



Sustainable Trade in Textiles & Clothing

WWF would like to thank all the participants of the EPTSD Textiles Dialogue mentioned in Annex 4 for their valuable contribution towards this work.

WWF International's Trade and Investment Unit is also grateful for the financial grant provided by the Environment Ministries of Norway and the Netherlands as well as DANIDA to the Expert Panel on Sustainable Development (EPTSD) Trade in Textiles Project

The views mentioned in this document reflect those of the author and not necessarily those of WWF.

EPTSD Work is coordinated by
Aimee Gonzales
Senior Policy Adviser
WWF International
Ave Mt Blanc
1196 Gland
Switzerland
Tel: +41 22 364 9002
Fax: +41 22 364 8219
E-mail: agonzales@wwfint.org

Other publications can be found on the website
www.panda.org/resources/programmes/trade/
Or contact agonzales@wwfint.org

Desktop Publishing: Delwyn Dupuis, WWF International
Cover Illustration © WWF-Canon / Stéphane MAURIS
Dyes of many different colours Kathmandu, Nepal

Published March 2002 by WWF – World Wide Fund For Nature (Formerly World Wildlife Fund), Gland, Switzerland. Any reproduction in full or in part of this publication must mention the title and credit the above-mentioned publishers as the copyright owners.

© Text 2002 WWF. All rights reserved.

The material and the geographical designations in this report do not imply the expression of any opinion whatsoever on the part of WWF concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries.

TABLE OF CONTENTS

INTRODUCTION	1
1. GENERAL CONCLUSIONS	3
2. AREAS FOR FUTURE WORK	5
3. BRIEF SUMMARY OF DISCUSSIONS IN BREAKOUT GROUPS	6
ANNEX 1 SUSTAINABLE TEXTILES & TRADE: FINDING NEW SYNERGIES <i>Ritu Kumar, Director, TERI-Europe, Commonwealth Science Council</i>	11
ANNEX 2 WILL THE EMPEROR WEAR CLOTHES FROM BANGLADESH IN 2005 ? <i>Dean Spinanger c/o Institute of World Economics, Kiel, Germany</i> <i>Jan Peter Wogart, Hamburg, Germany,</i>	27
ANNEX 3 THE IMPLEMENTATION OF THE AGREEMENT OF TEXTILES AND CLOTHING & THE WTO FRAMEWORK FOR TEXTILES & CLOTHING <i>Richard Hughes, Counsellor, Textiles Division, WTO, Geneva, Switzerland,</i>	55
ANNEX 4 LIST OF PARTICIPANTS WWF Expert Panel on Sustainable Development (EPTSD) Dialogue Promoting Sustainable Trade in Textiles and Clothing, London, 24-25 January 2002	60

PROMOTING SUSTAINABLE TRADE IN TEXTILES & CLOTHING

INTRODUCTION

An international dialogue promoting sustainable trade in textiles and clothing was held in London, United Kingdom on 24-25 January 2002. The dialogue was sponsored by WWF International, Trade and Investment Unit, under its Expert Panel on Trade and Sustainable Development (EPTSD) project.

The dialogue is part of a series of participatory dialogues convened under the EPTSD project to examine the issues in the trade, environment and development interface and promote integrated solutions. WWF believes that a way to resolve the challenges in the trade, environment and development interface is for affected groups to speak to each other and deepen understanding about each others' perspectives and work towards a common solution or a co-operative approach.

The objectives of the dialogue were:

1. To facilitate better understanding of the challenges and opportunities faced by key stakeholders/actors in the trade of textiles and clothing with a view to helping create the context by which these stakeholders/actors work together and promote sustainable trade in textiles and clothing.
2. To provide input into WWF's work in promoting sustainable trade in textiles and clothing while at the same time securing improved market access for developing countries in the post WTO Agreement on Textiles and Clothing (ATC) scenario.
3. To generate feedback and/or support to the newly created Sustainable Trade and Innovation Centre (STIC) whose purpose is to establish the links at the production and trade level between 'sustainably produced' goods and services and the market.

