade, *August 1997,* uzbekistan** http://www.fas.usda.gov/cotton/circular/1997/97-08/cover/uzbekistan.ht downloaded on 24 January, 2001

[84] Ibidem

[85] 2000/01 World Cotton Production Down From 1999/2000 Level http://www.fas.usda.gov/wap/circular/2000/00-05/wap2.htm downloaded on 14 October, 2000. US Department of Agriculture, Foreign Agricultural Service Home page

The government of Uzbekistan is addressing these problems gradually. Again, if we look at the data in Table 4.5 for the NIS states (often called CIS[86] states as well after the liquidation of former USSR) in which Uzbekistan is included, it surfaces that production of cotton as a whole for the CIS states in late 1990s has dropped to almost half of the same in 1991/92. This may have an implication to the collapse of Soviet Union in 1990. External imports are traditionally low that maintained over the decade while exports figures are high every time.

Table 4.5: New Independent States (NIS) Supply and Demand (Marketing Years 1991/92 - 2000/01)
(1,000 **480 Lb. Bales**)

MY	Beginning Stocks	**Production**	Imports Internal[1]	Imports External[2]	Exports Internal[1]	Exports External[2]	Consumption	Ending Stocks
1991/92	3,414	11,065	5,450	50	5,450	3,300	7,600	3,629
1995/96	2,122	8,260	1,820	45	1,820	5,048	2,910	2,469
1996/97	2,469	6,588	1,550	45	1,550	4,755	2,573	1,774
1997/98	1,774	7,108	1,700	80	1,700	4,345	2,750	1,867
1998/99	1,867	6,600	1,375	30	1,375	4,237	2,480	1,780
1999/2000/3	1,780	**7,305**	2,125	30	2,125	3,815	3,255	2,045
2000/01 /4	2,045	6,380	2,175	30	2,175	3,205	3,430	1,820

Source: USDA, Foreign Agricultural Service, as of December 2000
Notes: 1/ Reflects only trade among the 12 countries of the former Soviet Union and three Baltic States, 2/ Reflects NIS trade with external trading partners, 3/ Estimate, 4/ Projection. Adding internal and external trade will provide a total trade figure. Ending stocks may include any loss that has occurred. **The NIS includes: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.**

4.2.6: Cotton Production of Turkey

Aegean, Cukurova, and southeastern Anatolia are three main regions in Turkey of which **Aegean** is the **largest** growing

[86] Commonwealth of Independent States

area producing an average of 1.4 million bales **best quality longer staple** cotton annually. This cotton preferred by the **local textile** industry for its **length**. In contrast, **southeastern Anatolia** cotton production is being opened out significantly through **Southeastern Anatolian Project** that "consists of a series of dams, power stations, tunnels, and canals designed to generate electricity and irrigate the plains surrounding the Tigris and Euphrates rivers"[87].

In Turkey, roughly speaking, 500 ginning firms **exists which are privately owned** "with owners generally purchasing seed cotton from growers, unlike the United States where the grower maintains **ownership** throughout the ginning process". **Ginning operations,** therefore, play a vital role in domestic marketing channels.

Turkish Government **supports cotton prices** every year prior to harvest at a level below international, although domestic supply and demand regulates market prices. A **dilemma in setting prices** has to be encountered by the government. Price should be "sufficiently high to encourage

[87]http://www.fas.usda.gov/WAP/circular/1997/97-09/cover/turkeycott.htm down loaded on 14 October, 2000. US department of Agriculture,Foreign Agricultural Service homepage.

production but not excessively high so that the **cost of raw materials puts the Turkish textile industry at a competitive disadvantage** to textile industries of other nations”[88] . Clearly, a **supply chain** exists here, cotton being the first item of such chain.

Turkey is a dominant force in the global cotton industry and cotton plays a crucial role in its domestic economy. As mentioned earlier, Turkey ranked “**sixth in cotton lint production**, after **China, the United States, India, Pakistan and Uzbekistan.** These 6 countries together accounted for 76 percent of world production in **1996/97”.**

As of December 2000 (MY 2000/2001), an estimate of USDA shows that Turkey’s total production of cotton is 806,000 metric tons (see appendix-II), being the **sixth highest** in the world.

Turkey’s textile industry is **expanding very fast** for which it has to import cotton even after a bulge in domestic production[89]:

> “Until the mid-eighties, demand by the textile industry was totally met by domestic production. However, since 1985-86, the strong **rise in textile output** combined with the **liberalization of cotton imports** has triggered an increase in imports. Although domestic production

[88] Ibidem
[89] Sebahattin Gazanfer, Op. Cit.

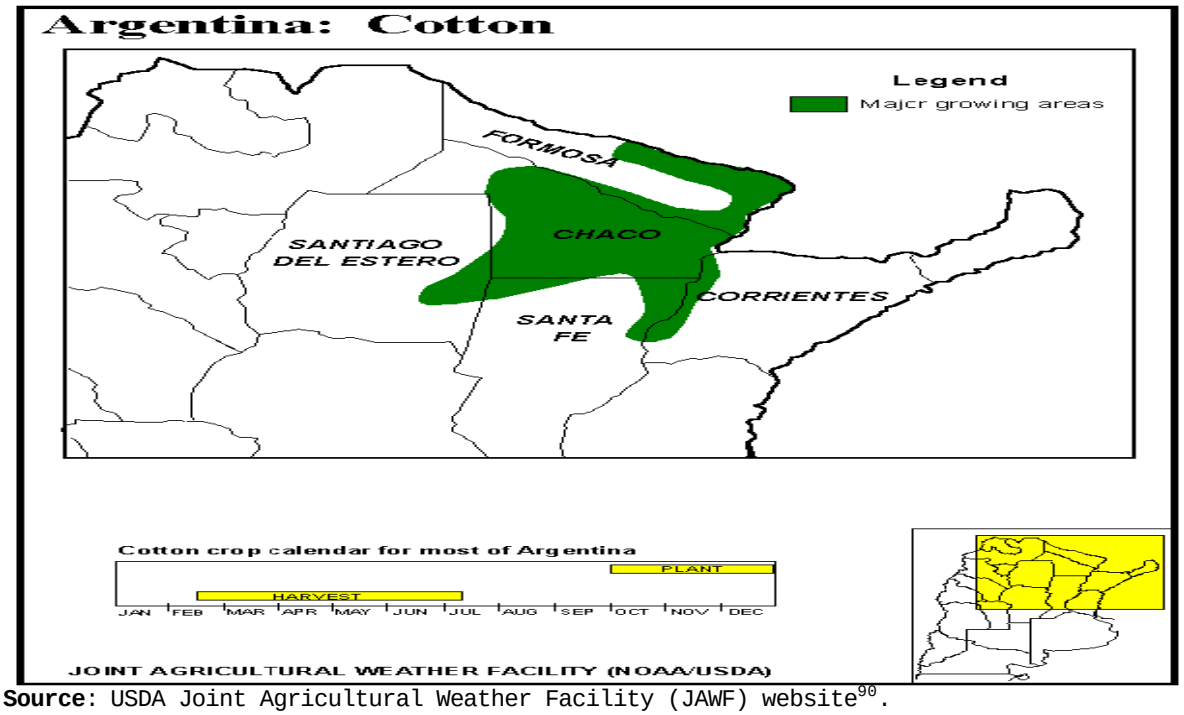
of cotton has grown significantly, it has not been able to keep pace with the surge in demand generated by the **expanding textile exports**. As a result, the share of **imported cotton in mill use has increased since 1987 to around 36 percent by 1997".**

In spite of rising domestic demand for cotton by local industry, government's endeavor favoring domestic production as well as availability of vast potential growing land, "cotton production in Turkey is presently facing a number of **constraints".** These are **growing shortage of farm labor** leading to increasingly **high costs for harvesting**, **high cost of capital** for growing cotton compared to other crops as well as for machine harvesting**, high inflation rate and** the **tendency for textile firms to blend synthetic fibers with cotton** in order to reduce their costs.

4.3: OTHER SIGNIFICANT COTTON PRODUCING COUNTRIES

Argentina produces a significant amount of cotton. As of December 2000 (MY 2000/2001), an estimate of USDA shows that Argentina's total production is 201,000 metric tons (appendix-II). Principal growing areas are Chaco, Formosa, Santa Fe and SantiagoDel Estero as evident from figure 4.5.

Figure 4.5: Cotton Production of Argentina on the map



Source: USDA Joint Agricultural Weather Facility (JAWF) website[90].

Time series data of Argentina's cotton production in Table 4.6 reveals that both growing area and total production in the country are increasing albeit a decline in the yield in late 1990s.

Table 4.6: Time series data on cotton production in Argentina

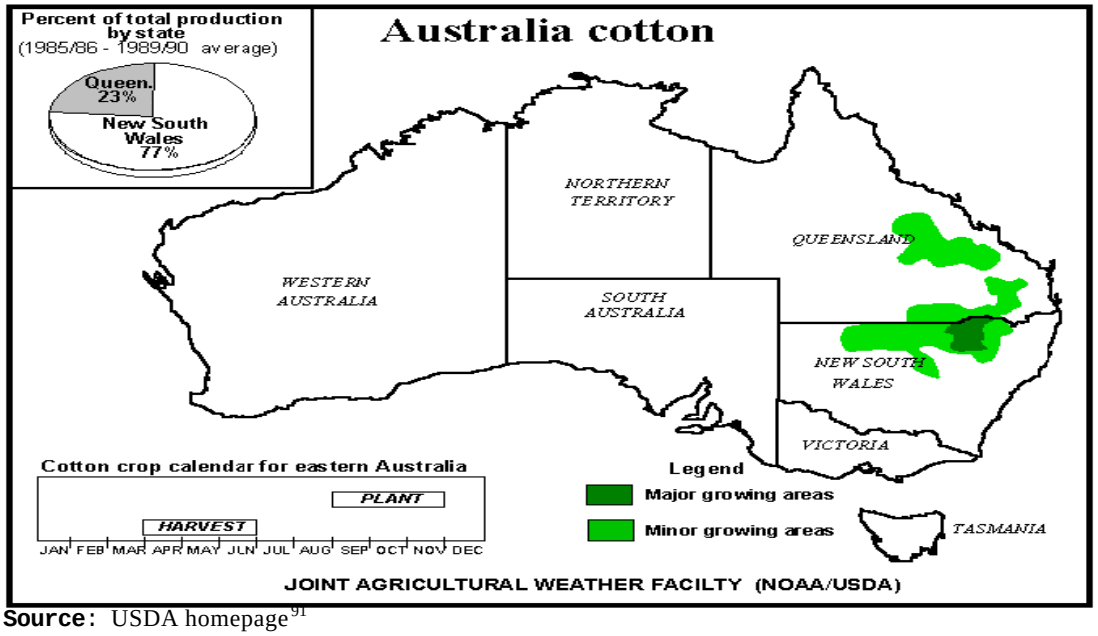
Year	Area ('000 Hectares)	Yield (Metric Tons/Hectares)	Production ('000 Metric Tons)
1980	300	0.28	85
1985	320	0.37	119
1990	630	0.47	295
1995	960	0.44	420
1996	880	0.37	325
1997	850	0.36	306

[90]http://www.usda.gov/agency/oce/waob/jawf/profiles/html/arg/argcot.html downloaded on October15, 2000.

Source: United States Department of Agriculture (USDA) website
Note: 1997 corresponds to the crop that was harvested Feb-Jul 1998.

Queensland and New South Wales are the cotton producing states in **Australia**. As shown in figure 4.6, Queensland and New South Wales accounts for 23% and 77% respectively on average over the period 1985/86-1989/90. Again, as of December 2000 (MY 2000/2001), an estimate of USDA shows that Australia's total production is 718,000 metric tons (appendix-II).

Figure 4.6: Cotton Production of Australia on the map



Source: USDA homepage[91]

[91] http://www.usda.gov/agency/oce/waob/jawf/profiles/html/aus/auscot.html downloaded on 15 October, 2000

Time series data on Australian cotton production shows that growing area, yield and total production are being augmented over the years.

Table 4.7: Time series data on cotton production in Australia

Year	Area ('000 hectares)	Yield (metric tons/hectares)	Production ('000 metric tons)
1988	194	1.38	267
1990	279	1.55	433
1995	301	1.42	429
1996	396	1.53	608
1997	438	1.52	667

Source: US Department of Agriculture website[92].

Appendix-II , as mentioned earlier, demonstrates that countries like Brazil, Thailand, Greece, Iran, Mali, Mexico, Spain, Syria, Zimbabwe, Egypt retain noteworthy position in the world share of cotton production. As of December 2000 (MY 2000/2001), these estimates stands for Brazil, Egypt, Iran, Greece, Mali, Mexico, Spain, Syria, Zimbabwe as 806,000 MT; 185,000 MT; 142,000 MT; 414,000 MT; 109,000MT, 78,000MT; 98,000 MT; 370,000; 147,000 MT respectively.

4.4 : SYNTHETIC FIBER PRODUCTION OVER THE WORLD---

[92] http://www.usda.gov/agency/oce/waob/jawf/profiles/html/aus/auscot.html Downloaded on 15 October, 2000

A GLIMPSE

In Europe, chemists embarked on employing their intelligence and knowledge of textiles to the development of new fibers in around 1900. They made fibers out of natural materials such as cotton linters and wood, which were called **cellulosic. Rayon** was the first such manufactured fiber [93] . "In the 1930s, chemical companies hired scientists to develop wholly synthetic fibers from coal, tar, and water using chemical processes" [94] . In 1938, **Du Pont**, an America's leading chemical firms, became successful first to commercially produce a synthetic fiber called Nylon[95] . It was adjusted "through a series of minor innovations involving fabric, yarn, and machinery" in the 1950s. Since then, a dozen of different synthetic fibers have been developed.

Remarkable advances in synthetic fiber technology had started off "with the large scale production of rayon in

[93] "**Nylon: Miracle or Marketing**?" Wilmington, DE.,1998. The Lemelson Center for the Study of Invention and Innovation, National Museum of American History, Smithsonian Institution. http://www.si.edu/lemelson/centerpieces/whole_cloth/u7sf/u7materials/sfTessay.html downloaded on 15 October, 2000)

[94] '**Physical and Chemical Properties of Fibers: Unmercerized versus Mercerized Cotton Thread**" The Lemelson Center for the Study of Invention and Innovation, National Museum of American History, Smithsonian Institution. (http://www.si.edu/lemelson/centerpieces/whole_cloth/u7sf/u7materials/sfPac5.html downloaded on 15 October,2000).

[95] Wilmington, Op. Cit.

the beginning of this century”. In the 1960s and early 1970s, **developed country textile industry revived with new vigor due to this technological development**[96] . Table 4.8 shows the growth of world man-made fiber production.

From the Table, it is obvious that in the 1950s and 1960s cellulosic fibers comprised mainly the man-made fiber, proportion of synthetic fibers production was little although increasing. This trend reversed since 1970 as synthetic fiber’s exploitation grew at a faster rate than the other.

Table 4.8: World Fiber production, 1900-1980

(millions of metric tons)

	Man-made Fibers[97]	
	cellulosic	synthetic
1900	--	--
1950	1,608	69
1960	2,656	702
1970	3,579	4,818
1973	3,856	7,444
1980	3,554	10,673

Source: Blokker (1989) p.10 Table: 1.3, which has been reproduced from GATT, Textiles and clothing in the world economy, Geneva 1984, p.29

In today’s world many countries produces man-made fibers, chiefly synthetic fibers, specially the developed countries whose comparative advantage has shifted from labor-

[96] **International Regulation of World Trade in Textiles**, Neils Blokker Published by Martinus Nijhoff Publishers,1989

[97] Cellulosic fiber (e.g. rayon) are products of naturally occurring cellulose (usually cotton and wood). Synthetic fibers (e.g. polyester, nylon) are petrochemical derivates.

intensive to capital-intensive technology such the United States, Japan, European countries, Hong Kong, Taiwan, South Korea, Turkey, China, Thailand and so on. In particular, Turkey, as an instance, has attained amazing progress in **Synthetic fibers abreast the natural one**, which could be grasped from the following[98]:

> "The **man-made fibers industry** started in Turkey with the production of regenerated cellulose in 1938. Polyamide was first produced in Turkey in 1964, polyester in 1968, acrylic in 1974 and polypropylene in 1975. Turkey now has the **ninth largest synthetics capacity in the world**. Most of the raw materials for synthetic fibers and yarns are procured locally, but the main raw material for acrylic fibers is imported. The total value of man-made fibers, yarns and fabrics exported was 1 billion dollars in 1998".

Again, East Asian countries such as Japan, South Korea, Hong Kong, Taiwan have made remarkable progress in this regard. China and Thailand are also expanding their synthetic fiber production bases despite at a slower pace than their successful neighbors.

[98] Turkish textile industry
http://www.anil.com.tr/eng/turkis.htm downloaded on 13 October, 2000

Table 4.9 shows fiber composition[99] of three East Asian countries vis-à-vis the world production in which it is clear that in early 1980s South Korea and Taiwan employed synthetic fibers 70% and 78 % respectively in their total consumption while China was then at the initial stage.

Table 4.9: Fiber Composition of Textile Production in East Asia, 1959 to 1983 (per cent)

	Synthetic	Cotton	Wool	Other Natural	Total
World					
1959-61	22	68	10	0	100
1969-71	38	55	7	0	100
1981-83	51	45	4	0	100
Japan					
1959-61	19	58	14	9	100
1969-71	41	37	13	9	100
1981-83	54	35	9	2	100
South Korea					
1959-61	2	92	5	1	100
1969-71	42	54	3	1	100
1981-83	70	26	4	0	100
Taiwan					
1959-61	6	90	3	1	100
1969-71	27	70	1	0	100
1981-83	78	21	1	0	100
China					
1970	7	89	2	2	100
1980	9	85	2	4	100
1983	14	80	3	3	100

Source: Hamilton (1990), Table 6-5, p-151

[99] **In: China and the Multi-fiber Arrangement by Kym Anderson. In:** The Uruguay Round, Textile Trade and the Developing Countries. Eliminating the Multi-Fiber Arrangement in the 1990s Carl B. Hamilton, Editor. A World Bank Publication, 1990

In Thailand, domestic production of synthetic fiber has also been more than doubled since 1990, which increased from around 274,000 tones in 1990 to 561,000 tones by 1996[100].

4.5: BANGLADESH POSITION

Bangladesh is not in a position to move towards synthetic fiber production as it involves capital intensive-technology, which is not harmonious with its comparative advantage of labor-intensive production. Moreover, Bangladesh's share in world total cotton production is insignificant. In a sense, it is just budding. As of December 2000 (MY 2000/2001), an estimate of USDA shows that Bangladesh's total production is 14,000 metric tons (appendix-II). Under the tutelage of Ministry of Agriculture, Bangladesh Cotton Development Board (BCDB) undertakes cotton promotion activities but its achieve-ment is not satisfactory. While country needs desperately to strengthen fiber bank to meet the growing demand of textile sector, its natural cotton production is in a

[100] **"The Impact of Liberalisation: Communicating with APEC Communities Textiles Industry in Thailand",** 1998 Australian APEC Study Centre, Monash University (http://www.arts.monash.edu.au/ausapec/cacthai.htm Downloaded on 2001-01-05)

squatting position. Currently, BCDB is striving for higher production of cotton with a production target of 1,03,620 bales in four cultivating zones in southwestern part of the country. An impression of the present-day situation of the country's cotton production could be obtained through a news item appeared in a popular national daily as placed below[101]:

> "Bangladesh Cotton Development Board (BCDB) has taken up an intensive program for cultivating cotton seeds in **four cotton cultivation zones of Jessore, Jhenidah, Kushtia and Chua-danga during the current season**. According to the official sources of BCDB, about **44 thousand hectares of land** have been earmarked in the above-mentioned zones for the cultivation of cotton seeds. Of the total land, 11 thousand hectares of land will be brought under cotton seeds cultivation program in each of the zone. The **production target** of seeds cotton in four zones has been fixed at **about one lakh three thousand six hundred twenty bales**.……The target of cotton seeds in this (Jessore) zone has been fixed about 25 thousand 9 hundred 60 bales. …. It is expected that about 25 thousand 9 hundred 60 bales of cotton seeds will be produced in this(Zhenaidah) zone. In Kushtia zone, …… production target in this area is fixed at 25 thousand hundred 50 bales. **Cotton seeds cultivation is gaining popularity in Magura, Jhenidah, Jessore, Chuadanga, Kushtia and Meherpur districts as an important cash crop".**

Government incentives and support prices might be useful to retain this '**gaining popularity' among the farmers.**

4.6: CONCLUDING REMARKS

Bangladesh in an inconvenient position as regard to the production of both natural and man-made fiber. As mentioned earlier, man-made fiber production is not currently appropriate for the country. Again, cotton production

[101] "**Massive cotton seeds farming programme in 4 dists".** The Daily Star, Regional News volume 1 Number 9 August 21, 1997, available at http://www.dailystarnews.com/199708/21/n7082107.htm#BODY2 downloaded on 15 october,2000.

necessitates large growing field, which is not plentiful as Bangladesh accommodates 128 million population in an area of 1,44,000 sq. kilometers. This implies that the country has to depend on imports of cotton which, in turn, involves large amount of foreign exchange. To induce farmers Government should launch **incentive policies** to augment the yield as much as possible.

Now, to facilitate understanding the technical aspects that persist in textiles and clothing area, it is necessary, as I understand, to incorporate discussions on this edge. **Chapter Five** is attempt simply to this purpose.

SUMMARY OF CHAPTER FOUR

This chapter looks into the **fiber production of Bangladesh** in textiles and clothing sector vis-à-vis the same in **other potential countries**. Fibers are principally of two categories: **natural fibers** and **man-made fibers.** Natural fibers mainly constitute **cotton** and **wool while m**an-made fibers encompass chiefly **cellulosic fiber** and **synthetic fiber**. Man-made fibers involve **capital intensive technology**

which in Bangladesh, at present, is not feasible as its comparative advantage is headed for mainly **cotton.**

China, the United States, India, Pakistan and Uzbekistan and Turkey produced 76 percent cotton of the world total countries in 1996/97. On a **recent statistics** of the United States Department of Agriculture (USDA**)** regarding Cotton Production, Supply and Distribution by Country (see Appendix II), **China** appears with ending stock up to December 2000 (MY 2000/2001) as **2,276,000 MT**, being **the highest** all over the world. Similar estimate for the **United States** figures **3,778,000 metric** tons, being the **second highest** while **India ranks third** with a total production of **2,591,000 metric tons**, **Pakistan** being the fourth. Cotton is the **major crop** in **Uzbekistan** and it totals **936,000 metric** tons, the **fifth largest producer** of the world. Again, Turkey ranked "**sixth in cotton lint production** in **1996-97** in the world with total production 806,000 metric tons. **Argentina** , **Australia,** Thailand, Greece, Iran, Mali, Mexico, Spain, Syria, Zimbabwe, Egypt retain noteworthy position in the world share of cotton production.

Bangladesh's share in world total cotton production is **insignificant**. As of December 2000 (MY 2000/2001), an

estimate of USDA shows that Bangladesh's total production is **14,000 metric tons.** Bangladesh Cotton Development Board (BCDB) undertakes cotton promotion activities but its achievement is not satisfactory so far. **Bangladesh, therefore, is in an inconvenient position as regard to the production of both natural and man-made fiber.**

CHAPTER FIVE:

SOME TECHNICAL ASPECTS IN THE FIELD TEXTILES AND CLOTHING

5.1: FOREWORD

In order for grasping the substances in the subsequent chapters trouble-free I thought it logical to incorporate

some key aspects and terminologies in the sphere of textiles and clothing, mostly being pertinent to this work. The attempt made in this chapter is attributed to this objective merely.

5.2: Carding

When cotton or wool is imported or procured from the field, after opening and cleaning the bundles, fibers are disentangled, straightened, and laid parallel with each other. This process is called Carding.

5.3: Hand-cards

Before the invention carding machine, hand-cards were in use "which were brushes made of short pieces of wire, instead of bristles; the wires being struck into a sheet of leather, at a certain angle, and the leather fastened on a flat piece of wood, about twelve inches long and five wide, with a handle. The cotton being spread upon one of the cards, it was repeatedly combed with another till all the fibers were laid straight, when it was stripped off the card in a fleecy roll ready for the rover"[102].

[102] **"The Textile Industry". The Spartacus Internate Encyclopedia homepage. The British History 1700-1950** (http://www.spartacus.schoolnet.co.uk/Textiles.htm Downloaded on 11 October, 2000)

5.4 Carding Machine

A devise, which has a “card covered with slips of wire placed round a cylinder”. Richard Arkwright upgraded the machine which comprised “a cylinder carding engine, incorporating a crank and comb mechanism. The comb moved up and down, removing the carded fibers from the doffing cylinder in a continuous filmy fleece[103]”.

5.5 Comber Machine, Rovings, Yarn

When carding is completed, the fibers need to undergo further processing in a machine, called **comber machine,** in order to generate combed yarn where the short strands are taken out. Then it is processed into sliver. The sliver is then supplied to the draw frame, and speed/roving frames. Here sliver is twisted to shape what is called **roving[104]**. Finally, the roving is placed in spinning frame in order to exert further twisting and drafting to produce **yarn, which** is again spun around a bobbin or cone with the help of autoconers or cone winding/reeling machines. The yarn is then packed and marketed.

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[103] Ibidem

[104] “The Textile Industry of Bangladesh” by Azizur Chowdhury http://www.ais-dhaka.net/SENIORS/textileazizur downloaded on 2000-10-4

5.6: Spinning

The spinning of wool, cotton or flax[105] was, initially, carried out by the spindle[106] and distaff. "The distaff, a stick about 3 ft long, was held under the left arm, and the fibers of wool drawn from it were twisted spirally by the forefinger and thumb of the right hand. As the thread was spun, it was wound on the spindle"[107]. **Spinning** refers to the process in which fibers are drawn out **into yarn** and a **twist** is initiated. Later, this yarn is used in weaving as either wrap (longitudinal threads) or weft (interlacing the wrap threads) to produce cloth.

5.7: Spinning Jenny

Spinning Jenny refers to a machine that "used eight spindles onto which the thread was spun from a corresponding set of rovings[108]". Later developments on the machine enabled the number to be raised to eighty. This yarn was "suitable only for the filling of weft"

[105] The thread got from the stem of the flax plant, used in making linen (Oxford dictionary, 1997)
[106] A thin rod on which thread is twisted or wound during spinning (Oxford dictionary, 1997)
[107] The Spartacus Internate Encyclopedia homepage, Op. Cit.
[108] "A GUIDE FOR THE PLANNING, DESIGN AND IMPLEMENTATION, **OF WASTEWATER TREATMENT PLANTS IN THE TEXTILE INDUSTRY"**, Water Research Commission, Pretoria, Republic of South Africa. Downloaded on 25 January, 2001
http://www.und.ac.za/und/prg/publications/textguid/guide1

(the cross-thread of warp) as the same was coarse and lacked strength.

5.8: Roller Spinning

This is a machine, which has “two sets of rollers which traveled at different speeds. This drew out a sliver of wool to the right thickness before spinning it. By 1741 this machine, powered by donkeys, was being used in a mill in Birmingham”[109].

5.9: Flax Spinning Machine

Two men from Darlington, John Kendrew and Thomas Porthouse, registered a patent for a new flax-spinning machine in June 1787 which was made up of a drawing frames with drums large enough to roll out long flax fibers and a spinning-frame with four spindles[110].

5.10: Handloom Weaving

This method involves interlacing one set of threads of yarn with another. The **warp** threads are spread out lengthwise in

[109] Ibidem
[110] The Spartacus Internate Encyclopedia homepage, Op. Cit.

the weaving loom while the **weft**, the cross-threads, are woven into the warp to make the cloth. This has been stated in preceding sections as well.

5.11: Greige, Mercerising

Woven cloth which has not been processed further is called **Greige**. But when cotton fabric is treated with cold concentrated sodium hydroxide to attach sheen and to improve the water absorption, it is called **Mercerising**[111].

5.12: Size and sizing

Size refers to a coating applied to warp yarn to improve its weaving efficiency while **sizing** is the application of size to the warp yarn. Again, sizing is applied only in the woven sector of the industry[112].

5.13: Gray

The initial stage of fabric produced by using **looms or knitting** machines is called gray[113]. The term 'gray' indicates that the fabric has no color at this stage.

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[111] Water Research Commission, Pretoria, Republic of South Africa. Op Cit.

[112] Ibidem

[113] Azizur Chowdhury, Op. Cit.

5.14: Knitting

As an alternate to looms, circular knitting machines are used for knitting for making fabrics. These machines employ **needles fed with yarn** that run in an up and down motion and knit **interlocking** arrangements of yarn [114] . This Knitted fabric is **much softer and more flexible than that produced on looms.**

5.15: Dyeing, Printing, Finishing

Grey fabric pass through a process called the batch method [115] (scouring, bleaching, and dyeing). Scouring involves the treatment of gray in chemical solutions to take out the size, natural fats, waxes, proteins, and other impurities, as well as to bring about the fabric **hydrophilic**, i.e. it no longer repels water.

The next process is bleaching which is vital to turn the cloth a clean white. Bleaching could be accomplished either “with dilute hypo chloride solution at room temperature, or by using hydrogen peroxide solution at elevated temperatures, usually 80 to 90 degrees Celsius. The latter method usually results in better and longer lasting

[114] Ibidem
[115] Ibidem

whiteness, however is the more expensive of the two methods”.

5.16: Dyeing and shrinking

After bleaching, the scoured cloth is dyed, and then printed on. Printing is carried out “using perforated rollers that allows certain chemicals and colors to diffuse through the holes”. Then, fabric is “washed, soaked in chemicals under elevated temperatures for color fixation, and then washed again”. In case of knitted fabrics[116], **scouring, bleaching, or dyeing** processes are ended by a **jigger machine** when the fabrics are loaded on it. Now, the fabric placed on **de-watering** or de-twisting machine which **removes water** from the fabric. Again, the fabric passes through a **shrinkage tensionless drier** for drying, shrinking, and relaxing the knitted fabrics.

compacting is the final process before the fabric is prepared for use. Here, the fabric is “steamed and ironed between a roller assembly” after which it is folded and for marketing and RMG industry utilization.

[116] Ibidem

5.17: Silk

Silk filament[117] is a fine, tough, elastic fiber produced by caterpillars called **bombyx mori,** its scientific name. The entire process of producing silk thread has been enumerated plainly in the **Spartacus Internet Encyclopedia homepage** as below:

"For thirty-five days after it has hatched from the eggs laid by its parent moth, the caterpillar, normally referred to as a silkworm, spends its time eating the leaves of a **mulberry tree**. It then, in the course of two or three days' spinning, it surrounds itself in a **cocoon** which consists of a continuous and very fine filament of silk. The silkworm then turns itself into a moth, which escapes by making a hole through the cocoon. First the cocoons were placed into very hot water to soften the sticky gum, **sericin** that holds the filament together. The ends of the filament are found and are then unwound. This process is called **reeling**. The silk filament, which can be as much as a mile long, is then put on to large reels, known as **swifts**. **Unlike cotton or wool, silk is not spun but twisted**. Hence the term **throwing** rather than spinning. **Throwing** involves the revolving of two sets of bobbins[118] at different, carefully adjusted, speeds".

5.18: Fuller's earth

This one type of which was used clay in the early woolen industry to eliminate grease from wool fibers. Oxford dictionary (1997) defines Fuller's earth as "a type of clay used for cleaning newly woven cloth and making it thicker".

[117] a very thin strand, like a thread (Oxford dictionary, 1997)

[118] A small cylinder round which thread, wire, etc. is wound for use in a machine (Oxford Dictionary, 1997)

5.19: Willowing

This refers to the breaking up of cotton and removing impurities, in earlier times, after arrival at the port when cotton formed hard matted lumps being stored on the boats for long time sailing. This cotton wool also contained seeds and dirt[119].

5.20: Willowing Machine

This **machine** had a “large drum filled with iron spikes, which loosened and separated the fibers, and a powerful fan which blew away the dust and other impurities through a large pipe”[120].

5.21: Flying Shuttle

Over the centuries **handloom weaving** had been carried out by “the **shuttle** bearing the yarn being passed slowly and awkwardly from one hand to the other”. Obviously, this was not comfortable job rather an arduous one. Such difficulties were removed by the invention of flying shuttle by **John Kay** in **1733** that **dramatically increased the speed of this process**. A weaver, therefore, using Kay's flying shuttle could produce much wider cloth at faster speeds than before.

[119] The Spartacus Internate Encyclopedia homepage, Op. Cit.
[120] Ibidem

5.22: Polymerization

Polymerization is the process where molecules are joined together to form small building blocks of matter and the length of the chain of such joining is called the **degree** of polymerization. When molecules of the same compound combine to form long chains, it is called simple polymerization. For instance, **Cotton is a simple polymer** [121] and it is composed of long chains of glucose molecules combined to form cellulose. When two or more different kinds of molecules combine into a chain, each capable of polymerization itself, it is called **co polymerization**. **Wool and silk are co-polymers** composed of many different amino acids protein molecules. Again, it would be called **heteropolymerization,** when two or more different kinds of units combine, **but not all of them are capable of polymerization by themselves**. For example, **synthetic fibers.**

[121] The Lemelson Center for the Study of Invention and Innovation, National Museum of American History, Smithsonian Institution , Op. Cit. (http://www.si.edu/lemelson/centerpieces/whole_cloth/u7sf/u7materials/sfPac5.html downloaded on 15 October, 2000).

Synthetic fibers, in addition, can be simple **polymers and copolymers.**

5.23: Automation and Computer Aided Design (CAD)

CAD is relevant to the industry specific design system where computer is used as a tool. In today's world, CAD is used to design anything from an aircraft to knitwear and it was launched in textile and apparel industry in the 1970s[122]. Computer **only** expedites the cloth making process, for example, repeat making, color changing, motif manipulation etc. Thus, **automation** refers to such labor saving process with the aid of CAD. Automation is also attributed to improved quality with lesser time.

5.24: Information Engineering system in Textile and Clothing

[122] Apparel Trade Promotion Network, India homepage. IndiaMART InterMESH Ltd. Downloaded on 25 January, 2001. Available at:http://apparel.indiamart.com/

In order to enhance the decision effectiveness in textile manufacturing new **and efficient Information Engineering system** is being used in recent times, which captures and disseminate management information[123]. This system, thus, addresses a critical needs of the textile industry to sort through information quicker thereby shortening response time (Quick Response) and minimizing manufacturing losses.

5.25: Environmental pollution by textile industries

The textile industry pollutes the environment, "particularly when dyeing cotton and cotton blend fabrics where a **large amount of salts and color dye pollutants are discharged into water[124]". The** ongoing method of removing these pollutants from wastewater **are difficult and costly. Membrane technology** is also used now –a-days in the dyeing process "that recovers and **reuses about 50% of saltwater (brine)"**. Moreover, it has some other advantages, for instance, elimination of polymer needed for conventional

[123] "Textile industry's value-adding key to effective decision- making" http://www.ntcresearch.org/current/year8/I99-S10.htm downloaded on 14 October, 2000.

[124] **Brine Reuse Saves Energy and Reduces Waste for the Textile Industry** Textile industry's value-adding key to effective decision- making http://www.ntcresearch.org/current/year8/I99-S10.htm downloaded on 14 October, 2000.

color treatment, significant trim down colored wastewater generation and, hence, the requirement of associated processing equipments as well as their maintenance costs.

At this stage, we can initiate discourse on the historical development of textiles and clothing. Chapter Six is attributed to this end merely.

SUMMARY OF CHAPTER FIVE

In order for trouble-free understanding in the subsequent chapters, I found it reasonable to incorporate some **key aspects** and **terminologies** in the field of textiles and clothing, mostly being pertinent to this work. These are **carding**, hand-cards, carding machine, comber machine, rovings, **yarn**, **spinning** , spinning jenny, roller spinning, flax spinning machine, handloom weaving, greige, mercerising, size and sizing , gray, knitting, dyeing, printing and finishing dyeing and shrinking ,**silk, fuller's earth, willowing, willowing machine, flying shuttle, polymerization, automation and computer aided design (cad), information engineering system in textile and clothing, environmental pollution by textile industries,**

CHAPTER SIX

WORLD TEXTILES AND CLOTHING INDUSTRIES: HISTORICAL DEVELOPMENT

6.1: FOREWORD

It is extensively believed that **India** is the "**birth place** of the **cotton manufacture"** where this industry stayed in a "high state of perfection" at least three thousand years ago[125]. Again, it is factual that the "**industrial revolution** was **mainly** the **revolution of the cotton industry** in Britain[126]." Moreover, cotton industry in Japan witnessed a rise in mid-eighteenth century followed by other East Asian

[125] Ellison, Thomas; **The Cotton Trade of Great Britain**. Frank Cass and Company Limited.1968,London.p.1

[126]**International Regulation of World Trade in Textiles**, Neils Blokker Published by Martinus Nijhoff Publishers,1989. p.4

states. It is, therefore, obvious that expansion of textile and clothing industries was not ubiquitous. In this context, present chapter focuses on the historical development of textile and cotton industries from the perspectives of both location and age with accompanying technological innovations.

6.2: CHRONOLOGICAL INNOVATIONS OF DEVICES IN THE TEXTILES AND CLOTHING INDUSTRIES

Historical evidence dictates that **Charka** was the first hand mill which was utilized to make cotton threads in **India** in ancient past beyond known history and at that time cotton was cleaned from dirt by means of a vibrating bow and the term **"bowed cotton"** has been derived from it[127]. Again, the term **"manufacture"** has been originated from the time of "arrival of a number of Flemish immigrants during the reign of William the Conqueror" and the "art of **spinning and weaving** wool were introduced **into England by the Romans"[128].** The Spartacus Internet Encyclopedia homepage about the British History (1700-1950) supplements that the handloom was devised about **2,000 years ago.** But these were primeval innovations which couldn't assist in a faster process with large output. At a later stage, "after the invention of the

[127] **The Cotton Industry. An Essay in the American Economic History, b**y M. B. Hammond, Ph. D. Macmillan Company, New York, 1897, p.22
[128] Ibidem p. 4

fly-shuttle by Mr. John Kay, of Bury, in 1738”, the weavers could “turn out twice as much cloth as before in a given space of time[129].” The improved variety of this primitive wheel was the **‘spinning jenny’ invented by James Hargreaves in 1764[130] .** Before this innovation, in **1730, John Wyatt** created a device which was known as **spinning by rollers** and it provided a footing to **Richard Arkwright’s “spinning-frame”** in **1768.** Later, this spinning –frame was perfected at a mill at Cromford, Derbyshire in **1771** that took up the name **‘water-frame’.[131]**

In fact, these **two machines** Spinning-Jenny and the water-frame initiated “a **new era** in the history of cotton trade” as well as **“cotton manufacture, as a separate and distinct industry”.**

Unifying the principles of both Hargreaves’ jenny and Arkwright’s water-frame a machine, called **‘mule’, was** devised in **1779** that enabled production of “ **finer and more uniform yarn”.** After that, Dr. Cartwright invented a **power –loom in 1785[132] .”** Moreover, abreast the development of spinning and weaving, technological development also took

[129] Ibidem p. 15
[130] Ibidem p. 19
[131] Ibidem p. 19

[132] Ibidem p. 20

place with the invention of **Cylinder printing** by Bell of Glassgow, in **1783**[133] **.** Innovations didn't come to an end rather it continued in other segments textile industry. For example, in **1748,** a **carding machine** was brought out by **Lewis Paul** of Birmingham to replace the hand one, which was **improved upon by Mr. John Lees** of Manchester, in 1772[134];

All these developments so far were not entirely flawless. **Mr. Roberts,** in **1825,** patented the new **"self-acting mule"** which eliminated the difficulties of earlier one and its refined variety came out in **1830**. Almost concurrently, "a very important **improvement** was made in the **'water-frame'** whereby the quality of the yarn spun was improved, the quantity produced increased, and the cost of production diminished. The **new machine was called 'Throstle'"**[135]**.**

As regards the **Woolen Industry,** it was established in the **Middle Ages**[136]**. At** that time, this industry used homegrown wool where production was based on the domestic system.

[133] Ibidem p. 24

[134] Ibidem p. 20

[135] Ibidem p.32

[136] **"The Textile Industry, The Spartacus Internate Encyclopedia, The British History 1700-1950". Op. Cit.**
(http://www.spartacus.schoolnet.co.uk/Textiles.htm Downloaded on 11 October, 2000)

Leeds in Yorkshire then became the center of such product market. On the other hand, **opening of silk** production dates back to **ancient China**. Subsequently, “the art of producing silk cloth reached **France, Spain and Italy** in the **12th century**. The **weaving of silk** was introduced to England by **Flemish refugees in the 16th century** and was greatly developed after 1685 when the Huguenots from France established themselves at Spitalfields in London. The main centers of the silk industry in England in the 16th century was London, Coventry and Norwich”[137]. More recently, silk loom was invented by **Joseph Jacquard** in the early **19th century, who** was a silk weaver in **France** and with the widespread application of this loom in the 1820s imparted the textile industry a tremendous boom in Britain[138].

In addition, “since the **Second world War three types of technical change** have had an important impact on the textile industry”. These are “rapid progress in **transportation** and **telecommunication** combined with the development of mass retailing” that facilitated the global rise in production and distribution of clothing, astounding **advancement in synthetic fiber technology** that “revitalized the textile industry in developed countries in the 1960s

[137] Ibidem
[138] Ibidem

and early 1970s" and **important process innovations** such as introduction of **rotor spinning and shuttle looms**, **increased automation** in various stages of production etc. Specially, **computerized production management and** application of **microelectronics** to new machinery became prominent by the **end of 1970s**, which "increased capital-intensive character of the textile industry" leading to "a shift in competitive advantage between developed and less-developed countries". In this connection, a citation regarding such advancement in spinning in the US textile industries would be noteworthy as below[139]:

"The development of **open-end (OE) spinning technology** in the **1960s** started **a new era in yarn manufacturing**. This advance provided spinners the opportunity to increase output per production unit by more than two-fold. Current OE systems operate at rates six times that of ring spinning, while the newer **air jet systems** are more than eight times as fast".