The dialogue was held for a day and a half. It was structured as an open process where participants helped shape the agenda by recommending specific topics for discussion on the challenges and opportunities in promoting sustainable trade in the textiles and clothing sector. Working group sessions were held for the identified topics led by its proponent(s). A background paper, entitled "Sustainable Textiles and Trade: Finding New Synergies" and a reference paper "Will the Emperor Wear Clothes from Bangladesh in 2005?" were distributed to the participants ahead of time (see Annexes 1 and 2). A Paper on the Implementation of the Agreement on Textiles and Clothing and the WTO Framework for Textiles and Clothing was also made available to the participants (see Annex 3).

The first day was devoted to an open discussion of the challenges and opportunities in promoting sustainable trade in the textiles and clothing sector. Key concerns revolved around what precisely is meant by sustainable trade in textiles and clothing; how to obtain access to information on importers' social and environmental requirements; how to conform with external social and environmental requirements with minimum competitiveness loss; would adhering to voluntary guidelines be better

than conforming to mandatory requirements to promote sustainable trade in textiles and clothing; what are the practical measures to promote market access on sustainably produced textiles and clothing; how to ensure that discussions on sustainability will not be hijacked by protectionist interests; what are the consequences of the elimination of quotas on the economic, social and environmental sustainability of textiles and clothing export dependent countries; what will be the impact of China's entry into the WTO on these countries and how should they get ready for the textiles quota free system in 2005.

The second day saw a more focused discussion on three topics selected as priority topics by the participants. The topics include: practical measures to promote sustainably produced textiles and clothing; impact of quota elimination on the economic, environmental and social sustainability of the textiles and clothing sector; and issues and concerns surrounding standards compliance. Practical recommendations were identified to make progress in these areas. For a synthesis of these discussions and recommendations, pls. refer to p.6).

The dialogue was attended by a diverse group of individuals with years of experience and great expertise in the sector of textiles and clothing. A number of them were suppliers and manufacturers from South Asia; retailers from Europe; representatives of retailers and manufacturers in Europe; representatives from government sponsored export promotion bodies; environmental and sustainable development NGOs; experts in certification, fashion and design, marketing, sourcing, policy; and experts working in intergovernmental bodies and the academia (for a full list of participants, please refer to Annex 4).

The meeting proved to be a valuable opportunity for an open exchange of views and experiences among such a diverse group of stakeholders. Specific recommendations were made on the three priority issues identified and are summarized on p.3.

This summary and its annexes do not constitute a consensus document and may not reflect the views and positions of all participants. However, the discussions produced the following results in terms of areas of emerging common interest and need for further exploration.

1. GENERAL CONCLUSIONS

The environmental problem in the textiles and clothing industry is a question of scale and there are limits to international trade's influence as well as its importance. A central concern of international trade in textiles is the number of internationally imposed barriers to trade, particularly the quota regime embodied in the WTO Agreement on Textiles and Clothing (ATC). The ATC is a transitional process, which, over a ten-year period will integrate all textiles and clothing trade fully into the rules of the WTO, and out of special regimes that have governed much of this trade for the past four decades. The completion of this process, by the end of 2004, means that the quota system will be fully eliminated and trade will be under normal market forces and the rules of the WTO. Nevertheless, several potential trade barriers remain which could hamper; in particular, developing countries' access to developed countries' markets. These include, restrictive rules of origin, WTO anti-dumping actions, countervailing duty measures and technical barriers to trade, besides tariffs which remain significantly higher for textiles and clothing than industrial tariffs in general (such as product standards, technical requirements).

A number of countries, particularly developing countries/territories, which have emerged as major textiles exporters in the last three decades have also expressed concern that compliance requirements (voluntary and mandatory) often pose as obstacle to market access. Some dialogue participants raised the fact that promoting sustainability in the textile and clothing sector may be seized by protectionist interests as a vehicle to create unnecessary barriers to trade. Some also argued that the environmental and social impact of textile and clothing industries is relatively benign compared to other resource-extractive sectors like transport, energy, tourism. However, it was pointed out that environmental impacts and their intensity are also a function of the ambient and local environment. In Tirupur, India, for example, the textile dyeing process has in the past wreaked havoc with the local water resources.