6.3: EXPANSION OF TEXTILE AND CLOTHING INDUSTRIES IN DIFFERENT COUNTRIES

Manufacturing process, in general, appeared in "**Italy** in the **fourteenth** century. By the **middle of the sixteenth century** it was established in Germany, Prussia, Saxony, and the Netherlands. A little later came **England**. France followed in **seventeenth** century and **Russia** in the

[139] **"75 Years of Change in the American Textile Manufacturing Industry"**, by J. Richard Aspland and Edward A. Vaughn, Clemson University, Clemson, S.C. Raleigh. The American Association of Textile Chemist and colorists (AATCC) homepage(http://www.aatcc.org/magazine/may1997/p29-35/p29-35.html downloaded on 12 October, 2000).

eighteenth" [140] . This development in manufacturing is not anything discrete from the development in the textile and clothing industries because, as mentioned earlier, the industrial revolution of Britain in eighteenth century was basically the revolution of textile and clothing industries there. However, an interesting feature of this development in textiles and clothing industries is that it was not ever escalating in a country rather " the **relative importance of this industry declined as industrialization progressed"** with time as Blokker (1989) mentioned:

"World manufacturing production doubled between 1911-1913 and 1936-1938; the **increase in world textile production was less than 40 per cent** during this period. After the **Second World War**, this trend continued: whereas in all market economies, in 1953, production of textiles amounted to 13.6 per cent of total manufacturing production, this share had decreased to 8.7 per cent by 1980"[141].

Again Blokker (1989) adds that this decline in developed countries is tagged with a rise "in **Japan, East European and less-developed countries", as it carried out almost the same "take off" function that occurred previously in developed market economies**[142]" which resulted in a slump in textile exports from developed market economies to the

[140] Ellison, Thomas; Op. Cit, p.3

[141] GATT, Textile and Clothing in the World Economy, Geneva 1984, p.21 and p.27 cited in Blokker (1989) p .7

[142] E. Herbert Noman, Japan's Emergence as a Modern State , New York 1940, p. 126 cited in Blokker (1989) p.8

domestic markets of these new producers[143]; a confrontation of textile industries in developed market economies cropped up with textile products of the 'new comers[144]' in other markets as well as in 'their own' domestic market[145].

In a cyclic order, these 'newcomer' countries' share of textiles in total production of manufactures **also dropped** "between **1953 and 1980, in Japan** from 18.1 per cent to 5.8 per cent and in the **group of less-developed countries** from 30.3 per cent to 16.0 per cent. Only for Africa this share rose"[146]. Now, we can move to scrutinize the reason behind this rise and fall in the relative importance of textiles and clothing industries. Certainly, it is linked to the shift in comparative advantage (i.e. from labor intensive to capital intensive products) of the concerned countries as their economy get matured with strides toward high-tech industries. According to this cycle, it could be anticipated that countries, like **Bangladesh,** would be turned to the similar competitive edge in textile and

[143] Jurgen wiemann, Selective Protectionism and Structural Adjustment, Berlin 1983, pp.47-48 cited in: **Blokker (1989) p.8**

[144] Taiwan, Hong Kong, Korea, Singapore---later than Japan

[145] Angus Maddison , Economic growth in Japan and the USSR, New york, 1969,pp.24-25 cited in: Blokker (1989) p.8

[146] Blokker (1989) p.9 which has been calculated from the 1984 GATT study, Textile and Clothing in the World Economy, p.21, table 2.4

clothing industries for their comparative advantage in cheap labor provided that other relevant factors stay favorable.

6.3.1: The United Kingdom

As mentioned earlier, at the hub of the industrial revolution in Britain in eighteenth century was the rise in textile industry and its importance persisted in the first half of the nineteenth century as well. The production of cloth rose from 40 million yards in 1785 to 2025 million yards in 1850[147].” But the Readymade Garments (RMG) industry seems to be introduced in Britain a little later as stated in Bangladesh Garments Manufacturers and Exporters Association homepage placed below:

> “In **1821** the first garment factory came into being with 80 sewing machines in **Paris,** France. In **1856 John Barrel** set up a garment factory with three sewing machines in **Leads, UK”.**

Linen manufacture, on the other hand, had been introduced into England in the **thirteenth century”** and progressed abreast the woolen industry in Lancashire until the beginning of cotton manufacture[148].

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[147] **International Regulation of World Trade in Textiles**, Neils Blokker Published by Martinus Nijhoff Publishers,1989 p.5 He quotes from E.J. Hobsbawn, The Age of Revolution, London 1962, p.53

[148] Ellison, Thomas; Op. Cit.

While these revolutionary advancements took place in the textile industry of Britain, its history is not entirely exempted from grievances of **human rights violation** in the textile industry. Children were usually employed as "scavengers and piecers". **"Pauper apprentices"** children were bought from orphanage and workhouses to assuage labor shortage problem. Moreover, these children were brutally punished by the owners as mentioned in the Spartacus Internet Encyclopedia homepage[149]:

> "Children who worked long hours in the textile mills became very tired and found it difficult to maintain the speed required by the over-lookers. Children were usually **hit with a strap** to make them work faster. In some factories children were **dipped head first into the water cistern if they became drowsy**…..Children who were considered potential runaways were **placed in irons**".

These are, no doubt, the dark side of the history in the development of textile and clothing industries that persist even today in some countries. Bangladesh RMG industries currently are free from child labor, which will be discussed later in Chapter Ten.

6.3.2: Republic of Korea

Since the **seventeenth century**, in **Korea**, unlike china and Japan, merchants were not allowed "to take part in the

[149] **The Textile Industry, The Spartacus Internate Encyclopedia, The British History 1700-1950, Op. Cit.**

circulating processes of cotton fabrics because the tenant peasants were compelled to cultivate cotton and weave cloth for the purpose of **tax payments**[150]**".** M**andarins** controlled these commodities and "circulated through political channels and not by commercial processes". The decline of the Korean cotton industry at that time, therefore, is attributed to the breakdown of appearance of **"money economy" system** during the reign of Yi dynasty. Moreover, "the **cotton industry in Korea was primarily a rural industry offering part-time employment for the tenant-peasants**[151] **".** As the Yi dynasty was only interested in collecting tax for its financial support without caring the promotion of cotton sector, people were leaving cotton cultivating and weaving professions.

6.3.3: India

India, as mentioned earlier, was enriched in cotton production and weaving in the ancient times, the strength of which could be felt from the following[152]:

"…..at a period when the inhabitants of the British Isles were attired in the skins of wild animals, the leading people of **India** were

[150] **The Place of Korea in the History of the Early Cotton Industry in the Far East. In : Stages of Industrial Development in Asia,** A comparative History of Cotton Industry in Japan, India, China, and Korea. By Sung Jae Koh Philadelphia: University of Pennsylvania Press, 1966

[151] Ibidem

[152] Ellison, Thomas; **The Cotton Trade of Great Britain**. Frank Cass and Company Limited.1968,London, p.2

luxuriating in garments of a texture so fine as to have earned the poetic description …..”

Again, it is mentioned that “ Spinning and weaving were the national industries of **India** down to the commencement of the **nineteenth century**[153] ” which implies the industry’s significance and weight in the national economy of the country and Henry Gouger, a British merchant, first erected **cotton factory in India** at Fort Golster, fifteen miles from Calcutta in the neighborhood of **1818**[154] .” The actual expansion of the modern cotton industry in India began with the establishment and promotion of **Bombay Spinning and Weaving Mill in 1851** under the guidance of Cowasjee Nanabhoy Davar, a **Parsi merchant**[155]**.**

With this foundation, **“from 1875 to 1900** the erection of the more cotton mills continued, and by 1900 **India** had 193 mills with 4,945,783 spindles and 40,124 looms. In this continuous expansion the Parsi and other merchant groups tended to pattern their business activity along the lines followed by the Tata family[156].” It is worth mentioning that

[153] **International Regulation of World Trade in Textiles**, Neils Blokker Published by Martinus Nijhoff Publishers,1989, p.5 Quoted from Romesh Dutta, The Economic History of India, Vol.II, London 1903, p.517

[154] Sung Jae Koh, Op. Cit. p.88

[155] Ibidem p.90

[156] Ibidem, p.99

Tata family traditionally played a vital in the development of India's Industry. Although the British was in power, they didn't participate directly in upgrading this industry but the machinery trade and other related support were provided by them which is apparent from the citation below:

> " ……..,in **1925** only eleven of the eighty-one mills in **Bombay** were under British management. This indicates that the **British merchants were not eager** to take a leading part in launching India on an industrial career. But on the other hand, it is clear and must be emphasized that **British machinery makers and exporters were in a way instrumental** in furthering the development of the modern cotton industry in India in competition with the Lancashire cotton interests[157]."

Instead, a **managing agent system** was in place performed three principal functions, i.e. **open up new industries** and playing a role of promoters, delivering both the **fixed and the working capital and** work that is performed in other countries by a manager or a managing director[158]. Through these endeavors Indian textile industries expanded greatly as could be perceived from the statistics below[159]:

> " Between **1914 and 1936 the number of cotton mills in India increased from 337 to 379**. The great increase was in mills of medium and small sizes. The average number of spindles per mill was only 26,100. The average number of spindles per mill was only 26,100."

India today is in a better position than any other country in South Asia, as it has developed every segments of the chain in textiles and clothing industries from raw materials to export or consumption of apparels.

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[157] Ibidem p.105
[158] Ibidem p.105
[159] Ibidem p. 111

6.3.4: China

The cotton industry in China and Japan **“reached a stage”** by the middle of the **eighteenth century through a “putting out” system**[160]**.** By this system **“merchant** could easily take a leading part in the further growth of the cotton industry by providing the operating funds for the weavers and by providing a system to put out raw cotton as well as some other materials”. Obviously, this method assisted the cotton producers and weavers at that time in these countries. But, unlike India and Japan, merchant class in China “were **less likely** than ever before to provide dynamic and progressive **leadership”** to play a pioneering role in the development of cotton industries[161].

[160] Ibidem.
[161] Ibidem, p.183

Although the **"Opium War (1840-42)**, the European industrialism and commercial activities" exerted a thrust to traditional Chinese society, this **"external stimulus" could in** no way convert the merchants into industrial leaders[162]. The **bureaucrats,** therefore, began to emerge themselves as industrialists under the mounting pressure of foreign industrial development. Although they had "a **great role** in the development of the **modern cotton industry in China",** soon the **bureaucratic industrialists** revealed "the **management problems**, such as the cost structure, the pricing of the product, the profitability of the enterprise" etc. Consequently, "most of these mills eventually underwent **change of ownership** or failed altogether"[163]. Subsequently, when industrialization was in progress in India and Japan in the **1850's and 1860's**, China lagged far behind of these two countries that successfully dominated Chinese market and thereby stimulated their domestic industries. Moreover, at that time, "China was opened to a flood of Western influence" and the Ch'ing government felt urgent need to reinforce the Industrial sector[164]. **First Chinese cotton mill**, however, was not erected before **1890** and by **1930**, there were **fifty-nine**

[162] Ibidem, p.221-222
[163] Ibidem, p.254

[164] Ibidem, p.182

cotton mills in Shanghai including thirty-two Japanese, three British and the rest Chinese[165].

6.3.5: Japan

The commencement of **Cotton spinning** machinery in Japan happened in the neighborhood of **1866 while** "no machine method was adopted in **cotton weaving** until **1888"**. On the other hand, in the **cotton-weaving industry** the tempo of employment of machinery was so dawdling "that in **1894, at the time of Sino-Japanese War**, which opened a new era in the industrial development of Japan, there were **only 420 power looms** in the entire country"[166]. By **the period of World War I,** the **cotton weaving industry** had been fostered a "**modern system** of industrial organization and could adopt **large-scale** production methods". Conversely, the **spinning industry expanded very fast during the late 1880's** which is substantiated by the data below[167]:

> "In **1886** there were **81,000 spindles** in operation, producing **16,000 bales of yarn** per annum. By **1890** there were **358,000** spindles, producing 108,000 bales of yarn. By **1896** there were **959,000** spindles, turning out **428,000 bales** of yarn. This was a tremendous achievement in a remarkably short space of time."

However, the **Japanese cotton industry began to develop** in intensely around **1887 and by 1894** as "the dominant

[165] Ibidem, p.182
[166] Ibidem

[167] Ibidem p. 23

manufacturing industry" in terms of using up of its product, as well as the number of workers[168]. Japan embarked on **exporting** her cotton goods in world market by **1897** and the Japanese cotton industry, like Indian cotton industries, strengthened coarse cloth production rather than fine[169]. Thereafter, Japanese cotton industry, expanded further and in 1937, Japan possessed 215 mills in operation and the average number of spindles per mill was 57,482. Again, it is amazing that "the size of an average mill in Japan was twice that of an average mill in India[170]."

6.3.6: The United States

It has already been mentioned in the preceding chapter that **"Charka"**, a thread making hand cotton mill and the **"vibrating bow"** were in use in India in the primeval times. These were later **introduced into America**[171]. P-22

As seen in the preceding sections, in India and Japan, **unlike Korea and China**, the Unites States marked the rise of a "**commercial class**, which took upon itself the responsibility of supplying the spinners and weavers with the raw materials, and found for those artisans a market

[168] Ibidem p. 62
[169] Ibidem p. 61
[170] Ibidem p. 111
[171] Hammond, Op. Cit p.22

for their finished products. This **revolution in methods of trading** had been completed by about **1760**[172]**"** around which surfaced great inventions in the textile industries.

It is interesting to observe that **cotton** production influenced the preservation and extension of **Slavery** directly or indirectly **in the United States** as evident from the following citation[173]**:**

"The **upper and the middle regions of South Carolina**, where the cotton lands of this state are chiefly found, contained only about **28,000 slaves** in **1790**, and in the entire state of **Georgia** the number of slaves was but a **little larger** than that of New York. **Maryland and Virginia** had nearly three-fifths of all the slaves then in the United States."

Besides this, Spartacus Educational homepage also provides some insights about slave labor exploited in the cotton industry as placed below[174]:

> "A large number of early settlers in America grew cotton. To grow cotton and to pick, gin (remove seeds from the white fluff) and bale it took a great deal of work. Therefore **large numbers of slaves** were purchased to do this work. The industry was given a boost **invention of Eli Whitney's Cotton Gin in 1793.** With the aid of a horse to turn the gin, a man could clean fifty times as much cotton as before. This increased the demand for slaves".

However, "the **English inventions in the spinning and weaving** machines and application of **steam power** to the cotton manufacture" and the accompanied **factory system**

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[172] Ibidem p.16
[173] Ibidem p.48
[174] **Spartacus Educational, Cotton Industry**
http://www.spartacus.schoolnet.co.uk/USAScotton.htm
downloaded on October 11, 2000

stimulated growth of cotton cultivation and "in **1815** there were in the **neighborhood of 165 mills** in the **New England** states, operating **119,310 spindles**. The **whole** number of **spindles** in the United States was estimated at **130,000** and the amount of cotton consumed at **thirty-one and one-half million pounds**[175] ." Definitely, US cotton industry was booming at this time.

By 1921, the US textile manufacturing attained a "technological sophistication" as "the factory system of producing yarns and fabrics had reached its **second generation**, and the construction of state-of-the-art spinning and weaving mills in the southern textile belt had become the direction for the future"[176]. More over, the improvement of **open-end (OE) spinning technology** in the 1960s initiated a new era of yarn manufacturing in the United States and a new-generation **automation** has been introduced since the early 1970s.

6.3.7: BANGLADESH

Before 1947, today's India, Pakistan and Bangladesh were integrated in one colony called Indian sub-continent ruled

[175] Hammond, Op. Cit. p 242
[176] **"75 Years (1921-1996) of Change in the American Textile Manufacturing Industry"**, Op. Cit. downloaded on 12 October, 2000.

by the British. The chronological development of textile and clothing industries naturally originates from Indian history. Historically, **cottage industries**[177], made most of the textiles in the sub-continent. **Muslin, Jamdani, and various cotton and silk fabrics** were produced. After the industrial revolution in Britain in the eighteenth century, the fabric manufactured and dyed in **British factories saturated the Indian markets**. But, after **1947**, most of the capital and resources of Pakistan came under the **hegemony of West Pakistan**. **The west** produced **more cotton than the east.** On this ground, development of the textile **industries mainly took place in the west** rather than in the east. After **independence in 1971**, the government of Bangladesh **nationalized** the textile industry and Bangladesh Textile Mills Corporation (**BTMC)** was formed to cater the textile industries, which remained under the control of the BTMC **until 1982-83**. **"Bureaucratic obstacles** combined with other problems such as **low productivity** in the labor force, **lack of planning**, **indiscipline**, **lack of accountability, and poor machine maintenance and operation resulted in a lack of profits** [178] **"**. The government, therefore, incrementally **denationalized** the production of textiles.

[177] artisans working in small groups
[178] **Azizur Chowdhury, Op. Cit.**

6.4: CONCLUDING REMARKS

Textiles and clothing industries has traversed a long way of its development through diverse innovations in its vast domain. From ‘Charka’ to ‘automation’----it’s really an astounding progress. As an LDC Bangladesh, latest technologies has not been introduced yet in its textiles sector. While our comparative advantage lies in labor-intensive technology, we can look at the future from now.

Again, development of world textiles and clothing industries through the ages obviously triggered the opportunities for its trade in the international arena. The next chapter would, therefore, focus on the gradual development of world trade in textiles and clothing.

SUMMARY OF CHAPTER SIX

Present chapter focuses on the historical development of textile and cotton industries from both location and age with accompanying technological innovations. It is extensively believed that **India** is the “**birth place** of the **cotton manufacture”** and “**industrial revolution** was **mainly** the **revolution of the cotton industry** in Britain”. Cotton industry in Japan also witnessed a rise in mid-eighteenth

century followed by other East Asian states. Manufacturing process, in general, appeared in **Italy** in the **fourteenth** century. By the **middle of the sixteenth century** it was established in Germany, Prussia, Saxony, and the Netherlands. A little later came **England**. France followed in **seventeenth** century and **Russia** in the **eighteenth**.

Handloom was invented about 2,000 years ago and **fly-shuttle** by Mr. John Kay in 1738**, spinning jenny** by James Hargreaves in 1764**, spinning-frame** by Richard Arkwright's in 1768 that that took up the name **water-frame** in **1771.** These two machines spinning-Jenny and the water-frame initiated a **new era** in the history of cotton trade as well as cotton manufacture, as a separate and distinct industry**.** With the principles of both Hargreaves' jenny and Arkwright's water-frame a machine, called **'mule', was** devised in **1779.** Dr. Cartwright invented a **power –loom in 1785.** The invention of **Cylinder printing** occured by **Bell** of Glassgow, in 1783. In **1748,** a **carding machine** was brought out by Lewis Paul of Birmingham. Mr. Roberts**,** in **1825,** patented the new **"self-acting mule.** An improvement on the water-frame was made and the new machine was called **Throstle.**

Since the **seventeenth century**, in **Korea**, unlike china and Japan, **merchants** were not allowed “to take part in the circulating processes of cotton fabrics. M**andarins** controlled these commodities and circulated through political channels and not by commercial processes. Again, spinning and weaving were the national industries of **India** down to the commencement of the **nineteenth century. Managing agent system** in **India** played a role of promoters. The cotton industry in **China and Japan “reached a stage”** by the middle of the **eighteenth century through a “putting out” system** in which **“merchant** could easily take a leading role in the further growth of the cotton industry by providing the operating funds. During **Opium War (1840-42)** the European industrialism and commercial activities exerted a thrust to traditional Chinese society. **Cotton spinning** machinery in Japan commenced in the neighborhood of **1866** and **cotton-weaving industry,** in **1894, at the time of Sino-Japanese War**, opened a new era in the industrial development of Japan.

Since the **Second world War three types of technical change** have had an important impact on the textile industry. These are astounding **advancement in synthetic fiber technology, important process innovations** such as introduction of rotor

spinning and shuttle looms, increased automation computerized production management and **application of microelectronics** to new machinery by the **end of 1970s**, which increased **capital-intensive** character of the textile industry.

After 1947 East Pakistan, now **Bangladesh**, came under the **hegemony of West Pakistan**. **The west** produced **more cotton than the east** and the textile **industries developed mainly in the west**. After **independence in 1971**, the government of Bangladesh **nationalized** the textile industry and Bangladesh Textile Mills Corporation (**BTMC)** was formed to cater the textile industries, which remained under the control of the BTMC **until 1982-83**

CHAPTER SEVEN

WORLD TRADE IN TEXTILES AND CLOTHING: HISTORICAL PERSPECTIVES

7.1: FOREWORD

Structure and size of world trade have traditionally depended on the developments and innovations in the textile industry and its adjacent areas. Statistical evidence as mentioned in Blokker (1989) corroborates this idea:

> "As to its **structure**……an example: Japanese exports of cotton piece goods were equivalent to only a third of those exported from the United Kingdom in **1927, but by 1935** they were 40 per cent higher than British exports.[179] As to its **size**: when **Japan and less-developed** countries began to supply their own population with **domestically produced** textiles, **world trade in textiles contracted**. Thus, in **1913,** textiles and garments presented about 13 percent of total world trade; in **1964** this share was less than 6 percent;[180] and in 1987 6½ per cent"[181].

[179] Royal Institute of International Affairs, The Problem of International Investment, Oxford 1937, p.62 cited in Blokker (1989) p. 11

[180] GATT, A Study on Cotton Textiles, Geneva 1966, p.9 cited in : Blokker (1989) p.11

[181] [181] GATT, International Trade '87-'88, Geneva 1988, Vol.II, Table AB3 cited in: Blokker (1989) p.11

This chapter, therefore, deals with the development of world trade in textiles and clothing through ages among different countries and regions.

7.2: SOME DEVELOPMENTS BEFORE 1800

Since **late sixteenth or early seventeenth century,** the spinning and weaving activities of cotton had been continuing in Great Britain. As the domestic manufacturers of Great Britain could not produce, at that time, "the soft **muslins** and beautiful "**printed calicoes**", England had been importing these fine cloths from **India since 1631** that were popular with the "fine ladies" including even the **Queen** herself[182]. Again it is observed that " from the **seventeenth** century up **to** the **middle** of the **eighteenth** century, the East India Company's shipments to England of **Indian cotton** cloth showed a phenomenal expansion"[183].

As retaliation to the rise of Indian exports of cloth, in **1700**, the British manufacturers swayed the Parliament to

[182] Hammond, Op. Cit. p.8

[183] Ibidem, p. 89

enact legislation “prohibiting the import of printed calicoes” but allowed “the import of plain calicoes upon the payment of a heavy duty” in the benefit of the printing industry, which had been operating since 1676[184].

From the **middle of the eighteenth century India’s** “handloom manufacturing was on the road to **ruin”** owing chiefly to **“remarkable mechanical inventions” in** the later **half century** that “revolutionized the textile industry in England” and first sample of **English muslin** entered into **Bengal** in **1783** and **“1786 saw the complete cessation of the export of cotton yarn from Bengal to England [185] .”** In addition, when the **Fort Golster** factory was established in 1818, English machine-made cloth superseded Indian cloth owing to its **“cheapness and durability”** and found a ready market there[186].”

Again, it is noticed that “the **beginning of the regular cotton trade** between the **United States** and **Great Britain** dates from **1784**.”[187] In **1789,** 126,300 pounds of **American**

[184]Ellison, Thomas Op. Cit. p.11

[185] Sung Jae, Op. Cit. p. 89

[186] Hammond (1897) p.89

[187] Bishop, ‘History of American Manufactures,’ (1866) as citied in Hammond (1897) p.231

cotton were exported to Liverpool, and 12,150 pounds in the following year[188]. Moreover, England received cotton wool from the Mediterranean ports during this time as enumerated in the following statement[189]:

> **"Previous to the last twenty years of the eighteenth** century, the **cotton wool imported into England** for use by the cottage manufactures, came almost entirely from the **Mediterranean ports**, specially from **Smyrna**." P- 234

By **1790**, imports of raw cotton from the West Indies also increased slowly[190]. Moreover, **the West Indies** supplied cotton to the American manufactures in the neighborhood of **1780**[191]**.** In **1781**, Brazil began exporting cotton to the United States[192].

Although Britain passed bill in the Parliament prohibiting import of "calico", as mentioned earlier, from India, it was at times depended intensely on India's cotton owing mainly to lower price compared to other countries e.g. the United States. This might be evident from the following citation[193]:

> "Fifty six million pounds of cotton **entered Great Britain in 1800,** and **twenty-eight percent** of this came from the **United States**. Prices had rapidly advanced during the closing years of the century, and

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[188] Ibidem, p.232
[189] Ibidem, p.234
[190] **The Textile Industry, he Spartacus Internate Encyclopedia, The British History 1700-1950, Op. Cit.**

[191] Hammond (18970 p.235
[192] Ibidem
[193] Ibidem p.238

> Manchester had again besought the **East India Company to increase** shipment of cotton from the East. In response to this appeal, the shipments of **East India cotton for 1799 and 1800** averaged six and two-thirds million pounds……..' The **west Indies still** continued to be the principal source of cotton supplies for the English manufacturers." P-238

However, "American cotton had been steadily growing in favor in **England, since 1797**[194]." American traders not only supplied cotton to Britain, they explored the Chinese market too in the year **1784**[195]**.**

7.3: DEVELOPMENT OF TEXTILES AND COTTON TRADE BETWEEN 1800 AND 1900

The United States cotton exports to Britain continued to **rise** further. In **1802** British **imports** of the cotton wool from the **United States** exceeded those from the West Indies[196]. Between **1806 and 1810**, it "averaged more than three times the amount sent from either the **West Indies or Brazil**, and exceeded the total amount received by Great Britain from all quarters except the United States[197]." Interestingly, India's status, **by 1820**, transformed from cotton-manufacturing country to cotton exporting country

[194] Ibidem p.239
[195] Sung Jae Koh, Op. Cit

[196] [196] Ellison, 'The cotton Trade' ,85 as cited in Hammond (1897)

[197] Hammond, Op. Cit. p.239

for reasons mentioned earlier. India diversified its markets and by 1817 it started exporting cotton to China, which could be found from the following[198]:

> " In **1817** twenty-four ships from Bengal arrived in China, the main market of such **Indian exports as opium and cotton**; and only thirteen from Bombay. After **1820**, however, Bombay's shipping began to grow, owing to the **rapid increase in imports of Lancashire-made cotton goods and exports of raw cotton to England** as **India** was reduced from the position of a **cotton-manufacturing country to that of a supplier** of raw cotton."

As a result, in England it was found that "the volume of raw cotton exported from India increased from 20 million lb. in **1775** to 80 million lb. in **1834**, of which 60 million lb. were shipped from Bombay and most of the rest from Calcutta[199] ." Moreover, the export of Indian raw cotton gained a momentum from the **American Civil War (1861-65)** because blockade to cotton export from the United States then culminated in a **"cotton famine"** in Lancashire and English **manufactures were bound to look back on India for supplies** during India earned about 81 million pounds sterling[200].

[198] Sung Jae Koh, Op. Cit., p. 95

[199] Ibidem, p.96

[200] Ibidem, p.97

Besides India, there were other sources of cotton supply for Britain during the period **1835 to 1845** that is justified from the following quotation[201]:

"From the East Indies, from Egypt, which since **1823** had been a cotton growing country of importance, from Brazil and from Turkey, cotton **continued to pour into the British ports**, the amount received from all quarters in 1845 being nearly double that imported in 1835."

France in **1858** was prominent for cotton manufacturing and it consume two hundred and forty million pounds of cotton and except a little fine cotton from Egypt, "almost this **entire amount came from America**[202]." Again, in spite of the rise in the shipments of **American** cotton, **Indian** export of Surat cotton to England was competitive and it increased **from 563,200 bales in 1860 to 986,600 bales in 1861**[203]**."** Moreover, the **importation of the Indian cotton** raised at the peak in **1866** "when 1866,000 bales were received" by Britain. Again, the following citation would impart an insight regarding the consumption of cotton by British mills and their dynamic activities as late as 1872[204]:

> "The greatest **shipment of Egyptian cotton**, which comes little into competition with American short staple, was received in **1865**, when 413,000 bales of this kind arrived in **Great Britain**. **Importation from Brazil** increased from 100,000 thousand bales in **1861** to over 700,000 bales in **1872**. The **West Indies** vanquished by America early in the century, made a struggle for mastery again in the sixties, but gave it up after increasing importation into England from 9700 bales in 1861 to 166,400 bales in 1872."

[201] Hammond, p. 253
[202] Ibidem
[203] Ibidem, 276
[204] Ibidem, 277

As mentioned earlier, in **1784** the American merchants began their commercial operations in the **Chinese markets**. But **British cotton goods were handicapped in competing with American cotton goods in the Chinese markets** because "the American cotton cloths exported to China were manufactured by mills in the southern states where the **labor cost was low", low cost of transportation** to China and the adoption of **automatic weaving machines** by the American competitors[205].

Between the **1850s and 1870s,** supremacy of **the Western** industrial countries were challenged by Indian and Japanese cotton goods in the **Asian markets.** Japanese cotton textiles "were much heavier than the American" and also "the Japanese turned their sights toward **north china and Manchuria**, the United States' best customer". Moreover, "**Japan** had the further advantages of **low labor costs and proximity to the markets"**[206].

7.4: DEVELOPMENT OF TRADE IN TEXTILES AND CLOTHING SINCE 1900

[205] Sung Jae Koh, Op. Cit.

[206] Ibidem

After the **First World War**, the **Japanese** manufacturers and merchants strived for **new markets** from where Japan imported raw cotton, for instance, India and the United States. Japanese imports of raw cotton from America were escalating especially after **1913** and "during the **1930's American raw cotton became** the most important of Japan's raw-cotton imports[207]".

Again, in **1924-25 Japan** was the harbinger in cotton yarn exports to the Indian market, and the Japanese cotton cloth was promptly supplanting that of England in Indian imports. Between **1925 and 1933** Japan further increased its share in Indian imports and in **1939** superseded that of England[208]. Even before this time, "in the closing years of the nineteenth century, the **Japanese** cotton had **replaced** the predominance of **Indian** cotton goods in the **Chinese market**, and furthermore it appeared in **1918-19 as a competitor** in the **Indian market** itself [209] ." All these evidences unambiguously demonstrates the astounding rise of Japanese cotton manufacture and trade in the earlier part of twentieth century.

7.4.1: Share of developed and developing area in world

[207] Ibidem, p.175
[208] Ibidem, p. 175
[209] Ibidem, p. 77

trade in textiles and clothing

Table 7.1 below indicates that developed countries export share dropped in world total both in textiles and clothing between **1955** and **1982** which assumed a significant upward turn between 1982 and **1986** whereas the same for developing countries exhibits an increasing trend with a corresponding fall between 1982 and 1986. Most of world imports, in particular for clothing, are accounted for by developed countries during the period. It might be mentioned here that clothing export of **Bangladesh** observed sharp rise in the early 1980s when the clothing export of developing countries, as a whole, had declined considerably.

Table7.1: Area distribution of World trade in Textiles and clothing (percentage shares)

	Textiles					Clothing				
	1955	**1963**	**1973**	**1982**	**1986**	**1955**	**1963**	**1973**	**1982**	**1986**
EXPORTS (billion $)	4.7	7.0	23.4	51.5	66.3	0.8	2.2	12.6	41.0	61.8
world	100	100	100	100	100	100	100	100	100	100
Developed Area	79	74	70	60	65	71	67	51	38	46
(EC intra Trade)	(14)	(23)	(27)	(22)	(28)	(16)	(23)	(26)	(19)	(23)

Developing Area	15	18	22	30	25	10	15	35	48	41
(Southern area)	---	(2)	(4)	(5)	---	--	(2)	(5)	(6)	---
Eastern trading area	6	8	8	10	10	19	18	14	14	13

	Textiles					Clothing				
	1955	**1963**	**1973**	**1982**	**1986**	**1955**	**1963**	**1973**	**1982**	**1986**
IMPORTS										
world	100	100	100	100	100	100	100	100	100	100
Developed area	52	63	68	57	64	56	66	78	75	84
Developing Area	43	30	25	34	27	26	17	10	17	9
(Southern Europe)	---	(2)	(3)	(3)	---	--	(½)	(1)	(½)	--
Eastern trading area	5	7	7	9	9	18	17	12	8	7

Source: Blokker (1989), Table 1.4, p.12 that has been reproduced from then GATT Secretariat & GATT, Textile and clothing in the world economy, Geneva 1984, pp. 40 -41

7.4.2: EAST ASIAN TRADE IN TEXTILES AND CLOTHING

Textile and clothing production has expanded very fast in East Asia vis-à-vis the rest of the world. “It grew especially rapidly in **Japan in the 1950s** and the **1960s**, in **Korea** and **Taiwan** in the **1960s and 1970s**, and in **China** since its opening up in **1978” with a fall “in Japan** and other industrial countries from the early 1970s **as comparative advantage there moved toward more capital-intensive products and away from labor-intensive manufactures because**

of competition from newly industrializing economies[210] ." Consequently, **share of East Asia** in world exports of textile and clothing has accelerated spectacularly. Although Japan experienced a decline in its share, "**East Asia** now accounts for one**-third of that trade**, almost double the share of three decades ago and close to the combined share of Western Europe and north America[211]."

Table 7.2 provides data on export shares in textiles and clothing for 1988 and 1991 of four East Asian countries (China, Hong Kong, Korea, Taiwan) in OECD, EEC (EU) and other European countries. It is apparent that these NICs of East Asia accounts for significant shares in those markets, particularly in clothing.

Table 7.2: Export shares in T&C of China, Hong Kong, Korea and Taiwan in 1988 & 1991 **(per cent)**

Year	T &C	OECD	EEC	France	Italy	Germany	UK
China							
1988	Textile	4.86	1.94	1.73	4.46	2.57	1.52
	Clothing	7.23	3.34	3.10	9.67	4.50	1.57
1991	Textile	n.a	n.a	1.74	3.98	2.82	1.94
	Clothing	n.a	n.a	5.08	11.02	9.53	2.58

[210] **"China and the Multi-fiber Arrangement", by Kym Anderson. In:** The Uruguay Round. Textile Trade and the Developing Countries. Eliminating the Multi-Fiber Arrangement in the 1990s .Carl B. Hamilton, Editor, A World Bank Publication, 1990, p. 144

[211] Ibidem, p.146

Hong Kong							
1988	Textile	1.11	0.64	0.22	0.18	0.42	1.93
	Clothing	11.11	8.69	2.65	3.59	9.15	21.09
1991	Textile	n.a	n.a	0.31	0.50	0.29	1.34
	Clothing	n.a	n.a	2.53	2.82	7.23	19.02
Korea							
1988	Textile	3.19	1.00	1.32	1.44	0.97	1.24
	Clothing	11.09	5.10	3.89	2.94	5.85	7.54
1991	Textile	n.a	n.a	1.24	1.54	1.17	1.10
	Clothing	n.a	n.a	2.49	2.20	3.27	3.64
Taiwan							
1988	Textile	2.45	0.94	0.84	0.98	1.14	0.80
	Clothing	6.04	1.85	0.84	1.54	2.37	2.62
1991	Textile	n.a	n.a	0.88	0.72	1.03	0.95
	Clothing	n.a	n.a	0.64	0.98	1.60	2.26

Source: **Beyond the Multi-fiber arrangement: Third World Competition and Restructuring Europe's Textile Industry,** By Giorgio Barba Navaretti, Riccardo Faini and Aubrey Silberston, OECD 1995 (from table 6.2, 6.3, 6.4, 6.5)

With the more updated data in Table 7.3 for textile exports, it is observed that in 1997 three East Asian countries i. e. **Hong Kong, China, Korea occupied the top three slots** among the leading textile exporters of the world, although positions of **Taiwan, Japan** appear later. These five countries altogether account for 39.5 per cent of world's total export in textiles.

Table 7.3: Leading Textile Exporters (million US$)

Country	1994		1995		1996		1997	
	Value	Share (%)	Value	Share (%)	Value	Share (%)	Value	Share (%)
Hong Kong	12574.0	9.7	13815.0	9.2	14146.0	9.4	14602.0	**9.4**
China	11818.0	9.1	13918.0	9.3	12112.0	8.0	13828.0	**8.9**
Korea, Rep.	10693.0	8.2	12313.0	8.2	12718.0	8.4	13346.0	**8.6**
Germany	12654.0	9.7	14389.0	9.6	13787.0	9.2	13053	8.4
Italy	10861.0	8.3	12797.0	8.5	13206.0	8.8	12901.0	8.3

Taiwan	10260.0	7.9	11882.0	7.9	12048	8.0	12731.0	**8.2**
U. S. A	6592.0	5.1	7372.0	4.9	8009.0	5.3	9193.0	5.9
France	6224.0	4.8	7468.0	5.0	7303.0	4.9	7214.0	4.7
Bel-Lux	6797.0	5.2	7880.0	5.2	7438.0	4.9	7010.0	4.5
Japan	6780.0	5.2	7178.0	4.8	6927.0	4.6	6750.0	**4.4**
U.K.	4492.0	3.5	5163.0	3.4	5398.0	3.6	5618.0	3.6
Pakistan	3985.0	3.1	4256.0	2.8	4919.0	3.3	4594.0	3.0
Turkey	2194.0	1.7	2527.0	1.7	2722.0	1.8	3352.0	2.2
Netherlands	2694.0	2.1	3526.0	2.4	3240.0	2.2	3010.0	1.9
Spain	1947.0	1.5	2595.0	1.7	2886.0	1.9	2784.0	1.8
Indonesia	2498.0	1.9	2713.0	1.8	2835.0	1.9	2255.0	1.5
Thailand	1647.0	1.3	1937.0	1.3	1830.0	1.2	1925.0	1.2
Austria	1843.0	1.4	1989.0	1.3	2005.0	1.3	1911.0	1.2
Switzerland	2112.0	1.6	2267.0	1.5	2010.0	1.3	1795.0	1.2
Portugal	1344.0	1.0	1627.0	1.1	1610.0	1.1	1629.0	1.1
Others	10211.0	7.8	12648.0	8.4	13501.0	9.0	15779.0	10.2
WORLD	130220.0	100.0	150260.0	100.0	150650.0	100.0	155280.0	100.0

Source: World Trade Organization (WTO), Downloaded and edited from: Thailand textile institute website http://www.thaitextile.org/

Again, in the similar list with regard to the **clothing** exports in Table 7.4, **China and Hong Kong** secured the **top two position** in 1997 among the leading clothing exporters of the world while didn't appear in the top 20 exporting countries. Other four countries altogether account for 35.3 per of world's total. **Unfortunately, Bangladesh has no position in the least of top twenty exporters, even not in clothing exports** while Pakistan fills both the lists. East Asian countries, therefore, enjoys a vibrant position in world trade for both textiles and clothing.

Table 7.4: Leading Clothing Exporters (million US$)

Country	1994		1995		1996		1997	
	Value	Share (%)	Value	Share (%)	Value	Share (%)	Value	Share (%)

China	23731.0	16.9	24049.0	15.3	25034.0	15.1	31803.0	**18.0**
Hong Kong	21404.0	15.2	21297.0	13.5	21976.0	13.3	23107.0	**13.1**
Italy	12525.0	8.9	14175.0	9.0	16172.0	9.8	14851.0	8.4
USA	5616.0	4.0	6651.0	4.2	7511.0	4.5	8672.0	4.9
Germany	6669.0	4.8	7500.0	4.8	7579.0	4.6	7289.0	4.1
Turkey	4582.0	3.3	6119.0	3.9	6067.0	3.7	6697.0	3.8
France	4974.0	3.5	5621.0	3.6	5529.0	3.3	5345.0	3.0
UK	4116.0	2.9	4648.0	3.0	5184.0	3.1	5281.0	3.0
Korea, Rep.	5653.0	4.0	4957.0	3.2	4221.0	2.5	4192.0	**2.4**
Thailand	4508.0	3.2	5008.0	3.2	3845.0	2.3	3770.0	2.1
Netherlands	2622.0	1.9	2771.0	1.8	3053.0	1.8	3655.0	2.1
Taiwan	3445.0	2.5	3251.0	2.1	3207.0	1.9	3410.0	**1.9**
Portugal	3287.0	2.3	3805.0	2.4	3591.0	2.2	3303.0	1.9
Bel-Lux	2161.0	1.5	2723.0	1.7	3017.0	1.8	3007.0	1.7
Indonesia	3206.0	2.3	3376.0	2.1	3591.0	2.2	2904.0	1.6
Malaysia	2071.0	1.5	2266.0	1.4	2376.0	1.4	2329.0	1.3
Philippines	2185.0	1.6	2420.0	1.5	2389.0	1.4	2315.0	1.3
Tunisia	1840.0	1.3	2322.0	1.5	2396.0	1.4	2299.0	1.3
Poland	1847.0	1.3	2304.0	1.5	2373.0	1.4	2217.0	1.3
Pakistan	1578.0	1.1	1611.0	1.0	1872.0	1.1	1805.0	1.0
Others	22400.0	16.0	30546	19.4	34887.0	21.0	38359.0	21.7
WORLD	140420.0	100.0	157420.0	100.0	165870.0	100.0	176610.0	100.0

Source: World Trade Organization (WTO), Downloaded and edited from: Thailand textile institute website http://www.thaitextile.org/

7.5 : CONCLUDING REMARKS

From the preceding discussion it is obvious that world trade in textiles and clothing has traversed so far surmounting a lot of currents and crosscurrents. To explore a niche in the world market is crucial for effective export earning. It also constitutes a supporting task for the clothing exports of a country. As a member of LDC, **Bangladesh** needs to accomplish extensive homework in this regard. Now, the developments in international trade are also administered by the regimes that remain in place from time to time. Attention in the next Chapter, therefore, converges in international regimes in textiles and clothing from the very beginning and the effects of these rules and regulations on Bangladesh.

SUMMARY OF CHAPTER SEVEN

This chapter deals with the development of world trade in textiles and clothing through ages among different countries and regions. England had been importing the soft **muslins** and beautiful **"printed calicoes"**, from **India since 1631.** From the **seventeenth** century up **to** the **middle** of the **eighteenth** century, the East India Company's shipments to England of **Indian cotton** cloth showed a phenomenal expansion. In **1700**, British Parliament enacted legislation prohibiting the import of printed calicoes from India and the first sample of **English muslin** entered into **Bengal** in **1783.** The export of cotton yarn from Bengal to England stopped completely in **1786.**

The **beginning of the regular cotton trade** between the **United States** and **Great Britain** dates from **1784.** American traders not only supplied cotton to Britain, they explored the **Chinese market** too in the year **1784.** Interestingly, **India's status**, **by 1820**, transformed from **cotton-manufacturing country to cotton exporting country** for reasons mentioned earlier. **India,** by **1817,** started exporting cotton to **China**. The American civil war(1861-65) caused blockade to cotton export from the United States resulting in a **"cotton famine"** in Lancashire and English

manufactures were bound to look back on India for supplies. France in **1858** was prominent for cotton manufacturing most of which **came from America. I**n **1784** the American merchants began their commercial operations in the **Chinese markets** with **low cost products.** Between the **1850s and 1870s,** supremacy of **the Western** industrial countries were challenged by Indian and Japanese cotton goods in the **Asian markets.**

Japanese imports of raw cotton from America were escalating especially after **1913** and "during the **1930's American raw cotton became** the most important of Japan's raw-cotton imports. Between **1925 and 1933** Japan further increased its share in Indian imports and in **1939** superseded that of England. Moreover, the **Japanese** cotton had **replaced** the predominance of **Indian** cotton goods in the **Chinese market**, and furthermore it appeared in **1918-19 as a competitor** in the **Indian market** itself. **Textile and clothing production** has expanded very fast in East Asia vis-à-vis the rest of the world. "It grew especially rapidly in **Japan in the 1950s** and the **1960s**, in **Korea** and **Taiwan** in the **1960s and 1970s**, and in **China** since its opening up in **1978".**

CHAPTER EIGHT

INTERNATIONAL REGIMES IN TEXTILES AND CLOTHING AND BANGLADESH

8.1: FOREWORD

As the domestic productions and exports of any country are affected gravely by the developments in international environment, it is indispensable that the country be abreast of these evolutions absolutely. Specially, it is demanding in the context of complex features of international regimes in textiles and clothing. Present chapter touches all these developments from the time before World War II to the integration into World Trade Organization (WTO) under the Agreement on Textile and Clothing (ATC) along with its impacts on Bangladesh.

8.2: SOME DEVELOPMENTS BEFORE WORLD WAR II

As mentioned earlier, Japan achieved a spectacular growth between the two world wars and it began to export cotton textile products at this time. But “these exports were soon confronted with a number of restrictions: in **1936**, they were subjected to quantitative restrictions in 40 out of

106 markets—apart from protective and discriminatory tariffs, and exchange control measures."[212]

Particularly, Japan had to conclude some arrangements "under the **American threat** to take more restrictive unilateral measures if no agreement could be arrived at". Another agreement between the US and Japan was concluded in **1935** on the condition of Japanese control of exports of cotton fabrics to the Philippines which was then ruled by the US[213].

8.3: INTERNATIONAL TEXTILE TRADE POLICIES BEFORE 1960

After the Second World War, liberalized framework of **GATT** (General Agreement on Tariff and Trade) and of the **OEEC** (Organization for European Economic Cooperation) facilitated diminution in **restrictions** in international textile trade. But **North America and West Europe** harvested the benefits stemming from this liberalization. In contrast, restrictions on imports from Japan, East European countries and many less developed countries turned out to be, in many

[212] Monthly Record , Manchester Chamber of Commerce, 30 September 1936; quoted in Blokker (1989), Op. Cit. p.89

[213] Blokker (1989), Op. Cit. p.90

instances, “more restrictive in the course of the 1950s.”[214] Although less-developed GATT members were allowed to bring in restrictions under **Article XVIII** [215] of the General Agreement to stimulate **import substitution**, the upsurge of cotton textile production in these countries entailed in enhanced exports to developed countries, obviously raising confrontation with the products of developed countries in the international markets as well as in their domestic markets. Therefore, developed countries “defended in a way or other their domestic cotton textile industry that asked for protection”.

Most **West European countries** invoked provisions of the General agreement in **Article XIX**[216].” Moreover, “the cotton trade associations of Germany, Australia, Belgium, the Netherlands, Italy, France, Switzerland and Norway concluded in **1958** the so-called **Noordwijk Agreement”**, with a view to check “undermining of existing quotas through **re-exporting** to other participating countries of gray cloth,

[214] GATT, Textiles and Clothing in the World economy, Geneva 1984, p.63 cited in: Blokker (1989) p. 96

[215] “Governmental Assistance to Economic Development” through imposing tariff protection and quantative restriction to stimulate import substitution in the less- developed countries allowed by the contracting parties to GATT, 1994.

[216] permitting importing countries to take safeguard measures (tariffs or quotas) under certain conditions, when domestic producers suffers serious injury from increased imports to justify quantitative restrictions on their textile imports.

admitted temporarily on a duty-free basis for finishing".[217] On the other hand, the **US "took up** the same arms as before the war" i.e. Voluntary Export Restraints **(VERs)** to restrict cotton textile imports from **Japan**(1st VER November 1955 and 2nd VER 1956) and **Italy** (velveteen exports to the US for 1957) and an abortive attempt with **Hong Kong**. Thus, imports from Hong Kong increased while the same from Japan stabilized which is easily perceptible from the following Table 8.1 below.

Table 8.1: United States Imports of Cotton Manufactures, 1956-1961 (million US $)

	1956	1957	1958	1959	1960	1961
Total cotton manufactured Imports	154.3	132.2	150.0	201.3	248.3	203.3
Japan	**84.1**	**65.7**	**71.7**	**76.9**	**73.4**	**69.7**
Hong Kong	**0.7**	**5.8**	**17.4**	**45.8**	**63.5**	**47.0**
Other Asian countries	15.3	13.0	14.3	24.0	34.0	25.0
Egypt	0.4	0.5	0.3	0.3	5.9	1.0
Spain	0.3	0.3	0.4	1.6	7.2	3.2
Portugal	0.0	0.1	0.3	1.0	5.2	2.3

Source: Blokker (1989) p.94 table 3.5 which is taken from W. Hunsberger, Japan and the United States in the World Trade, New York 1964, p. 325

However, 'Hong Kong had to pay its price later, when it became the main target for new American restrictions during the Short-Term Agreement[218]".

After the Second World War, British industry[219] **asked for protection and d**uring **1959-1960 the British government**

[217] Vinod K. Aggarwal, Liberal Protectionism – The international politics of organized textile trade, Los Angeles 1985, p.73 cited in: Blokker (1989) p. 96

[218] Blokker (1989), Op. Cit, p. 96

reacted positively to this call agreeing to the **Lancashire Pact** [220] **. Selective restrictions,** thus, were effective against low priced imports of cotton textiles starting off from "newcomers" both within as well as outside the framework of GATT. Ultimately, "**selective safeguard measures** entered the **GATT legal order in 1961**, when the Short-Term Agreement entered into force[221] ." Thus, " The General Agreement on Tariffs and Trade was the only multi-lateral legal framework governing world trade in textiles from its provisional entering into force in **1948 until 1961**[222]."

8.4: TEXTILES AND CLOTHING ARRANGEMENTS FROM 1961 TO 1973

The Short-Term Arrangement (STA) and the Long Term Arrangements (LTA) were concluded in **1961** and **1962**

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[219] The **British cotton textile industry** had traditionally enjoyed a commanding position but it shrank extremely.In the nineteenth century "it exported 75 per cent of world exports, in 1913 50 per cent, and in the late 1950s the UK became a net importer of cotton textiles" Blokker (1989), Op. Cit, p. 97

[220] a series of inter-industries agreements affecting imports from Hong Kong, India and Pakistan. In agreeing to this Pact the British Government not only **violated** the General Agreement, it also contravened the Ottawa Agreement, containing the preferential system of the Commonwealth countries. Blokker (1989), Op. Cit, p. 97

[221] Blokker (1989), Op. Cit, p. 97

[222] Ibidem , p. 41

respectively to set up separate rules for international trade in cotton textiles and in **1973,** "the Multi-fiber Arrangement (MFA) extended this special treatment to trade in textiles produced from **man-made fibers** and **wool**[223] **".** These arrangements swerved from the General Agreement principally in **two fundamental aspects.** These are: "quantitative restrictions are allowed and these restrictions can be introduced on a **discriminatory basis**[224]." But these textile arrangements "**never covered all world trade in textiles**. **Never all** textile exporting and importing **countries** were **party** to the arrangements[225] ". Moreover, besides these textile arrangements, there were some other trade policy instruments that were different from textile arrangements but could affect the world trade in textiles and had their legal basis as well. These are tariffs, preferential tariffs (by virtue of Generalized Systems of Preferences, GSP), subsidies and countervailing duties, and anti-dumping duties.[226]." Again, **agreed cotton textile arrangements** obviously diverged from the basic rules of the General Agreement on Tariff and Trade (GATT) i.e. non-discrimination, prohibition of quantitative

[223] Ibidem, p.2
[224] Ibidem.
[225] Ibidem
[226] Ibidem, p.3

restrictions and particular Article XIX, as mentioned earlier).

The **first objective** of the 1961 arrangement[227] was "to provide growing opportunities for exports of these products provided that the development of this trade proceeds in a reasonable and orderly manner so as to avoid **disruptive effects** in individual markets and on individual lines of production" while the **second objective** was "to facilitate economic expansion and in particular to promote the **development of the less-developed countries** by providing increasing access for their exports of manufactured products[228]".

Again, both the **STA** and the **LTA** encompassed **only cotton textile products**, which is contrary to the Multi-fiber Arrangement (**MFA) as MFA included man-made fibers and wool** too. The **1961 Arrangements** were effective for **one year**. Thereafter, **LTA came into force on October 1962** and remained in force for five years. Later, **LTA was extended three times** without any amendment to its basic rules. The first two Protocols extended the LTA each by three years

[227] The 1961 arrangements includes both STA and LTA with a preample and two appendices.
[228] Ibidem, p.109

and the third extension was only for three-months to let the MFA emerge in 1974[229].

8.5: THE MULTI-FIBER ARRANGEMENTS (MFA) FROM 1974 TO 1994

As mentioned in the preceding paragraph, the MFA commenced its drive in 1974. **MFA-I** remained in force for four years with effect from 1 April 1974, **MFA-II period** drifted from 1978 to1981. Thereafter, **MFA-III** continued for four years and seven months and **MFA-IV** covered the period from 1 August 1986 up to 1 August 1991[230]. The MFA terminated on **31 December 1994** upon the entry into force of the **WTO** and its Agreement on Textiles and Clothing on **1 January 1995**[231]**.** During the period of 21 years, from 1974 to 1994, the MFA experienced numerous amendments with regard to **new provisions** and **new products**. Moreover, **six per cent growth rate in quotas,** as predicted in the MFA, "was in many cases **sharply reduced** in practice in **bilateral agreements**[232].

With reference to the **objectives** of the MFA, **Article 1.2** from its text reads as:

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[229] Ibidem, p. 117
[230] Blokker (1989) p.163

[231] World Trade Organization(WTO) homepage www.wto.org
[232] Ibidem

> "The basic objectives shall be to achieve the **expansion of trade**, the **reduction of barriers** to such trade and the **progressive liberalization of world trade** in textile products, while at the same time ensuring the **orderly and equitable development** of this **trade** and **avoidance of disruptive affects** in individual **markets** and on individual **lines of production** in both importing and exporting countries[233]".

From this Article it appears that the first main objective, **trade liberalization**, encompasses three more precisely defined objectives, I. e. to achieve the expansion of trade; to achieve the reduction of barriers to such trade and to achieve the progressive liberalization of world trade in textile products. Again, the **second main objective** in it may be splited into two objectives: ensuring the **orderly and equitable development** of this trade; ensuring avoidance of **disruptive effects** in individual markets and on individual lines of production in **both** exporting and importing countries. Obviously, these two objectives are partly conflicting. In addition, **Article 1.3** contains a **third main objective**, namely to **promote the development of less developed** countries. Article 1.3 of MFA reads as follows:

> " A principal aim in the implementation of this Agreement shall be to further the **economic and social development** of developing countries and secure a substantial **increase** in their **export earnings** from textile products and to provide **scope for** them in **world trade** in these products"[234].

[233] Blokker (1989), p. 157
[234] Ibidem, p. 158

The **third main objective** also breaks down into three more detailed objectives, i.e. to further the economic and social development of the developing countries; to secure a substantial increase in their export earnings from textile products; to provide scope for a greater share for them in world trade in these products. This is also conflicting. Through restrictions of quota developing countries, who have higher potential for export, find contracted market in developed countries which appears in disparity to the objective of economic and social development of developing countries owing to trim down of their export earnings.

In relation to the **Product Coverage allowed under MFA Article 12.1** of the MFA text stipulates as follows[235]:

> "For the purpose of this Arrangement, the expression **"textiles**" is limited to **tops, yarns, piece-goods, made-up articles, garments and other textile manufactured products** (being products which derive their chief characteristics from their textile components) of **cotton, wool, man-made fibers, or blend thereof**, in which any or all of those fibers in combination represent either the chief value of the fibers or 50 percent or more by weight (or 17 per cent or more by weight of wool) of the product".

As mentioned earlier, MFA had larger product coverage than its predecessors STA and LTA. It covered not only cotton textiles, but also man-made fibers and wool. In addition, **handloom** textiles from less-developed countries were excluded from the scope of MFA.

[235] Ibidem, p. 161

The MFA, like the preceding cotton arrangements, granted provisions for "the imposition of **quotas**, either through **bilateral agreements or unilateral actions**, when surges of imports caused market disruption or threat thereof in importing countries" whereby importing countries were required to **discuss with** exporting members "both in determining a situation of **market disruption"** as well as "**introducing** and maintaining **restrictions"** [236] . Normally, importing countries allowed **"annual growth rate of six per cent in the quotas" and** a statutory body, the **Textiles Surveillance Body**, was entrusted with monitoring and reporting functions and settlement of disputes[237].

Ironically, application of the MFA was not even handed. WTO homepage provides further that "apart from restrictions on former state trading countries, the **MFA was used almost exclusively to protect against imports from developing countries"**. But **Switzerland and Japan were** exceptions. Although these two countries were parties to the MFA, they "had **no restraint agreements" and "Sweden dropped** all of its restraints and withdrew from the MFA in 1991"[238].

[236] Ibidem
[237] WTO homepage www.wto.org
[238] Ibidem

8.6: EFFECTS THE MULTI-FIBER ARRANGEMENTS (MFA)

In a report published by OECD (1995)[239], it has been stipulated that "the growth of exports of **textiles and clothing from LDCs to the developed countries has been slowed down although even so it has continued to grow".** It indicates that LDCs are benefited from the MFA restriction but not at the pace if trade were free. Again, countries like Hong Kong reaped benefits in two ways, first by **quality upgrading** and, second from **off-shore production base**, to exploit quota rents which has also been mentioned in OECD report as[240]:

> "Throughout the 1980s Hong Kong entrepreneurs could not only profit from domestic quota **rents and upgrading.** Moreover, they could migrate **and establish off-shore** operations to tap quota rents".

Again, excerpts from Hamilton (1990) demonstrates that developing countries suffer the loss of exports originating from the MFA restrictions[241]:

"Most studies have found decline in export opportunities and revenues from the MFA to be substantial for developing countries. For example, the **UNCTAD (1986) estimated** that **complete non-discriminatory** liberalization (involving both tariffs and the MFA quotas) **could increase developing country exports** of **clothing** by **135** percent and **textiles** by **78** percent. Another estimate by **Kerman** and others (1984)

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[239] Giorgio Barba Navaretti,Ricardo Faini and Aubery Silberston, Op. Cit

[240] Ibidem, p. 243

[241] **The Uruguay Round, Textile Trade and the Developing Countries,** Eliminating the Multi-Fiber Arrangement in the 1990s. By Carl B. Hamilton, Editor, A World Bank Publication, 1990. p.23

suggests that **developing country exports to the major OECD countries could increase** by **82** percent for **textiles** and **93** percent for **clothing** if both trade restrictions were removed."

While the MFA has "the **effect of encouraging investment flows from restricted to non-restricted or less restricted developing countries**[242]**",** for instance**,** large-scale overseas investment activity of Hong Kong as mentioned earlier, it has also repercussion in the restricted markets, like **Bangladesh**.

Again, it is factual that "**despite the increasingly restrictive MFA quotas, the Asian Big Three** [243] **have continued to have high growth rates through the 1970s and 1980s**[244]. It is obvious from the preceding discussion that the effect **of the MFA on development** is controversial**.**

8.7: EFFECTS THE MULTI-FIBER ARRANGEMENTS (MFA) AND BANGLADESH

Appendix-IV provides a list of participating states in the MFA at different phases (MFA-I, MFA-II, MFA-III, MFA-IV) in which it is observed that **Bangladesh** was the member of MFA from its commencement. Obviously, Bangladesh was subjected

[242] Ibidem, p. 30
[243] Hong Kong, Taiwan, Korea, Rep. of
[244] Hamilton, Op. Cit. p.32

to quota restriction from the developed countries, which would be more transparent from the discussions in subsequent chapters.

It has been lay down in Hamilton (1990) that" if all developed country trade restrictions on textile and clothing exports are removed, textile and clothing exports from **Korea and Hong Kong** would increase by **210** percent and **35** percent respectively. Moreover, export from **China** would increase by **322** percent, while those from **Bangladesh** would increase by **70 percent**[245] ." Moreover, the statistical evidence below indicates that the discouraging effects of MFA towards investment opportunities would be minimized:

> "…… **harmful consequences of the MFA quotas follow from their adverse impact on investment opportunities in developing countries**. The experience of **Sri Lanka in 1977-78 and Bangladesh in late 1985** when the harsher MFA quotas restricted inward investment flows are examples of discouragement effects due to the MFA. These are particularly serious for countries, which are only just starting to foster export-oriented manufacturing. As Chaudhury and Hamid (1988) further pointed in discussing the effects of the MFA on Pakistan's textile industry, **the MFA has 'hampered modernization of the sector**, led to expansion of the low cost power-loom sector, and generally **put Pakistan technically behind in textile**[246]**."**

Thus, it is optimistic that Bangladesh will enjoy its growing exports and investment opportunities when the quota restrictions would be over after December 1994.

[245] Ibidem, p. 24
[246] Ibidem

In **1984, "France and the UK imposed MFA quotas on Bangladesh and later the US did likewise**[247]**" (World Bank, 1987).** These bilateral agreements were enormously restrictive. The US, for instance, allowed **only a 6% growth rate in MFA imports from Bangladesh.** Even after so, this measure had shown a 386.4% rate of growth from 1981 to 1984. Moreover, it was so exhaustive agreement that restricted imports from Bangladesh included "down to 7-digit SITC **(Standard International Trade Classification**) categories[248]". Owing to the **MFA restrictions** on Bangladesh, **immediately large number of factories closed,** threw thousands of female workers destitute, banks broke off providing loans due to uncertainty over the future and investments in the industry dwindled[249] . While **republic of Korea** adjusted to the MFA quotas by moving to higher **quality** production and exploiting the **skilled and educated labor** force, **Bangladesh**, regrettably, has **not been benefited** from the growth experience of the NICs[250]**".** Thus, **MFA couldn't encourage Bangladesh** to pave the way for further industrialization

[247] World Bank report, 1987 as cited in: **"The Multi-Fibre Arrangement - A Thread of Protectionism", by** Samantha Smith - Senior Sophister, Trinity College Dublin, Ireland, DEPARTMENT OF ECONOMICS, (http://www.economics.tcd.ie/SER/1998/Essay21.htm Downloaded on 16 October, 2000)

[248] Ibidem. **7- digit** for example, a quota was placed not only on shirts, but on shirts made from dyed yarn in particular sizes

[249] Samantha Smith, Op. Cit.

[250] Ibidem

even after the comparative advantage of abundant **cheap labor force** in the country.

8.8: THE AGREEMENT ON TEXTILES AND CLOTHING (ATC) AND BANGLADESH

The WTO Agreement on Textiles and Clothing (ATC) has been concluded by the member states for a period of ten years (1995-2004). It is a transitional instrument to step into the quota free trade in the international market. But it will not be the duty free regime, for which further negotiations might be necessary. A full text of the ATC has been attached to the **Appendix-III** that would afford every element of the Agreement. On the whole, the **ATC** has been framed by the following key facets[251]:

"(a) The **product coverage**, basically encompassing yarns, fabrics, made-up textile products and clothing;

(b) A program for the progressive **integration** of these textile and clothing products into GATT 1994 rules;

(c) A **liberalization process** to progressively enlarge existing quotas (until they are removed) by increasing annual growth rates at each stage;

[251] **"The Agreement on Textiles and Clothing" WTO home page.** http://www.wto.org/english/tratop_e/texti_e/texintro.htm downloaded on 16 October,2000

(d) A **special safeguard mechanism** to deal with new cases of serious damage or threat thereof to domestic producers during the transition period;

(e) Establishment of a **Textiles Monitoring Body ("TMB")** to supervise the implementation of the Agreement and ensure that the rules are faithfully followed; and

(f) other provisions, including rules on circumvention of the quotas, their administration, treatment of non-MFA restrictions, and commitments undertaken elsewhere under the WTO's agreements and procedures affecting this sector".

The **product coverage is** listed in the **Annex to the ATC, which** could be available from the WTO homepage[252]. The list incorporates "all products which were subject to MFA or MFA-type quotas in at least one importing country".

ATC Article 2 of the Agreement spells out the **integration process** as to how "Members shall integrate the products listed in the Annex into the rules of GATT 1994 over the 10-year period". It has to be achieved "progressively in **three stages** (3 years, 4 years, 3 years) with all products standing integrated at the end of the 10-year period".

[252] Ibidem

The **first stage started** on **1 January 1995** "with the integration by Members of products representing not less than **16 per cent** of that Member's total 1990 imports of all the products in the Annex". **Stage 2** began on **1 January 1998** with a set target of "not less than a further 17 per cent" integration. **Stage 3** would commence **on 1 January 2002** when "not less than a further 18 per cent will be integrated". Finally, before 1 January 2005, "all remaining products (amounting up to 49 per cent of 1990 imports into a Member) will stand integrated and the Agreement terminates. Therefore, after 31 December 1994, world trade in textiles and clothing would be free of quota restriction and market take up would depend purely on competition.

8.9 : CONCLUDING REMARKS

Bangladesh now enjoys the quota facility i.e. for clothing products in US and EU markets. This is an assured market facility as a member of Least Developed Countries (LDC). But this advantage will linger no more from 1 January 2005. At that time, Bangladesh clothing exports will face stiff competition from other countries, for example, China, India, Pakistan, Thailand and so on. The countries, which do not enjoy quota facility, now, are capable of exporting RMG products by their own supply chain using mostly indigenous

materials, for instance, India. In other words, **backward linkage** industries have already thrived in these countries, which would let them to stay in competition in the ensuing free market with a better position than Bangladesh. Therefore, setting up **backward linkage** industries in Bangladesh with a complete **supply chain** for its major export earning RMG sector is crucial. **Chapter eleven** will afford in details in this matter. Now, before we turn to the Bangladesh perspective in textiles and clothing sector, it is imperative that we look into the experience of other contemporary leading countries. Chapter Nine next deals with the same.

SUMMARY OF CHAPTER EIGHT

This chapter touches all the developments international regimes in textiles and clothing from the time before World War II to the into World Trade Organization (WTO) under the Agreement on Textile and Clothing (ATC) along with its impacts on Bangladesh.

Japan had to conclude **Voluntary Export Restraints(VER**) arrangements under the **American threat** when Japanese textiles and clothing industry experienced a boom during the period between two world wars. After the **Second World War**, liberalized framework of **GATT** and the **OEEC** facilitated diminution in **restrictions** in international textile trade. Thus, GATT was the only multi-lateral legal framework governing world trade in textiles from its provisional entering into force in **1948 until 1961.**

The Short-Term Arrangement (STA) and the Long Term Arrangements (LTA) were concluded in **1961** and **1962** respectively to set up separate rules for international trade in **cotton textiles** and in **1973,** the Multi-fiber Arrangement (MFA) extended this special treatment to trade in textiles produced from **man-made fibers** and **wool.** The **first objective** of the 1961 arrangement[253] was to provide opportunities for exports of these products to avoid **disruptive effects** in individual markets and on individual lines of production while the **second objective** was to facilitate economic expansion and, in particular, to promote the **development of the less-developed countries** by

[253] The 1961 arrangements includes both STA and LTA with a preample and two appendices.

providing increase access for their exports of manufactured products.

The MFA was launched in 1974 and terminated on **31 December 1994** followed by the emergence of Agreement on Textiles and Clothing (ATC) on **1 January 1995** under WTO. The main objectives of the MFA were **trade liberalization** and **orderly and equitable development** of trade to avoid **disruptive effects** in individual markets and on individual lines of production in **both** exporting and importing countries, to **promote the development of less developed** countries. Ironically, the **MFA was used almost exclusively to protect against imports from developing countries.**

Bangladesh, regrettably, has **not been benefited from the MFA even after** the comparative advantage of abundant **cheap labor force** in the country chiefly because of the unskilled and uneducated labor force that was unable to produce quality products.

The WTO Agreement on Textiles and Clothing (ATC) has been concluded by the member states for a period of ten years (1995-2004). It is a transitional instrument to step into the quota free trade in the international market in 2004.

Bangladesh’s the quota facility will remain no more from 1 January 2005 resulting in stiff competition from other countries, for example, China, India, Pakistan, Thailand, among others. **Backward linkage** industries have thrived in these countries that would let them to stay in competition in free market with a better position than Bangladesh. Therefore, setting up **backward linkage** industries in Bangladesh with a complete **supply chain** for its major export earning RMG sector is crucial.

CHAPTER NINE

TEXTILES AND CLOTHING: EXPERIENCE OF CONTEMPORARY LEADING COUNTRIES

9.1: FOREWORD

Prior to looking into Bangladesh situation prevailing in the textile and clothing sector, it is essential to focus into the other leading countries' experience with a view to grasp the trajectory of such development that could be followed by Bangladesh blending the existing realities of the country. As will be elaborated later, Bangladesh is at the labor–intensive end in the spectrum of the advancement in the textile and clothing industry. It is, therefore, logical that Bangladesh follows the path of those countries that started at the labor-intensive end but, now, have moved to capital-intensive end partially or completely. Given this context, Bangladesh could examine the experiences of countries like Japan, China, Hong Kong, Republic of Korea, Turkey, India, Thailand, among others. This chapter is attributed to this objective only.

9.2: JAPAN---THE PIONEER IN EAST ASIA

As early as 1874, **Japanese cotton-weaving industry** was **sluggish** in its **modernizing.** For instance, in Mikawa Province, mostly depressed small-scale farmers **lacked**

arable lands that couldn't afford living expenses by crop cultivation. Consequently, farmers adopted cotton weaving as their **subsidiary occupation, which** inhibited the **emergence** of cotton weavers' **professionalism.** Moreover, these unspecialized peasant cotton weavers were **short of organizational and financial independence.** Provincial **merchants** afforded advanced production **funds** but **not** the **yarn**, the most important material in weaving cotton cloth[1].

But the shortage of production of dyed cotton cloth was removed by a **structural shift** with the application of **Jacquard looms** and professional **wage labor** as mentioned below[2]:

> "Because of the increasing demand for dyed cotton cloth, some provincial **merchants began to install workshops in the back yards of their houses** for weaving with a small number of **Jacquard looms**, first introduced from Europe in 1874. Employing wage laborers, the workshop produced a substantial volume of dyed cotton cloth. This was a new phenomenon, from the **structural aspect** of the cotton-weaving industry."

Structural shift in technology and growing professionalism triggered the rise of Japanese textile industries in preliminary stages. In addition, "the **wealthy** and **middle-scale farmers** played a decisive role in the modernizing of the cotton-weaving industry in Japan[3]."

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[1] Sung Jae Koh, Op. Cit. p. 44

[2] Ibidem, p.45
[3] Ibidem,p.48

In Japan, it was only the **second decade of twentieth century** that handlooms were being supplanted by power-looms and **"hand looms were still widely in use** as the important tool for the production of cotton cloth. In number, handlooms were dominant. In **1900** there were more than 700,000 hand looms, while the total number of power looms was only 32,000[4]." It shows that handloom occupied a pre-dominant position in the way of development of Japan's textile and clothing industry.

After the **first world war**, the main products of the **rural weaving** industry, the **gray clothes**, launched its **exporting** owing to the opening up of markets in **India** and the **South Sea Islands**. This time double-width weaving machine twitched to supplant the single-width. The opening up of these markets also led to the **modernization** of the rural **cotton-weaving** industry in Japan[5]. On the other hand, the **spinning section** of the cotton industry, at that time, was geared up for modernization by merchants and landlords as evident from the excerpt below[6]:

> "**Prosperous merchants and big landlords mobilized their savings for the modernization** of the **spinning section** of the cotton industry. On the other hand, **wealthy farmers** were **able** to utilize

[4] Ibidem,p.49
[5] Ibidem,p.49
[6] Ibidem,p.52 & 53

limited amounts from their savings for the modernization of the **weaving section**.

It is notable that availability of the **girl workers**[7]" and cheap **labor** played a great role in the development of Japanese cotton industries. But the manufacturers faced **labor shortage** as female workers had to work in appalling circumstances in the factories as under[8]:

". the **health** condition of the **female workers** was greatly **impaired** because they were paid **low wages**, **worked nights**, and lived like **prisoners** in company dormitories. According to the report made by Japan Cotton Spinners' Association, during the period of a year from **October 1896, to September 1897**, there were 44,270 workers, or 84 percent of the total number of workers, in the cotton mill who had diseases incurred in the line of work. Thus, **living conditions and the standard of sanitation** were the direct cause of the continued problem of **labor shortage** in Japan".

An admirable feature of the Japanese textile industry, as early as 1925, was that, unlike India, it had almost no labor movement that certainly helped expedite the development process, as could be work out from the following citation[9]:

"The textile trade union membership increased by more than 250 percent during the period of **1927-38**. In other words, **in India** the cotton textile industry developed a most **effective labor movement**, while there is almost **no labor movement in the Japanese textile industry** where 80 percent of the total labor force was composed of female workers. The fundamental difference in the labor movement of these two countries lies in their **socio-economic realms**." P-74

As stipulated earlier, Japanese textile industries experienced a **boom between the two world wars**. This

[7] "as they could not enter the labor market as a normal force because of their social character",Ibidem p. 58
[8] Ibidem p. 65
[9] Ibidem p. 74

growth in Japanese competitiveness in textile products also **revolutionized** its **fiber consumption pattern** because its "importance as an **exporter of raw silk gradually declined** and it emerged as an **importer of raw cotton and wool"** and by the **1950s**, "Japan accounted **for one-quarter** of **US** cotton exports and **one-fifth** of **Australian wool exports -** and the latter share was two-fifths by the early 1970s"[10].

The rise in textiles and clothing industries contributed greatly to the Japanese economy during this period and, as it moved towards the capital intensive edge, labor-intensive manufacturing started losing ground with the growing competitiveness originating from the NIEs in the post war era. This could further be grasped from the quotation below[11]:

"Around 1930, those manufacturing industries provided **one-tenth** of **GDP and employment** in Japan and **one-third** of the country's total **export earnings**. Their importance within the rapidly expanding manufacturing sector peaked a decade or so earlier, when they accounted for **30 per cent** of **manufacturing value-added** and about **60 per cent** of both **industrial employment and exports of manufactures**. …… Japanese economy **matured**, these labor-intensive manufacturing industries rapidly **lost their competitiveness** internationally as NIEs with less capital per worker emerged in the postwar years".

[10] **Introduction and Summary, Kym Andrson, In: New Silk Roads, East Asia and World Textile Markets,** edited by Kym Anderson, Cambridge University Press (1992)

[11] **The experience of Japan in historical and international perspective,** Young-ll Park and Kym Anderson'**In** : Kym Anderson, Op. Cit. p.19

Again, this structural shift is reinforced by the evidence that **"capital-intensive synthetic and fabric sub-sector accounted for about 60 per cent of Japan's exports of textiles and clothing"** in the **1970s and 1980s** while "labor-intensive finished textiles and clothing have come to account for 60 per cent of all textile clothing imports[12]." Moreover, Japanese industries passed through several important domestic adjustment processes such as "**shedding of excess labor and capital equipment**, **the demise of small plants and adoption of modern, labor-saving equipment, investment in research and development**, the already mentioned switch in production emphasis from **labor-intensive to capital-intensive products**, and **changes in protection from imports"**[13] of which enhancement of capacity utilization through scrapping looks particularly interesting as it "was concentrated on equipment in the **yarn and fabric stages,** where the industry's **international competitiveness** was **declining"**. This could be looked further as[14]:

> "Over the period **1956 to 1981**, 200,000 looms for cotton and staple fibres, 120,000 looms for silk and rayon, 22,000 looms for wool, and 5 million spindles were **scrapped with the help of 360 billion yen in government subsidies and loans**. These measures contributed to the 13 per cent **increase in capacity utilization** in these industries between 1965 and 1973".

[12] Ibidem, p. 28
[13] bidem, p.94
[14] Ibidem, p.96

Correspondingly, “production capacity for synthetic **fibers quadrupled** between 1965 and 1986, from 1150 to 5000 tons per day. The number of establishments in synthetic fiber production also increased, from 31 in 1965 to 76 in 1983”[15]. In addition, “industry's efforts to adopt cost-reducing technologies have focused on introducing equipment that embodies **automation and computerized techniques**, thereby **speeding up production processes”**[16].

Formal research efforts also stimulated the productivity in the **textile.** For instance, the Japanese textile industry “exported 182 technologies and received more than 4 billion yen in royalties. More than 70 per cent of those technology exports were purchased by neighboring Asian countries”. Moreover, the Japanese textile industry has “responded to changing market conditions by shifting its product mix **to more technologically sophisticated items and by upgrading products,** particularly in **new synthetic materials and high-quality textiles”**[17]**.** Another important facet of Japanese textile industries is its interior textiles[18] the market size of which was **US$3,775**

[15] Ibidem, p. 96
[16] Ibidem, p. 96
[17] Ibidem
[18] carpeting, curtains and other products.

million at 131 yen/$) in 1998[19]. In the recent times, Japanese textile industries seems to be dwindling in terms of number of establishments, number of employment, exports which is evident from Table 9.1 below.

Table 9.1: Textile Industry (1985-1999) of Japan

(persons) (million yen)

•@	Number of Establishments	Number of Employees	Value of Shipments
1985	35,424	609,462	8,086,962
1990	30,515	530,736	7,838,171
1995	16,045	264,528	4,230,099
1999	12,309	201,264	3,236,317

Source: Ministry of International Trade and Industry homepage, Japan[20]

In addition, Table 9.2 provides data on employment in the textile and clothing industries, which again exhibits the similar trend as the preceding one.

Table 9.2: Employment in Japanese textile industries

(000' persons)

Year	Manufacturing	Man-made fiber (A)	Textile (B)	Spinning	Weaving	Knitting	Dyeing & Finishing	Apparel (C)
1990	11,788	25	625	57	141	192	102	621
1995	10,880	23	327	31	93	16	84	644
1998	10,399	19	272	23	76	14	70	544

Source: Ministry of International Trade and Industry homepage, Japan
Note: Gloves and hosiery are included in 'Apparel' in 1994-1998, ' Knitting' in 1989-1993.

This declining trend might be imputed to the rising force in East Asia in these industries, namely, Hong Kong, Taiwan, Korea and, more recently, China and Japan's

[19] **INTERIOR TEXTILES**
http://www.tradeport.org/ts/countries/japan/isa/isar0011.html
Downloaded on 13 October, 2000
[20] Ibidem

parallel move to even high-tech industries coupled with rising labor costs in its capital-intensive edge.

9.3: CHINA-----THE EMERGING FORCE IN EAST ASIA

China badly needs **"hard-currency** export earnings" to purchase **essential imports** as well as for **servicing** China's sizeable **foreign debt.** As **Chinese farmers** are unlikely to put in much to the basket of foreign exchange earning and the demand for **mineral and energy** products are likely to grow faster than domestic supply in China's industrial development process, textile and clothing industries contribution is crucial to its economic growth and development[21].

China ranks as the largest producer of cotton clothing, and the second largest producer of synthetic fibers in the world. It is, therefore, reasonable to believe that China is one of the most important producers and exporters of clothing and textiles in the world. China owned about 54,000 textile and clothing factories in 1995 of which more than **90%** were small-and medium-sized enterprises **(SMEs)**[22]. **Some 80% of the fibers consumed in**

[21] **Will China's experience be different? b**y Kym Anderson. In : Kym Anderson, Op. Cit. , p. 197-98

[22] Profile of China's Textile Industry
http://www.cestt.org.cn/acca21/online-erivces/sectors/Textile%20Industry.htm
Downloaded on 13 October, 2000

China in its textiles and clothing is cotton[23] **.** In addition, other natural fibers such as wool, jute, mulberry worm silk, hair, etc. are also used. Synthetic fiber is constitutes also a significant component in its total fiber consumption. Moreover, the textiles and clothing industry in China provides opportunity for large employment. The industry employed 12.43 million employees in 1995. The total value of output was 703.5 billion Yuan RMB in the same year.

As mentioned above, **China's textile industry** is mostly in the type of **SMEs** and so compatible the **technology and techniques** are, “at the level of the Europe-American textile industries in the 1970s' and 1980s”. In spite of its rear position in technological advancement, the textile industry of China enjoys a competitive edge in the global market owing mainly to its “comparative advantages in **low labor costs, available raw materials, and low manufacturing cost**[24] **”**. Further, its **domestic textile market is quite large** due to the gigantic size of its population, more than 1.2 billion. Being a traditional industrial sector, detailed **standards have been formulated** in Chinese textile industry, specially

[23] Ibidem
[24] Ibidem

raw material standards, yarn and fabric standards, and clothing processing stands[25].

Again, China has not joined **the WTO** till date, although it is preparing so. While the **competitive co-efficiency of the garment industry in China is 0.93** (and that of the fabrics industry is only 0.07)[26], it is apprehended that China would have faced stiff competition from its other competitors after its accession to the WTO. It is alleged that the competitiveness of China is buttressed by **great export volume and high custom tariff**[27], although, "most of the **exported garments are of low and middle grade"** [28] **.** Textile industry in China seems to have little scope to keep pace with market fluctuation as "the **government controls the purchase of cotton" and** hence a **stable production cost** persists in **the textile industry.** Notwithstanding periodic short-term macroeconomic and political crises, modest **political stability** has prevailed in the 1980s and 1990s that allowed rapid growth in the industry.

Another advantage of China is derived from the "successful **structural adjustments both Japan and the**

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[25] Ibidem
[26] **China textile sector to face challenges after WTO accession** http://www.jobbankusa.com/indnews/textiles.html **available 2000-10-14**

[27] Ibidem
[28] Ibidem

East Asian NICs" making room in 'world markets for labor-intensive goods" with a simultaneous rise of China's import **demands of commodities for capital-intensive** intermediate goods [29] . Annual production of synthetic fibers of China trebled between 1977 and 1983 even though the **imports of** synthetic fiber expanded in parallel[30].

Outward looking policies during the 1980s had led clothing industries of both **China and Thailand** to expand very fast and are becoming **more dependent on imports of fibers. However,** "the **emergence of China** especially as a major exporter of textile products is now **putting competitive pressure on Asia's advanced developing economies as well as adding to pressure on manufacturers in high-income countries"[31].** It is interesting that China has established "Hi-Tech Park" for China's Textile Industry (IHPCT) which would impart, no doubt, a new momentum to the China's textile and clothing[32].

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[29] **China and the Multi-fiber Arrangement, by Kym Anderson. In:** Carl B. Hamilton, Op. Cit., p. 151. Again intermediate goods are, for example, yarn, fabrics etc.

[30] Ibidem

[31] **Introduction and Summary, by Kym Andrson In:** Anderson, Op. Cit

[32] "**International Hi-Tech Park for China's Textile Industry" U. C. Computer(Shanghai) Co. Ltd. 568 Ou Yang Road, Shanghai, 200081, P. R. China.** http://www.sh.com/zone/other/textile.htm downloaded on 12 October, 2000

As stated earlier, demand for natural fibers is increasing notwithstanding the huge natural fiber production. It is, therefore, perceived that “expanded production and exports of finished textiles and standard clothing are leading to increased imports of fibers, both natural (from the United States and Australasia) and synthetic (from Japan and newly industrialized East Asia)” [33] . Further to mention that **“China has already achieved the most difficult tasks required to emulate its East Asian neighbors”.**

9.4 : HONG KONG ------THE SECOND GENERATION

With the declining comparative advantage of Japan in labor-intensive end in the early 1970s, the NICs in East Asia, namely, Hong Kong, Korea and Taiwan marked a spectacular growth in their textiles and clothing industries, first, with the labor-intensive production. Later, in the 1980s these NICs, like their predecessor Japan, moved towards capital-intensive production i. e. through the use of man-made fiber technology. Therefore, these NICs could be marked out as second generation in the rise of their textile and clothing industries in East Asia with Japan being the first.

[33] **Effects of China's dramatic reforms on its neighbours and on world markets, Kym Anderson and Young-ll Park, In:** Kym Anderson(1992), p. 48

Presently, Hong Kong's foremost export earner is its textile industry, which "accounts for 7% of total domestic exports, and employs 9% of total manufacturing workforce"[34]. It is also the major supplier to the local garment industry, which "takes up more than half of total output". The textile industry, therefore, turns up to a **backward linkage** to the garment industries of Hong Kong. Moreover, Hong Kong has set up some offshore production bases, mainly in Asia, **Central and South America** with a view to exploit **cheap labor** and get hold of **quotas available in these countries**. It has also "established factories **in Western Europe, US and Canada**, in a bid to **by-pass quota** restrictions and to gain better **access to these markets"** [35] . For **quota-free items**, Hong Kong manufacturers chose **China** as offshore **production base**. Hong Kong's textile industries also supply fabrics to these overseas garment factories. Another feature of Hong Kong textile industry is that "**most** of the **textiles** factories are **small-scale**, with **60%** of Hong Kong's textile firms employing **less than 20 persons**. **Medium-**sized factories constitute **36%** of the total number of

[34] **Overviews of Textile Industry of Hong Kong** http://www.company.com.hk/hkencyc/hkersi47.htm downloaded on 14 October, 2000

[35] Ibidem

textile firms, while the remaining **4%** are large factories which employ **over 100 workers”**[36].