Nevertheless, it is also a well-established fact that over the years, expectations and needs of the consumers and communities have become more explicit, including considerations of environmental, health and safety, corporate responsibility and trade regulations. Suppliers and manufacturers of textiles and clothing both in developed and developing countries, albeit in varying degrees, face pressures to comply with environmental and social requirements in addition to the ongoing requirements for improvements in business performance and in their competitive edge. These pressures come from several sources: government regulations, the markets, voluntary codes of conduct of retailers, NGOs and consumer demands for “ethical” and fair-trading.

Push for reforms in the WTO on textiles

In order to address these problems, a number of recommendations have been proposed, particularly in international textile trade policy making. They include expanding the benefits of the general system of preferences for lower income countries; ensuring that non tariff barriers such as antidumping measures and technical requirements/standards are not used as substitute for quota protection and ensuring that social and environmental requirements are not used as protectionist trade barriers.

Develop efficient domestic policies

Participants also acknowledged that in order to attract investment and markets for textiles and

clothing, there is no substitute for good, efficient domestic policies on providing infrastructure, communication and production technology and transparency of regulations. Technical and financial assistance from OECD countries will enable developing countries to develop such efficient policies and governance mechanisms.

Get ready for quota free environment in 2005

While the full elimination of quotas in the textiles and clothing trade is still almost three years away, it is necessary that discussions are held now and countries heavily dependent on the quota system formulate a plan of action and prepare for the changed environment in the coming years. This should include developing production efficiency, improved marketing, consistent quality, dependability as well as product diversification and other strategies to maintain the market share, to which liberalisation of access to their textiles and clothing markets should be a contributing factor. Marketing strategies for 'sustainably produced' textiles and clothing can also provide a competitive advantage.

There is a need to build capacity in government, particularly, the export promotion agencies, towards assessing the changes and formulating appropriate national strategies for adapting to external requirements. Above all- and perhaps foremost- is to ensure that entry into and exit from countries is facilitated by efficient transportation/communications infrastructure.

International information exchange

To maximise net economic gains, suppliers and manufacturers, particularly in developing countries, need to keep abreast of the latest marketing trends and regulatory developments in the import market. At the same time, importers and retailers in Europe need to appreciate and understand the costs, financial and technological constraints faced by suppliers and manufacturers in the South.

Continue the dialogue

There is a need to create a forum for regular dialogues particularly between suppliers and manufacturers in the South and importers, retailers and manufacturers in Europe to ensure a heightened awareness and appreciation of the constraints and challenges of implementing sustainable trade in textiles and clothing faced by relevant actors. This could also be a potential way to build lasting partnerships along the supply chain.

Harmonise compliance requirements at the national and international levels

At the national level - a number of compliance requirements have been developed and imposed by distinct regulatory agencies and market expectations. These requirements need to be integrated and rationalised into a coherent and integrated compliance package to reduce cost, minimise risk and improve business productivity.

At the international level - there is a need to promote mutual recognition and equivalency of environmental standards. Intergovernmental agencies can help to ensure the scientific basis of environmental compliance requirements and to accredit local testing facilities.

More importantly, suppliers and manufacturers in developing countries must be consulted and engaged in the development of the compliance standards to ensure that the standards are implementable and can be met.

2. AREAS FOR FURTHER WORK

The participants identified several areas for further work to promote sustainable trade in textiles and clothing. They include:

Building the case for sustainable trade in textiles and clothing

Clear empirical data is needed to provide evidence on whether the trend to consume 'sustainably produced textiles and clothing' is growing. Specific questions needing answers include:

- ◆ what precisely is a sustainably produced product?
- ◆ what was the data five-ten years ago compared to the current data?
- ◆ what might be the scenario five-ten-twenty years from now?
- ◆ is there a competitive advantage to implementing sustainable trade in textiles?
- ◆ do they gain a share in the market?
- ◆ what are the pressures from the supply chain?