As regards the spinning, “modern machines and techniques such as **open-end spinning”** are used in Hong Kong. C**otton yarn,** cotton/man-made fiber yarn, man-made fiber yarn as well as woolen and worsted[37] yarn are produced in its spinning industries. In **Weaving** sector, about **90%** of the output is “**cotton fabrics**, with **denim**[38] taking up the lion's share”. **Shuttle less looms,** for instance, multi-gripper, rapier and air jet looms are employed that “**exhibit high productivity”.**

Manufactures of **knitting**[39] segment are “**mainly cotton fabrics**, although **wool/acrylic and nylon/acrylic blends** are also produced”. Computerized design systems, programming equipment and knitting machines are extensively used to enhance **productivity.** A few companies Vertically **integrated** the manufacturing of textile products through a successive backward linkage supply chain i. e. “**from yarn, fabrics to ready-to-wear is**

[36] Ibidem
[37] a fine wool cloth used for making trousers, skirts etc.(Oxford)
[38] a strong cotton cloth, usually blue in color, used for making jeans etc. (Oxford dictionary)
[39] to make garments, etc. by creating rows of connecting loops of specially wool thread using long metal, plastic or wooden needles (Oxford dictionary)

carried out by, operating facilities in spinning, weaving, knitting, dyeing, finishing and garment making"[40].

In Hong Kong, productivity of the industry has been greatly enhanced which is imputed to **increased application of modern, computer-aided manufacturing equipment and production machinery[41].** By **moving up-market** Hong Kong survives in competition from **low-cost countries. "Efficient finishing services"** appears as an important factor in maintaining the **competitiveness** of the textiles industry. Moreover, a "**large variety of clothing** ranging from **high** fashion wear to **simple** clothing accessories are manufactured in Hong Kong which, in turn, move towards **higher-value-added** through design **and quality improvements**.

Textile related companies are also listed in stock exchange. As the home page provides, "**20 clothing and textile related companies"** are listed on the **Hong Kong Stock Exchange** that accounts for "about **one-seventh of the total number of industrial stocks"**.

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[40] Overviews of Textile Industry of Hong Kong, Op. Cit.

[41] Ibidem

Hong Kong's strategic location has made it as a **regional hub for sourcing garments**. Among the orders received by Hong Kong firms, **"simple items** are usually **allocated to their offshore production bases"** while **"local factories** mainly deal with **higher quality and higher-priced garments". Fashion designers** of Hong Kong have earned reputation in **"quality workmanship, sensitivity to current trends, and ability to blend commercialism with innovativeness"**. In addition, a fashion library has been set up by the Hong Kong Trade Development Council in 1987, which **"provides market information on the latest and projected world fashion trends to the local industry"**.

It has been apprehended in this home-page article that after **phasing-out of quotas in 2005** "only **high-end operations"** will stay behind in Hong Kong and others will "**relocate** to **low-cost** countries". Moreover, to meet the challenge of **"Quick Response**[42]**"** system which is widely used in **US, Japan and Western Europe,** Hong Kong companies are heading towards **modern clothing technology, for instance, CAD/CAM in pattern grading, marker making, automatic cutting, etc.**

[42] "It is a **mode of operation which employs modern production and communications technologies so as to supply the right products in the precise quantities just in time** to have them sold straight away. It calls for **short cycle manufacturing, quick turnaround time, large product varieties and small quantities"**. IN: **"Overviews of Textile Finishing Industry of Hong Kong"** downloaded on 14 October, 2000 http://www.company.com.hk/hkencyc/hkersi46.htm

The important feature of the **Hong Kong finishing industry** is “quick production lead time and reliable product quality” and it shores up “local spinning, weaving and knitting sectors by finishing yarns and fabrics that are either exported or used domestically by the clothing Industry” [43] . The industry, therefore, provides backward **linkages** to the garments industry of Hong Kong. Moreover, it also alters imported gray fabrics into high quality finished fabrics. The homepage also provides that “Hong Kong's bleaching, dyeing, printing and finishing factories are able to meet 70% of the local clothing industry's requirements for textile fabrics”. However, the industry also faces some **infrastructural and environmental constraints,** for instance, “lack of ample factory **space** for new and large mills, inadequate **water treatment** and discharge facilities and increased **environmental protection** measures [44] ”. Again, “**computer aided coloring to improve precision and consistency”** is being utilized gradually in Hong Kong dyeing and finishing industry that imparts more value to its textile products.

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[43] **Overviews of Textile Finishing Industry of Hong Kong, Op. Cit.**

[44] Ibidem

Again, another driving force to the Hong Kong's textile and clothing industries was put by its **week labor union**, which, in a sense, facilitated the entrepreneurs to react promptly to the **market change**. On the other hand, it triggered trouble in the restructuring as **"neither unions nor workers had any input into corporate decision making process"** which is apparent from the paragraph below[45]:

> **"Unions in Hong Kong** have been **numerically weak**, **organizationally fragmented**, and **lacking** in **shop-floor linkages** throughout much of the post war period. For these reasons as well as the absence of collective bargaining between employers and unions, **neither unions nor workers had any input into corporate decision-making process**. This **added to the 'flexibility' of local firms in reacting to market changes**, but one consequence was an intensification of conflicts during **restructuring**."

On a overall perspective, it appears that the **apparel industry** of Hong Kong is **"a buyer-driven commodity chain"** which span "from fibers, to yarn, to fabrics, to accessories, to garments, to trading and marketing"[46], again indicating a total backward linkage to the RMG industries in Hong Kong.

9.5: REPUBLIC OF KOREA ------ ANOTHER ASSOCIATE OF SECOND GENERATION

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[45] **The world Economy, State, and Sectors in Industrial Change: Labor relations in Hong Kong's Textile and Garment-Making Industries.** In: Industrialization & Labor Relations, Contemporary Research in seven Countries, Edited by Frenkel and Jeffery Harrod, ILR Press, New York p. 169

[46] **"Information Technology Infrastructure for Textile and Apparel Industry in Hong Kong" , by Benjamin P.-C. Yen and C.J. Su,** http://www.electronicmarkets.org/netacademy/publications.nsf/all_pk/87Abstract downloaded on 2001-01-05

In the early 1970s, the textile industries of Republic of Korea marked a boom mainly with the educated and skilled labor force as its comparative advantage that, at a later stage, moved towards capital-intensive end, which is still soaring up. Therefore, Korea might be contemplated as one of the associate of Hong Kong in East Asia. Korean textile exports totaled to US$17 billion in 1999, an average 3.3% increase over the year earlier and textile goods including apparel scored a 6.8% rise in year-to-year exports while fabrics marked up a 3.7% growth[47].

Increased investment in **automation to reduce costs and improve productivity** is, presently, the tendency of Korean manufacturing industries, the extent of which, according to the information provided in the homepage, is 70% this year compared to 45% in 1995 and is expected 80% by 2005. Major **facility investments** are also heading "for **environment protection**, **energy conservation** and the introduction of **information technology** systems in this sector. Moreover, **Local area network (LAN), management-oriented software and computer integrated manufacturing (CIM) investment** are expected to come up more brisk as

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[47] The Textile Industry – Korea-1999 Review, Korea Federation of Textiles Industries (KOFOTI), Seoul, Korea.
http://www.kofoti.org/textile/kofoti_textile_review.html
downloaded on 12 October, 2000.

companies turn more and more to **small quantity, multiple product** output[48].

During the MFA period, over the 1980s, Korea adopted the strategy of product **diversification [49] , overseas subcontracting and** "product upgrading **to circumvent the quantity restrictions** of quotas". In addition, "significant amount of **entrepreneurial flair,** highly **educated and productive labor were also some stimulant in this regard.** Again, "the number of foreign investments, mainly to exploit the cheap labor and unused quotas in those countries, made by the Korean textile and clothing industry rose significantly, between 1983 and 1988 for example, the number of clothing projects increased from 2 to 21, and many of these investments were located in **Bangladesh"[50]**.

The importance of textiles and clothing industry in Korean economy in the 1970s and in the 1980s could be grasped from Table 9.3. All export figures, (except percent shares in manufacturing) mark tremendous increase

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[48] Ibidem
[49] Those products which were
[50] **"The Multi-Fibre Arrangement - A Thread of Protectionism",** Samantha Smith - Senior Sophister, Trinity College Dublin, Ireland, downloaded on 16 October, 2000 from http://www.economics.tcd.ie/SER/1998/Essay21.htm

throughout the period while the value-added share in manufacturing sector exhibit decline after 1975. This could be attributed to the growth of total industrial sector in Korea that was exploding faster than textile and clothing industries during the period.

Table 9: 3: Textile and Clothing Industry in Korea's Economic Development

	1970	1975	1980	1985	1988[a]
Share in total value-added of Manufacturing sector (%)	14.8	18.9	15.3	13.7	10.3
Total exports (million 1990 US$)	1,004	5,428	17,505	30,283	60,696
Exports of textiles and clothing (share %).	389 (38.7)	1870 (34.4)	5014 (28.6)	7004 (23.1)	14111 (23.2)
Of which					
Yarn	64	271	692	694	1015
Fabric	129	469	1411	1889	2203
Textile Products	-	129	608	924	2887
Clothing	196	1001	2303	3497	6808
Total employment manu.sector (1000 workers)	1268	2205	2955	3504	4667
Employment Text. & Clothing (Share)	260 (20.2)	558 (25.3)	732 (24.8)	726 (20.7)	762 (16.3)

Source: Carl B. Hamilton 1990, table 7-1 p. 160

9.6: THAILAND ------THE ACCOMPLICE OF CHINA IN THIRD GENERATION

Exports of Thailand's textiles and clothing industry output have expanded **dramatically in the mid-1980s** that yielded it a status of the "highest **foreign exchange earning commodity group"** contributing "about **one-quarter of manufacturing value-added" and "the highest employment share of any sub-sector in the manufacturing sector"**[51]. It is, therefore, suggested that "**Thailand is**

[51] **Thailand's growth in textile and clothing exports**, by Suphat Suphachalasai. **In**: Kym Anderson, Op. Cit.,p.57

following the pattern of earlier industrial development of first Japan and then Hong Kong, the Republic of Korea and Taiwan"[52].

Traditionally, the textile and clothing industry of Thailand has been dictated by the **large number of garment firms** that presently "employ more than **900,000 people** and account for nearly three quarters of Thailand's clothing and textile industry exports[53]". Moreover, about **250 small and old technology** featured **weaving** firms along with a few **large modern firms, which employ air-jet looms** "account for 13.7 percent of exports"[54]. Further more, there exist **141 spinning companies** producing yarns that contribute 8.3 percent of exports[55]. Again, at the most capital-intensive end of the industry, there are 16 firms manufacturing **artificial fibers** that add up 2.3 percent of Thailand's clothing and textile industry exports[56].

Multi-Fiber Arrangement (MFA), in the early years of the agreement, **supported Thailand** by "curtailing sales of the three biggest textile exporters, Hong Kong, the Republic

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[52] Ibidem

[53] Textiles Industry in Thailand Australian APEC Study Centre , Monash University, (downloaded on 16 October, 2000 from http://www.arts.monash.edu.au/ausapec/cacthai.htm)

[54] Ibidem

[55] Ibidem

of Korea and Chinese Taipei". Moreover, through the **nineties**, the industry has subsisted with **"lower levels of tariff protection", fibers and yarns 10 percent, fabrics 20 percent and clothing 30 percent**. As regards the **technological advancement**, a segment of the "**weaving industry** is moving to an era of shuttle less production, but more than 80 percent of Thai textile companies still use shuttles[57]". Thus, weaving in Thailand is competitive owing to the availability of **wide range of alternative technologies**. Currently, **the renovation** of the entire industry is underway with funds obtained form the **Asian Development Bank** and the **World Bank** under the aegis of **the Thai Textile Institute[58]. Table 9.4** provides a picture of the spinning and weaving section of the industry from 1975 through 1985, which demonstrate a continuous expansion of the said section.

Table 9.4: Textile Machines in Thailand

(in thousands)

Year	Spindles	Looms	Knitting Machines
1975	1,094	53	17
1980	1,320	67	30
1985	1,963	80	41

Source: Thai Textile Manufacturing Association. In: Suphachalasai (1994)

Labor costs in Thailand were **one-eighth of the costs of labor in Western Europe in 1984** that made its production

[56] Ibidem
[57] Ibidem

very **competitive** internationally[59]. **"Rising labor costs** in Thailand, and the **shift towards more capital intensive** production" are off-setting the privilege of low cost of labor in Thailand in the recent years. It is, therefore, suggested that **"smart thinking"** is essential "to achieve efficient production throughout the **supply chain**, and also to deliver quality produce that meets the increasingly **exacting standards of international customers"** as well as "to succeed in a testing international regulatory environment"[60].

Domestic producers in Thailand are unable to **produce enough raw materials, notably cotton.** They **only produces low grades of cotton, necessitating imports raw materials**[61]**.** Correspondingly, some large and **integrated man-made fiber** spinning, weaving and finishing firms has been built up as **joint venture** from Japan, Taiwan and Hong Kong from the mid-1970s[62]. The progress of man-made fiber and yarn could be grasped from the Table 9.5 below which indicates a significant shift of Thai Textile and clothing industries towards capital-intensive production:

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[58] Ibidem

[59] **"Thailand's growth in textile and clothing exports"**, by Suphat Suphachalasai. **In**: Kym Anderson, Op. Cit., p.57

[60] **"Textiles Industry in Thailand"** Australian APEC Study Centre **, Op. Cit.**

[61] **Thailand's Clothing and Textile Exports, by Suphat Suphachalasai, Institute of Southeast Asian Studies, 1994, p.24**

[62] **Thailand's growth in textile and clothing exports**, by Suphat Suphachalasai. **In**: Kym Anderson, Op. Cit., p.57

Table 9.5: Textile and clothing production of Thailand (1994-1998)

	1994	1995	1996	1997	**1998**
Fiber (1000 tons)	**503.8**	**546.5**	**548.4**	**576.5**	**720.4**
Growth rate (%)	10.4	8.5	0.3	5.1	25.0
Cotton fiber	**6.5**	**26.0**	**26.9**	**25.0**	**18.2**
Growth rate (%)	-68.3	300.0	3.5	-7.1	-27.2
Man-made fiber	**497.3**	**520.5**	**521.5**	**551.5**	**702.2**
Growth rate (%)	14.1	4.7	0.2	5.8	27.3
Staple fiber	**271.8**	**280.3**	**278.1**	**300.7**	**387.9**
Growth rate (%)	5.6	3.1	-0.8	8.1	29.0
Filament yarn	**225.5**	**240.2**	**243.4**	**250.8**	**314.3**
Growth rate (%)	26.3	6.5	1.3	3.0	25.3
Yarns (1000 tons)	**754.4**	**779.3**	**769.9**	**769.6**	**777.1**
Growth rate (%)	-0.4	3.3	-1.2	-0.4	1.0
Cotton yarn	**280.0**	**305.9**	**317.0**	**297.4**	**267.2**
Growth rate (%)	-17.2	9.2	3.6	-6.2	-10.2
Man-made yarn	**474.4**	**473.4**	**452.9**	**472.2**	**509.9**
Growth rate (%)	13.2	-0.2	-4.3	4.3	8.0
Fabrics (1000 tons)	**591.2**	**687.5**	**632.1**	**617.7**	**578.8**
Growth rate (%)	Na	16.3	-8.1	-2.3	-6.3
Woven fabrics	**377.2**	**454.0**	**418.6**	**411.3**	**383.9**
Growth rate (%)	Na	20.4	-7.8	-1.7	-6.7
Cotton fabrics	**133.5**	**186.5**	**189.7**	**172.6**	**159.2**

Source: Thailand textile institute homepage http://www.thaitextile.org/

Long term Government assistance to the industry seems to underpin its growth that encompassed "**promotion privileges, credit subsidies,** as well as protectionist **import barriers**, but there have been offsetting **sales taxes and tariffs on intermediate inputs".** In addition, **the draw-back system, credit subsidies** for production and export from the bank of Thailand, **cumulative sales taxes**[63] on **intermediate goods, prudent monetary and fiscal policies, low inflation** helped the industries' proliferation.

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[63] Clothing manufacturers prefer **not to be handicapped to woven product suppliers to** respond to the fashion changes by changing fabrics instantly. This leverage seems to **outweigh the costs of the sales taxes that could be averted through vertical integration. Therefore, integration has been confined to spinning and** weaving merely where economies of scale are possible.

Another appreciable step of Thai textile and clothing industries is the establishment of **Thailand Textile Institute** "to upgrade the entire textile industry to enable Thailand to become **a quality textile manufacturing country** in line with the **market** rather than a **low-cost** one, and to equip the Thai textile industry with the readiness **to enter a value adding age under the same free-trade system** as in developed countries. Moreover, **major directives** to be implemented by the **Institute for 1997-2001 are: "replacement of existing machinery** with modern technology machinery for greater efficiency, **Quality management** to expedite the accreditation of the Thai textile industry by an **ISO standard** as early as possible, **human resource development** to upgrade the knowledge, appreciation, and competency of textile industry staff members, technical professionals, and management, establishment of business and technical **relations with foreign textile industries,** preparation for **value addition to the textile industrial system** for example, "**Quick Response"**, by preparing an information system and relevant work plans, e.g., design, management, brand name development, relying on the know-how and past experience of foreign countries"[64].

[64]Thailand Textile Institute homepage http://www.thaitextile.org/ downloaded on 06 January, 2001

Finally, it has been mentioned that Thai **exports of clothing have grown for three main reasons** [65] **:"**a **competitive environment** in both clothing and textiles; **increasing domestic production capacity**, especially during the mid 1980s at a time of falling domestic demand; and the **high profitability of exports** compared to domestic sales". While these factors seem reasonable, the other criteria of Thai textile industry mentioned above should also be born in mind.

9.7: TURKEY ------AN EMERGING POTENTIAL IN EUROPE.

The modern textile industry in Turkey is the consequence of industrialization efforts in the sixties and seventies. Gradually, the sector demonstrated rapid growth and during the seventies it switched on exporting. Presently, it is one of "the most important sectors in the Turkish economy in terms of GDP, employment and exports" and Turkey's position in 1997 was 6th among the clothing exporters of the world[66]. Moreover, "as a **quality cotton-producing country**, Turkey has an **integrated and diversified production in all sub-sectors of the textile**

[65] **"Thailand's growth in textile and clothing exports"**, by Suphat Suphachalasai. **In**: Kym Anderson, Op. Cit., p.57

[66] **Turkish textile industry**
http://www.anil.com.tr/eng/turkis.htm downloaded on 13 October, 2000

industry, produces and exports all types of yarn, fabric, clothing, household textiles and other Ready-made products[67]”.

Availability of abundant raw cotton has facilitated the expansion of Turkish **spinning and weaving** industries. The estimated amount of **cotton yarn** produced was around **790,000 tons** and **cotton fabric** production was **1455 million meters** in 1998, the export value of which was 781 million dollars. In addition, being a leading producer of wool, Turkey has a **strong woolen textile and clothing industry** and it is the **third largest mohair[68] producer** in the world. The 1998 export value of wool, fine hair, yarn and fabric was 97 million dollars.

Turkish **home textile[69]** industry has also marked a rise in terms of production and exports. Almost all kinds of home textiles are produced in Turkey by some large scale firms as well as small and medium sized firms that are dispersed all over the country. “As a division of the textile industry, the home textiles sector with an export value of 807 million dollars and a 2.7 % share in

[67] Ibidem
[68] the fine softhairof the ANGORA goat, used to make cloth or wool (Oxford Dictionary).
[69] Bed linens, bed spreads, table linens, towels, bathrobes, voiles , curtains, lace, interior blinds, curtain or bed valances, blankets,cushions, pillows, quilts, eiderdowns etc. All these are produced in Turkey.

Turkey's total exports in 1998 has been **an important sub-sector for the Turkish economy"**[70]**.**

The Turkish **clothing industry** has also attained a stable growth. The availability of **high quality cotton**, as mentioned earlier, extensive use of **CAD (Computer Aided Design) and CAM (Computer Aided Manufacturing)** and the increase in the number of **qualified personnel** has assisted the products of the Turkish clothing sector to earn a good reputation in foreign markets and the production volume of **clothing** was estimated at 260 000 tons in 1988[71]. Again, a **flexible production structure enables the sector to adjust itself to changes in fashion from time to time.**

The textile and clothing industry of Turkey is responsive to the increasing trend in international markets towards "**healthier** and more **environmentally-friendly products"** and, thus, endeavors to fit itself to these developments "within **legal and technical regulations"**. Further to the scope of market, the **European Union** provides the "**biggest market** for Turkish **clothing** exports and the total value of Turkey's clothing exports to the EU was **4.5 billion dollars"** in 1998. **Textile exports in Turkey** is a highly

[70] **Turkish textile industry, Op. Cit.**
[71] Ibidem

dynamic sector where “more than **93 percent** of the firms are **privately** owned”[72].

The **rise** of textile and clothing industry in Turkey is attributed to “**a series of structural reforms** aimed at **liberalizing the economy** and developing exports **instead** of the previous **import-substitution** strategy”; investment by the **private sector** in spinning, weaving and clothing industries; **liberalization of international trade;** the rapid **devaluation** of the national currency **(lira)** against the US dollar since 1990; inclusion in **customs union** with the member states of the European Community (EC) in January **1996 and so on.**

Conversely, the **high cost of fibers, a high inflation rate,** relatively **higher labor and capital costs** are the present difficulties faced by the **textile sector of the country**. Another, key problem **is the rising demand for cotton** owing to the fast expansion **of** the industry. This could be met by the **growth in domestic production or by higher imports**. Turkish Government has taken steps to expand cotton production base in the country, for

[72] **Homepage of FAO UN, Economic and Social Department (ES), “The cotton industry in Turkey”, Sebahattin Gazanfer, Secretary General, Aegean Exporters' Unions General Secretariat , Turkeyhttp://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESC/ESCR/Cotton/China-e/cap52TUR.htm**

instance, the **South-eastern Anatolian Project**[73] and it is expected that this project would bridge the existing gap between demand and production of cotton of the country.

9.8: INDIA ------ THE PIONEER IN SOUTH ASIA

The textile industry of India is a **robust sector** with regard to its **socio-economic importance**, which accounts for around **5% of GDP** and over **one-third** of total exports of the country[74]. Moreover, the sector is the **largest foreign exchange earner** for India.

The Indian Textile Industry has a **moderately complex structure** with **"hand spinning and hand weaving operations"** at one end of the spectrum while **"a highly sophisticated, capital-intensive and high speed manufacturing activity"**, on the other. In addition, a well **established infrastructure for production, technically qualified manpower and skilled labor available at considerably lower costs, material competence and marketing expertise** are other stimulants

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[73] a **rural and urban development project** aimed at improving overall living standards in the **south-eastern** part of Turkey. The GAP consists of a series of dams, power stations, tunnels and canals to generate electricity and to **irrigate** the plains surrounding the **Tigris and Euphrates** rivers. The irrigated area will cover **1.7 million hectares** accounting for 19 percent of **Turkey's** economically irrigable area

[74] **Indian Textile Industry http://www.fabricsourceindia.com/overview.htm downloaded on 2001.01.05**

to satisfy the demand of the one billion strong home market as well as a huge and growing volume of exports[75].

About **70 percent** of the **raw material** consumed by the Indian **textile** industry is **cotton**[76]**.** Moreover, India produces "a fabulous range of **man-made fibers**, polyester cotton, and polyester-viscose blended fabrics".

Textile industry of India consists of **three major sectors**, namely, the **mill-made**, also called the organized sector, the **handloom and power loom** sectors both being classified as **decentralized** sectors and the **hosiery and garment sector.** As stated in the homepage, "the **total** production of **fabrics** in all the **three sectors** combined was in the order of **36,200 million sq.mtrs"** of which **57 percent** by the **power loom** sector, 20 **percent** by the **handloom** sector, **18 percent by the hosiery sector** and the **rest** by the **organized mill sector**[77]. It is, therefore, evident that decentralized sector (handloom and power-loom) of India has a robust share (77%) in the entire textile industry output.

As far as the **production of yarn** is concerned, the industry has an installed capacity of **over 33.93 million**

[75] Ibidem
[76] Ibidem

Ring Spindles and around 317 thousand OE Rotors[78]**.** This **large installation** coupled with wide variety of **locally available raw material** has enabled the industry to produce **yarn to match any specification and count range. India** is the **largest** producer of **jute**, the **second largest producer of silk** and the **third largest producer of cotton**, cotton yarn, and cellulosic fiber/yarn in the world [79] . It is also the **fifth largest** producer of **synthetic yarn/yarn**. Table 9.6 provides a picture of yarn production of India in the recent years in which it is apparent that cotton yarn, as mentioned earlier, occupies the lion's share every year.

Table 9.6: Production of Spun Yarn, India

(million Kg)

Year	Cotton Yarn	Blended yarn	100%non-cotton yarn	Total
1995-96	1894	395	196	2485
1996-97	2148	484	162	2794
1997-98	2213	583	177	2973
1998-99	2022	595	191	2808

Source: **Indian Textile Industry home page.**

Fabric Manufacturing in India was prominent for its **high quality** standards **through centuries of experience.** In

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[77] Ibidem

[78] Open-end rotors

[79] **WTO and textile industry , by T. S. Vishwanath**, **In**: Financial Daily, from **THE HINDU** group of publications, Friday, April 07, 2000 http://www.hindubusinessline.com/2000/04/07/stories/040769ju.htm Downloaded on 13 October, 2000.

1998-99, production of **cloth** in the **mill-made** sector **was 1785 million sq.mtrs and t**he **employment** generation in cotton/manmade fiber **textile industry, currently,** is over **one million**[80]. Table 9.7 provides a comprehensive data of the entire fabric production of India from 1995-96 to 1998-99, which indicates that mill-sector's contribution is very less and the power-loom sector's production is the highest. It also reveals that non-cotton fabric production in all sectors is quite significant compared to the production of all sector cotton fabrics i. e. 12007 million square meters.

Table 9.7: Production of fabrics by sectors, India (million Sq. meters)

Type of Fabric	1995-96	1996-97	1997-98	1998-99
Mill Sector	**2019**	**1957**	**1948**	**1785**
Cotton 100%	1159	1222	1238	1111
non-cotton	258	247	244	230
Handloom Sector	**7202**	**7456**	**7604**	**6790**
Cotton	6239	6441	6699	5862
Blended 100%	18	52	69	111
non-cotton	945	963	836	817
Decentralized				
Power loom Sector	**17201**	**19352**	**20951**	**20552**
Cotton	7014	7238	6652	5855
Blended 100%	3137	3948	4481	4356
non-cotton	7050	8166	9818	10341

Table 9.7 (contd.)

Decentralized

[80] Ibidem

Hosiery Sector	**5038**	**5533**	**6394**	**6533**
Cotton	4488	4940	5403	5124
Blended 100%	268	400	735	790
non-cotton	282	193	256	619
All Sectors	**31460**	**34298**	**36896**	**35660**
cotton	18900	19841	19992	17952
Blended 100%	4025	4888	5751	5701
non-cotton	8535	9569	11153	12007
Khadi Wool & Silk	**498**	**540**	**540**	**540**
Grand Total	**31958**	**34839**	**37436**	**36200**

Source: **Indian Textile Industry home page.**

Again, India **produces and exports textiles of diverse kinds** from a wide variety of fibers----natural fibers, regenerated cellulosic fibres and synthetic fibres etc. In 1998-99, Indian **exports of all textiles** were of the order of US$ 10516.55 million[81] which drawn from the Table 9.8 below. Besides power-loom fabrics and made-ups, Indian silk textile export earnings is quite significant which was 238.11 million US$ in 1998-99.

Table 9.8: Export of Textiles, India (Figures: Million US$)

	1996-97	1997-98	1998-99
Cotton Textiles			
Cotton **yarn** incl.sewing thread	1529.50	1566.26	1416.49
Cotton Fabrics & Made-ups			
Mill made	601.97	643.35	757.40
Powerloom	1141.18	1206.91	1164.74
Knitted	101.32	86.05	87.06
Handloom	460.42	495.28	476.63
Total	**3834.38**	**3997.85**	**3902.32**

Table 9.8 (cont'd)

Silk Textiles	**249.49**	**241.50**	**238.11**

[81] Ibidem

Wool & Woolen Tex.			
(Excl. arcylic knitwear			
& RMG all knitwear)	**156.67**	**179.28**	**161.37**
Man-made Fiber tex.			
Cotton(excl.knitwear & RMG)	**911.47**	**1013.17**	**946.35**
Apparel			
(all RMG & Knitwear)	911.47	4910.70	5268.40
Grand Total	**9914.11**	**10342.50**	**10516.55**

Source: **Indian Textile Industry home page**

An article written by Déjà vu in Financial Daily of India provides that "over **60 per cent of the mills are sick** and more than 300 have downed shutters" in the country which is attributed to the misleading Government policy that "encouraged the **proliferation of power looms in the 1970s and the 1980s"** entailing "the ruin of the mills sector" burdened, at present, with "technological **obsolescence, overcapacity and pervading sickness"** [82] . Recently, the Indian government has, therefore, declared "the establishment of **technology updating missions** for the two principal fibers, cotton and jute", for "both **qualitative and quantitative** improvements in the cultivation of the two fibers and planned technological

[82] **http://www.hindubusinessline.com/2000/08/19/stories/041921ed.htm Downloaded on 16 October, 2000. Financial Daily, from THE HINDU group of publications on indiaserver.com Saturday, August 19, 2000**

improvements in the subsequent phases of processing and production, and, at the final stage, earmarking for the export market"[83].

In addition to the technological updating mission, there are several appreciable Government steps, currently at place, which boost the textile and clothing industry. The **Export Promotion Capital Goods Scheme** permits import of textile machinery, both new and second hand, at **concessional rate** of duty subject to time bound discharge of the prescribed export obligations. Moreover, **Advance Licensing Scheme** permits duty-free import of raw materials, intermediates, components, consumables, parts, accessories; mandatory spares and packing material required for the manufacture of textile and clothing export products. In order to ensure the **quality of textiles, "a** country-wide campaign to encourage **textile sector units to acquire ISO-9000 standard certification"** has been framed by the Textile committee, established by the Textiles Committee Act, 1963. Again, the **laboratories of the Textiles Committee** render services to the trade and industry, under the Commercial Testing of Samples Scheme.

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[83] **Fortieth Report on Demands for Grants (1999-2000) of Ministry of Textiles Rajya Sabha secretariat, New Delhi**, April, 1999. (Downloaded on 16 October, 2000 http://alfa.nic.in/rs/book2/reports/commerce/text_rep.html)

In India, a 100% **Government funded institution,** National **Institute of Fashion Technology (NIFT),** registered as an autonomous Society in 1986, acts as an **"apex institution to cater to the growing needs of India's evolving fashion industry"**. High-level interactions and collaborations take place with the leading fashion **institutions of the world that** has "enhanced the **stature and scope for the fashion industry in India** to meet the challenges of the industrial competitiveness on a global plane"[84].

Finally, it could be added that the textiles and clothing industry is the **"only industry, which is self-reliant and complete in value chain from raw material (cotton) to the highest value-added products (garments and made-ups).** This signifies that Indian textiles and clothing industry is complete with respect to the backward linkage industries. Only thing India requires to do is to streamline and upgrade its industries, which is currently going on as "the growth of this industry has a significant bearing on the overall **development of the economy"[85]**.

9.9: CONCLUDING REMARKS

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[84] Ibidem

[85] **"WTO and textile industry" , by T. S. Vishwanath**,
In: Financial Daily, from **THE HINDU** group of publications, Friday, April 07, 2000(http://www.hindubusinessline.com/2000/04/07/stories/040769ju.htm Downloaded on 13 October, 2000)

In this chapter, experiences of seven countries, namely, Japan, China, Hong Kong, Republic of Korea, Thailand, Turkey and India in textiles and clothing have been enumerated as far as possible. All of these countries have either matured their expertise or in the way to attain complete maturity. **Bangladesh** has numerous **similarities** such as labor cost at the beginning, labor composition, industry features, population size, trade policy, socio-economic background etc. while a lot of **dissimilarities** exists too, for instance, political atmosphere, infrastructure, raw material endowment, technological maturity and so on. Regardless of similarity or dissimilarity, Bangladesh could gather lessons from these countries' success in the way of its development efforts in textile and clothing domain. Now, with the experience of these countries in textiles and cotton industries, we can move to the Bangladesh context to see what's going on there, what are its problems and difficulties. Chapter Ten next would be focusing on these matters.

SUMMARY OF CHAPTER NINE

This chapter attempts to furnish leading countries' experience in textiles and clothing.

It is notable that availability of the **girl workers** and cheap **labor** played a great role in the development of Japanese cotton industries.

Domestic adjustment processes such as shedding of excess labor and capital equipment, the demise of small plants and adoption of modern, labor-saving equipment, investment in research and development, switch in production emphasis from labor-intensive to capital-intensive products, shifting its product mix **to more technologically sophisticated items and by upgrading products** and changes in protection from imports are the **features, among others, that lend the maturity** to Japanese textile and clothing industry.

In the recent times, Japanese textile industries seems to be dwindling in terms of number of establishments, number of employment, exports. This declining trend might be imputed to the rising force in East Asia in these industries, namely, Hong Kong, Taiwan, Korea and, more recently, China and Japan's parallel move to even high-tech industries coupled with rising labor costs in its capital-intensive edge.

China ranks as the largest producer of cotton clothing and the second largest producer of synthetic fibers in the world. Some 80% of the fibers consumed in China in its textiles and clothing is cotton. The industry employed 12.43 million employees in 1995. The total value of output was 703.5 billion Yuan RMB in the same year.

China's textile industry is mostly in the type of **SMEs** and has rear position in technological advancement which enjoys a competitive edge in the global market owing mainly to its comparative advantages in **low labor costs, available raw materials, and low manufacturing cost. Moreover, i**ts **domestic textile market is quite large** due to 1.2 billion population. Competitiveness of China is buttressed by **great export volume and high custom tariff. M**ost of the **exported garments are of low and middle grade. T**he **government controls the purchase of cotton" and** hence a **stable production cost** persists in **the textile industry.**

Annual production of synthetic fibers of China trebled between 1977 and 1983 even though the **imports of** synthetic fiber expanded in parallel. **Outward looking policies** during the 1980s had led clothing industries of both **China and Thailand** to expand very fast and are becoming **more dependent on imports of fibers.** Demand for

natural fibers is increasing notwithstanding the huge natural fiber production. C**hina has already achieved the most difficult tasks required to emulate its East Asian neighbors.**

Hong Kong's foremost export earner is its **textile industry**, which accounts for 7% of total domestic exports, and employs 9% of total manufacturing workforce. Hong Kong has set up some **offshore production** bases, mainly in Asia**, Central and South America** with a view to exploit **cheap labor** and get hold of **quotas available in these countries.**

Most of the **textiles** factories are **small-scale**, with **60%** of Hong Kong's textile firms employing **less than 20 persons**. Modern machines and techniques such as **open-end spinning** are used in Hong Kong. **Shuttle less looms** are employed that **exhibit high productivity.** Computerized design systems, programming equipment and knitting machines are extensively used to enhance **productivity. E**nhanced productivity of the industry is imputed to **increased application of modern, computer-aided manufacturing equipment and production machinery.**

Hong Kong’s strategic location has made it as a **regional hub for sourcing garments**. **Fashion designers** of Hong Kong

have earned reputation in **“quality workmanship, sensitivity to current trends, and ability to blend commercialism with innovativeness.** Quick production lead time and reliable product quality are important features of the Hong Kong industry. **Dyeing, printing and finishing** factories are able to meet **70% of the local** clothing industry's requirements for textile fabrics. Again, some **infrastructural and environmental constraints,** for instance, “lack of ample factory **space** for new and large mills, inadequate **water treatment** and discharge facilities are existent in Hong Kong’s textile and clothing industries.

In the **early 1970s**, the textile industries of **Republic of Korea marked a boom** mainly with the **educated and skilled labor force** as its comparative advantage that, at a later stage, moved towards capital-intensive end, which is still soaring up. Therefore, Korea might be contemplated as one of the **associate of Hong Kong in East Asia**. Major **facility investments in Korea,** at present, are heading “for **environment protection**, **energy conservation** and the introduction of **information technology** systems in this sector. Moreover, **Local area network (LAN), management-oriented software and computer integrated manufacturing (CIM) investment** are expected to come up more brisk.

Exports of **Thailand's textiles and clothing** industry output have expanded **dramatically in the mid-1980s** that yielded it a status of the "highest **foreign exchange earning commodity group"** contributing "about **one-quarter of manufacturing value-added" and "the highest employment share of any sub-sector in the manufacturing sector.** Thailand is following the pattern of earlier industrial development of first Japan and then Hong Kong, the Republic of Korea and Taiwan.

Long term **Government assistance** to the industry seems to underpin its growth that encompassed promotion privileges, **credit subsidies**, as well as **protectionist import barriers**, but there have been offsetting sales taxes and tariffs on intermediate inputs. In addition, the **draw-back system**, prudent **monetary and fiscal policies**, **low inflation** helped the industries' proliferation. The establishment of **Thailand Textile Institute** to upgrade the entire textile industry to enable Thailand to become **a quality textile manufacturing country** in line with the **market** rather than a **low-cost** one.

The modern **textile industry in Turkey** is the consequence of industrialization efforts in the **sixties and seventies**. Gradually, the sector demonstrated rapid growth and during the **seventies it switched on exporting**. Presently,

it is one of “the most important sectors in the Turkish economy in terms of GDP, employment and exports and Turkey’s position in **1997 was 6th among** the **clothing exporters** of the world. Moreover, “as a **quality cotton-producing country**, Turkey has an **integrated and diversified production in all sub-sectors of the textile industry, produces and exports all types of yarn, fabric, clothing, household textiles and other**

Availability of abundant raw cotton has facilitated the expansion of Turkish **spinning and weaving** industries. The estimated amount of **cotton yarn** produced was around **790,000 tons** and **cotton fabric** production was **1455 million meters** in 1998. Turkey has a **strong woolen textile and clothing industry** and it is the **third largest mohair producer** in the world. Turkish **home textile** export value was 807 million dollars in 1998. It is **an important sub-sector for the Turkish economy.**

The availability of **high quality cotton**, as mentioned earlier, extensive use of **CAD (Computer Aided Design) and CAM (Computer Aided Manufacturing)** and the increase in the number of **qualified personnel** has assisted the products of the Turkish clothing sector to earn a good reputation in foreign markets and the production volume of **clothing** was estimated at 260 000 tons in 1988. The

European Union provides the **"biggest market** for Turkish **clothing** exports and the total value of Turkey's clothing exports to the EU was **4.5 billion dollars** in 1998. **Textile exports in Turkey** is a highly dynamic sector where "more than **93 percent** of the firms are **privately** owned.

The **rise** of textile and clothing industry in Turkey is attributed to **"a series of structural reforms** aimed at **liberalizing the economy** and developing exports **instead** of the previous **import-substitution** strategy"; investment by the **private sector** in spinning, weaving and clothing industries; **liberalization of international trade;** the rapid **devaluation** of the national currency **(lira)** against the US dollar since 1990; inclusion in **customs union** with the member states of the European Community (EC) in January **1996 and so on.**

The **textile industry of India** is a **robust sector** with regard to its **socio-economic importance**, which accounts for around **5% of GDP** and over **one-third** of total exports of the country. The Indian Textile Industry has a **moderately complex structure** with **"hand spinning and hand weaving operations"** at one end of the spectrum while **"a highly sophisticated, capital-intensive and high speed manufacturing activity",** on the other. In addition, a

well **established infrastructure for production, technically qualified manpower and skilled labor available at considerably lower costs, material competence and marketing expertise** are other stimulants to satisfy the demand of the one billion strong home market as well as a huge and growing volume of exports. Textile industry in India is the o**nly industry, which is self-reliant and complete in value chain from raw material (cotton) to the highest value-added products (garments and made-ups).**

CHAPTER TEN

TEXTILES AND CLOTHING: BANGLADESH PERSPECTIVE

10.1: FOREWORD

Bangladesh "textile industry accounts for **45% of all industrial employment** in the country and contributes **5% of the total national income"**[86]. It also has to address serious problems, principally because "the **country does not produce enough of the raw materials necessary, unfavorable trade policies, and inadequate incentives for expansion"** [87]. The textile and clothing industries of Bangladesh, therefore, is plagued with a lot of difficulties. An attempt will be made in this chapter to deliver an overall portrait of this sector focusing on the constraints, in particular.

10.2: KOREAN INVOLVEMENT IN BANGLADESH CLOTHING INDUSTRY AT THE BEGINNING

Koreans were some of the **first foreign investors to come to Bangladesh**. Owing to the **labor shortage in the Korean garment factories**, Korean entrepreneurs selected Bangladesh as one of its overseas production base "because **of its relatively low labor costs"**[88]. Garments industry of Bangladesh was **born in 1978** and it owes much to **Korean involvement**. "Koreans were active in teaching Bangladesh workers both the **technical and the business**

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[86] **Azizur Chowdhury, Op. Cit.**

[87] Ibidem

[88] **"Korean Involvement in Bangladesh's Garment Industry"** American International School, Dhaka website http://www.ais-dhaka.net/SENIORS/Nackhoonkoreangarment downloaded on 14 October, 2000

sides of the garment industry over the years". As stated in the homepage, "a report written by the World Bank in 1989 stated that the Bangladesh garment industry was virtually begun by the **Daewoo Corporation of South Korea"**. Many of the Koreans doing business in Dhaka still feel that garments industry in **Bangladesh** will help **eliminate its poverty** as they did once in their own country.

10.3 : ORGANIZATIONAL SET UP OF BANGLADESH TEXTILES AND CLOTHING SECTOR

The **textile industry** of Bangladesh is comprised of **three main categories namely,** the **public sector, handloom sector, and the organized private sector**[89]. Presently, the **organized private sector** takes over other sectors and is also **growing at the fastest** rate. Apart from these three sectors, **silk sector** activities are also running parallel despite its slower tempo due to some troubles it is suffering currently that would be discussed later in a subsequent section.

10.3.1 : Public Sector

Public sector industrial units are benefited from certain privileges for instance, government funding. Regrettably, "**factories in the public sector are not well**

[89] **Azizur Chowdhury Op. Cit.**

supervised". Frequent changes of officers, lack **personal interests** of these officials in the factory resulting in negligence in their responsibility, lack of maintenance of the **equipments,** misappropriation of allocated money through corruption and poor accounting etc. are the setbacks of the public sector textiles and clothing plants in Bangladesh[90].

10.3.2 : Handloom Sector

In Bangladesh, this sector consists of a **rural** group of textile producers and a number of organizations for example, **BRAC (**the Bangladesh Rural Advancement Committee) employing rural women for this purpose. The Handloom industry, in total, generates **employment** for much population in the country. It also makes available a large portion of the **fabric** required by the **local market**. However, "the **inferiority of their machinery**, mostly due to their **narrow width**, means that the fabric **production is slow**, and usually **falls short of the quality needed for export"** [91] . More information is provided in section 10.8

[90] Ibidem
[91] Ibidem

10.3.3 : Private Sector

Private sector, as mentioned above, is the **most productive** among these three categories. Factories are owned **by companies or entrepreneurs** and they take **an active part in planning, decision-making, and management** as benefits are directly accruing to them. The **machineries** in the factories, therefore, are **superior** to those in two other sectors[92].

10.4 : RAW MATERIAL AVAILABILITY IN BANGLADESH

Although in textiles and clothing, the term “raw material” can signify different materials or products in relation to its different stages of manufacture, here it is meant for the beginning stage. For instance, cotton yarn may be manufactured from cotton fiber by spinning but it is the raw material for weaving or knitting sub-sector which is the second stage in the textiles and clothing chain and the same is true for subsequent stages. The status of Bangladesh cotton production has been laid down in **section 4.5 in Chapter Four**. Needless to mention that Bangladesh textiles and clothing sector faces problem because the country **does not produce enough of the raw materials as compared to its demand** entailing its high dependence **on imports.** The country, therefore, **can**

not earn as much foreign exchange from its textile industry as it should.

Generally, the **principal materials** for spinning sub-sector are **raw cotton and synthetic fibers,** for example, viscose and polyester staple fibers. **"None of these materials, however, are produced in Bangladesh on a large enough scale** to supply a significant part of the demand"[93]. Although the cotton produced in Bangladesh is of an **acceptable standard**, "the **increased cultivation** of cotton in this country is **not feasible** because the crop requires large amounts of land for a substantial yield". As Bangladesh population size is very large, owing to food demand **"farmers choose to grow rice over cotton". Presently, locally grown cotton can afford only 4-5% of the total requirement of this sector.** On the other hand, "the production of the **synthetic/man-made fibers** used in the textile industry requires fairly **advanced technology and investment",** which is not feasible the present status of the sector.

10.5 : SPINNING

The estimated **production** capacity of the **spinning sub-sector** is **in the region of 183 million kg per year**.

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[92] Ibidem
[93] Azizur Chowdhury, Op. Cit.

However, only **125.16 million kg, or 67.3% was produced in 1997-98**[94]**.** This **under production** is imputed to the fact that about **38% of the spinning mills** in the country are **more than twenty-five years old** . **High import duty on textile machinery and their spare parts** is the principal hurdle that stands in the way of importing new machinery allowing them to be outdated. Moreover, there is a "**shortage of technicians in this field** resulting in both very **expensive and sub-standard repairs"**. **Frequent power failures, a shortage of raw materials, a high import duty on raw materials and a high percentage of wastage** constitutes the ground for the low output of the spinning sub-sector.

The **labor productivity** is about **0.65 kg per man-hour** in the spinning sub-sector, which is again **lower** than that of other competing countries. As stated in the above mentioned homepage, a recent World Bank survey pointed out that the number of spindles installed in "Bangladeshi spinning mills could produce **twice as much yarn while using only 10% of the labor force**. **Obsolete machinery,** again constitutes the rationale behind so.

10.6 : WEAVING

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[94] Ibidem

The **shortage in supply from the spinning** sub-sector is also **negatively linked** to the amount of **gray** produced. However, the **yarn gap** is filled by **imports of 3.15 billion meters of gray per year**[95] for which the subsequent sectors have to suffer more in **"transportation, import taxes, etc., resulting in a more expensive end product".** Further, the weaving sub-sector lacks **organization and coordination** because small-scale manufacturers remain scattered all over the country, which breeds **"replication** and a **lack of specialization"**.

10.7: KNITTING/HOSIERY

Various types of products such as undergarments, socks, stockings, and other soft apparel are manufactured by the hosiery industry of Bangladesh. Originally designed for the local market, these factories have shown significant **improvements in quality** in recent times which **"propelled them to enter the export market and knitting has become another rapidly growing textile sub-sector"** in the country. This sector also **needs modern facilities** for manufacturing quality fabrics. Moreover, it suffers from **shortage of raw materials** and **working capital**[96]**.** In spite of these difficulties, knitting sub-sector has been **extremely successful recently** and the **claim for knit gray**

[95] Ibidem
[96] Ibidem

can be met **locally,** the quality of which is competitive recently installed **machinery**.

Table 10.1 demonstrates some **disappointing features** in the cotton textile industries of Bangladesh. While the **installed capacity** is being augmented with time signifying the industry's expansion, number of **operational spindles and looms** is gradually **decreasing**, particularly a drastic fall in the year 1995-96. The same is true for production of cloth. This slump indicates **closure of some of the mills** in the sector. The apprehension is corroborated by the statement of the State Minister for Textiles in National Parliament of Bangladesh, which says that **179 textile mills are laid off at present**[97]. These units incurred huge loss to the already poor economy of Bangladesh. Some of the reasons have already mentioned at the beginning of the chapter and will be focused more in the subsequent sections.

Table 10.1 : Structure of Cotton Textile Industries of Bangladesh

Year	No. of reporting mills	Installed capacity		Working at the end of period		Consumption of cotton (' 000' lbs)	Yarn produced (' 000' lbs)	Prod. of surplus yarn (' 000' lbs)	Prod. of cloths (' 000' yards)
		No of spindles (' 000')	No. of looms (' 000')	No of spindles (' 000'	No. of looms (' 000')				
1983-84	58	1088	6	892	5	110554	98858	86057	66229
1985-86	58	1173	6	857	5	105690	94716	79615	64639

[97] 32 spinnuing, 6 weaving, 5 composite textile, 57 dyeing and finishing, 63 specialized fabrics and power looms, 7 small size power looms, 1 knitting and knit dyeing, 5 silk yarn and fabrics and terry towel. **Source**: The Daily Ittefaq, a national daily of Bangladesh, homepage. 29 January, 2001 issue. (Available at www.ittefaq.com/current/others/news4.pdf downloaded on the same date).

1990-91	63	1260	6	1055	4	135654	123227	107393	65427
1995-96	63	1248	6	285	4	120828	109844	106583	11204

Source: 1996 statistical Yearbook of Bangladesh, Bangladesh Bureau of Statistics (BBS), Ministry of Planning, Bangladesh. Table 5.16, p.226

10.8 : HANDLOOM SUB-SECTOR OPPORTUNITIES AND THREAT

With regard to employment, hand-loom sector stands as "**second largest source of rural employment** after agriculture". It doesn't need **electricity** to run. Even though it is being blighted steadily due to the **irregular supply of the yarn**, **dyes, and chemicals**, **poor access to transportation** resulting in dependence on **brokers** at their local levels who are **very experienced and some are dishonest** [98] . Moreover, most export oriented garment factories **reject the gray produced by the rural handlooms** inferiority **in uniformity, quality and narrower width than power looms.** Further, handlooms "**cannot produce fast enough** to meet the deadlines set by export oriented customers". **Table 10.2** provides that over **one million** persons were employed in handloom sector in 1990. But a striking feature is that approximately **0.2 million** looms were non-operational year round impeding the growth of this sector.

Table 10.2 : Ownership, and loom operational status by size of handloom unit, 1990

(value in Taka '000')

Ownership & size of units	No. of Units	Total looms	Year round		Total fixed	Initial investment	Working capital	Persons engaged
			Operat -ional	Non-operational				
Private family								
Total	209848	497369	314757	182612	4887840	2633430	2497185	996733
01 loom	1143044	1143044	54895	58149	1267096	832871	560206	254598
02 looms	50869	101738	62649	39089	900770	539888	417852	220411

[98] Ibidem

03 looms	16012	48036	32644	15392	398388	214613	198741	102345
04 looms	10033	40132	28582	11550	374627	192562	213098	80606
05 looms	5003	25015	18070	6945	224541	127144	105703	50384
06-10 looms	10035	75110	55904	19206	731201	332515	407160	142590
11-19 looms	3164	43543	31422	12121	445295	202383	260377	75239
20-29 looms	1108	25293	15485	9808	296687	119131	188554	36636
30 looms	580	25458	15106	10352	249235	72323	145494	33924
Partnership								
Total	2217	15429	11668	3761	222629	94055	127908	27982
01 loom	500	500	353	147	19866	8658	7042	1338
02 looms	353	706	537	169	6346	2865	2817	1766
03 looms	208	624	480	144	6694	2293	6200	1443
04 looms	196	748	607	177	17933	4239	5168	1584
05 looms	124	620	471	149	6097	2606	2537	1394
06-10 looms	399	3145	2421	724	34909	14111	20798	5939
11-19 looms	266	3739	2845	894	49413	28956	31362	6542
20-29 looms	107	2464	1725	739	45335	19023	26170	3850
30 looms	64	2847	2229	618	36036	11304	25814	4126
Cooperative								
Total	356	1658	932	726	38114	13244	15178	2692
01 loom	105	105	69	36	1452	587	410	234
02 looms	76	152	84	68	2007	1021	537	272
03 looms	29	87	44	43	946	535	199	150
04 looms	41	164	110	54	3798	1181	1025	327
05 looms	24	120	49	71	1599	495	222	154
06-10 looms	42	319	182	137	3790	1734	1428	429
11-19 looms	23	311	186	125	11805	4609	3999	588
20-29 looms	12	269	92	177	5070	2367	5943	239
30 looms	4	131	116	15	7647	715	1415	299
TOTAL	**212421**	**514456**	**327347**	**187099**	**5148583**	**2740729**	**264027**	**1027407**
01 loom	113649	113649	55317	58332	1288414	842116	567658	256170
02 looms	51298	102596	63270	39326	909123	543774	421206	222449
03 looms	16249	48747	33158	15579	406028	217441	205140	103938
04 looms	10270	41080	29299	11781	396358	197982	219291	82517
05 looms	5151	25755	18590	7165	232237	130245	108462	51932
06-10 looms	10476	78574	58507	20067	769900	348360	429386	148958
11-19 looms	3543	47593	34453	13140	506513	235948	295738	82369
20-29 looms	1227	28026	17302	10724	437092	140521	220667	40725
30 looms	648	28436	17451	10985	292918	84342	172723	38349

Source: 1996 statistical Yearbook of Bangladesh, Bangladesh Bureau of Ststistics (BBS), Ministry of Planning, Bangladesh. Table 5.10, p.220

Needless to mention that handloom sub-sector has tremendous implication in the socio-economic context of rural Bangladesh. Handloom sector can promote the rural economy with new vigor and dynamism if the problems are addressed properly that it is currently passing through.

10.9 : Dyeing, Printing, and Finishing

The final steps in the textile industry i.e. dyeing, printing, and finishing has **improved dramatically** over the last five years despite their **complex processes**. The

sub-sector ,however, lies in **deficiency of modern equipment and facilities** for which still unable to meet the **standard of quality** demanded by the export-oriented RMG industries, or the export market. Some of the units depend substantially on **imported gray** to produce export quality fabrics, although a number of hurdles have to crossed-over by such imports, for example, **import taxes, transportation,** and so on.

10.10 : READYMADE GARMENTS INDUSTRY (RMG) AND ITS GROWTH IN BANGLADESH

The RMG industry i.e. the clothing industry has grown at a blistering pace **since 1978** largely due to the **simple level of technology** needed by the industry[99]. Moreover, relatively **inexpensive and easily available machinery,** requirement of **smaller premises** compared to the textile industry, **abundant supply of cheap labor** consisting **mostly of women, incentives** such as liberal trade policies, low tariffs on imported machinery, and bonded warehouse facilities and, most significantly, **benefit of reserved markets** by **MFA Quota** have spurred the growth of the garment industry. Additionally, garment exporters of Bangladesh “enjoy the privilege of **quota-free entry into the European Union” (**EU), while their “major competitors, such as **China, India, Indonesia, Pakistan,**

Sri Lanka, and Thailand, are subjected to the restrictions of an **assigned quota"**[100].

10.11 : TRADITIONAL CLOTHING INDUSTRY IN BANGLADESH

The **advantages of silk industry,** traditional clothing industry of Bangladesh, is manifold. It is **agriculture based** and **labor-intensive.** Besides this, it has several other benefits, which, in the context of **Bangladesh,** could be grasped from the following citation[101]:

> "Silk Industry **requires labor that is easily trained**. Since **silk production** requires very **little investment**, since **net profit** is **relatively high**, and since all it needs is **easily trained family labor**, this is **one of the best occupations where rural women of Bangladesh can be easily employed".**

Needless to say that all the industry features mentioned above fully coincides with the socio-economic conditions of the country.

The Bangladesh Silk Board (BSB) was founded in 1978. Since then, BSB took up massive program **main objective** of which was to "**increase** the production of **quality silk** by creating opportunity for **full-time occupation** and increase in **income** for the **rural** people" through imports of "high yielding variety (**HYV) mulberry plants**, **better species** silk-worms, and **better** quality **machinery** and

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[99] Ibidem
[100] Ibibem
[101] **"SILK: An Avenue to Poverty Alleviation", by Prof Sajjad Hussain** The Daily Star on-line archieve, Features ,Volume 1 Number 188, February 21,

equipment from abroad"[102]. **Rajshahi[103], Jessore, Rangpur and Dhaka** are four major silk producing regions of Bangladesh employing above **180,000 people are directly** and **another 70,000 people indirectly** which, in turn, comprises about **28,538 mulberry farming families,** and **5824 silk-worm rearing families[104]**. Bangladesh's share, at present, in the total world production of raw silk is approximately **0.05 per cent.** Although, in recent years, Bangladesh has been in continuous effort "to introduce **HYV silk-worms and produce better quality silk yarns, yet the production of silk has been miserably lagging behind in this country".** In fact, the production of silk has remained **stagnant in Bangladesh ever since 1978-79[105]**.

In Bangladesh, silk is used **mainly for producing saris[106]**. Only a very **small quantity** is used for producing **dress** material, shirting, bed-sheet, curtain, and bed cover. But, in the **international market, silk** has high demand since it is, like other natural fibers, **environment friendly** and has many other attractive features of its own. Currently, **some 58 countries** are producing silk around the world of which "only eight countries, namely

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1998(http://www.dailystarnews.com/199802/21/n8022109.htm) Downloaded on 14 October, 2000

[102] Ibidem

[103] Rajshahi takes the lion's share in silk production

[104] Prof Sajjad Hussain, Op. Cit.

[105] Ibidem

China, India, Japan, Russia, South Korea, Brazil, Vietnam and Thailand are the main producers". Total world production of silk in 1987 was 63,000 tons in which shares of China, India and Japan altogether was about 84 per cent, China being the pioneer. **India**, currently, secures **second position** among the silk producers of the world. The countries that **imports** silk mainly are **USA, France, Switzerland, Italy, Britain, and Germany.** Bangladesh silk industry can avail these markets if it could grow at a faster rate like, China and India. As mentioned earlier, silk industry features are highly compatible with Bangladesh situation and the **only thing that is crucial is "proper commitment** from the government and sufficient **political backing** from the **highest quarters"**[107] and proper management of the industry.

Recently, CARITAS, an NGO working in Bangladesh has signed an agreement with Bangladesh Silk Foundation[108] (BSF) to help boost the silk production in the country

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[106] one kind of long women cloth mostly used in Indian Sub-continent

[107] **Prof Sajjad Hussain, Op. Cit.**

[108] "BSF, a **not-for-profit company** established in **1997** under the **Companies Act**, has been implementing the SDP since 1998 under a **credit of $11.35 million from the International Development Association (IDA).** BSF has been producing silkworm eggs in two grainages located at Bogra and Jhenaidah taken on long-term lease from **Bangladesh Sericulture Board** and catering to the needs of different **NGOs and private entrepreneurs** who are implementing sericulture programme".

through various programs[109]. This is surely an appreciable step to put push the silk sector ahead.

10.12 : DEMAND-SUPPLY GAP IN THE TEXTILES AND CLOTHING INDUSTRY OF BANGLADESH

In section 10.4 , discussion has been confined to the raw material availability at the **first stage** of textile and clothing chain, cotton supply situation in Bangladesh. Moreover, section 4.5 provides the position of cotton production in Bangladesh. It is apparent from these discussions that Bangladesh has to import about 95% cotton to satisfy the raw materials demand of its spinning mills. In Bangladesh, "most of the **cotton fabric used is imported** from **China, India, Pakistan**, and a few other countries" [110] . The **polyester material comes form Korea, Indonesia, or other Asian countries**.

At the **second stage** of the chain, i.e. yarn production by spinning mills, "only **21% of the total demand for yarn** is met locally in Bangladesh"[111]. The figures for **gray** fabric production, at the **third stage**, are not much better as

[109] **"Silk Foundation signs MOU with Caritas",** by Economic Reporter, The Independent archive, a national daily of Bangladesh, 26 September, 2000 issue

[110] American International School, Dhaka website. Op. Cit.

[111] **Azizur Chowdhury, Op. Cit.**

"only **28% of the total demand** is met locally"[112]. At the **fourth stage**, the **finishing sub-sector** (Dyeing, printing and finishing) currently is "**able to process all** of the **locally** produced gray", but will **need to expand** in future with the growth of weaving and knitting sub-sectors in the country[113]. At the **fifth stage**, i.e. RMG or cloth making stage, Bangladesh is in severe shortage of raw materials, the finished fabrics, as the garments industry has expanded very fast from the beginning of 1980s. The demand supply gap in this connection could be understood from the following[114]:

> **"Apparel sector** has created an export oriented captive market for **over 3 billion yards** of fabrics per year which is **increasing** by not less than **20% each year,**…… Presently around **85% of the total requirement of woven fabric** and around **35% of the total requirement of knit fabric** are imported by the export oriented RMG industry".

At the **final stage**, it is required to explore the market opportunities in the international arena. Although it appears last after RMG production, in a market-driven free economy, production bases are suggested to be market oriented which would be discussed at a later stage.

10.13 : THE TEXTILES AND CLOTHING OF BANGLADESH IN THE POST ATC ERA

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[112] Ibidem
[113] Ibidem
[114] **Investing in Bangladesh**, A guide to opportunities Board of investment (BOI), October, 1999, p. 43

In **section 8.7** it has been illustrated that Bangladesh had significant repercussion of MFA which, unlike East Asian NICs, it couldn't entirely circumvent and in **section 8.8** discussion was also held about ATC and Bangladesh's conformity towards the same. As mentioned earlier, ATC is passing through **the second stage of MFA phase-out** in which Bangladesh has **17 per cent** quota access to US for its RMG products.

At present, **"United States** accounts for about **42 per cent** of the total RMG exports from Bangladesh. Moreover, about **70 per cent** of the RMG export to US from Bangladesh is made under quota"[115]. **The EU**, in a recent move, "has proposed **opening** its markets to all goods **excepting arms** from the world's poorest countries"[116]. **The United States** is a leading trade partner of Bangladesh. It is reasonable to expect that the US would match the EU motion to LDCs and "ATC could be one of the most appropriate platform to reflect it" by enlarging Bangladesh RMG quota access to the **U.S. market from existing 17% to 30%**[117]. Moreover, in the context of sluggish quota phase-out by the importing countries,

[115] **"Dhaka needs to push for early execution of MFA for LDCs Centre for Policy Dialogue report says"** By Monjur Mahmud, The Daily Star, Business Page Volume 3 Number 402 Thu. October 12, 2000 (http://www.dailystarnews.com/200010/12/n0101205.htm#BODY1) downloaded on 2000-10-13

[116] Ibidem
[117] Ibidem

"**Bangladesh could seek**, as a compensating measure, special treatment within the WTO by way of a **faster integration of the MFA** into the ATC for LDCs".

However, there is considerable debate on the impending effects on Bangladesh clothing exports after the quota phase-out from **01 January, 2005** and the establishment of **backward linkage** industries to offset the likely repercussion of such phase-out. A report prepared by Bangladesh Textile Mills Association (BTMA) said that "**phasing out** of the Multi-fiber Agreement (MFA) was **not only a challenge**, but also a **great opportunity for Bangladesh** to enter the global textile market"[118]. It is alleged that to meet the challenge, a solid foundation of **backward linkage** industries is inevitable for Bangladesh. This would be examined in details in the next chapter.

10.14 : USTDA, 2000 ACT AND BANGLADESH RMG INDUSTRIES

To stimulate the economic growth and promote stability in Africa, one of the world's poorest regions, and the **Caribbean countries, US Trade and Development Act of 2000 (USTDA 2000)** has come in effect from 01 October,

[118] **"BTMA decries gas, power tariff increases, Govt mulls special fund for backward linkage", The Daily** Star Business Report, Business Page volume 3 Number 103 Sun. December 05, 1999 (http://www.dailystarnews.com/199912/05/n9120505.htm#top available 2000-9-30)

2000 [119] . Experts envisage that **Bangladesh will have detrimental affect from this measure**. The reason behind so is that **72 African and Caribbean countries**[120] will have **quota free** and **duty free access to US** due to the enactment of this legislation where Bangladesh, the Chairman of LDCs, is not included, naturally. Therefore, it is argued that any **adverse development in the RMG sector** would have serious economic and developmental implications destabilizing social and political situations in the country[121]. The possible negative affect might also be understood from the following lines[122]:

"The total customs value of apparels exported to US market from **Bangladesh was $1.6 billion in 1999**. On the other hand, the total customs value of apparels exported from Caribbean Basin and sub-Saharan Africa countries was $ 8.8 billion and $ 584.38 million respectively".

It is anticipated that the rise in exports by Caribbean Basin and sub-Saharan Africa countries to US market would trim down the Bangladesh RMG's share in the same market, particularly after the phase-out of quota restriction.

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[119] **The Daily Ittefaq, a national daily of Bangladesh in Bengali, issue of 01 October, 2000, downloaded from its homepage** www.ittefaq.com on the same date.

[120] Of the 72 countries, 48 are African Sub-Saharan and 24 are Caribbean and 33 of these countries are Least Developed Countries **(LDCs) in** which Bangladesh is not included

[121] **"Sub-Saharan Africa and the U.S. Textile Industry",** Economic Strategy Institute, 1401 H St., NW Suite 560 Washington, DC 20005, **September 1998.** (http://www.econstrat.org/ssatext.htm Downloaded on 14 October, 2000)

[122] **"Bangladesh should seek free access to US:Economists Move to avoid negative impact of new US law on exports",** The Daily Star, Business Page, Volume 3 Number 391 October 02, 1998 issue. Available at (http://www.dailystarnews.com/200010/02/n0100205.htm#BODY1 Downloaded on 3 October,2000)

10.15 : SAARC CUMULATION AND GSP ISSUES WITH THE EUROPEAN UNION

Originally, Bangladesh, as a member of LDCs, enjoyed a tariff reduction facility while exporting its commodities in EU markets including RMG products on condition that these garment products would be made from yarn and then fabrics produced both in the respective exporting countries and 12.8 per cent tariff reduction would be accorded in doing so[123]. But this system didn't bring much benefit to the country as a few entrepreneurs used indigenous fabrics.

SAARC[124] Secretariat, therefore, requested EU headquarters to provide **"SAARC Cumulation"** facility under which fabrics might be imported from any SAARC countries, in contrast to the earlier case, instead of the obligation to be produced domestically, on the condition that 12.8 percent tariff reduction facility would be provided if local value addition to any product were more than 50 percent. Otherwise, this privilege would be reduced to 15 percent of that 12.8 percent i.e. overall 1.92 percent.

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[123] The Daily Ittefaq homepage, A national daily of the country in **Bengali** 27 January, 2001 issue
(available at http:// www.ittefaq.com/current/special/news3.pdf)

[124] South Asian Association for Regional Coperation(SAARC), founded in 1985 at the auspices of Bangladesh Government with South Asian countries, namely, Bangladesh, Bhutan, India , Maldives, Nepal, Pakistan and Sri Lanka.

Later, SAARC Cumulation came into effect on 01 October, 2000.

Now, acceding to the SAARC Cumulation proposal, the government of Bangladesh is under tremendous pressure from two conflicting groups. The Bangladesh Garments Manufacturers and Exporters Association (BGMEA)stands in favor of SAARC Cumulation while the Bangladesh Textiles Mills Corporation (BTMC) resists the move on ground that SAARC Cumulation would seriously impair the growth of **backward linkage industry** in the country which is regarded as extremely important to survive in the post-MFA era starting from 01 January, 2005. However, a recent World Bank study reveals that the prospects of benefits accruing to Bangladesh RMG sub-sector from SAARC Cumulation is very scanty[125].

10.16 : LABOR SITUATION IN THE CLOTHING INDUSTRIES OF BANGLADESH

About **3000 readymade garments factories** comprise the RMG sub-sector in the country of which **2400 units** are in **actual production** where as many as **10 lakh workers are employed, roughly 80 per cent of these workers being women**. This employment has **augmented individual family income** and afforded them a reasonable state of **social**

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[125] The Daily Ittefaq homepage, A national daily of the country in **Bengali** 27 January, 2001 issue available at http:// www.ittefaq.com/current/special/news3.pdf

security as well as scarcely **elevated social status**, compared to earlier job, mainly as domestic aide[126] . However, these women has to work and live in a miserable condition which is evident from the following news report[127]:

> "…….about 35 per cent of the working girls in the city work in very **dangerous situation** and about 27 per cent are **sexually harassed**. While 83 per cent of the working girls need more **security** in their workplaces as well as in their homes. ……. about 82 per cent of the female garment workers live in **slum areas**. Majority of them attend the factory **on foot**.…… about 60 per cent of the female workers have **extremely poor toilet** facilities while nearly 20 per cent **do not have any toilet** facilities".

Moreover, fire safety measures are not sound and factories are set under blaze frequently. Further to that, stampede situation takes place when panic stricken workers rush to the stair, which are not usually built in a planned way. Two such incidents are reported in a news item as below[128]:

> "On July 15, nine garments workers were killed and 25 others injured in a **fire at two garments factories** in Mirpur. On July 30, 26 workers were killed and more than 100 injured in a **stampede fearing fire** at 5 garments factories in a multistoried building in Mirpur. The division bench of the HC comprising Justice Mainur Reza Chowdhury and Justice AMM Ruhul Amin issued the rule".

As regards the staircase of the factory buildings where the stampede situation takes place, a prominent architect

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[126] **"Readymade Garments Industry Facing the Challenge", b**y **Kazi Alauddin Ahmed**, The Daily Star homepage, (http://www.dailystarnews.com/199911/03/n9110309.htm Downloaded on 30 September, 2000) Feature page, Volume 3 Number 72 Wed. November 03, 1999

[127] **"No transport, welfare facilities, Garment girls feel insecure"** **The New Nation** homepage, 20 September,2000 issue.

in the country blames the owners who build the factories in an unplanned manner[129]:

> "There is no such thing as **"standardized staircase**" as the number, width and design of staircases depend on the number of persons it is meant to serve. Most often, a building made for residential use for say ten persons per floor is transformed overnight into garments factories for well over one hundred workers per floor. Needless to say, a **stampede situation** will occur if there is any emergency situation in any of these factories".

In addition the garment factories sometimes contravene **"the labor laws** and **human rights** by forcing the workers to work in **night and on weekly holidays, which** could be seen from the following citation[130]:

"…….. most garment factories did not let their workers take weekly off; moreover, owners make them work in a **12 to 16 hours** working shift **without** giving any **overtime**. Thousands of garment factory workers have **fallen sick** due to absence of proper working condition in garment factories".

Again, through the continued efforts for the last few years the **child labor** in the garments sector has **reduced to less than 1 percent of the total labor and** the number of child labors of age less than 14 years out of more than 1.5 million work force of all the garments factories

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[128] **"Showcause on govt, garments factories",** The Daily Star archive, 29 August, 1997 issue

[129] **"BGMEA Has a Lot to Do", by** Professor Dr. Nizamuddin Ahmed, Dept of Architecture,Bangladesh University of Engineering & Technology(BUET), Dhaka. The Daily Star archive, 20 August, 1997 issue

[130] **"Call to implement accord, Garment factories violating labour laws, human rights",** The Daily Star homepage, General News, Volume 3 Number 391Mon. October 02, 2000 available at http://www.dailystarnews.com/200010/02/n0100210.htm#BODY2 downloaded on 03 October, 2000

in the country is only little over than 9000 [131] .The tripartite Memorandum of Understanding (MOU) and subsequent initiatives among the International Labor Organization (ILO), Bangladesh Garments Manufacturers and Exporters Association (BGMEA) and the Government of Bangladesh are attributed to this improvement. It is expected that the garment industries would be completely free from the child labor by 2002[132].

Abundant cheap labor is available in the country which is "easily **trainable** and convertible into semi-skilled and skilled work force while the **price** of labor is **lower** than that of neighboring countries as well as some other garment producing countries in South-East Asia and East Europe[133].

10.17 : INFRASTRUCTURAL CONDITIONS WITH REGARD TO THE TEXTILE THE CLOTHING INDUSTRIES OF BANGLADESH

[131] **The Daily Ittefaq, a national daily of Bangladesh in Bengali, issue of 24 September, 2000 downloaded from its homepage** www.ittefaq.com on the same date.

[132] Ibidem

[133] **"Bangladesh Opportunity" Bangladesh Garments Manufacturers and Exporters Association, Dhaka)**, http://www.bgmea.com/ban.htm , Downloaded on 03 October, 2000

Bangladesh has two **sea-ports** namely, Chittagong and Mongla. However, there are frequent labor problems in these ports resulting in unnecessary delay in discharging imported good. RMG industries, being greatly dependent on imported fabrics and often committed to time bound orders from the foreign buyers, has to face serious problems. A proposal is, therefore, underway to establish **green channel** to facilitate discharge of such goods with almost no customs checking:

> "Imports of garments exporters with no bad record in last five years will be released through the **green channel** virtually without any customs checking and there will be **no checking** on way to warehouses. The custom officials at the port will however **check five per cent of the goods at random** so that the facility can not be misused"[134].

In view of the frequent **hartals, strikes and work abstention by workers and employees,** the exporters **demanded that these services be declared essential**. The effectiveness of the system envisaged would, however, depend on the sincerity from all quarters. Moreover, another proposal has also been aired to establish **deep-sea port** attributed to the same purpose, success of which again depends on proper management and commitment to the objective.

Again, factories fell sick due to **stock lot** problem, **which** happens mostly due to **political disturbances and**

[134] **"Ctg port to have green channel for garments exporters"**, The Daily Star archives, 26 September, 2000 issue. Available at (http://www.dailystarnews.com Downloaded on 05 October, 2000)

port problems[135] and many of them "had to pull down their shutters being **overburdened with indisposed inventories of finished products"**[136].

Paucity of credit from banks is another major stumbling block in the way of smooth operation of some factories in the RMG industries. Many factories' production suffers from shortage of working capital[137].

for the garments **Currency devaluations** by some of the neighboring countries, such as **India, Pakistan, Sri Lanka, Thailand**, **Malaysia** is another problem exporters of Bangladesh because the devaluation in those countries facilitates foreign buyers to buy goods at a lower price resulting in a shift of the export orders from Bangladesh to other countries. To sustain a stiff competition in garment exports arising out of such **devaluation**, the BGMEA seeks "at least **10 per cent cash incentives against their export earnings"**[138].

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[135] **BGMEA News letter,(**http://www.bgmea.com/news.htm Downloaded on 03 October, 2000 Volume 10 October 1999 Issue 8)

[136] Kazi Alauddin Ahmed, Op. Cit.

[137] Ibidem

[138] **Export Promotion Bureau,Dhaka, Bangladesh homepage** (http://www.epbbd.com/Month22/BGMEA%20for%2010pc.htm availableon 03 October, 2000)

To eliminate such difficulties, mentioned so far, **BGMEA**[139] seeks, like in quota distribution system at the EPB, the representation of the association in the **law and order, customs, bank and insurance and port management bodies**. The demand seems quite reasonable in view of the problems currently RMG sector is experiencing.

Again, considering low bank interest of **India and Pakistan**, the government has been requested, as of May 1999, **to reduce bank loan interests at 8-10 per cent instead of the current 16 per cent**[140]**.** Recommendations have also been put forward to make **export income of textile products tax-free, waive double insurance system on imports for export purposes,** to make **flood insurance optional,** to allow **duty-free import of raw cotton**, and **dyes and chemicals** consumed in the export-oriented industries, to introduce a **specialized bank for providing loans to export-oriented industries** and to set up some **textile parks** with similar facilities as in the export

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[139] a **sectoral trade body which is non-government** in nature and free from traditional bureaucracy to assist the RMG sub-sector to boost up the **country's foreign exchange earnings**. It was founded in **1977**. Since its commencement with only **nineteen** garment manufacturers and exporters, BGMEA has grown in time into a **strong and dynamic body** comprising about **2600 garment manufacturers** and **exporters** as its members. The basic **objective** of BGMEA is to establish a **healthy business environment** with sound relationship between the manufacturers, exporters and importers to ensure a steady growth in the foreign exchange earnings of the country.

[140] **"Govt urged to take steps for development in textile sector"** The Daily Star homepage, Business Page, Volume 2 Number 258, Wed. May 12, 1999(http://www.dailystarnews.com/199905/12/n9051205.htm#BODY3 Downloaded on 30 September, 2000).

processing zones **(EPZs)**[141]**.** Therefore, the condition and operational status of roads, power, telecommunication, banking, insurance, customs-----all need to be enhanced since the poor infrastructural facilities increase the cost of production of the industry.

10.18 : ESTABLISHMENT OF APPAREL BOARD

In view of the competitive world trade in RMG products in textiles and clothing sector after phase-out of quota restrictions in 2005, the implications of **Apparel Board** is far-reaching, particularly when it is important to retain a market niche in the international arena. It might be fostered an institutional structure to act permanently for issuing country of origin certificate, export license, Textile visa, GSP certificate etc. This issue of establishing an **Apparel Board** has been **hanging** since last **12 years** due to conflict led indecision of the concerned ministries[142].

10.19 : ESTABLISHMENT OF INSTITUTE OF FASHION TECHNOLOGY

Roughly 6,000 skilled foreign workers are employed in the garment manufacturing factories of Bangladesh for whom entrepreneurs have to spend about 40 billion taka as

[141] Ibidem. The information are of May, 1999 so far available
[142] The Daily Ittefaq homepage archive www.ittefaq.com/current/special/news5.pdf downloaded on 29 January, 2001

their salary and bonus[143] . **Due to shortage of local skilled manpower,** Garment owners are **bound to engage foreign experts and** their service is required to produce **high quality and high valued items** in the RMG. Bangladesh is, therefore, lagging behind in export of **high valued items** in the countries of EU and USA.

To satisfy the need of **efficient manpower in garment factories** as well as to attain the expected standard in the quota free global market after the year 2004 by the RMG sub-sector BGMEA has adopted a program to establish Institute of Fashion Technology with the financial assistance from World Bank and Finance Ministry. The Institute will provide **Graduate, Diploma & Trade Certificate Courses.**

10.20 : THE FIFTH FIVE YEAR PLAN 1997-2002 AND TEXTILE SECTOR OF BANGLADESH

The major focus of the **textile sector** during the Fourth Five Year Plan period was on **"generation of employment, private investment, export, rationalization of tariffs, providing monetary and fiscal incentives, product diversification and horizontal market expansion, etc"[144] .**

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[143] **BGMEA News letter, Op. Cit.**

[144] **"The Fifth Five Year Plan 1997-2002"** Planning commission, Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka ,March 1998, p.24

It also brought together programs on **balancing, modernization, replacement, and expansion of the selected old mills and private investment** was given priority in all segments of the textile and clothing chain. However the Fifth Plan reads as following[145]:

> "The target set for **employment generation** in the textile sector was **1.79 million** numbers. As against this target, **only 0.80 million** people were employed. **High prices of inputs, stiff external competition in yarn and fabric markets and weak institutional back-up were responsible for the slow response of the textile sector excluding garments**. As a result textile sub-sector was **not able to generate the targeted employment**."

The term 'institutional back-up' perhaps indicates the lack of **backward linkage support** in textile and clothing industry in the country.

10.21 : ENVIRONMENTAL ISSUES IN TEXTILE AND CLOTHING

Presently, Garments manufacturing plants are **dispersed almost all over Dhaka City** including the **residential areas**. Surely, this has repercussions on the "basic municipal services such as **electricity, road, water, drainage waste management etc"**. Moreover, housing for the garment workers who are principally migrants from the villages poses a serious threat to the normal city life. The **low-paid female garment workers** are compelled to live slums, **which lack basic municipal services** being attacked by various **diseases**.

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[145] Ibidem, p.25

Moreover, vast amount of **"solid waste** including pieces of leftover clothes, plastic materials" etc are extracted from the garments industries[146]. However, the situation has been upgraded as these leftover materials are now consumed in the cottage industries to produce toys, dolls, cushions, mattresses etc. The growing **textile industries as backward linkage to the garment industries** may cause a serious **environmental problem.**

10.22 : CONCLUDING REMARKS

From the foregoing discussions it is clear that all segments of the textiles and clothing industry of Bangladesh is plagued with myriad of problems and difficulties. In the **yarn and fabric stage**, these problems include lack of power, obsolete technology, low capacity utilization, lack of machinery maintenance, a work force that is not adequately trained, problems with labor unrest and militancy, political unrest causing disruption such as hartals, and a lack of working capital.

In addition, **finishing and clothing** industries also suffer from numerous difficulties such as lack of access to credit, shortage of power supply, discharge of

[146] **"Sustainable Trade and Environmental Concerns in Bangladesh"**, by **Saleemul Huq, Khandaker Mainuddin and Dwijen Mallick**, The Daily Star homepage, Features , Volume 3 Number 185 Wed. March 01, 2000, http://www.dailystarnews.com/200003/01/n0030109.htm#top Downloaded on 03 October, 2000

pollutants, absence of rule of law, politicization of the labor force, miserable labor situation, lack of continued policy support by the government, crisis management capacities and shortage of experts in fashion designing, frequent port strike and so on.

These drawbacks put the local entrepreneurs in an **extremely unfavorable environment** particularly in view of the post MFA global market beginning from 01 January 2005. A complete and comprehensive chain of production comprising all sections of the textiles and clothing industry, along with the elimination of the difficulties mentioned above, is , therefore, demand of the time. Chapter Eleven next would focus on the establishment of such backward linkage industry in Bangladesh in different stages examining every factor as far as possible both vertically and horizontally.

SUMMARY OF CHAPTER TEN

Bangladesh textile industry accounts for 45% of all industrial employment in the country and contributes 5% of the total national income. The country does not

produce enough of the **raw materials** as compared to its demand entailing its high dependence on imports. Presently, locally grown cotton can afford only 4-5% of the total requirement of this sector. On the other hand, “the production of the synthetic/man-made fibers used in the textile industry requires fairly advanced technology and investment”, which is not feasible, at present, for Bangladesh.

The estimated production capacity of the spinning sub-sector **is in the region of 183 million kg per year. However, only 125.16 million kg, or 67.3% was produced in 1997-98 and** under production **is imputed to the fact that about 38% of the spinning mills in the country are more than** twenty-five years **old. Frequent** power failures, **a** shortage of raw materials, **a high import duty on raw materials and a high percentage of** wastage constitutes the ground for the low output of the spinning sub-sector. Only **21% of the total demand for yarn** is met locally in Bangladesh. The **shortage in supply from the spinning** sub-sector is also **negatively linked** to the amount of **gray** produced. The **yarn gap** is filled by **imports of 3.15 billion meters of gray per year. T**he weaving sub-sector lacks **organization and coordination** because small-scale manufacturers remain scattered all over the country, which breeds “**replication** and a **lack of specialization**

Knitting/hosiery factories have shown significant **improvements in quality** in recent times and knitting has become another **rapidly growing textile sub-sector.** But **i**t needs **modern facilities** for manufacturing quality fabrics suffers from **shortage of raw materials** and **working capital. Some 179 textile mills are laid off at present.**

With regard to employment, **hand-loom sector** stands as second largest source of rural employment. **Irregular supply** of the yarn, dyes, and chemicals, poor access to **transportation,** dependence on **brokers are some of the problems of the handloom sector. M**ost export oriented garment factories **reject the gray produced by the rural handlooms because of** inferiority **in uniformity, quality and narrower width than power looms. O**ver **one million** persons were employed in handloom sector in 1990.

The final steps in the textile industry i.e. dyeing, printing, and finishing has **improved dramatically** despite **deficiency of modern equipment and facilities.** This sector depend highly on imported gray.

The RMG industry i.e. the clothing industry has grown at a blistering pace since 1978 largely due to the simple level of technology needed by the industry. Moreover,

relatively inexpensive and easily available machinery, requirement of smaller premises compared to the textile industry, abundant supply of cheap labor consisting mostly of women, incentives such as liberal trade policies, low tariffs on imported machinery, and bonded warehouse facilities and, most significantly, benefit of reserved markets by MFA Quota have spurred the growth of the garment industry. Around **85% of the total requirement of woven fabric** and around **35% of the total requirement of knit fabric** are imported by the export oriented RMG industry.

To stimulate the economic growth and promote stability in Africa, one of the world's poorest regions, and the **Caribbean countries, US Trade and Development Act of 2000 (USTDA 2000)** has come in effect from 01 October, 2000. Experts envisage that **Bangladesh will have detrimental affect from this measure**.

Again, **"SAARC Cumulation"** facility, under which fabrics might be imported from any SAARC countries for using in RMG factories before exporting to EU countries, has emerged controversial. Lack of enforcement of **labor laws, human rights,** frequent labor problems at the sea-port, **stock lot** due to **political disturbances and port problems, paucity of credit from banks, currency devaluations** some

of the neighboring countries are, among others, problems of RMG sector in the country.

To introduce a **specialized bank for providing loans to export-oriented industries ,** to set up some **textile parks** with similar facilities as in the export processing zones **(EPZs),** to establish a **Apparel Board** are some of the **demands of RMG sector**.

CHAPTER ELEVEN

BACKWARD LINKAGES TO CLOTHING EXPORT OF BANGLADESH : AN APPRAISAL

11.1: FOREWORD

This chapter attempts to **scrutinize the prospects of establishing the backward linkage industries in the textiles and clothing sector of Bangladesh** through looking at the pertinent factors at different stages of the chain, as mentioned earlier, encompassing the likely experiences of other countries. Discussions afterwards, therefore, would incorporate concepts of linkages, the rationale behind the necessity of backward linkages in the textiles and clothing industries, compatibility of standard trade theory for Bangladesh textile and clothing sector with specific examples, different vertical stages in the chain, examining the horizontal factors linked to every stage in the sector, relevant backward linkage issues in general, sorting out the possible steps to be taken at every such stage and, lastly, concluding remarks.