Continuing the International Dialogue Through the Sustainable Trade and Innovation Centre

- ◆ To promote further discussion and sharing of information and experience;
- ◆ To include interested countries and organizations in promoting sustainable production and trade in textiles and clothing;
- ◆ To further explore tools and methodologies for standards/compliance mechanisms that best offer opportunities to promote sustainable trade in textiles and clothing, particularly in developing countries;
- ◆ To encourage and facilitate mutual recognition of standards and codes of conduct;
- ◆ To develop inventories of legislation, laws, standards/ information that are easily accessible by all interested parties, e.g. by electronic means;
- ◆ To develop (case) studies that can serve as reference material;
- ◆ To share relevant resource materials regarding various aspects/factors of market trends, particularly on stable markets for 'sustainably produced textiles and clothing' and regulatory developments in importing countries and economic, social and environmental conditions in exporting countries;
- ◆ To promote better participation of the private business sector and non-governmental organizations both in developing and developed countries;
- ◆ To identify key entities and institutions that are working on sustainable trade in textiles and clothing with a view to establishing networks;
- ◆ To encourage collaborative work between developed and developing countries on promoting sustainable trade in textiles and clothing.

Working to ensure that a quota free environment indeed takes place in 2005

- ◆ Helping those economies dependent on textiles and clothing exports prepare for the changing environment.
- ◆ Begin the discussions and plan of action for diversification now.

3. BRIEF SUMMARY OF DISCUSSIONS IN BREAKOUT GROUPS

This section attempts to capture the discussions in the Breakout Groups. It does not necessarily reflect a consensual view by all participants in the dialogue.

a. What practical measures need to be taken to provide market access for “sustainably produced” textiles and garments?

Lack of access to reliable information, notably on the marketing trends and regulatory developments in Europe is a major barrier in promoting sustainable trade in the sector. Internet access is still not widely accessible in the south and market fairs, considering the time and resources it takes to organise them, take place only once or twice a year. Meanwhile, changes in marketing trends in Europe happen so fast and information does not reach the supply end particularly in the south as rapidly as it is desired.

Information exchange and training and capacity building are key in promoting sustainable trade. Information on marketing trends, particularly on sustainable means of producing raw materials and the growing customers' demand and expectations for sustainably produced textiles and clothing in Europe needs to be communicated to suppliers/ manufacturers in developing countries so they can adapt to the changing trends. At the same time, problems experienced by developing country suppliers and manufacturers such as the need for technical and financial assistance to comply with environmental and social standards, lack of/ or insufficient information on the regulatory developments in Europe need to be communicated to partners in Europe to help foster understanding and assistance in responding to the suppliers' constraints.

Apart from rapid information dissemination on environmental requirements, information on possible alternatives and testing methods and discussions on mutual recognition of certification and labelling schemes are also considered helpful.

Information exchange and dissemination can occur in several ways: attendance in textiles and apparel fairs; access to CD ROM's, attendance in in-country seminars sponsored by trade promotion bureaus, access to magazines and journals which gives input on latest technology, compliance requirements, etc. Conducting dialogues between suppliers, manufacturers and retailers were also considered useful since this could help build lasting partnerships along the supply chain.

Training and capacity building on adapting and complying with environmental and social standards is equally important. Although, they are normally part of government programmes and policies to promote exports, sustained funding for strategic training and capacity building is almost always a problem. Other training needs identified to remain competitive include improving productivity, encouraging incentives to develop indigenous designs, etc.

b. Issues and problems with environmental and social compliance

Much of the discussion on compliance with environmental and social requirements was focussed on whether these requirements pose competitiveness concerns for developing countries. It has been stated that these regulations present a new opportunity for developing countries to improve market access if they can adapt more appropriately. Participation in certification/ecolabeling programmes for

example, could provide new opportunities to exporters, including those from developing countries.

The factors driving suppliers and retailers to extend responsibility along the supply chain include:

1. NGO/public opinion pressure and campaigns from environment and social groups have proved a potent force for change.
2. Market pressure in response to consumer preferences for 'green' or 'fair' trading.
3. Government regulations to deliver basic public service to protect the environment by controlling toxic and hazardous chemicals and reducing waste and promote social well being.