11.2: CONCEPTS OF LINKAGE, BACKWARD LINKAGE AND FORWARD LINKAGE

Dr. Carole E. Scott[147] presents excellent definitions of backward and forward linkages in his article "Economic Growth" which reads as below[148]:

"Supporters of **unbalanced growth** believe that a few key industries should be established that have **backward and forward linkages** so that their establishment in a **market economy** will provide an incentive for entrepreneurs to create **related industries**. In unbalanced growth only a few industries are developed. This can be accomplished by either the government or by private industry, which may or may not, be aided by the government……**Linkages** refer to the **economic connection** between a **firm's operations** and **other sectors** of the economy. It is called a **forward linkage** when a firm's output is used as an input by other firms; so, by providing necessary inputs, its existence creates an opportunity for entrepreneurs to **create firms in "downstream" industries**. The reverse can also take place…..Imagine **cotton farms** back in the mid-nineteenth century that lie alongside a river. **Downstream from the farms is a cotton mill. Further down** the river is a large, **port city**. The creation of the **cotton farms because good bottom land** was available could have provided **the incentive that induced someone to build the cotton mill downstream from them**. This is a **forward linkage**. On the other hand, the **creation of the mill because falling water** was available where it was built might have provided **the incentive necessary to get some people to clear the bottom land and plant cotton upstream from the mill**. This is a **backward linkage**. The building of the **cotton mill** might have provided the **incentive** for someone **to build wharves and warehouses** in the **port city** so that they could acquire its output and **ship it abroad**. This is a **forward linkage**. **Strong foreign demand for cotton and the building of wharves and warehouses in the port city** might have provided the **incentive** for someone to build the **mill upstream** from the port city. This is a **backward linkage**…. Supporters of **unbalanced growth** point out that a country doesn't have to be able to provide all the inputs needed for an industry as some balanced growth theorists seem to assume, because **some can be imported**. They question, too, how LDCs, who save relatively little, can finance a **"big push" (balanced growth)** with outside capital that for most of the post-World-War-II period the LDCs **abhorred** because they viewed substantial DC investment as a **new form of colonialism**. Some LDC leaders oppose DC investment because they view it as a way to "piggy-back" **Western culture into their nation".**

If we look into the situation of Bangladesh, an LDC, it is not possible to exert to 'big push', as envisaged in

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[147] **Dr. Carole E. Scott** is a Professor of Economics at the State University of West Georgia and Editor of Business Quest. She mentions that several decades ago Albert O. Hirshman (1958) developed the **concept of linkages**. This term refers "...to the economic connection between a firm's operations and other sectors of the economy. The connection might be a product linkage, which in turn might be forward or backward".

[148] **Economic Growth , by Carole E. Scott**, Professor of Economics, Richards College of Business , University of West Georgia (available at : http://www.westga.edu/~cscott/develop/growth.html downloaded on 04 October, 2000).

the balanced growth theory, by its own poor resource base, nor it is feasible to attract such huge foreign capital in view of the country's present socio-economic condition even if the cultural and colonial factors are not taken into consideration. **Backward linkage** industries, as envisaged in **unbalanced growth** above, is, therefore, suitable for **Bangladesh** particularly in the **textile and clothing** sector which has been the **pioneer** in the total industrialization for many countries of the world, for instance, **Japan** and South Korea. Form the citation above, it is clear that **backward and forward linkages are oppositely inter-related** and they involve the '**inducement' factor** between the **economic activities** of the related firms.

Again, Professor **Noel Woods** in his working paper [149] mentioned that the notion of such **linkage** has implications for **employment**, which is extremely relevant to the situation of Bangladesh. In his own words:

" The **notion of linkage** has implications for employment, particularly in relation to the generation of **employment**. The generation of employment is based on the premise that each sector not only employs people directly but there is also other employment, which is in some sense associated or dependent on these sectors. Thus consideration must be given to the nature of this **secondary or indirect employment."**

11.3: WHY BANGLADESH NEEDS BACKWARD LINKAGE INDUSTRIES IN TEXTILES AND CLOTHING SECTOR?

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[149] **"Induced Employment in Marketed Services in Ireland, 1975 to 1990: An Input-Output Analysis" by Noel Woods**, Department of Economics, University College Cork, Ireland, February 1999. Working Paper 99-2 p.4

Bangladesh, as mentioned in **section 8.8,** will have **no quota facility** i. e. reserved market in its RMG importing countries, specially the United States after 2004 as per the provisions of the WTO Agreement on Textiles and Clothing (ATC) and thus, it will face stiff competition from its neighbors, for example, India, China, Thailand and many other countries. These competing countries have stronger base in Textiles and clothing sector in different perspectives and they will exploit every possible opportunities to raise their export earnings in the sector, even the raw materials and intermediate goods which are now Bangladesh imports from these countries, will be consumed by themselves to meet their extended export target resulting in the hike of prices of these materials for Bangladesh to import. The following statement again supports this[150]:

> **"Bangladesh's garment** and textile manufacturers will have to face **steep competition** from countries such as **India, Pakistan, China, and Thailand**, **from whom the country now imports fabric to meet the demands of its RMG sector.** When the WTO free market is established, all these countries will be able to **expand their RMG exports, now limited by quotas**. As a result, these countries will be able to utilize **more of their locally produced yarn and fabrics internally**, resulting in the **rise of prices** for these in the export market, putting pressure on the industries of countries such as Bangladesh".

[150] **Azizur Chowdhury, Op. Cit.**

Again, another example of recent rapid exploitation of Canadian market opportunities by Chinese RMG products might be understood from the following state[151]:

> **"Canada withdrew quota facility from cotton garments** and that around **90 per cent of the market has been captured by China** indicating the potential gravity of heavy competition in the global apparel market".

It is, therefore, anticipated that Bangladesh RMG products will not be able to sustain in competition in the MFA phase-out period **unless the country streamline its textile and clothing sector through establishing necessary backward linkage industries**. However, an **alternate view** about the likely competitive global environment after 2004 is also in place that might be looked at the flowing[152]:

> "…..particularly **India, Pakistan, China and Thailand** which are at a **relatively higher stage of development** and are richer compared to Bangladesh will in the near future move to the production of **high-technology higher-value items where return on investment will be much higher** than that in RMG. The garment industry being migratory in nature will **continue to thrive in a country like Bangladesh as long as labor remains cheap**. Therefore, for Bangladesh, the sources of supply of cotton, yarn and fabrics **will not completely dry out**…..This means that the RMG industry **needs to be integrated only partly**; a limited number of composite mills, a larger number of independent spinning mills and processing units may be established".

This view, however, **not encouraged** because the competing countries' (as mentioned above) labor intensive RMG

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[151] **"Garment exports face global competion, Backward linkage industries need investment woth Tk 50b",** The Daily Star on-line archieve, Business & Finance,October 05, 1999 Volume 1 Number 318(http://www.nation-online.com/199910/05/n9100503.htm#BODY2 Downloaded on 4 October, 2000)

[152] **"Developing Backward Linkage to Face the Challenges of 2005"** by **Professor Hafiz G A Siddiqi**, The author is **Pro-Vice Chancellor, North South University, Dhaka.** The Daily Star on-line archieve, Features, Volume 3 Number 80 Thu. November 11, 1999 Downloaded on 30 September 2000 from http://www.dailystarnews.com/199911/11/n9111109.htm

production would, probably, **not be completely dry out** in view of their **colossal population and cheap labor advantage.**

Moreover, **Value-addition** in RMG products is **only 25 percent** which is very low compared to other export items because 75 percent RMG export earnings is spent for the fabric imports which again necessitates the backward linkage industries for producing yarn and fabrics in the country. An editorial news item of a leading national daily of the country reads as follows[153]:

"……the domestic value-added of jute products, frozen foods, leather, raw jute, tea etc, are in the range of 60-70 per cent, while the **value-added of the RMG items is about 25 per cent or less since** it is largely **dependent on** the **import** of its key raw material, fabric. **As the export of RMG is increased by one $, it requires an increased import of 0.75 $ of fabrics.** This is a mandatory import. Therefore, as the rate of export of RMG including knitwear increases, the rate of increase of import of fabric would go up by a factor of 3/4. . ……To overcome this, Bangladesh should **modernize, expand and strengthen** its **textile sector** so as to meet the growing demand for **fabric** coming from its expanding RMG sector by **importing raw cotton from any cotton growing country** in the world and **producing high quality yarn and fabric domestically**. This will **increase the value-added portion of Bangladesh's RMG sector** substantially".

For instance, about Taka. 8 billion were spent per year **to** import **Madras Check** from India about five years ago. **Grameen Bank,** an NGO of Bangladesh, **fabric 'Grameen Check'** has now "created a market niche for itself and is **being used in the RMG sector"** forcing Madras Check import

[153] **"Sources of Export Growth in Bangladesh",** The Daily Star on-line archive, Editorial Page, Volume 1 Number 54, October 05, 1997 http://www.dailystarnews.com/199710/05/n7100502.htm#BODY4 downloaded on January 22, 2001

to drop to about **Taka 2 billion** a year[154]. This may be termed as **non-tariff protected import substitution** as well as a **backward linkage** to the RMG sector which, in turn, **slashes** country's **imports** and creates **employment** and **income** to the domestic weavers and others. The necessity of backward linkage industry is confirmed again. V**alue addition at every stage** is also required for producers **to continue** their business and to provide incentives to **modernize and upgrade their technology and skills.** The **budget speech** of Finance Minister in the National **Parliament** stress the necessity of backward linkage industries in the country[155]:

"Development and growth of **backward linkage industries including** that for the textile industries are critical for consolidating the future of our industrial sector. In consideration of the importance of **backward linkage industries**, I propose to **reduce duty rates on various raw materials used in the textiles**, leather, footwear and similar other industries".

In addition, **BGMEA homepage** provides some valuable information in this regard as under[156]:

> "Estimate shows that about 80 percent of **garment accessories like cartons, threads, buttons, labels, poly bags, gum tapes, shirt boards, neck boards etc**. are now being produced in our country, contributing to the national GDP. But, the textile (Spinning, Weaving, Finishing etc.) industry is just budding.…..Presently, the **total fabric requirement** in our captive market is for **about 3 billion yards**, of which about **85-90 percent we import from countries like China, India, Hong Kong, Singapore, Thailand, Korea, Indonesia, Taiwan, etc.** Fabric requirement is **increasing @ 20 percent per annum**. This offers a tremendous opportunity for **further industrialization** in our country".

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[154] Ibidem

[155] **Budget Speech** at the National Parliament, Dhaka, Bangladesh. "**Annual Budget 2000-2001"**, part II, by Finance Minister on 8th June, 2000. (Available at: http://www.gobfinance.org/budget/speech_text2.htm Downloaded on 04 October, 2000)

[156] **"Backward Linkage of Apparel Industry Shows Potential for Foreign Investment"**. BGMEA, Dhaka Home page, Available at: http://www.bgmea.com/ban.htm#5 Downloaded on 03 October, 2000

The foregoing discussion, therefore, entails the establishments of backward linkage industries are crucial to underpin the textiles and clothing sector in order to survive its RMG sub-sector in the post MFA period.

11.4: STANDARD TRADE THEORY AND BANGLADESH TEXTILES AND CLOTHING SECTOR

Kym Anderson (1992) illustrates the standard theory in relation to the textile and clothing industry as follows[157]:

"A **poor country opening up to international trade** will tend to specialize in the export of **primary products**, though less so the more **densely populated** the country. If its domestic outcomes grow more rapidly than the rest of the world's, its **export specialization will gradually switch away from primary product to manufactures**. The manufactured goods **initially** exported will be more **labor-intensive the more resource-poor or densely populated the country**. Since many processes in **textile and clothing** production tend to be **intensive** in the use of **unskilled labor**, they will be among the items initially exported by a newly industrializing, densely populated country. And as the demands for textile raw materials by that country's expanding textile industry grow, so the country's **net exports of natural fibers** will diminish, or **net imports of natural fibers will increase**, *ceteris paribus* [158] . On the other hand, since **synthetic fiber** production is an extremely **capital- intensive** activity, its products will tend to be **imported by** the newly industrializing country **from relatively capital-abundant industrial countries**. If this newly industrializing country is growing more rapidly than other countries, it will initially **increase its shares of world production and exports** of textiles and clothing and of **world imports of fibers** at the **expense of** more mature industrial economies. In time, **another generation** of newly industrializing countries would **duplicate this process**, so gradually displacing the former in those world markets **but providing them with a growing export market for capital-intensive manufactures, including synthetic fibers".**

He adds further that **Japan** was primarily an **agrarian economy before the 1870s** and it transformed, as of 19992, "into one in which the **primary sector** accounts for **less**

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[157] **New Silk Roads, East Asia and World Textile Markets**, edited by Kym Anderson Cambridge University Press (1992) p.xx

[158] *ceteris paribus*, i.e. other factors remaining constant

than one-tenth of employment and one-thirtieth of GDP and exports". The **shares of textiles and clothing in GDP, employment and exports** increased from squatting levels in the 1870s to sizeable peaks in the middle of the twentieth century as "comparative advantage **switched** to manufactures that were intensive in **more abundant human and physical capital".** Consequently, **natural fibers export** share dropped down almost zero and, conversely, the **fiber import share in Japan's total imports grew initially.** Subsequently, **decline** in Japan occurred **first for labor-intensive** clothing and **last for capital-intensive** synthetic fibers **as envisaged in standard trade theory. Bangladesh**, like **Japan** and **other NICs** such as Hong Kong, Taiwan, and Korea, **can traverse the same trajectory** as the key factors envisaged in Trade theory fully coincides with those prevalent in the country. Till now, **Bangladesh remains at the initial phase** of this trajectory and it has long way to go for which **backward linkage** industries seems to be essential.

11.5: VERTICAL STAGES IN THE BACKWARD LINKAGE CHAIN OF TEXTILES AND CLOTHING

In **section 10.12** demand-supply gaps in the textiles and clothing industries of Bangladesh were outlined in different stages, production and supply of raw materials being the first. But now, I would like to **reverse** the direction **staring first at the MFA phase-out** in the year

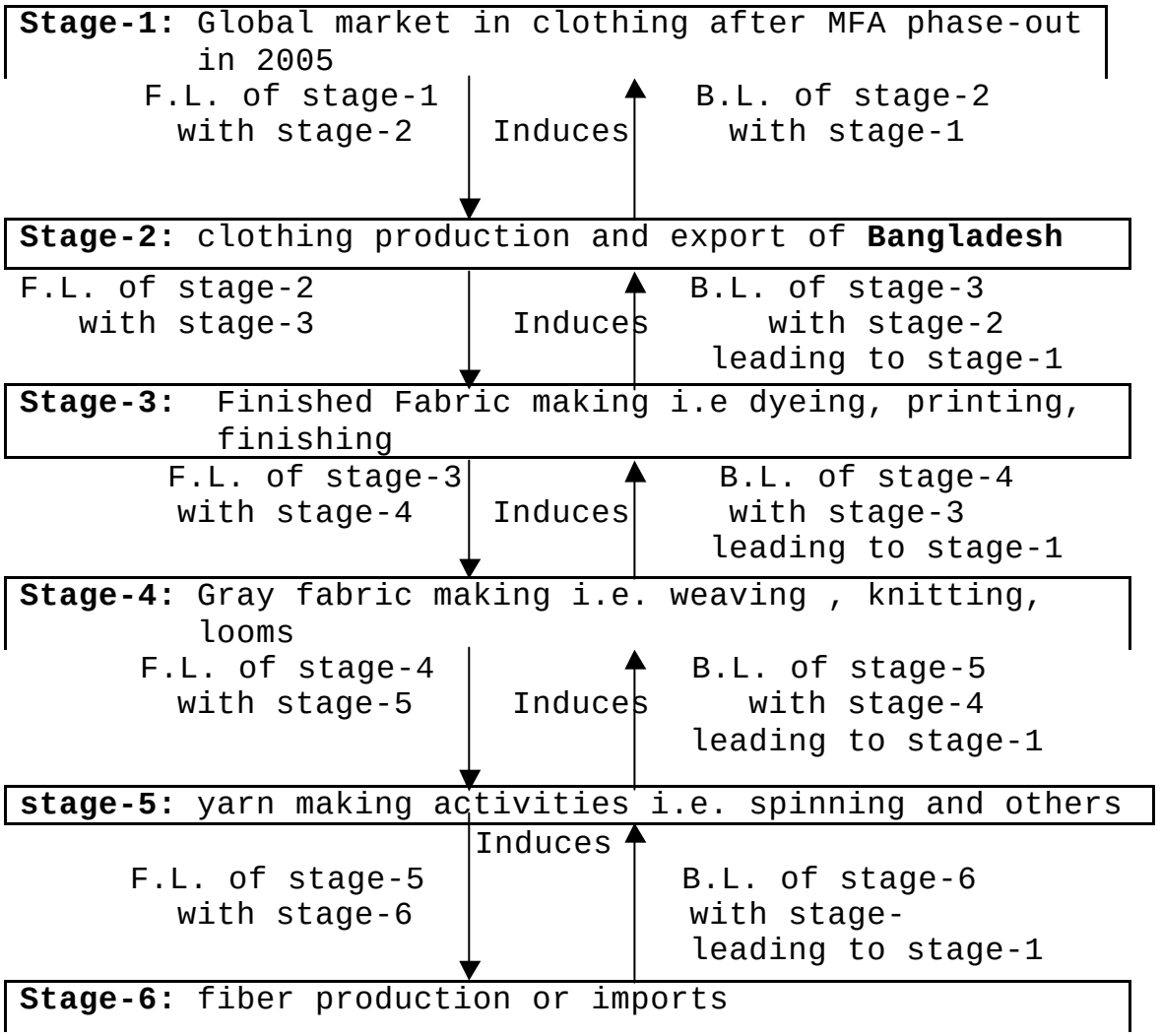
2005 and acting backward. As enumerated in the concept of forward and backward linkages in **section 11.2,** MFA phase-out generated **"incentive that induce"** the RMG export of a country like Bangladesh would be considered as the forward linkage of MFA phase-out to the RMG production and export of the country. As forward linkage and backward linkage are related in opposite direction, the RMG production and export would be the backward linkage to the economic activities in clothing in the MFA phase-out era. Similarly all other successive vertical stages of production and supply would be linked applying the same principal.

This total chain of production and supply in the textiles and clothing might reasonably be perceived as the backward linkage to the global market of RMG products in the unrestricted quota free environment after 2004. It could be more apparent from the **flow chart in figure 11.1. India** has such backward linkage value chain, which is obvious from the excerpt below[159]:

> "It is the **only industry, which is self-reliant and complete in value chain from raw material (cotton) to the highest value-added products (garments and made-ups).** Consequently, the growth of this industry has a significant bearing on the overall **development of the economy"**.

[159] **WTO and textile industry , by T. S. Vishwanath**, Op. Cit.

Figure-11.1: Backward linkage(B.L) to clothing exports Of Bangladesh



Similarly, **Hong Kong** has a strong **supply chain**, which is not producer-driven, rather it is **buyer-driven.** This is apparent from the following citation[160]:

> "Hong Kong's textile and apparel industry is a **leader in managing the supply chain** on a world-wide basis… It differs from **producer-driven** supply chains led by **multi-national companies**. The **apparel industry is a buyer-driven commodity chain** led by a coalition of retailers, contractors, sub-contractors, merchandisers, buyers, and suppliers. Each participating entity plays a role in a network of **supply chains which span from fibers, to yarn, to fabrics, to accessories, to garments, to trading and marketing".**

[160] **"Information Technology Infrastructure for Textile and Apparel Industry in Hong Kong", by Benjamin P.-C. Yen and C.J. Su,** (http://www.electronicmarkets.org/netacademy/publications.nsf/all_pk/87Abstract downloaded on 2001-01-05)

Anderson (1992) mentions that **"Dixit and Grossman (1982) have developed an elegant model of manufactures** which are produced via a **vertical production structure with many stages**. At each stage **value is added to an intermediate material to yield a good-in-process** for the next stage. **The good at stage i+di is produced from one unit of stage i output.** All stages produce pure intermediates except the last stage which produces the final product"[161].

Although it is almost similar to that in figure 11.1, a considerable simplification has been made in this model. For example, the manufacturing of carpet, a home textile does not require weaving. However, the backward linkage chain as mentioned in figure 11.1 certainly involves at every stage some factors that are linked horizontally to that specific stage. In addition, some horizontal linkage factors might be perceived **common to every stage**. These would be discussed in a subsequent section.

[161] Structural Adjustment in Australia and New Zealand, by Peter Lioyd In: **New Silk Roads, East Asia and World Textile Markets, edited by Kym Anderson, Cambridge University Press (1992), p.189**

11.6: STAGE-1----GLOBAL MARKET IN CLOTHING AFTER MFA PHASE-OUT IN 2005

In this stage, as mentioned earlier, **Bangladesh** need to find "market niche" in the global market with regard to its clothing exports after the phase-out of MFA quota restriction in 2005. Because, "in an increasingly globalized economy, **industries** will have to be more **market-driven** than ever before". Any strategy formulated to run into this objective "will have to **start with the markets and work backwards"**[162] . Bangladesh textiles and clothing sector needs, therefore, to **work backward** to "cater satisfactorily to the **quantity, quality and price requirements of both domestic and international markets, keeping in view the industry's potential for employment"** through the expansion of **backward linkage** industries in this sector. At present, **the EU and the US** provide the lion's share of markets for RMG exports of Bangladesh, which indicates that the international market for RMG products is not diversified. Therefore, "**identification of markets and the products for each market"** is crucial, particularly, in view of the impending quota free global trade in textiles and clothing.

[162] **"Importance of Textile Sector in Tamil Nadu"** (http://www.focustamilnadu.com/tamilnadu/textile_policy.htm Downloaded on 16 October, 2000).

Bangladesh must **claim,** as a member of WTO, **duty free access** to such large markets as **India, Japan and China**. Although these countries have robust textiles and clothing base, “there are many new types of garments **which Bangladesh can produce with the support of the new backward linkage facilities** and serve these markets”. Of course, extensive research is required to identify the **specific market** segments. However, if Bangladesh **can enter into “the markets** of **Japan, India, ASEAN countries and China**, it **will not have problem's** in maintaining its leadership in RMG exports after 2004”[163]. Turkey’s market share in EU is really extensive. In 1998, 67% of its clothing were exported EU as mentioned in Chapter Nine and almost all materials used in this industry are obtained domestic markets. Again, marketing **efforts** in **Bangladesh RMG sub-sector** has been very little thus far because of **sub-contracting** nature of work beginning in 1978 by the firms in which Korean entrepreneurs, as mentioned in section 10.2, were the harbingers in order to get hold of quota facility and cheap labor in Bangladesh. In **Thailand**, as mentioned in **Chapter Nine**, small clothing firms are heavily engaged in **sub-contracting**. However, in view of the competitive environment in the post MFA world market, “the **number of**

[163] **Garment exports face global competion, Backward linkage industries need investment woth Tk 50b,** The Daily Star on-line archive, Op. Cit.

the independent firms must increase from the current level of **8 per cent to at least 30 per cent"**[164]. These firms must develop capacity to identify, through **market research**, new market segments including new products. While this strategy is being implemented by both **India and Sri Lanka**[165]**,** Bangladesh RMG sub-sector should also undertake such market research program.

USTDA, 2000 Act by the United States, as mentioned in **section 10.14** may prove **detrimental** for Bangladesh RMG exports as the African and Caribbean countries, stipulated in the law, would, owing to proximity to the US, inter alia, be able to export more than Bangladesh to the US market that, in turn, may dwindle backward linkage initiatives. Bangladesh, therefore, can adopt an strategy, **like Hong Kong** as mentioned in Chapter Nine, of **"moving up-market"** to prevent low cost competition from other countries which again requires exploring new markets through extensive market research. Again, in addition to the RMG products export, an window could be opened, though far away, for export of intermediate goods, i.e. yarn, gray, finished fabrics etc. if these goods were produced in plenty through the backward linkage chain as

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[164] **Ibidem**

envisaged above. Raw materials, **technology, human and financial resources and the institutional arrangements** are also required in line with the anticipated market demand which would be discussed later.

11.7: HORIZONTAL FACTORS LINKED TO STAGE 2---- RMG INDUSTRIES IN BANGLADESH

In **section 10.5, 'SAARC cumulation'** issue has been explained in details. However, **considerable debate** exists regarding this issue between Bangladesh Garments Manufacturers and exporters Association (BGMEA) and Bangladesh Textiles Mills Corporations (BTMC). BGMEA views that fabric imported under SAARC Cumulation arrangement "will **not harm the local textile** sector" rather it will expedite **"setting up of backward linkage industries and create employment"**[166]. On the other hand, **BTMA** perceives that "it would bring **disaster** for the country's textile sector" because the RMG manufacturrers would utilize the imported fabrics, mostly from India. However, BGMEA's stance might be defended as long as local textile mills cannot meet the demand of the RMG manufacturers. Currently, "only **10 per cent** of the demand for **'woven fabrics'** are produced locally and price is **higher** than those of imported ones despite huge

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[165] Ibidem

[166] **BGMEA sees boon in new GSP provision** http://www.dailystarnews.com/200008/10/n0081001.htm#BODY6 Downloaded on 30 September, 2000 **The Daily Star** On-line archive, Front Page, Volume3 Number 339 Thu. August 10, 2000

incentives by the government”[167]. However, the statement of BGMEA President is not clear as to how “the **new provision will help us establish backward and forward linkage industries**,"[168]. Recently, a World Bank study, as mentioned in **section 10.5,** revealed that **Bangladesh won’t be benefited much from the SAARC Cumulation** and the Government is now put in trouble as it acceded to the proposal sans proper consultation with either BGMEA or BTMA. As mentioned in **Chapter Nine** regarding the fabrics collection, **Thailand** clothing manufacturers choose **not to be tied to local woven product suppliers** in order to respond quickly to the fashion changes requirements although sales tax could be avoided through vertical integration by using locally produced fabrics. While this tendency of Thailand manufacturers **offset the spirit of backward linkage**, it is **equally important** if considered the **value addition** in such fashion design.

Another issue at **stage-2** in the RMG export of Bangladesh is **“lead period”**[169] which is reasonably recommended as short as possible for speedy disposal of export order and thereby making dynamic the RMG sub-sector. The proposals for **direct shipping lines**, **deep sea port** for berthing

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[167] Ibidem
[168] Ibidem
[169] time left in hand for executing an RMG export order after accepting the same.

mother vessels, **private warehouses, private port and green channel** have been raised and these are under consideration of the Government. Activities of **private port** at Patenga[170] are on the track despite demonstration from the **labor union** in the Chittagong port. Again, deep sea port, green channel and private warehouse matters should be looked into very carefully because these initiatives, if come true, may encourage pilferage to local market which, in turn, would **frustrate the spirit of backward linkage** through local industries' production. An excerpt from a popular daily in Bangladesh reads as following[171]:

> "For reducing the **"lead period"**, the government can allow **private bonded warehouses** to store raw materials, establish **direct shipping link with major Southeast Asian ports and deep sea port.** It takes around **20-25 days for raw materials to reach Chittagong port** from major Southeast Asian ports. If a **deep sea port** is established at a suitable place for berthing mother vessels, the raw materials **would reach within eight to 10 days. ……**On the other hand, the **private bonded warehouses can collect raw materials and supply** it to the **garment manufacturers** according to their requirements, which would make the **execution process faster**. There should be transparency about the capacity of the existing port and proposals from a foreign company for **establishing a private port** there".

Again, the condition of **packaging segment** within RMG sub-sector **is better** than the local **fabric and accessories**

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[170] A place near chittagong port

[171] **"No policy guidelines yet to face the quota-free regime" The Daily Star** on-line archieve, (available at http://www.dailystarnews.com/200004/20/n0042005.htm available 2000-9-30 Business Page, volume 3 Number 229 Thu. April 20, 2000)

support in Bangladesh, which is evident from the following[172]:

> "……three modes of backward linkage industries including **textile, accessories and packaging** are required to support balanced growth of the garments sector. There is **satisfactory growth in case of packaging**. Investments are required in other sectors".

Diversification of Products is another important element in the export of readymade garments and considering "adequate government support will be available, the important thing is that Bangladeshi entrepreneurs **emphasize the quality of the products, product diversification and aggressive marketing"[173] .** While up-grading the quality of product, it is to be recalled that some countries has moved, as explained in **section 5.23**, towards **automation** (pattern grading**,** marker making, automatic cutting etc.) **and Computer Aided Design (CAD)/ Computer Aided Manufacturing (CAM),** for example, **Hong Kong**, **Turkey** and **South Korea**, in their RMG sub-sectors that involve capital-intensive high technology. This system is also known as **"Quick Response"**. Again, **automation** in **South Korean** clothing industries, as mentioned in **Chapter Nine**, is expected to reach 80% by 2005. These instances are, however, **not in line with** the comparative advantage, at present, in Bangladesh.

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[172] **Garment exports face global competion, Op. Cit.**

[173] Ibidem

Administrative issues in **stage-2**, for instance, **"separate authority under direct supervision of the prime minister** to speed up decision-making for **garment sector"**[174] and the establishment of an Apparel **Board,** both demands raised by BGMEA, might prove beneficial to strengthen the RMG sub-sector base stimulating, in turn, the backward linkage efforts as stated earlier.

In **stage-2, BGMEA's** demand also include **access to credit, power supply, rule of law, depoliticization of the labor force, continued policy support of the government, improved management capacities and excellence in fashion designing** to help local entrepreneurs face the challenges of the post 2004 global market[175]. As will be discussed later, the paucity of **fund** and **power crises** are serious problems in the country. Moreover, **law and order** situation in the country is **dreadful** which is noticeable from everyday news items. **Labor situation** in the RMG sector has been spelled out in details in **section 10.6** that is really **abysmal** even though **low labor cost,** as would be evident later in this chapter, constitutes the comparative advantage of the RMG sub-sector of Bangladesh.

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[174] **"BGMEA calls for separate body to speed up RMG decision-making", The Daily Star** on-line archieve, Business Page Volume 3 Number 205 Fri. March 24, 2000,(http://www.dailystarnews.com/200003/24/n0032405.htm#BODY3 , Downloaded on 30 September, 2000)

[175] **BGMEA News letter, Op. Cit.**

Again, the clothing industry of the country, **like Thailand**, as mentioned in Chapter Nine, is based on **low capital** per worker and **simple technology**. **Policy support** of the government is also **poor**. Improved management system may be achieved through **Information engineering system, which** involve high cost technology.

As mentioned in **section 10.19**, building of an institute of **fashion technology** is under way. Certainly, it will boost up the RMG sector when implemented. For example, **Hong Kong** has high reputation in fashion designing and a **fashion library** has been established by Hong Kong Trade Development Council which is very useful to fashion designers as it provides up-dated information and communication facilities in this field. **Turkey** exploits labor of qualified personnel in its apparel industries and adapts to changes in fashion. **India**, as mentioned in **Chapter Nine**, has established 100% government funded autonomous National Institute of Fashion Technology **(NIFT)** in **1986** through which high level **interaction and collaboration with the leading fashion institutions** of the world is feasible. This institute has also raised the **status and scope** of Indian RMG sub-sector. RMG sub-sector of Bangladesh could exploit such experiences in fashion designing from Hong Kong, Turkey, India and others. Again, **New Zealand designers,** as mentioned in **Chapter Nine,** have

core competencies in production and design and it has, in response to increased international competition, **reduced** number of **employees** by introducing **automation**, increased **offshore production** and contracted the industry as a whole. Automation, offshore production and downsizing of clothing industry, however, are **not apposite** to the present situation of the RMG sub-sector of Bangladesh.

Moreover, **stock lot** situation, as mentioned in previous chapter, due to **political disturbances and port problems,** currency **devaluation** by neighboring countries, requirement of Dhaka-Chittagong **dual carriage way, telecommunication, banking, insurance, customs** ----all these stands in the way of the steady growth of RMG sub-sector of Bangladesh[176]. Among these, **port labor turmoil** poses **serious threat** to the RMG export activities for which demand has already been raised to declare the **port service essential**. The following excerpt could be useful to understand the port situation[177]:

> "……..there were **work stoppages** in **Chittagong port** for about 7 days by two groups of port workers leading to piling up of imported goods, demurrages, and eventually to the imposition of "congestion charges";

To compensate the neighboring countries' **devaluation** exporters sought 10% cash incentives if not counter

[176] Ibidem

[177] **"Where is the Economy Heading For"?, b**y Kabir U Ahmad, **The Daily St**ar Archives, 31 August, 1997 issue.

devaluation is allowed. Dhaka-Chittagong **dual carriage way is** essential in view of the expanding RMG exports although it would involve **colossal** amount of money.

Again, **strength** of RMG factories in Bangladesh might partly be attributed to relatively **inexpensive machinery**, requirement of **smaller factory space** compared to textile mills, **low tariff** etc. Again, there are some other factors that are **not** linked **directly** to the backward linkage strength of RMG, **but are so indirectly**, as more and more **human rights** and **environmental** issues are being raised by the buyers. These are **child labor**, ominous living and working conditions, outlined in **section 10.16**, of **workers** comprising mostly women among others. Moreover, in **section 10.12**, it has been demonstrated that RMG firms **imports** colossal amount of **finished fabrics**, which could be supplied by local production if backward linkage support were in place. **Stress has been given** to **BGMEA representation** in every RMG relevant government body to open the knots, lowering bank **interest rate** at the level of neighboring countries, **income tax free** textile products, lifting **double insurance** system, **special bank** for export-oriented industries, **textiles park** similar to EPZ and so on.

These factors linked horizontally at **stage-2** needs careful consideration from all quarters to update the RMG sub-sector with backward linkage propensity to the entire sector. Regrettably, country's **RMG sector** is **not fully prepared** to provide for the backward linkage to the 2005 competitive quota free global trade.

11.8: STAGE 3---FINISHED FABRIC MAKING

As mentioned in **Chapter Nine**, **Hong Kong textile** industry is competent in efficient finishing service, which lends a hand to retain its competitiveness in the international market. Moreover, the finishing industry of Hong Kong provides an **inducement** to local spinning, weaving and knitting sub-sectors by finishing yarn and fabrics to be exported or used in Hong Kong's cloth making industries. Hong Kong bleaching, dyeing, printing and finishing factories, as mentioned in the same chapter, can afford 70% of local RMG's textile demand. This is in line with present concept of **backward linkage** as stated earlier.

In **Bangladesh**, however, dying, printing and finishing industries, as mentioned in **section 10.9**, have grown very rapidly during the last few years. But it depends substantially on **imported gray** which again involves additional cost in import tax, transportation etc. Moreover, the sub-sector **lacks** modern equipment and

demanded quality. Again, as the **current dyeing facilities** are mostly dependent on **imported fabrics**, their expanding is **not dependent** on any of the other sectors impeding the backward linkage growth in those sectors. However, the recent textile policy of the Government envisages that in Dyeing, **Printing, and Finishing** sub-sector "**new units** will be set up with **appropriate technology",** "bonded warehouse will be provided **until local gray** production can meet the quality and quantity required by the sub-sector" and "**duty** on dyes and chemicals will be **withdrawn"**[178] **.** While we anticipate positive outcomes of these steps, it is obvious, at present, in **stage-3** that finishing industry in Bangladesh is not ready to lend or induce backward or forward linkage supports to the relevant segments of the textiles and clothing chain.

11.9: STAGE 4--- GRAY FABRIC MAKING (WEAVING, KNITTING, LOOMS)

Again, looking back at the experience of **Hong Kong** in Chapter Nine, textile industry there is the major supplier to local garments industry as well as to its off-shore clothing set-ups. Again, it is noteworthy that 60% of Hong Kong's textile firms are **small scale** employing less than 20 persons. Again, In **Thailand**, as

[178] **Azizur Chowdhury , Op. Cit.**

mentioned in Chapter Nine, broad spectrum of **weaving** technology is available but still remains at the **labor-intensive** end (80% companies use shuttle looms) in which technologies are available globally. Moreover, **Government's control** exists on domestic textile capacity and production since 1978 in which intermediate items are not allowed to import.

In the same chapter, it has been mentioned that **Tamil Nadu** state government in **India is** committed to various direct and indirect **subsidies** to its handloom sector as well as ensures the sector's **forward and backward linkages** although some weavers leave this profession every year due to low wages. **Tamil Nadu** Government launched **development and welfare scheme** to prop up the sector. Again, as a **forward linkage to the power loom** sector **Tamil Nanu** Government is committed to set up **Garment Export Parks** to produce fabrics to meet the requirements of garment exporters[179]. All these instances apparently lead to strengthen the fabric-making base to provide back up support to clothing industries of the respective countries.

On the other hand, **Bangladesh weaving** mills constantly fall short of production owing to chain link shortage of

yarn production in spinning sub-sector. As a result, the country has to import 3.15 billion meters gray per year adding tax, transport etc. thereby making the fabric expensive. Moreover, the sub-sector lacks organization and coordination as already mentioned in **section 10.6**.

Knitting segment of gray cloth making in Bangladesh is better than others and the **knit gray demand is met by local production**. Conversely, it has also some difficulties for example, as mentioned in **section 10.7**, shortage of raw material and working capital, lack of modern facilities for quality production among others.

Again, the handloom sector, as mentioned in **section 10.3.2 and section 10.8** also faces a lot of difficulties, although involvement of NGOs appears prospectful. Moreover, the shut down of handloom activities has repercussion to spinning mills of Bangladesh Textile Mills Corporations (BTMC), which is evident from the following citation[180]:

As a result of the **closure of the handlooms**, the yarn mills of BTMC are also being closed. Because the weavers of the handloom industry were the real and main **customers of the yarn mills of BTMC. (B. L)**

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[179] Importance of Textile Sector in Tamil Nadu , Op. Cit.

[180] **"Jamdani Exhibition and the State of Handloom Industry", by Binoy Barman** The New Nation, a national daily of Bangladesh, 22 September, 2000

The weavers in handloom sector face many **problems** e.g. dearth of **bank loan**, **narrow marketing facility**, **lack of governmental patronization** among others. A **Tant Bank**(handloom bank), **therefore,** is essential to improve the lot of the weavers and the industry. Against the silence of the Government in the matter, "the leaders of Bangladesh Sanjukta Tanti Samity (**BSTS)** with their own initiatives are working for establishing the **Tant Bank** which will be "exclusively devoted to providing the **credit facility for the weaver community".** In addition, some steps taken by the government also looks constructive which came out from the Commerce Minister's dialogue[181] in an interview:

"This year, we have **withdrawn 2.5 per cent DSC (development surcharge**) from **textiles** and **three per cent** advance income tax. Every exporter will benefit from it. We are **upgrading our customs department** also".

Again, the **Jamdani Sari** [182] **production** through the handlooms also faces some problem that could be grasped from the following excerpt from a news item in an influential daily[183]:

> "The **weavers of Jamdani saris demanded resumption of 25 per cent cash incentive** for them in order to run the traditional Jamdani industry efficiently…… But now the handloom industry, the weavers community and the traditional Jamdani industry are on the verge of

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[181] **"Moving ahead with a 'patriotic' agenda",** http://www.dailystarnews.com/199905/14/n9051409.htm#top Downloaded on 30 September, 2000 Features Volume 2 Number 260 Fri. May 14, 1999

[182] one kind of long , thin, women wear popular in South Asian countries

[183] Reviving the glory of Jamdani, by Shafiqur Rahman Khan, The Independent **29 September, 2000**

> collapse. Due to **indecision**, **wrong and unstable policy** of **the authorities over the years, the handloom industry has become a sector beset with problems**. About **42 lakh weaver families** find their ancestral profession a hopeless one and are trying to engage themselves in other. **It is because of the frustrating condition of the handloom sector the country is also becoming dependent on foreign cloth……** there has already been started a **handloom credit program** from **January 2000 in several villages at Sonargaon of Narayanganj district"**.

Now, as envisaged in the recent textile policy, the government of Bangladesh is committed to set up **"223 modern weaving units** each with an annual capacity of producing **ten million meters", Handloom- supervised credit system** for **long term** loans, necessary **training,** various means of encouragement and exposure such as **exhibitions and competitions and so on**[184]**.**

Due to a large **demand-supply gap** in Bangladesh, the **weaving and knitting** sub-sectors require **to expand at a rapid rate**. But the problems and difficulties, mentioned above, need to be addressed efficiently to attain such objectives. While it is encouraging that with **increased investment** and **modernized machinery "**Bangladesh could **profit greatly" from** weaving and knitting sectors, the present status **doesn't indicate** that it has **backward linkage** potential as envisaged in **stage-4 of the Textiles and clothing chain.**

[184] **Azizur Chowdhury , Op. Cit.**

11.10: STAGE 5--- PRODUCTION OF YARN THROUGH SPINNING

In **Hong Kong**, as mentioned in **Chapter Nine**, modern opened technology is used in spinning mills to produce yarn which is supplied to the local knitting and weaving industries. In **Thailand**, stated in the same chapter, government policy was to protect lightly capital-intensive sector resulting in double yarn production during last 10 years. Again, in **India**, 33.93 million Ring Spindles and Open-ended (OE) rotors put together a large installation for manufacturing **"any specification and any count range"** yarn which is boosted up by abundant raw material available in the country. These instances demonstrate these countries' sound yarn production base capable to satisfy the demand for yarns by the gray-producing firms.