However, a number of participants also argued that on account of the high proportion of their trade being directed at the OECD markets, particularly in the textiles sectors, the vulnerability is greater, especially because industries in developing countries tend to enjoy a market on account of low prices. It was felt that some compliance mechanisms can discriminate against imports from developing countries when they reflect exclusively the environmental conditions and preferences of importing country. The number and variety of criteria adhered to may in itself act as barrier to market access on account of the cost of compliance involved. The problems relate to high transaction costs, lack of insufficient information regarding these standards and other market imperfections.

In addition, regulatory standards and regulatory culture vary widely across countries. In most developing countries enforcement and monitoring of national regulations is low. Considerations of economic efficiency and ecological wellbeing indicate that these requirements are best met by national level environmental and social compliance/standard formulation.

In order to minimise problems related to compliance, maintain competitive edge and foster sustainable trade, standards and requirements should be clearly defined and globally harmonised. Key to achieving an effective process leading to harmonisation is the mutual recognition and agreement such as in the use of chemicals and social compliance.

A suggestion was made to integrate various forms of compliance requirements into the standard corporate practices. Traditionally, suppliers and manufacturers have managed compliance requirements of quality assurance, environmental performance, health and safety, social responsibilities and trade regulations in disparate manner. Different regulatory agencies and market expectations drive these different types of compliance requirements. Complying with all the processes has proven to be cumbersome, time consuming and resource draining. The modular integrated approach proposes to enhance the cost effectiveness and achieve added value, minimises risk and promotes sustainable trade opportunities. Its implementation as a voluntary performance management system can be used to drive improvements in business performance.

Nevertheless before any type of standardisation process is introduced particularly in developing countries, there is a need to understand the circumstances and conditions under which the standards will be implemented. Developing country suppliers need to be consulted and engaged before compliance standards are imposed and/or issued. Key to having a harmonised standardisation process is the political will and commitment of governments at both the international and national level.

c. Proposal to develop a garment passport or a garment swing ticket

A proposal was made to develop some sort of passport for garments or a swing ticket. The passport will contain information on the origin of the garments such as the physical properties of the fibre used to manufacture the garment. It will also indicate information about the processing of the fibre through the supply chain. The idea is to maintain transparency of the origin of the fibre such as cotton

where consumers can identify via a swing ticket on the garment. It will be made available to manufacturers who want to offer full transparency about their manufacturing chain.

Proponents of the proposal believe that the most important way to translate general demand into a strong and urgent market demand is through a high level brand exposure in the market place for fibre. It is argued that only when demand is guaranteed to be high and urgent, will the members of the textile processing industry make the necessary change to pure and fair fibre (cotton, i.e. the terms of trade). It is further explained that influencing the price is not the place where change is required, but must be worked out to ensure fair advantage to the growers. Pioneering work on pure and fair cotton fibre is currently undertaken by Vericott Ltd.(refer to www.gossypium.co.uk).

♦ Benefits of having the garment passport

Transparency and traceability of processing and production methods
Better terms of trade for sustainable fibre growers
Heighten awareness among consumers by providing them with the choice of purchasing more environmentally friendly goods

♦ Several issues were raised concerning the proposal:

What type of information will it have?
Fears of bureaucratic delay
Concerns that it may run contrary to WTO rules- customs facilitation, issue on process and production methods (PPMs)
Costs of installing such as system

d. What will be the consequences of total quota elimination on the economic, social and environmental sustainability of textiles and clothing production in countries heavily dependent on textiles exports?

Implications on economic sustainability

It is most likely that there will be a decline in competitiveness in countries that are heavily dependent on the quotas on textiles and clothing such as Sri Lanka and Bangladesh. When Canada lifted its quotas on specific types of clothing in 1997, sourcing of materials was almost immediately transferred to China from countries like Bangladesh, South Korea, Thailand and Indonesia.