On the other hand, 38% of spinning machines of **Bangladesh**, as mentioned in **section 10.5**, is obsolete. Moreover, the spinning sub-sector is plagued by high import duty for machinery and parts, technician shortage, power crisis, shortage of raw materials among others. The towering gap between demand and production of yarn entails massive imports under bonded warehouse facility, which is, again, flawed by leakage. The following excerpts provides a

short and snappy picture of the spinning sub-sector of Bangladesh[185]:

> "According to a **Textile Ministry** report, **11 out of a total 141** spinning mills now produce export **quality yarn.** The country currently **produces** a total of **96.5 million kg yarn** out of total demand of **467 million kg** (domestic need of 186 million kg plus need for yarn in the export-based RMG and knitwear of 281 million kg). **While some 10 percent of export requirements for yarn are met from domestic production, the shortfall in domestic requirements plus the bulk of the export needs are met through bonded imports.** However, the domestic industry complains of the **leakage of bonded yarn** to the local market, which according to industry sources is counterproductive. **Most of the bonded yarn comes at a lower price from India** (which protects domestic producers by keeping raw cotton prices for domestic mills around **20 percent cheaper** than the export price of raw cotton); this yarn wins out over local yarn, especially in the **medium count** range. As **India does not produce short and long staple (cotton), the Bangladesh mills have competitive edge in lower and higher counts".**

This **leakage,** although mentioned counter-productive, cannot be encouraged in view of the growth of the local spinning factories. The price differential between Indian and Bangladesh yarn, mentioned above, is also reinforced by the Commerce Minister's statement[186]:

> "They are giving the money to real investors, not to sick industries, at a **subsidized rate of interest**. The price of **yarn in India is US$ 2.5. Here it is 3.5.** We are giving one dollar in cash incentive, so that our people can buy it".

Again, to prop up backward linkage activities, in **stage-5** i.e. yarn production, FDI or Joint Venture initiatives are also in progress. As of 04 December 1998, **Daewoo, a Korean company,** was the **first** to **invest** in such **backward**

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[185] **"Country Commercial Guide, FY 1999"**, US Embassy in Dhaka, Bangladesh. http://www.state.gov/www/about_state/business/com_guides/1999/sa/bangla99_05.html downloaded on 15 October, 2000

[186] **"Moving ahead with a 'patriotic' agenda", Op. Cit.**

linkage industry at the extension of **Savar EPZ** with an investment of **27 million US dollars to** produce **yarn**, **yarn dyeing** and **sweater**[187] . Similarly, State Minister for Textiles embarked on such backward linkage activities with Italian Entrepreneurs as shown in the following excerpt[188]:

> "Since RMG export is **largely dependent on imported yarn and fabrics**, Bangladesh has **no other alternative** but to make all-out efforts for **immediate establishment of backward-linkage industries** for the export-oriented industry, the **state minister** observed……for doing this, at least 148 additional spinning mills, each with 25,000 spindles, and 295 weaving and 280 dyeing cum finishing units, each with a per annum production capacity of 10,000 million meter, have to be set up…….**urged the Italian entrepreneurs to invest in the Bangladesh's textile sector and relocate their textile industries in Bangladesh".**

While these efforts are going on, some disappointing pictures are also in place[189] , an example of which is Bogra (a district of Bangladesh) Cotton and Spinning Mill's lay-off---a news item reads as:

> **'Bogra Cotton and Spinning mill** was established in 1953 at the northern end of Bogra city. Capital machineries were imported from America, Japan and Germany. In addition to the **thread and fabrics** making, the mill produced **quality blankets** …….. jutex cotton blankets ……... **Inability to pay back bank loans, shortage of capital and unprofitability led the mill declare lay-off leaving two thousand workers unemployed.** In addition, nine other industrial units at Bogra are closed for a long time'.

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[187] **"We want FDI, not ODA: Hasina",** The daily Star online archive (http://www.dailystarnews.com/199812/04/n8120401.htm#top Downloaded on 30 September, 2000)

[188] **"Textile miniter calls for Italian investment"** (http://www.dailystarnews.com/199904/14/n9041405.htm Downloaded on 30 September, 2000), Business Page, Volume 2 Number 233, April 14, 1999

[189] **The Daily Ittefaq, a national daily of Bangladesh** in Bengali, 27 September, 2000(downloaded from its homepage www.ittefaq.com on the same date).

In spite of the country's advantage of lower waste percentage, lowest power price, low depreciation and interest rate, only two factors take away the comparative advantage of Bangladesh over India and Bangladesh as below[190]:

> "Bangladesh has a **lower waste** percentage than all its competitors. **Power** along with Korea is the **cheapest in Bangladesh** amongst all the yarn producers. The country also has a very **low depreciation rate and a fairly low interest rate** as well, aided by a low conversion cost as well. However, the price of **auxiliary materials** in Bangladesh is the **highest** among all the **yarn** producers, as is the **price of raw materials**. Due to **these two factors Bangladesh loses its comparative advantage over India and Pakistan".**

It is now clear from the preceding discussions that Bangladesh's position in **stage-5** i.e. yarn production is severely vulnerable to the disappointing situation as stated above and it is not in a position to lend support to the consecutive stages as predicted in textile and clothing chain.

11.11 : STAGE 6---FIBER PRODUCTION OR IMPORTS

In **Chapter Four** enumerates in details the position in fiber production of **Bangladesh** vis-à-vis other leading countries (China, US, India, Pakistan, Uzbekistan, Turkey etc.) from which it is obvious that extensive natural fiber production, mainly cotton, is not feasible owing to growing demand for food to feed a gigantic population as well as paucity of cotton growing land. This entails the

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[190] **Azizur Chowdhury, Op. Cit.**

massive import (95%) of cotton by the spinning sub-sector of the country.

Australia has, as mentioned in **Chapter Nine**, **strong comparative advantage in fine wool and cotton** but it cannot exploit this advantage---both of these sides are attributed to low population. Thus, Australia is not capable to exploit its fiber advantage in backward linkage chain. Conversely, Japan, Turkey, India, China etc. are vivid examples of fiber advantage exploiting countries in such chain.

Japan at beginning of its developing textile industries, as stated earlier, was **net exporter** of cotton, which later transformed into **net importer** of cotton[191]:

"The growth in **Japanese competitiveness in textile** products reflected also in **Japan's changing role in natural fiber markets**. Its importance as an **exporter of raw silk gradually declined** and its importance as an **importer of raw cotton and wool expanded dramatically** during the first half of this century. By the 1950s, **Japan** accounted for one-quarter of US cotton exports and one-fifth of Australian wool exports - and the latter share was two-fifths by the early 1970s".

Therefore, **Bangladesh's comparative disadvantage in natural fiber doesn't break off the spirit of such backward linkage** if other segments of the chain emerge as dynamic and potential.

[191] **Introduction and Summary , Kym Andrson, In: New Silk Road**

Alternately, production of man-made fiber could prove beneficial for the poor people in the country due to the following[192]:

> "…The clothing needs of the **poorer sections** of society are **better served** by increasing the use of **synthetic fibers** like polyester as these fabrics are **lower in both initial and maintenance costs, more durable and more easily maintained than pure cotton fabrics**. This is the trend worldwide as **cotton fabrics** are considered to be primarily for the **wealthier sections** of society. Therefore, ensuring the availability of such synthetic fibers at the right prices is an area that needs attention".

Unfortunately, this is not feasible, at present, for **Bangladesh** as it involves capital-intensive technology, which is costly enough to stand against its comparative advantage of cheap labor force. Although, at **stage-1,** Bangladesh doesn't enjoy fiber endowment, it can meet up the demand of fibers by highest possible domestic production despite constraints, and the rest by cheap imports of shorter and longer staple in which it has comparative advantage over India. It may be mentioned here that India produces diverse textiles from wide variety of fibers as enumerated in **Chapter Nine.**

11.12: OTHER FACTORS INVOLVING THE BACKWARD LINKAGE SPIRIT IN BANGLADESH

One of the major hurdles in the way to transform the backward linkage vision into reality is to afford **colossal amount of fund** for which neither Government nor

[192] **Importance of Textile Sector in Tamil Nadu:** http://www.focustamilnadu.com/tamilnadu/textile_policy.htm Downloaded on 16 October, 2000.

entrepreneurs are prepared entirely which could be grasped from the following extract[193]:

> "The backward linkage industries require an investment of **3 billion dollars** - half of which is supposed to come from Bangladesh government while the rest half from garment exporters……But Bangladesh's garment manufacturers and exporters are **not in a position to invest 1.5 billion** dollars…. inviting **foreign investors to come forward** to invest in Bangladesh…"

On a **private** sector **initiative**, mainly by BGMEA, attempts have been made to attract foreign direct investment (FDI) from the overseas investors as well as possible international relocation of industries, for instance, Italy as stated earlier. It has been added to the above paragraph, for example, that "two foreign companies, one from **Canada** and another from **Taiwan,** are willing to invest **Tk 1 billion** in the **backward linkage sector of garment industry** in Bangladesh…… **enquired about the prospects of investment** in **fabrics, weaving, dyeing and printing".** However, these steps are just budding. FDI inflow depends on the overall **investment climate** in a country, which in Bangladesh is not pleasant so far, owing chiefly to political turmoil prevailing in the country.

On an **Official move**, attempts have also been made to raise money from international lending institutions such

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[193] **"Two foreign cos keen to invest in backward linkage garment", The Daily Star** on-line archieve, Business Page, Volume 2, Number 129 December 21, 1998 (http://www.dailystarnews.com/199812/21/n8122105.htm#BODY6),downloaded on 30 September, 2000

as **IFC, ADB** as well as through the **industrial bonds** promoting mainly among the expatriate Bangladeshis. Asian Development Bank President Tadao Chino , a Japanese national said that "**Bangladesh could use Japanese grant funds** for setting up **backward-linkage industries** to feed its readymade garment industry" when Finance Minister of the Government of Bangladesh asked for **some investment by the ADB to establish backward-linkage industries in Bangladesh**[194]**.**

Again, the Finance Minister is optimistic that "the **money to be cashed from industrial bonds** would go for long-term industrial financing specially for much-needed **backward linkage** for apparel sector" [195] . These government initiatives are also at the **beginning stage** of operation. To encourage investment, entrepreneurs demand is to slash the equity portion as stated below[196]:

> "Investment in backward linkage industries, particularly in **composite mills** is quite large. ……. the entrepreneurs will need **equity** capital from **financial** institutions. **Currently** a **50:50** debt-equity ratio is enforced. To encourage investment in this sector the government should lower the **ratio to a reasonable level, say, 80:20".**

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[194] **"ADB chief appreciates robust growth despite difficulties. Kibria seeks funds for RMG backward linkage industries". The Daily Star,** Downloaded on 30 September, 2000. Business Page,Volume 3 Number 215 Tue. April 04, 2000 issue from http://www.dailystarnews.com/200004/04/n0040405.htm

[195] **"Bond money to go for financing apparel sector backward linkage", The Daily Star** on-line archive, Business Page, Volume 2 Number 351 Sat. August 14, 1999(http://www.dailystarnews.com/199908/14/n9081405.htm#top Downloaded on 30 September, 2000)

Informal payments, in other words, bribe in the concerned offices, **together with the formal ones** "discourages entrepreneurs to initiate establishment of backward linkage industry in the garments sector"[197]. This is, again, related with the entire investment climate of the country. **Reasonable interest rate** for long-term loans is also a demand of the investors, which, as of November 1999, were "around 12 per cent, the actual cost of fund to the entrepreneurs amounts to **some 20 to 22 per cent after various adjustments"[198].** This rate seems quite **high** which will **discourage investment, no doubt.** The discussion made so far indicates that the **progress of financing the intended backward linkage industries** is **insignificant** which need to be accelerated.

In order to promote the expansion of the **textile industry** in Bangladesh, the government is currently providing **numerous incentives**. **Bonded warehouse facilities** allow export-oriented factories "to **import** their raw materials **duty free"[199]**. However, the bonded warehouse privileges have been maltreated by **leaking** imported duty free materials into the **local market** instead of using in export-oriented factories entailing **unfair competition**

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[196] **"Garment exports face global competion, Backward linkage industries need investment woth Tk 50b", The Daily Star** on-line archieve, Op Cit.

[197] Ibidem

[198] Ibidem

for local producers. Apparently, this leakage has thwarted the growth of local industries and thereby **dwindled** the **spirit of backward linkage**. **Duty Exemption Drawback Organization (DEDO)** allows factories, which **do not** take advantage of the **bonded warehouse** facilities and **import** their raw materials **independently,** claim the duty they paid under DEDO on condition that the **finished goods** would be exported. This system is **mostly** applicable for the **dyeing** sub-sector of the textile industry. Government provides **25% export cash incentive** to "producers **who do not use their DEDO or the bonded warehouse privilege**, and **utilize local materials"** [200] **for export**. Moreover, **tax holiday** for **five to nine years** for new factories, **duty free importation** of raw materials of export in the RMG, **avoidance of double taxation** for joint venture projects, **income tax exemption** for up to **three years** for foreign technicians, **duty free import** of capital machinery are also provided as incentives to expand textile industries in Bangladesh. While these initiatives appear beneficial for the improvement of the total textiles and clothing sector, **leakage** of material from the bonded warehouse, on the other hand, seems to be **detrimental** for the growth of backward linkage industries.

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[199] **Azizur Chowdhury , Op. Cit.**

[200] Ibidem

In view of the continued demonstration by the labor unions in the textile mills against the privatization process, government has embarked on **handing over** the troubled industries to the **workers** forming companies as per the rules of the country as evident in the following passage[201]:

> "In a bid **to appease workers, who are opposed to the government's privatization and reform processes**, the government earlier had decided to offer 100 per cent ownership of the moribund **textile mills**. The Cabinet on January 25 this year short-listed the nine mills to **hand them over to the workers**. Unions of those mills have been asked to **form** respective **companies**, as per the gazette issued two days back, to become owners".

While this step conforms to the backward linkage initiative in the textile sector, it would depend ultimately on how the workers manage the vulnerable conditions of the sick industries. Moreover, **Cheap labor cost** in **Bangladesh** encourages the establishment of backward linkage industries in the country as would be revealed in table 11.1:

Table 11.1: Textile industry labor costs in a few countries
(1995 USD per hour)

West Germany	24.23
East Germany	19.53
US	12.18
UK	11.60

[201] **"Makeover of nine textile mills to workers likely by May 1. Govt asks union leaders to form cos".** **The Daily Star** Busines page, Volume 3 Number 175 Sat. February 19, 2000(downloaded on 03 October,2000. http://www.dailystarnews.com/200002/19/n0021905.htm#BODY2)

Table 11.1 (Cont'd)

Hungary	2.37
Mexico	2.27
Brazil	1.98
Poland	1.61
China	**0.52**
Bangladesh[202]	**0.43**

Source: **The Polish Textile and Garment Industry,** http://www.paiz.gov.pl/textile.htm

Human Resource Development is crucial to prop up the **backward linkage pursuit** in the total chain of textiles and clothing industries of Bangladesh. **Labor productivity and managerial efficiency** must be viewed with high priority otherwise "equity support and concession in rates of interest will not be of much help"[203]. Again, the quality of **yarn** and **fabrics** should be of **high standard,** at least, in parallel with the **competitors of Bangladesh, namely, Hong Kong, India, Sri Lanka, and others,** as mentioned earlier. **Poland** has also developed extensive research and development activities in this field. As mentioned in **section 10.19**, an institute of fashion technology is on the way under the aegis of BGMEA. As the "**quality of the product and delivery services, including marketing**" are supposed to ultimately determine the destiny of the clothing exports of the country **after 2004**, development of skills of production workers of the

[202] Bangladesh data has been estimated from Board of Investment (BOI) Guide
[203] Garment exports face global competion, Op. Cit.

spinning mills, weaving mills, processing units and garment factories is indispensable. The country has **yet to do a lot** in this matter.

Power crisis in Bangladesh, as a part of the overall infrastructure of the country, emerges even more **destructive** to the industrial growth, in general and the textiles and clothing industries, in particular. The severity of power shortage and its repercussion on the textile sector could be perceived from the following extract[204]:

"Many textile industries face up to a **30 per cent production** loss due to **energy shortage**,……..The industries in the country are **allowed** to have their **own gas or diesel generators**, but due to **low gas pressure**, many industries in Dhaka and Chittagong have **suffered huge production losses**, despite having captive generation capabilities,……This situation has been further aggravated by the **increase in gas tariff**.…. the **production costs of yarn** and fabric have **gone up** due to **power and gas tariff increases**, creating an uneven competition with the smuggled yarn in the market".

Moreover, the buyer countries are broaching "**more and more non-tariff barriers** like **workplace code of conduct, eco-labeling, human rights and social and safety requirements**" [205] . Government, therefore, in collaboration with the BGMEA is "planning to shift garments factories, which do not meet the safety and other requirements, to the **garments village** outside Dhaka

[204] **"BTMA decries gas, power tariff increases, Govt mulls special fund for backward linkage". The Daily Star** on-line archive, Business Page ,Volume 3 Number 103 Sun. December 05, 1999 Downloaded on 30 September, 2000 from http://www.dailystarnews.com/199912/05/n9120505.htm#top

[205] **"RMG industry still in a dilemma to work out post-2005 strategy" by Inam Ahmed The Daily Star** on-line archive, Business Page, Volume 3 Number 66 Fri.

so that they can plan their factories there to meet **international standards"**[206].

The idea of '**garments village'** is upright as it conforms to the **spirit of backward linkage** to the clothing export of Bangladesh. Again, it requires suitable places at low prices which is difficult to maintain. The condition of RMG factories impairing environment of Dhaka city and the need for garments village could be perceived from the following[207]:

> "……. around **70 bighas of land are needed for a garments village** comprising at least **50 factories**. There should also be access roads, better communications and other facilities like mosque, club, labor quarters and medical center……. There are **1855 garments factories in Dhaka City Corporation area and 356 in Narayanganj pourasabha**. More than **60 per cent** of these are located in **residential areas**……. About **14 lakh workers** of these factories are also living in the city and in Narayanganj in too unhygienic condition".

In the mean time, Prime Minister of the country declared special **incentives** to those garment manufacturers and exporters who would "set up industries in the **less developed areas** of the country", specially, **"northern region"** in view of the recent opening of the **Bangabandhu Jamuna Bridge**[208]**.** This shifting of garments factories is

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October 29, 1999 (Downloaded on 30 September, 2000, http://www.dailystarnews.com/199910/29/n9102905.htm#BODY2)

[206] Ibidem

[207] http://www.dailystarnews.com/200006/18/n0061805.htm available 2000-9-30 **The Daily Star**, Business Page Volume 3 Number 285 Sun. June 18, 2000

[208] **"BGMEA plans 'garments villages' to relocate city's factories, PM for exclusive 'garment village' in northern region"** **The Daily Star** on-line archive, Business Page, Volume 2 Number 266 Thu. May 20, 1999

underway and would surely strengthen the country's RMG product base trouncing the non-tariff barriers raised by the buyers.

Again, looking at **technology up gradation** in the textile sector, country is loaded with obsolete machineries, as mentioned earlier, and lagged behind its neighbor India, particularly, in view of its large-scale technology import as under[209]:

> "The country's textiles and jute sectors are headed for a tough competition **from India**, which is reportedly planning a massive **import of technology to modernize** its industries, ……A Cabinet Committee on Economic Affairs (CCEA) last week approved the setting up of a **Rs 25,000 crore technology up gradation fund** scheduled to be operative from April 1, 1999……such extensive modernization of the Indian industries **would make it difficult for Bangladeshi entrepreneurs** in setting up **backward linkage** units to support the country's RMG sector, the top foreign exchange earner for Bangladesh".

As of now, Government of Bangladesh has **no such technology updating** program other than the initiatives for procuring special fund for setting up backward linkage industries.

The **Textile Policy** of the Government of Bangladesh, devised in order **to sustain** the country's competitiveness

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http://www.dailystarnews.com/199905/20/n9052005.htm#BODY3 Downloaded on 2000-9-30

[209] **"India allows large-scale technology import, Textile sector heads for stiff competition". The Daily Star** on-line archieve downloaded on 30 September, 2000. Business Page, volume 2 Number 166 January 31, 1999 http://www.dailystarnews.com/199901/31/n9013105.htm#top

in the WTO free market by 2005, envisages the **"self-sufficiency in yarn and fabrics** to meet the needs of the RMG industry through **backward linkages** and by encouraging investments by **private investors"** [210] . The policy makes **suggestions to develop** the sector such as closer monitoring of **leakage** in the market from warehouse, appointment of an **advisory committee** to represent the industry to the government, improvement of **research** and **computer technology, modernizing** all sectors of the industry, **tariff rationalization**, establishment of 116 new spinning mills having the capacity of 25,000 spindles[211]. However, the **Textile Policy,** as mentioned in the report[212], failed **to address a number of issues** such as **no scheme for financing** new factories and projects as envisaged in the policy, **no suggestions** for **enhancing** the **skills** of the workforce and engineers, **no suggestions** for "setting up **institutions** to conduct the **technical and marketing research** needed to upgrade the **quality** of Bangladeshi products" in the global market, **no indication** of Bangladesh's **infrastructure** development "such as **road, port, and railway** capacities to accommodate increased imports and exports", no mention about the paucity **land** as it pose difficulty **to build the necessary factories**,

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[210] **Azizur Chowdhury , Op. Cit.**

[211] Ibidem

no guideline to address **environmental pollution** specially the **affluent treatment and disposal** in the industry, no plan to solve power crisis and so on[213]. All these **flaws** in the **textile policy** would, no doubt, **impair** seriously the **backward linka**ge efforts in the clothing exports of Bangladesh. Moreover, smuggling **of clothing, especially "sari",** across the border between Bangladesh and India severely ruin **the competitiveness** of the **local industry,** thereby dwindling hope for **the expansion of the textile industry Bangladesh** as envisaged in the backward linkage chain in figure 11.1.

11.13 : CONCLUDING REMARKS

The discussions made in this chapter clearly show that backward linkage industries and related activities are **crucial** for the country's textiles and clothing sector to **survive** in the competitive post-MFA era commencing **in 2005**. The detailed analysis presented in **different stages** of the backward linkage chain as well as those discussed as **other factors** indicate that Bangladesh textiles and clothing sector, at present, **does not have capability** to provide back up chain support to the country's clothing exports due to numerous problems and difficulties as enumerated above. However, in view of the **post-MFA** era in

[212] Ibidem
[213] Ibidem

2005, Bangladesh **badly needs** to **streamline** its textiles and clothing sector with a **vision of backward linkage** to its clothing export in 2005 as well as addressing series of constraints to the same as pointed out above.

SUMMARY OF CHAPTER ELEVEN

This chapter attempts to **scrutinize the prospects of establishing the backward linkage industries in the textiles and clothing sector of Bangladesh** through looking at the pertinent factors at different stages of the chain, as mentioned earlier, encompassing the likely experiences of other countries. Discussions, therefore, incorporate concepts of linkages, the rationale behind the necessity of backward linkages in the textiles and clothing industries, compatibility of standard trade theory for Bangladesh textile and clothing sector with specific examples, different vertical stages in the chain, examining the horizontal factors linked to every stage in the sector, relevant backward linkage issues in general, sorting out the possible steps to be taken at every such stage, among others.

At stage-1, in view of the **global market in clothing after MFA** phase-out in 2005, **Bangladesh** need to find “market niche”. **At stage 2,** decision on **'SAARC cumulation'** is required immediately. Moreover, **shortening lead period,** up-grading the quality of product, **separate authority under direct supervision of the prime minister** to speed up decision-making for **garment sector,** establishment of an Apparel **Board, access to credit, power supply, rule of law, depoliticization of the labor force, continued policy support of the government,**

improved management capacities and excellence in fashion designing to help local entrepreneurs face the challenges of the post 2004 global market etc., are the demands of the RMG sector which need immediate attention of all quarters.

Again, working and living condition in the garments are really **abysmal,** as mentioned earlier, even though **low labor cost prevails. Moreover, stock lot** situation, Dhaka-Chittagong **dual carriage way, telecommunication, banking, insurance, customs, port labor turmoil,** the neighboring countries' **devaluation** etc. are the unresolved issues posing **threat to the prospects of backward linkage** in the sector of the country. **Human rights** and **environmental** issues, **BGMEA** representation in government bodies, **lowering** bank **interest rate, income tax free** textile products, lifting **double insurance** system, **special bank** for export-oriented industries, **textiles park** similar to EPZ etc. are important issues for which country's **RMG sector** is **not fully prepared** that would affect the backward linkage initiative for the 2005 competitive quota free global trade. Again, RMG factories require relatively **inexpensive machinery** and **smaller factory space** which is good for this prospects to bring to reality.

At stage 3, i.e. finished fabric making, finishing industry in Bangladesh is **not ready to lend or induce backward or forward linkage supports** to the relevant segments of the textiles and clothing chain.

At stage 4 i.e. gray fabric making (weaving, knitting, looms), Bangladesh weaving mills, as mentioned earlier, constantly fall short of production owing to chain link shortage of yarn production in spinning sub-sector. The **knit gray demand is met by local production**. The handloom sector faces a lot of difficulties as stated before. Moreover, as a result of the **closure of the handlooms**, the yarn mills of BTMC are also being closed. Because the weavers of the handloom industry were the real and main **customers of the yarn mills of BTMC. P**resent status at this stage, **doesn't indicate** that it has **backward linkage** potential as envisaged in **the Textiles and clothing chain.**

At stage 5, i.e. production of yarn through spinning also faces problems**, for example,** as mentioned earlier, 38% of spinning obsolete machines, technician shortage, power crisis, shortage of raw materials, **leakage** from warehouse, closure of mills, i**nability to pay back bank loans, shortage of capital, non-profitability and so on.**

Again, extensive natural fiber production, mainly cotton, is not feasible owing to growing demand for food to feed a gigantic population as well as paucity of cotton growing land, already mentioned. The spinning sub-sector imports (95%) of cotton. Therefore, at **stage-6, Bangladesh textile sector is again, not prepared to provide back up support as anticipated in the production chain.**

Other factors involving the backward linkage industries **in Bangladesh** are: **colossal amount of fund (3 billion dollars), human resource development, neighboring competitors of Bangladesh, power crisis** , growing **non-tariff barriers** like **workplace code of conduct, eco-labeling, human rights and social and safety requirements,** flaws in the textile policy etc. would, no doubt, impair seriously the backward linkage efforts in the clothing exports of Bangladesh. In view of the post-MFA era in 2005, Bangladesh badly needs to streamline its textiles and clothing sector with backward linkage to its clothing export in 2005 as well as addressing constraints discussed above.

CHAPTER TWELVE

POLICY IMPLICATIONS: BACKWARD LINKAGES TO CLOTHING EXPORTS OF BANGLADESH

Bangladesh is a densely populated country with around 128 million population dwelling in an area of 144,000 square kilometers. Obviously, the demand for food to feed this gigantic population is very high and farmers, therefore, **prefer cultivation of rice to cotton**. Moreover, cotton production **involves vast area of land**, which the country cannot afford for obvious reasons. **Wool** production, unlike **Australia**, is again **not suitable** as it involves extensive pastureland for lambs to grow and hover around. **Bangladesh**, therefore, suffers from **comparative disadvantage** in the production of natural fibers.

In spite of these constraints, **Bangladesh Cotton Development Board (BCDB)** can undertake intensive study program on the experiences of the leading cotton producing countries as explained in **Chapter Four**. Although any cotton production program similar to **Anatolian Project of Turkey** is not recommended for Bangladesh for dearth of sufficient land required for this purpose as well as high cost for such project implementation, the same might be examined in a **smaller boundary**. Simultaneously, the **farmers** might be induced

for cultivation of cotton through multifarious Government **incentives**.

Man-made fiber, on the other hand, involves capital-intensive high cost technology which is against the labor-intensive comparative advantage of Bangladesh despite the made-ups from such fibers are suitable for the poor due to a number of reasons mentioned earlier. Man-made fiber production, at present, is not, therefore, recommended. Rather, Bangladesh textile and clothing sector could **intensify fiber imports if its yarn and fabrics production base were expanded greatly in line with the backward linkage spirit** as envisaged in the textiles and clothing chain in figure 11.1. Textiles and clothing history of Japan, once giant in East Asia, suggests such steps as it, already mentioned, from net exporter of natural fibers at first, emerged as the net importer at last as the yarn and fabric production expanded.

The suggested strategy **at stage-6** (see figure 11.1) would be **to domestically produce natural fiber as much as possible abreast enhanced imports to meet the magnified consumption of fiber as predicted in the backward linkage string.**

Regarding the **yarn production (Stage-5)**, Bangladesh could look into the experiences of **Hong Kong, Thailand and India** as mentioned in section 11.9 despite their matured status in the same. Moreover, **sick and losing** public sector spinning mills should immediately be handed over to **private sector or companies** under workers' union retaining **stringent government control** to stand by those installations in need.

In view of the neighboring country **India's** massive **technological** up gradation and comparative advantage in **medium count** range yarn as well as the continued **subsidy** in raw material (cotton) by both **India and Pakistan**, it is **really very difficult** to sustain in yarn market for Bangladesh while it has **comparative disadvantage** in the same. Even after such constraints, some studies revealed that comparative **advantage** in **shorter and longer count yarn** production over India, cheap labor and low power price, inter alia, take effect in favor of Bangladesh's yarn production over both India and Pakistan which, in turn, is off-set by the total amount of production by these neighbors. At **stage-5, Bangladesh**, therefore, might take on an **strategy** of **concurrent** actions in: **sealing leakage** in bonded warehouse and cross border **smuggling** yarn with simultaneous government subsidy in domestic

yarn, as in place now, to counter the neighbors' subsidy in raw materials; lowering **import tax** for spinning machinery to facilitate supplanting obsolete equipments; sticking to **shorter and longer counts** yarn production in which Bangladesh has **comparative advantage** over India; reducing **fuel price** for spinning mills' private power generation in view of the country's continued **power crisis**; stimulate **joint venture** production, among others.

Again, in **stage-4, Bangladesh** could look at the experiences of **Hong Kong**, **Thailand** and, particularly, **India** as stated in **section 11.8**. In **India**, as a whole, and **Tamil Nadu**, in particular, the handloom and power loom fabrics weaving have enormous potential. Government **patronization** persists strongly there while the **handloom** sector of **Bangladesh** beset with numerous difficulties as explained earlier. It can assist satisfy the demand of low-income population in the country. Moreover, this sector has attained export quality fabric production through the involvement of **NGOs** such as **BRAC and Grameen Bank. Continued NGOs involvement in this sector is highly recommended**. **Knitting fabric** production is relatively **better** in Bangladesh despite shortage of **working capital** and **raw material** while the **weaving** mills face shortage of raw materials, as yarn production is inadequate in the country. Again, if the handlooms were in well operation,

these would raise the demand of yarn produced by Bangladesh Textile Mills Association (BTMA).

At **stage-3,** dyeing, printing and finishing factories are depended mostly on imported ‘gray’, which might be supplanted by domestically produced ‘gray’ if its quality were enhanced. An **strategy**, at **this stage**, would, therefore, be to provide incentives for higher quality domestic ‘gray’ production to extend back up support to the finishing industries abreast **gradual trim down** of incentives to imported ‘gray’.

At **stage-2,** participation in **SAARC cumulation** should be **withdrawn** if it is **not much beneficial** because the fabric imported from other SAARC countries impairs the domestic fabric production or a provision could be made to allow such import in a limited quantity. All other flaws pointed out in **section 11.7** should be addressed efficiently. Again, Bangladesh need, **at stage-1**, to adopt **market-driven** strategy as stated in **section 11.6** for which the sector should make extensive **market research** program under the aegis of the **Advisory Committee** to the Government in Textiles and clothing as envisaged in Textile Policy of the Government of Bangladesh. Market segments could be explored in **SEA and EA** as well as other countries, which is extremely important in view of the

confined Bangladesh RMG market in the EU and the US, at present.

As international awareness about the **environmental and humanitarian** issues is increasing day by day, Bangladesh Government, BGMEA, BTMA and all other concerned should look into these matters very seriously. The steps taken with regard to the elimination of child labor and shifting RMG factories to outside capital Dhaka are surely appreciable steps, although a lot remains unresolved. In view of the opening of **Bangabandhu Jamuna Bridge,** a gateway to **Northern Region** of the country, setting up of Textiles and clothing industries in this region along with proper infrastructural support is strongly recommended because this approach could pave the way towards country's total industrialization eventually.

Again, it is interesting to observe that **East Asian countries** experienced the rise and fall in the relative importance of Textiles and clothing industries in a sinusoidal fashion in the twentieth century, as envisaged in the **Standard Trade Theory** outlined in **section 11.4,** with a marked shift in comparative advantage from labor-intensive to capital-intensive production.

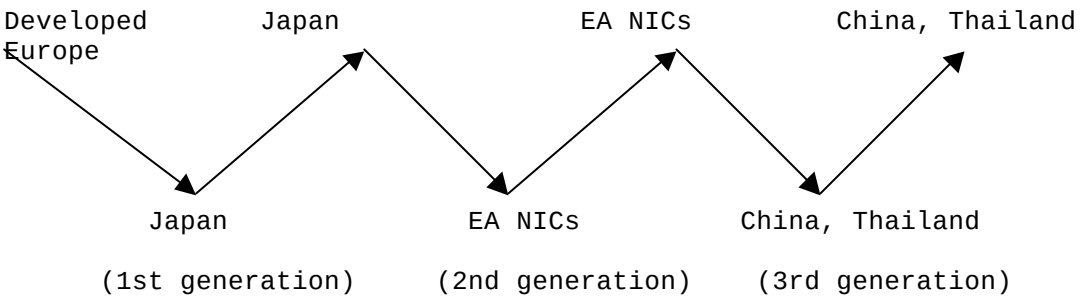

Figure 12.1 : Rise and fall in comparative advantage in textiles and clothing in East Asia

These East Asian countries could be models for Bangladesh in textiles and clothing and it is not exaggeration that Bangladesh would be **"a new generation"** in **South Asia** despite presence potential neighbors, particularly, India. On the other hand, Bangladesh could exploit **Turkey's experience,** specially the **home textiles** side, which is a rising force in textiles and clothing, in Europe in recent years.

Again, **Bangladesh** textiles and clothing sector **could tap the relocation** of production base by the NICs in East Asia as well as other matured countries in this sectors as these countries, perhaps, would go for high quality-high technology-high price clothing production and find off-shore production base for simple items, specifically in the post-MFA era in 2005.

All other **deficiencies and drawbacks** pointed out in **Chapter Ten & Eleven** for the textiles and clothing sector of Bangladesh deserve careful attention for the effective backward linkage support to the clothing export of Bangladesh in the post-MFA era in 2005. **Sincere cooperation of all quarters can assist eliminate the proliferated constraints, no doubt.**

SUMMARY OF CHAPTER TWELVE

In this chapter, **some implications** has been laid down to expedite establishment of such backward linkage chain **at every stage**. Moreover, it also indicates that the prospects of Bangladesh textiles and clothing sector to emerge as **'a new generation' in South Asia**, despite presence of potential neighbors in this sector, not unlikely, specially in view of the rise and fall of the comparative advantages in textiles and clothing industries in East Asian countries.

APPENDICES

APPENDIX-A

Imported commodity groups (arranged in descending Order of price)

HS CODE	COMMODITIES	JULY/91 TO JUNE/92 VALUE (in Taka)	JULY/90 TO JUNE/91 VALUE (in Taka)
	TOTAL IMPORT	**132,755,972,744**	**111,876,843,031**
27	Mineral fuel/oil/pdct mineral wax	16,259,965,931	12,925,644,410
84	Nuclear reactor boiler mach & part	11,958,417,400	11,570,535,890
52	**Cotton**	**11,799,289,155**	**8,530,672,526**
85	Electrical machinery equipment part	9,730,105,854	6,860,721,663
15	Animal/veg fat/oil, edible fat, wax	7,736,271,664	4,529,572, 737
55	**Man-made staple fibers**	**7,483,393,071**	**5,880,201,311**
10	Cereals	7,108,906,931	7,504,414,460
25	Salt sulphur earth/stone/cement	5,432,622,056	5,012,676,639
72	Iron and steel	4,792,743,405	4,424,187,413
54	**Man-made filaments**	**4,781,762,572**	**4,262,947,997**
31	Fertiliser	4,344,195,365	1,588,679,888
39	Plastics and articles thereof	3,487,801,057	2,939,010,167
73	Articles of iron or steel	2,787,772,615	3,473,362,065
4	Diary produce, bird egg, natural honey	2,733,513,128	2,793,182,945
29	Organic chemicals	2,192,003,508	1,883,201,166
12	Oil seeds & oleagenous fruits	1,996,908,746	773,313,720
87	Vehicles other than rail/tram, parts	1,883,480,043	2,518,675,359
28	Inorgan chemical/organ inorgan comp	1,759,591,584	1,289,941,976
7	Edible vegetables and certain roots & tubers	1,630,377,759	1,489,986,779
48	Paper/paperboard article paper pulp	1,592,849,280	1,469,406,665
60	**Knitted or crocheted fabric**	**1,576,625,410**	**819,829,753**
58	**Special woven tuft tex fbric triming**	**1,497,657,306**	**1,220,415,841**
9	Coffee, tea, mate & spices	1,453,683,452	782,524,348
90	Critical, photo, cinema surgical apts	1,393,715,363	1,464,270,414
96	Miscellaneous manufactured articles	1,265,957,753	990,709,342
32	**Tanning/dying extrct dye pigment etc.**	**1,249,883,589**	**1,120,237,089**
38	Miscellaneous chemical products	1,174,041,993	1,177,552,525
40	Rubber and articles thereof	1,171,171,280	1,325,271,878
76	Aluminium and articles thereof	1,085,070,582	1,224,868,290
30	Pharmaceutical products	983,309,979	949,294,696
89	Ships boat & floating structures	789,391,840	2,285,116,135
59	Impregnto coat covr lminato tex fab	741,052,874	318,788,932
79	Zinc and articles thereof	718,072,721	670,555,455
37	Photographic/cinematographic goods	497,301,733	331,726,876
8	Edible fruits, nuts, peels, citrus fruit	495,003,123	367,659,191
86	Rail/tram locomotive, rollg stok etc.	372,799,131	221,577,696
74	Copper and articles thereof	370,381,017	220,654,203
24	Tobacco/manufactured tobacco	358,648,896	136,751,460
19	Prep of creal/flour/starch/milk	317,767,574	346,543,092
70	Glass and glassware	309,750,043	286,785,344
63	**Made up tex article worn cloth rag**	**309,494,419**	**234,247,753**
47	Pulp wood/fibrous cellulosic	259,363,185	226,282,203

APPENDIX-A (Cont'd)

mtrl			
44	Wood/articles of wood; wood charcoal	230,442,728	317,544,604
49	Printed books newspapers, pictures	224,293,096	260,896,276
61	Artc apprl cloth accessor knit/crocht	209,885,408	280,167,450
22	Beverages, spirits & vinegar	182,873,598	115,592,433
53	**Vege tex fibr othe papr yrn & fbric**	**170,954,643**	**106,385,619**
95	Toy game sports requisit part acsr	163,682,508	95,357,945
82	Tool cutlry spoon base metal & part	147,827,099	188,050,913
98	Goods & commodity not incl elsewhere	131,886,066	167,785,655
21	Miscellaneous edible preparations	125,661,150	149,068,088
17	Sugars and sugar confectionery	113,694,532	375,587,165
33	Essential oil perfumery toilet prep	112,039,496	74,304,409
42	Article leather saddlery and harnes	110,288,826	99,788,045
83	Miscellaneous article of base metal	105,830,199	114,347,786
34	Soap, organic surface active agents	71,032,689	94,033,664
69	Ceramic products	70,278,016	132,313,719
68	Article stone plaster cement mica etc	58,767,858	78,166,127
35	Albuminoidal subs starch glue enzym	57,898,761	66,633,716
50	**Silk**	**54,187,272**	**43,433,166**
56	**Wacong felt spl yrn twin cordge etc.**	**51,456,311**	**58,538,498**
11	**Products of the milling industry**	**47,867,983**	**56,607,903**
2	Meat and edible meat offal	44,958,365	63,687,066
51	**Wool fine/coarse animal hair & fabric**	**40,755,985**	**33,543,360**
94	Furniture, bedding, mattresses, etc.	36,948,093	69,403,418
80	Tin and articles thereof	34,035,510	34,729,762
91	Clock & watch and parts thereof	32,917,578	48,985,577
81	Base metal other cermet article	31,524,593	21,939,957
62	Artcl apparl cloth accessor n-knitd	26,937,006	16,861,605
13	Lac gums, resins, veg saps/extracts	25,426,812	18,264,923
78	Lead and articles thereof	24,651,445	39,434,059
64	Footwear, gaiter and like, parts	23,481,516	8,129,475
71	Naturl/cultured pearl, precious stone	18,768,797	8,577,915
36	Explosive pyrotechnic pdt match etc.	15,711,916	9,452,230
5	Products of animal origin	10,763,260	10,604,528
75	Nickel and articles thereof	10,205,357	8,325,123
26	Cres slag and ash	8,711,727	7,749,649
41	Raw hides and skins & leather	8,559,322	19,802,534
88	Aircraft spacecraft parts thereof	8,345,583	83,977,193
93	Arms & ammunition, parts & accesor	7,719,255	21,391,538
46	Manufacture of straw	7,379,953	---
23	Residue food indus try prep	6,702,486	8,917,365
20	Prep veg, fruit, nut/plant parts	4,844,762	1,789,030
45	Cork and articles of cork	3,454,951	10,789,103
43	Furskins/artificial fur manufacture	2,841,318	239,787
18	Cocoa and cocoa preparations	2,805,164	2,372,294
1	Live animals	1,093,830	4,630,132
92	Musical instrument, part/accessory	1,006,544	638,793

APPENDIX-A,(Cont'd)

65	Headgear and parts thereof	436,037	318,800
67	Prepared feather & down & article	412,548	126,351
3	Fish- crustacean, molusc other aquatic	407,141	1,450,308
16	Preparations of meat/fish etc.	---	401,667
66	Umbrella sun umbrella walk stick etc.	361,291	135,325
14	Veg plaiting matrl, veg product nec	---	293,157
57	**Carpet other textile floor covering**	**185,833**	**2,916,722**
6	Live trees, plants, bulbs, roots, etc.	63,906	---
97	Work art collector piece & antique	3,159	362,803

Source: Technobangla home[214].

[214] http://www.techbangla.org/techbangla/ImportExport/BDImports/ImpGrB.html downloaded on October 14,2000. The information contained in this table has been collected from " **Foreign Trade Statistics of Bangladesh 90-91", published in 1994, Dhaka.**

APPENDIX-B : Cotton Production, Supply and Distribution by Country MY 2000/01 (1,000 Metric Tons)

	Beg. Stocks	Prod.	Imports	Total Supply	Dom. Use	Loss *	Exports	Ending Stocks
Afghanistan	3	19	0	21	15	0	3	3
Albania	12	0	7	19	8	0	0	12
Algeria	5	0	28	33	28	0	0	5
Angola	2	4	0	6	3	0	1	2
Argentina	79	201	4	285	98	2	109	76
Armenia, Rep.	0	0	1	2	1	0	0	0
Australia	412	718	0	1,130	44	(22)	697	412
Austria	6	0	27	33	27	0	0	6
Azerbaijan; Republic of	23	33	0	56	9	0	24	23
Bangladesh	20	14	185	219	196	0	0	23
Belarus	1	0	8	9	7	0	1	1
Belgium-Lux.	6	0	54	60	41	0	13	6
Benin	43	142	0	184	2	0	139	43
Bolivia	4	4	0	8	2	0	2	4
Brazil	340	806	239	1,385	947	0	82	356
Bulgaria	4	7	15	26	22	0	0	4
Burkina	21	114	0	135	1	0	113	21
Burma	9	44	0	53	37	0	7	10
Cambodia	0	0	1	1	1	0	0	0
Cameroon	19	71	0	89	10	0	61	19
Canada	5	0	76	81	76	0	0	5
Cen. African Rep.	2	9	0	11	1	0	8	2
Chad	16	65	0	81	3	0	62	16
Chile	4	0	17	22	17	0	0	4
China	3,256	3,919	152	7,327	4,899	0	152	2,276
Colombia	19	35	35	89	67	0	2	19
Costa Rica	3	1	2	6	3	0	0	3
Cote d"Ivoire	65	142	0	206	22	0	125	59
Cuba	2	0	9	11	10	0	0	1

(Appendix-B Continued)

Cyprus	0	0	0	1	0	0	0	0
Czech Republic	14	0	56	70	49	1	5	14
Denmark	1	0	3	4	3	0	0	1
Dominican Rep.	0	1	3	4	4	0	0	0
Ecuador	8	4	22	34	26	0	0	8
Egypt	88	185	44	316	174	5	65	72
El Salvador	7	0	28	36	28	0	0	7
Estonia	3	0	30	33	26	0	4	3
Ethiopia	5	15	4	24	20	0	0	5
Finland	1	0	0	2	1	0	0	1
France	22	0	114	136	106	2	7	22
Georgia, Rep.	1	0	2	3	2	0	0	1
Germany	16	0	158	174	147	0	13	13
Ghana	4	15	3	22	15	0	3	4
Greece	147	414	4	565	155	11	250	149
Guatemala	7	1	30	38	32	0	0	7
Haiti	2	2	0	4	2	0	0	2
Honduras	1	2	1	4	3	0	0	1
Hong Kong	22	0	111	133	93	0	19	22
Hungary	5	0	15	20	15	0	0	5
India	1,075	2,591	261	3,927	2,918	0	11	999
Indo -nesia	58	3	457	518	446	11	1	60
Iran	34	142	0	175	136	0	5	34
Iraq	6	9	13	28	22	0	0	6
Ireland	1	0	6	7	6	0	0	1
Israel	10	16	5	32	11	0	13	8
Italy	27	0	316	343	305	2	7	30
Japan	66	0	250	316	250	0	0	66
Kaza-khstan, Rep.	15	87	0	102	17	0	65	19
Kenya	9	7	8	23	13	0	0	10
Korea, North	7	1	23	30	24	0	0	7

(Appendix-B Continued)

Korea, South	93	0	305	398	305	0	8	86
Kyrgyz -stan, Rep.	4	28	0	32	10	0	19	4
Latvia	3	0	22	25	7	0	15	3
Lebanon	1	0	2	3	2	0	0	1
Lithuania	2	0	22	24	15	0	7	2
Mada -gascar	3	13	0	16	13	0	0	3
Malawi	1	7	2	9	8	0	1	1
Malay- sia	14	0	87	101	87	0	0	14
Mali	54	109	0	163	3	0	131	29
Mexico	93	78	457	629	501	5	22	101
Moldova, Rep.	2	0	2	4	2	0	0	2
Morocco	6	0	46	52	46	0	0	7
Mozam -bique	8	16	1	25	2	0	17	5
Nether -lands	1	0	4	5	4	0	0	1
Nica -ragua	0	2	0	3	0	0	2	0
Niger	1	1	0	2	1	0	0	1
Nigeria	31	60	15	106	52	0	22	32
Norway	2	0	3	5	3	0	0	2
Pakistan	574	1,807	33	2,414	1,742	5	131	536
Panama	0	0	1	1	1	0	0	0
Paraguay	12	120	0	132	10	0	103	19
Peru	13	40	37	91	70	0	8	13
Philippines	20	0	54	75	50	0	0	25
Poland	4	0	53	57	52	0	2	4
Portugal	33	0	158	191	152	0	0	38
Romania	16	0	24	40	27	0	0	12
Russia	37	0	359	397	348	0	0	48
Senegal	3	9	0	12	4	0	4	3

(Appendix-B Continued)

Singapore	2	0	12	14	0	0	12	2
Slovakia	6	0	14	20	13	0	2	5
Somalia	0	2	1	3	3	0	0	0
South Africa	16	35	44	94	76	0	7	12
Spain	43	98	60	201	111	0	46	44
Sri Lanka	3	1	8	12	9	0	0	3
Sudan	12	54	0	67	13	0	38	15
Sweden	2	0	5	7	5	0	0	2
Switzer -land	13	0	33	46	33	0	1	12
Syria	96	370	0	467	120	0	229	118
Taiwan	75	0	223	299	250	0	1	47
Tajikis -tan, Rep.	17	98	0	115	20	0	78	17
Tanzania	15	40	0	55	11	0	27	17
Thailand	91	7	354	451	348	10	0	93
Togo	19	54	0	73	3	0	52	18
Tunisia	9	2	26	38	28	0	0	9
Turkey	180	806	403	1,388	1,197	0	39	152
Turkmen -istan	140	207	0	347	76	0	152	118
Uganda	6	24	0	30	2	0	22	6
Ukraine	14	0	33	47	11	0	22	14
United Kingdom	4	0	23	27	23	0	0	4
United States	854	3,788	16	4,658	2,155	(1)	1,655	849
Uruguay	1	0	2	3	2	0	0	1
Uzbe -kistan, Rep.	182	936	1	1,120	196	0	784	140
Vene -zuela	4 5	11	35	50	44	0	1	
Vietnam	16	9	76	102	85	0	0	17
Yemen	1	14	0	15	5	0	9	1
Yugo -slavia	12	0	22	34	22	0	0	12

(Appendix-B Continued)

Zaire	1	3	3	8	7	0	0	1
Zambia	11	22	0	33	14	0	10	9
Zimbabwe	43	147	0	190	38	3	98	50
World Total	**8,960**	**18,862**	**5,916**	**33,738**	**20,087**	**37**	**5,845**	**7,770**

Source : USDA /FAS, December, 2000 report
http://www.fas.usda.gov/cotton/circular/2000/2012/toc.htm
downloaded on 17 December, 2000

* Loss for countries outside of the United States reflects cotton lost or destroyed while in the marketing channel. For the United States, loss reflects the difference between stocks as reported by the Bureau of the Census and implicit stocks based on supply plus total use. A negative "loss" is a positive number.

APPENDIX-C

AGREEMENT ON TEXTILES AND CLOTHING (ATC)UNDER WTO

Members,
Recalling that Ministers agreed at Punta del Este that "negotiations in the area of textiles and clothing shall aim to formulate modalities that would permit the eventual integration of this sector into GATT on the basis of strengthened GATT rules and disciplines, thereby also contributing to the objective of further liberalization of trade";

Recalling also that in the April 1989 Decision of the Trade Negotiations Committee it was agreed that the process of integration should commence following the conclusion of the Uruguay Round of Multilateral Trade Negotiations and should be progressive in character;

Recalling further that it was agreed that special treatment should be accorded to the least-developed country Members;

Hereby agree as follows:

Article 1

1. This Agreement sets out provisions to be applied by Members during a transition period for the integration of the textiles and clothing sector into GATT 1994.

2. Members agree to use the provisions of paragraph 18 of Article 2 and paragraph 6(b) of Article 6 in such a way as to permit meaningful increases in access possibilities for small suppliers and the development of commercially significant trading opportunities for new entrants in the field of textiles and clothing trade.215

3. Members shall have due regard to the situation of those Members which have not accepted the Protocols extending the Arrangement Regarding International Trade in Textiles (referred to in this Agreement as the "MFA") since 1986 and, to the extent possible, shall afford them special treatment in applying the provisions of this Agreement.

4. Members agree that the particular interests of the cotton-producing exporting Members should, in consultation with them, be reflected in the implementation of the provisions of this Agreement.

5. In order to facilitate the integration of the textiles and clothing sector into GATT 1994, Members should allow for continuous autonomous industrial adjustment and increased competition in their markets.

[215]To the extent possible, exports from a least-developed country Member may also benefit from this provision.

6. Unless otherwise provided in this Agreement, its provisions shall not affect the rights and obligations of Members under the provisions of the WTO Agreement and the Multilateral Trade Agreements.

7. The textile and clothing products to which this Agreement applies are set out in the Annex.

Article 2

1. All quantitative restrictions within bilateral agreements maintained under Article 4 or notified under Article 7 or 8 of the MFA in force on the day before the entry into force of the WTO Agreement shall, within 60 days following such entry into force, be notified in detail, including the restraint levels, growth rates and flexibility provisions, by the Members maintaining such restrictions to the Textiles Monitoring Body provided for in Article 8 (referred to in this Agreement as the "TMB"). Members agree that as of the date of entry into force of the WTO Agreement, all such restrictions maintained between GATT 1947 contracting parties, and in place on the day before such entry into force, shall be governed by the provisions of this Agreement.

2. The TMB shall circulate these notifications to all Members for their information. It is open to any Member to bring to the attention of the TMB, within 60 days of the circulation of the notifications, any observations it deems appropriate with regard to such notifications. Such observations shall be circulated to the other Members for their information. The TMB may make recommendations, as appropriate, to the Members concerned.

3. When the 12-month period of restrictions to be notified under paragraph 1 does not coincide with the 12-month period immediately preceding the date of entry into force of the WTO Agreement, the Members concerned should mutually agree on arrangements to bring the period of restrictions into line with the agreement year[216], and to establish notional base levels of such restrictions in order to implement the provisions of this Article. Concerned Members agree to enter into consultations promptly upon request with a view to reaching such mutual agreement. Any such arrangements shall take into account, inter alia, seasonal patterns of shipments in recent years. The results of these consultations shall be notified to the TMB, which shall make such recommendations as it deems appropriate to the Members concerned.

4. The restrictions notified under paragraph 1 shall be deemed to constitute the totality of such restrictions applied by the respective Members on the day before the entry into force of the WTO Agreement. No new restrictions in terms of products or Members shall be introduced except under the provisions of this Agreement or relevant GATT 1994 provisions.[217] Restrictions not notified within 60 days of the date of entry into force of the WTO Agreement shall be terminated forthwith.

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[216] The "agreement year" is defined to mean a 12-month period beginning from the date of entry into force of the WTO Agreement and at the subsequent 12-month intervals.

[217] The relevant GATT 1994 provisions shall not include Article XIX in respect of products not yet integrated into GATT 1994, except as specifically provided in paragraph 3 of the Annex.

5. Any unilateral measure taken under Article 3 of the MFA prior to the date of entry into force of the WTO Agreement may remain in effect for the duration specified therein, but not exceeding 12 months, if it has been reviewed by the Textiles Surveillance Body (referred to in this Agreement as the "TSB") established under the MFA. Should the TSB not have had the opportunity to review any such unilateral measure, it shall be reviewed by the TMB in accordance with the rules and procedures governing Article 3 measures under the MFA. Any measure applied under an MFA Article 4 agreement prior to the date of entry into force of the WTO Agreement that is the subject of a dispute which the TSB has not had the opportunity to review shall also be reviewed by the TMB in accordance with the MFA rules and procedures applicable for such a review.

6. On the date of entry into force of the WTO Agreement, each Member shall integrate into GATT 1994 products which accounted for not less than 16 per cent of the total volume of the Member's 1990 imports of the products in the Annex, in terms of HS lines or categories. The products to be integrated shall encompass products from each of the following four groups: tops and yarns, fabrics, made-up textile products, and clothing.

7. Full details of the actions to be taken pursuant to paragraph 6 shall be notified by the Members concerned according to the following:

(a) Members maintaining restrictions falling under paragraph 1 undertake, notwithstanding the date of entry into force of the WTO Agreement, to notify such details to the GATT Secretariat not later than the date determined by the Ministerial Decision of 15 April 1994. The GATT Secretariat shall promptly circulate these notifications to the other participants for information. These notifications will be made available to the TMB, when established, for the purposes of paragraph 21;

(b) Members which have, pursuant to paragraph 1 of Article 6, retained the right to use the provisions of Article 6, shall notify such details to the TMB not later than 60 days following the date of entry into force of the WTO Agreement, or, in the case of those Members covered by paragraph 3 of Article 1, not later than at the end of the 12th month that the WTO Agreement is in effect. The TMB shall circulate these notifications to the other Members for information and review them as provided in paragraph 21.

8. The remaining products, i.e. the products not integrated into GATT 1994 under paragraph 6, shall be integrated, in terms of HS lines or categories, in three stages, as follows:

(a) on the first day of the 37th month that the WTO Agreement is in effect, products which accounted for not less than 17 per cent of the total volume of the Member's 1990 imports of the products in the Annex. The products to be integrated by the Members shall encompass products from each of the following four groups: tops and yarns, fabrics, made-up textile products, and clothing;

(b) on the first day of the 85th month that the WTO Agreement is in effect, products which accounted for not less than 18 per cent of the total volume of the Member's 1990 imports of the products in the Annex. The products to be integrated by the Members shall

encompass products from each of the following four groups: tops and yarns, fabrics, made-up textile products, and clothing;

(c) on the first day of the 121st month that the WTO Agreement is in effect, the textiles and clothing sector shall stand integrated into GATT 1994, all restrictions under this Agreement having been eliminated.

9. Members which have notified, pursuant to paragraph 1 of Article 6, their intention not to retain the right to use the provisions of Article 6 shall, for the purposes of this Agreement, be deemed to have integrated their textiles and clothing products into GATT 1994. Such Members shall, therefore, be exempted from complying with the provisions of paragraphs 6 to 8 and 11.

10. Nothing in this Agreement shall prevent a Member which has submitted an integration programme pursuant to paragraph 6 or 8 from integrating products into GATT 1994 earlier than provided for in such a programme. However, any such integration of products shall take effect at the beginning of an agreement year, and details shall be notified to the TMB at least three months prior thereto for circulation to all Members.

11. The respective programmes of integration, in pursuance of paragraph 8, shall be notified in detail to the TMB at least 12 months before their coming into effect, and circulated by the TMB to all Members.

12. The base levels of the restrictions on the remaining products, mentioned in paragraph 8, shall be the restraint levels referred to in paragraph 1.

13. During Stage 1 of this Agreement (from the date of entry into force of the WTO Agreement to the 36th month that it is in effect, inclusive) the level of each restriction under MFA bilateral agreements in force for the 12-month period prior to the date of entry into force of the WTO Agreement shall be increased annually by not less than the growth rate established for the respective restrictions, increased by 16 per cent.

14. Except where the Council for Trade in Goods or the Dispute Settlement Body decides otherwise under paragraph 12 of Article 8, the level of each remaining restriction shall be increased annually during subsequent stages of this Agreement by not less than the following:

(a) for Stage 2 (from the 37th to the 84th month that the WTO Agreement is in effect, inclusive), the growth rate for the respective restrictions during Stage 1, increased by 25 per cent;

(b) for Stage 3 (from the 85th to the 120th month that the WTO Agreement is in effect, inclusive), the growth rate for the respective restrictions during Stage 2, increased by 27 per cent.

15. Nothing in this Agreement shall prevent a Member from eliminating any restriction maintained pursuant to this Article, effective at the beginning of any agreement year during the transition period, provided the exporting Member concerned and the TMB are notified at least three months prior to the elimination coming into effect. The period for prior notification may be shortened to 30 days with the agreement of the restrained Member. The TMB shall circulate such notifications to all Members. In considering the elimination of restrictions as envisaged in this

paragraph, the Members concerned shall take into account the treatment of similar exports from other Members.

16. Flexibility provisions, i.e. swing, carryover and carry forward, applicable to all restrictions maintained pursuant to this Article, shall be the same as those provided for in MFA bilateral agreements for the 12-month period prior to the entry into force of the WTO Agreement. No quantitative limits shall be placed or maintained on the combined use of swing, carryover and carry forward.

17. Administrative arrangements, as deemed necessary in relation to the implementation of any provision of this Article, shall be a matter for agreement between the Members concerned. Any such arrangements shall be notified to the TMB.

18. As regards those Members whose exports are subject to restrictions on the day before the entry into force of the WTO Agreement and whose restrictions represent 1.2 per cent or less of the total volume of the restrictions applied by an importing Member as of 31 December 1991 and notified under this Article, meaningful improvement in access for their exports shall be provided, at the entry into force of the WTO Agreement and for the duration of this Agreement, through advancement by one stage of the growth rates set out in paragraphs 13 and 14, or through at least equivalent changes as may be mutually agreed with respect to a different mix of base levels, growth and flexibility provisions. Such improvements shall be notified to the TMB.

19. In any case, during the duration of this Agreement, in which a safeguard measure is initiated by a Member under Article XIX of GATT 1994 in respect of a particular product during a period of one year immediately following the integration of that product into GATT 1994 in accordance with the provisions of this Article, the provisions of Article XIX, as interpreted by the Agreement on Safeguards, will apply, save as set out in paragraph 20.

20. Where such a measure is applied using non-tariff means, the importing Member concerned shall apply the measure in a manner as set forth in paragraph 2(d) of Article XIII of GATT 1994 at the request of any exporting Member whose exports of such products were subject to restrictions under this Agreement at any time in the one-year period immediately prior to the initiation of the safeguard measure. The exporting Member concerned shall administer such a measure. The applicable level shall not reduce the relevant exports below the level of a recent representative period, which shall normally be the average of exports from the Member concerned in the last three representative years for which statistics are available. Furthermore, when the safeguard measure is applied for more than one year, the applicable level shall be progressively liberalized at regular intervals during the period of application. In such cases the exporting Member concerned shall not exercise the right of suspending substantially equivalent concessions or other obligations under paragraph 3(a) of Article XIX of GATT 1994.

21. The TMB shall keep under review the implementation of this Article. It shall, at the request of any Member, review any particular matter with reference to the implementation of the provisions of this Article. It shall make appropriate recommendations or findings within 30 days to the Member or Members concerned, after inviting the participation of such Members.

Article 3

1. Within 60 days following the date of entry into force of the WTO Agreement, Members maintaining restrictions [218] on textile and clothing products (other than restrictions maintained under the MFA and covered by the provisions of Article 2), whether consistent with GATT 1994 or not, shall (a) notify them in detail to the TMB, or (b) provide to the TMB notifications with respect to them which have been submitted to any other WTO body. The notifications should, wherever applicable, provide information with respect to any GATT 1994 justification for the restrictions, including GATT 1994 provisions on which they are based.

2. Members maintaining restrictions falling under paragraph 1, except those justified under a GATT 1994 provision, shall either:

(a) bring them into conformity with GATT 1994 within one year following the entry into force of the WTO Agreement, and notify this action to the TMB for its information; or

(b) phase them out progressively according to a programme to be presented to the TMB by the Member maintaining the restrictions not later than six months after the date of entry into force of the WTO Agreement. This programme shall provide for all restrictions to be phased out within a period not exceeding the duration of this Agreement. The TMB may make recommendations to the Member concerned with respect to such a programme.

3. During the duration of this Agreement, Members shall provide to the TMB, for its information, notifications submitted to any other WTO bodies with respect to any new restrictions or changes in existing restrictions on textile and clothing products, taken under any GATT 1994 provision, within 60 days of their coming into effect.

4. It shall be open to any Member to make reverse notifications to the TMB, for its information, in regard to the GATT 1994 justification, or in regard to any restrictions that may not have been notified under the provisions of this Article. Actions with respect to such notifications may be pursued by any Member under relevant GATT 1994 provisions or procedures in the appropriate WTO body.

5. The TMB shall circulate the notifications made pursuant to this Article to all Members for their information.

Article 4

1. Restrictions referred to in Article 2, and those applied under Article 6, shall be administered by the exporting Members. Importing Members shall not be obliged to accept shipments in excess of the restrictions notified under Article 2, or of restrictions applied pursuant to Article 6.

2. Members agree that the introduction of changes, such as changes in practices, rules, procedures and categorization of textile and clothing products, including those changes relating to the Harmonized System, in the implementation or administration of those restrictions

[218] Restrictions denote all unilateral quantitative restrictions, bilateral arrangements and other measures having a similar effect.

notified or applied under this Agreement should not: upset the balance of rights and obligations between the Members concerned under this Agreement; adversely affect the access available to a Member; impede the full utilization of such access; or disrupt trade under this Agreement.

3. If a product which constitutes only part of a restriction is notified for integration pursuant to the provisions of Article 2, Members agree that any change in the level of that restriction shall not upset the balance of rights and obligations between the Members concerned under this Agreement.

4. When changes mentioned in paragraphs 2 and 3 are necessary, however, Members agree that the Member initiating such changes shall inform and, wherever possible, initiate consultations with the affected Member or Members prior to the implementation of such changes, with a view to reaching a mutually acceptable solution regarding appropriate and equitable adjustment. Members further agree that where consultation prior to implementation is not feasible, the Member initiating such changes will, at the request of the affected Member, consult, within 60 days if possible, with the Members concerned with a view to reaching a mutually satisfactory solution regarding appropriate and equitable adjustments. If a mutually satisfactory solution is not reached, any Member involved may refer the matter to the TMB for recommendations as provided in Article 8. Should the TSB not have had the opportunity to review a dispute concerning such changes introduced prior to the entry into force of the WTO Agreement, it shall be reviewed by the TMB in accordance with the rules and procedures of the MFA applicable for such a review.

Article 5

1. Members agree that circumvention by transshipment, re-routing, false declaration concerning country or place of origin, and falsification of official documents, frustrates the implementation of this Agreement to integrate the textiles and clothing sector into GATT 1994. Accordingly, Members should establish the necessary legal provisions and/or administrative procedures to address and take action against such circumvention. Members further agree that, consistent with their domestic laws and procedures, they will cooperate fully to address problems arising from circumvention.

2. Should any Member believe that this Agreement is being circumvented by transshipment, re-routing, false declaration concerning country or place of origin, or falsification of official documents, and that no, or inadequate, measures are being applied to address and/or to take action against such circumvention, that Member should consult with the Member or Members concerned with a view to seeking a mutually satisfactory solution. Such consultations should be held promptly, and within 30 days when possible. If a mutually satisfactory solution is not reached, the matter may be referred by any Member involved to the TMB for recommendations.

3. Members agree to take necessary action, consistent with their domestic laws and procedures, to prevent, to investigate and, where appropriate, to take legal and/or administrative action against circumvention practices within their territory. Members agree to cooperate fully, consistent with their domestic laws and procedures, in instances of circumvention or alleged circumvention of this Agreement, to establish the relevant facts in the places of import, export and, where applicable, transshipment. It is agreed that such

cooperation, consistent with domestic laws and procedures, will include: investigation of circumvention practices which increase restrained exports to the Member maintaining such restraints; exchange of documents, correspondence, reports and other relevant information to the extent available; and facilitation of plant visits and contacts, upon request and on a case-by-case basis. Members should endeavour to clarify the circumstances of any such instances of circumvention or alleged circumvention, including the respective roles of the exporters or importers involved.

4. Where, as a result of investigation, there is sufficient evidence that circumvention has occurred (e.g. where evidence is available concerning the country or place of true origin, and the circumstances of such circumvention), Members agree that appropriate action, to the extent necessary to address the problem, should be taken. Such action may include the denial of entry of goods or, where goods have entered, having due regard to the actual circumstances and the involvement of the country or place of true origin, the adjustment of charges to restraint levels to reflect the true country or place of origin. Also, where there is evidence of the involvement of the territories of the Members through which the goods have been transshipped, such action may include the introduction of restraints with respect to such Members. Any such actions, together with their timing and scope, may be taken after consultations held with a view to arriving at a mutually satisfactory solution between the concerned Members and shall be notified to the TMB with full justification. The Members concerned may agree on other remedies in consultation. Any such agreement shall also be notified to the TMB, and the TMB may make such recommendations to the Members concerned as it deems appropriate. If a mutually satisfactory solution is not reached, any Member concerned may refer the matter to the TMB for prompt review and recommendations.

5. Members note that some cases of circumvention may involve shipments transiting through countries or places with no changes or alterations made to the goods contained in such shipments in the places of transit. They note that it may not be generally practicable for such places of transit to exercise control over such shipments.

6. Members agree that false declaration concerning fibre content, quantities, description or classification of merchandise also frustrates the objective of this Agreement. Where there is evidence that any such false declaration has been made for purposes of circumvention, Members agree that appropriate measures, consistent with domestic laws and procedures, should be taken against the exporters or importers involved. Should any Member believe that this Agreement is being circumvented by such false declaration and that no, or inadequate, administrative measures are being applied to address and/or to take action against such circumvention, that Member should consult promptly with the Member involved with a view to seeking a mutually satisfactory solution. If such a solution is not reached, the matter may be referred by any Member involved to the TMB for recommendations. This provision is not intended to prevent Members from making technical adjustments when inadvertent errors in declarations have been made.

Article 6

1. Members recognize that during the transition period it may be necessary to apply a specific transitional safeguard mechanism

(referred to in this Agreement as "transitional safeguard"). The transitional safeguard may be applied by any Member to products covered by the Annex, except those integrated into GATT 1994 under the provisions of Article 2. Members not maintaining restrictions falling under Article 2 shall notify the TMB within 60 days following the date of entry into force of the WTO Agreement, as to whether or not they wish to retain the right to use the provisions of this Article. Members which have not accepted the Protocols extending the MFA since 1986 shall make such notification within 6 months following the entry into force of the WTO Agreement. The transitional safeguard should be applied as sparingly as possible, consistently with the provisions of this Article and the effective implementation of the integration process under this Agreement.

2. Safeguard action may be taken under this Article when, on the basis of a determination by a Member[219], it is demonstrated that a particular product is being imported into its territory in such increased quantities as to cause serious damage, or actual threat thereof, to the domestic industry producing like and/or directly competitive products. Serious damage or actual threat thereof must demonstrably be caused by such increased quantities in total imports of that product and not by such other factors as technological changes or changes in consumer preference.

3. In making a determination of serious damage, or actual threat thereof, as referred to in paragraph 2, the Member shall examine the effect of those imports on the state of the particular industry, as reflected in changes in such relevant economic variables as output, productivity, utilization of capacity, inventories, market share, exports, wages, employment, domestic prices, profits and investment; none of which, either alone or combined with other factors, can necessarily give decisive guidance.

4. Any measure invoked pursuant to the provisions of this Article shall be applied on a Member-by-Member basis. The Member or Members to whom serious damage, or actual threat thereof, referred to in paragraphs 2 and 3, is attributed, shall be determined on the basis of a sharp and substantial increase in imports, actual or imminent[220], from such a Member or Members individually, and on the basis of the level of imports as compared with imports from other sources, market share, and import and domestic prices at a comparable stage of commercial transaction; none of these factors, either alone or combined with other factors, can necessarily give decisive guidance. Such safeguard measure shall not be applied to the exports of any

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[219] A customs union may apply a safeguard measure as a single unit or on behalf of a member State. When a customs union applies a safeguard measure as a single unit, all the requirements for the determination of serious damage or actual threat thereof under this Agreement shall be based on the conditions existing in the customs union as a whole. When a safeguard measure is applied on behalf of a member State, all the requirements for the determination of serious damage, or actual threat thereof, shall be based on the conditions existing in that member State and the measure shall be limited to that member State.

[220] Such an imminent increase shall be a measurable one and shall not be determined to exist on the basis of allegation, conjecture or mere possibility arising, for example, from the existence of production capacity in the exporting Members.

Member whose exports of the particular product are already under restraint under this Agreement.

5. The period of validity of a determination of serious damage or actual threat thereof for the purpose of invoking safeguard action shall not exceed 90 days from the date of initial notification as set forth in paragraph 7.

6. In the application of the transitional safeguard, particular account shall be taken of the interests of exporting Members as set out below:

(a) least-developed country Members shall be accorded treatment significantly more favourable than that provided to the other groups of Members referred to in this paragraph, preferably in all its elements but, at least, on overall terms;

(b) Members whose total volume of textile and clothing exports is small in comparison with the total volume of exports of other Members and who account for only a small percentage of total imports of that product into the importing Member shall be accorded differential and more favourable treatment in the fixing of the economic terms provided in paragraphs 8, 13 and 14. For those suppliers, due account will be taken, pursuant to paragraphs 2 and 3 of Article 1, of the future possibilities for the development of their trade and the need to allow commercial quantities of imports from them;

(c) with respect to wool products from wool-producing developing country Members whose economy and textiles and clothing trade are dependent on the wool sector, whose total textile and clothing exports consist almost exclusively of wool products, and whose volume of textiles and clothing trade is comparatively small in the markets of the importing Members, special consideration shall be given to the export needs of such Members when considering quota levels, growth rates and flexibility;

(d) more favourable treatment shall be accorded to re-imports by a Member of textile and clothing products which that Member has exported to another Member for processing and subsequent reimportation, as defined by the laws and practices of the importing Member, and subject to satisfactory control and certification procedures, when these products are imported from a Member for which this type of trade represents a significant proportion of its total exports of textiles and clothing.

7. The Member proposing to take safeguard action shall seek consultations with the Member or Members which would be affected by such action. The request for consultations shall be accompanied by specific and relevant factual information, as up-to-date as possible, particularly in regard to: (a) the factors, referred to in paragraph 3, on which the Member invoking the action has based its determination of the existence of serious damage or actual threat thereof; and (b) the factors, referred to in paragraph 4, on the basis of which it proposes to invoke the safeguard action with respect to the Member or Members concerned. In respect of requests made under this paragraph, the information shall be related, as closely as possible, to identifiable segments of production and to the reference period set out in paragraph 8. The Member invoking the action shall also indicate the specific level at which imports of the product in question from the Member or Members concerned are proposed to be restrained; such level shall not be lower than the level referred to in paragraph 8. The Member seeking consultations shall, at the same time, communicate to the Chairman of the TMB the request

for consultations, including all the relevant factual data outlined in paragraphs 3 and 4, together with the proposed restraint level. The Chairman shall inform the members of the TMB of the request for consultations, indicating the requesting Member, the product in question and the Member having received the request. The Member or Members concerned shall respond to this request promptly and the consultations shall be held without delay and normally be completed within 60 days of the date on which the request was received.

8. If, in the consultations, there is mutual understanding that the situation calls for restraint on the exports of the particular product from the Member or Members concerned, the level of such restraint shall be fixed at a level not lower than the actual level of exports or imports from the Member concerned during the 12-month period terminating two months preceding the month in which the request for consultation was made.

9. Details of the agreed restraint measure shall be communicated to the TMB within 60 days from the date of conclusion of the agreement. The TMB shall determine whether the agreement is justified in accordance with the provisions of this Article. In order to make its determination, the TMB shall have available to it the factual data provided to the Chairman of the TMB, referred to in paragraph 7, as well as any other relevant information provided by the Members concerned. The TMB may make such recommendations as it deems appropriate to the Members concerned.

10. If, however, after the expiry of the period of 60 days from the date on which the request for consultations was received, there has been no agreement between the Members, the Member which proposed to take safeguard action may apply the restraint by date of import or date of export, in accordance with the provisions of this Article, within 30 days following the 60-day period for consultations, and at the same time refer the matter to the TMB. It shall be open to either Member to refer the matter to the TMB before the expiry of the period of 60 days. In either case, the TMB shall promptly conduct an examination of the matter, including the determination of serious damage, or actual threat thereof, and its causes, and make appropriate recommendations to the Members concerned within 30 days. In order to conduct such examination, the TMB shall have available to it the factual data provided to the Chairman of the TMB, referred to in paragraph 7, as well as any other relevant information provided by the Members concerned.

11. In highly unusual and critical circumstances, where delay would cause damage which would be difficult to repair, action under paragraph 10 may be taken provisionally on the condition that the request for consultations and notification to the TMB shall be effected within no more than five working days after taking the action. In the case that consultations do not produce agreement, the TMB shall be notified at the conclusion of consultations, but in any case no later than 60 days from the date of the implementation of the action. The TMB shall promptly conduct an examination of the matter, and make appropriate recommendations to the Members concerned within 30 days. In the case that consultations do produce agreement, Members shall notify the TMB upon conclusion but, in any case, no later than 90 days from the date of the implementation of the action. The TMB may make such recommendations as it deems appropriate to the Members concerned.

12. A Member may maintain measures invoked pursuant to the provisions of this Article: (a) for up to three years without extension, or (b) until the product is integrated into GATT 1994, whichever comes first.

13. Should the restraint measure remain in force for a period exceeding one year, the level for subsequent years shall be the level specified for the first year increased by a growth rate of not less than 6 per cent per annum, unless otherwise justified to the TMB. The restraint level for the product concerned may be exceeded in either year of any two subsequent years by carry forward and/or carryover of 10 per cent of which carry forward shall not represent more than 5 per cent. No quantitative limits shall be placed on the combined use of carryover, carry forward and the provision of paragraph 14.

14. When more than one product from another Member is placed under restraint under this Article by a Member, the level of restraint agreed, pursuant to the provisions of this Article, for each of these products may be exceeded by 7 per cent, provided that the total exports subject to restraint do not exceed the total of the levels for all products so restrained under this Article, on the basis of agreed common units. Where the periods of application of restraints of these products do not coincide with each other, this provision shall be applied to any overlapping period on a pro rata basis.

15. If a safeguard action is applied under this Article to a product for which a restraint was previously in place under the MFA during the 12-month period prior to the entry into force of the WTO Agreement, or pursuant to the provisions of Article 2 or 6, the level of the new restraint shall be the level provided for in paragraph 8 unless the new restraint comes into force within one year of:
(a) the date of notification referred to in paragraph 15 of Article 2 for the elimination of the previous restraint; or

(b) the date of removal of the previous restraint put in place pursuant to the provisions of this Article or of the MFA

in which case the level shall not be less than the higher of (i) the level of restraint for the last 12-month period during which the product was under restraint, or (ii) the level of restraint provided for in paragraph 8.

16. When a Member which is not maintaining a restraint under Article 2 decides to apply a restraint pursuant to the provisions of this Article, it shall establish appropriate arrangements which: (a) take full account of such factors as established tariff classification and quantitative units based on normal commercial practices in export and import transactions, both as regards fibre composition and in terms of competing for the same segment of its domestic market, and (b) avoid over-categorization. The request for consultations referred to in paragraphs 7 or 11 shall include full information on such arrangements.

Article 7

1. As part of the integration process and with reference to the specific commitments undertaken by the Members as a result of the Uruguay Round, all Members shall take such actions as may be necessary to abide by GATT 1994 rules and disciplines so as to:

(a) achieve improved access to markets for textile and clothing products through such measures as tariff reductions and bindings, reduction or elimination of non-tariff barriers, and facilitation of customs, administrative and licensing formalities;

(b) ensure the application of policies relating to fair and equitable trading conditions as regards textiles and clothing in such areas as dumping and anti-dumping rules and procedures, subsidies and countervailing measures, and protection of intellectual property rights; and

(c) avoid discrimination against imports in the textiles and clothing sector when taking measures for general trade policy reasons.

Such actions shall be without prejudice to the rights and obligations of Members under GATT 1994.

2. Members shall notify to the TMB the actions referred to in paragraph 1 which have a bearing on the implementation of this Agreement. To the extent that these have been notified to other WTO bodies, a summary, with reference to the original notification, shall be sufficient to fulfil the requirements under this paragraph. It shall be open to any Member to make reverse notifications to the TMB.

3. Where any Member considers that another Member has not taken the actions referred to in paragraph 1, and that the balance of rights and obligations under this Agreement has been upset, that Member may bring the matter before the relevant WTO bodies and inform the TMB. Any subsequent findings or conclusions by the WTO bodies concerned shall form a part of the TMB's comprehensive report.

Article 8

1. In order to supervise the implementation of this Agreement, to examine all measures taken under this Agreement and their conformity therewith, and to take the actions specifically required of it by this Agreement, the Textiles Monitoring Body ("TMB") is hereby established. The TMB shall consist of a Chairman and 10 members. Its membership shall be balanced and broadly representative of the Members and shall provide for rotation of its members at appropriate intervals. The members shall be appointed by Members designated by the Council for Trade in Goods to serve on the TMB, discharging their function on an ad personam basis.

2. The TMB shall develop its own working procedures. It is understood, however, that consensus within the TMB does not require the assent or concurrence of members appointed by Members involved in an unresolved issue under review by the TMB.

3. The TMB shall be considered as a standing body and shall meet as necessary to carry out the functions required of it under this Agreement. It shall rely on notifications and information supplied by the Members under the relevant Articles of this Agreement, supplemented by any additional information or necessary details they may submit or it may decide to seek from them. It may also rely on notifications to and reports from other WTO bodies and from such other sources as it may deem appropriate.

4. Members shall afford to each other adequate opportunity for consultations with respect to any matters affecting the operation of this Agreement.

5. In the absence of any mutually agreed solution in the bilateral consultations provided for in this Agreement, the TMB shall, at the request of either Member, and following a thorough and prompt consideration of the matter, make recommendations to the Members concerned.

6. At the request of any Member, the TMB shall review promptly any particular matter which that Member considers to be detrimental to its interests under this Agreement and where consultations between it and the Member or Members concerned have failed to produce a mutually satisfactory solution. On such matters, the TMB may make such observations as it deems appropriate to the Members concerned and for the purposes of the review provided for in paragraph 11.

7. Before formulating its recommendations or observations, the TMB shall invite participation of such Members as may be directly affected by the matter in question.

8. Whenever the TMB is called upon to make recommendations or findings, it shall do so, preferably within a period of 30 days, unless a different time period is specified in this Agreement. All such recommendations or findings shall be communicated to the Members directly concerned. All such recommendations or findings shall also be communicated to the Council for Trade in Goods for its information.

9. The Members shall endeavour to accept in full the recommendations of the TMB, which shall exercise proper surveillance of the implementation of such recommendations.

10. If a Member considers itself unable to conform with the recommendations of the TMB, it shall provide the TMB with the reasons therefor not later than one month after receipt of such recommendations. Following thorough consideration of the reasons given, the TMB shall issue any further recommendations it considers appropriate forthwith. If, after such further recommendations, the matter remains unresolved, either Member may bring the matter before the Dispute Settlement Body and invoke paragraph 2 of Article XXIII of GATT 1994 and the relevant provisions of the Dispute Settlement Understanding.

11. In order to oversee the implementation of this Agreement, the Council for Trade in Goods shall conduct a major review before the end of each stage of the integration process. To assist in this review, the TMB shall, at least five months before the end of each stage, transmit to the Council for Trade in Goods a comprehensive report on the implementation of this Agreement during the stage under review, in particular in matters with regard to the integration process, the application of the transitional safeguard mechanism, and relating to the application of GATT 1994 rules and disciplines as defined in Articles 2, 3, 6 and 7 respectively. The TMB's comprehensive report may include any recommendation as deemed appropriate by the TMB to the Council for Trade in Goods.

12. In the light of its review the Council for Trade in Goods shall by consensus take such decisions as it deems appropriate to ensure that the balance of rights and obligations embodied in this Agreement is not being impaired. For the resolution of any disputes that may arise with respect to matters referred to in Article 7, the Dispute Settlement Body may authorize, without prejudice to the final date set out under Article 9, an adjustment to paragraph 14 of Article 2,

for the stage subsequent to the review, with respect to any Member found not to be complying with its obligations under this Agreement.

Article 9

This Agreement and all restrictions thereunder shall stand terminated on the first day of the 121st month that the WTO Agreement is in effect, on which date the textiles and clothing sector shall be fully integrated into GATT 1994. There shall be no extension of this Agreement.

APPENDIX-D

PARTICIPATING STATES IN THE MFA AT DIFFERENT STAGES

Serial No.	Country	MFA-I	MFA-II	MFA-III	MFA-IV
1.	Argentina	x	x	x	x
2.	Australia	x			
3.	Austria	x	x	x	x
4.	**Bangladesh**	**x**	**x**	**x**	**x**
5.	Bolivia*		x		
6.	Brazil	x	x	x	x
7.	Canada	x	x	x	x
8.	China* (PR)			x	x
9.	Colombia*	x	x	x	x
10.	Costa Rica				x
11.	Czechoslovakia	x	x	x	x
12.	Dominican Republic	x	x	x	x
13.	Egypt	x	x	x	X
14.	El Salvador*	x	x	x	
15.	EEC	x	x	x	x
16.	Finland	x	x	x	x
17.	Ghana	x	x		
18.	Guatemala*	x	x	x	x
19.	Haiti	x	x	x	
20.	Hong Kong**	x	x	x	x
21.	Hungary	x	x	x	x
22.	India	x	x	x	x
23.	Indonesia	x	x	x	x
24.	Israel	x	x	x	
25.	Jamaica	x	x	x	x
26.	Japan	x	x	x	x
27.	Republic of Korea	x	x	x	x
28.	Malaysia	x	x	x	x
29.	Maldives			x	
30.	Mexico*	x	x	x	x
31.	Nicaragua	x			
32.	Norway	x		x	x
33.	Pakistan	x	x	x	x
34.	Panama			x	
35.	Paraguay*	x			
36.	Peru	x	x	x	x
37.	Philippines	x	x	x	x
38.	Poland	x	x	x	x
39.	Portugal(for Macao)	x	x	x	x
40.	Romania	x	x	x	x
41.	Singapore	x	x	x	x
42.	Spain	x			
43.	Sri Lanka	x	x	x	x
44.	Sweden	x	x	x	x
45.	Switzerland	x	x	x	x
46.	Thailand*		x	x	x
47.	Trinidad and Tobago	x	x		
48.	Turkey	x	x	x	x
49.	United States	x	x	x	x
50.	Uruguay	x	x	x	x
51.	Yugoslavia	x	x	x	x

Source: **Blokker (1989) p.160 table 5.1** Notes: * indicates: accession ex Article 13.2 ** until 1986: the UK for Hong Kong. Since 1986 Hong Kong, having full autonomy in the conduct external commercial relations and the other mattersprovided for in the General Agreement, is deemed to be a contracting party to the GATT in accordance with Article XXVI.5 © of the General Agreement.