To ensure proper transition and prepare for the change in environment with the final elimination of quotas at the end of 2004, countries are urged to diversify their markets of destination of textiles and clothing exports. There is a need to look beyond the US and EU towards possible intraregional trade and China as potential export markets as US and EU markets will likely continue to increase the levels of clothing imports both as a result of the comparative advantage in production held by developing countries but also due to the loss of quota protection.

The diversification of products could also be directed towards producing textiles and clothing in a sustainable manner such as eliminating pesticide use in cotton cultivation and toxic chemicals in textile manufacture; improving water and energy efficiencies, particularly during textiles processing and clothes' washing; cutting pollution, and waste in dyeing, etc. The shift in products will not come automatically. The development of high quality products and/or sustainably produced products will require investment in technology, training and product quality control. This is an area where greater communications and dialogue among affected actors will be critical.

The option of diversifying out of the textiles and clothing sector to other industries should also be explored. The transfer should be carefully planned not only in terms of assessing the economic costs and benefits, but also the environmental and social impacts of diversification compared to maintaining the status quo. The experience of Korea, Singapore and other countries should be helpful. Although it would be impractical and politically impossible to replicate these countries' experiences, some lessons should be worth looking into.

The need to sustain the market share was also deemed important. This could be made possible through upgrading the telecommunications infrastructure and availability of good quality transportation; establishing domestic sources for necessary inputs thus reducing reliance on imported inputs and better co-operation amongst trading partners.

China is viewed as a main threat of securing market share when the quota will be abolished in 2005. China has sound infrastructure services and offers rapid turnaround of export deliveries to overseas buyers and relatively lower labour costs in relation to South Asia.

Developing countries will need to be flexible and adaptable in order to attract foreign buyers.

Environment and social sustainability

The abolition of quotas will also have impacts on environment and social sustainability. The compliance with social and environmental standards gives possible competitive edge to some countries that practice them. Diversification especially if focussed in competitive factors may ease pressure on natural resource consumption and lowering of social standards. Positive factors include good quality telecommunications and infrastructure that provides for rapid turnaround of export deliveries to overseas buyers; training and capacity building; skills upgrading to meet rapidly changing market demands; creating a favourable regulatory environment. Major negative factors affecting competitiveness in particular of South Asian economies, are distance (i.e. time) and transportation costs.

Case for action

There is a clear window of opportunity in line with the new WTO round of negotiations to further the level playing field.

We do this because growth in trade can help foster sustainable development if the appropriate flanking policies are put in place. This means helping to create a scenario where no new barriers are imposed but rather the reduction to be coupled with the elimination of quotas.

Specific recommendations:

- ◆ GSP targeted only for lower income countries. The question is who gets on the list?
- ◆ Rules of origin should avoid complexities which hinder trade.
- ◆ Social and environmental requirements should not be used as protectionist trade barriers.
- ◆ Tariff reduction proposals should provide equal treatment to textiles and clothing as other sectors. Market access problems relating to high levels of tariff peaks in the textiles sector need to be addressed at the WTO, particularly because a decline in such tariffs would imply a significant increase in the market access of a number of exporting countries.
- ◆ To promote cleaner production and provide incentives for sustainably produced products, preferential tariff rates for sustainably produced textiles and clothing is proposed. It was however cautioned that such an approach could be misused, could create unequal treatment for some

developing countries and would in fact be contrary to the time-tested principle of non-discriminatory treatment. The challenge is to ensure that adverse effects of such policies are clearly identified and minimised if not avoided.

- ◆ Ensure that non-tariff barriers, anti dumping measures, etc are not used as substitute for the loss of quota protection and reduction in tariff levels.

There is no substitute for good, efficient domestic policies to promote environmental protection and livelihood security.

What specific actions are we prepared to commit to?

Flag where specific social and environmental policies are becoming a barrier to trade and where they present an opportunity to enhance trade.

e. Why raise issue of sustainability now when we are on the verge of free trade in textiles and clothing products after 2004?

Is it real concern for environmental/social issues or is it veiled protection or philosophical imperialism to be applied to other countries?

It is essential that the concept of sustainable trade in textiles and clothing is properly defined. It is equally important to identify and address the real causes of problems in the production of textiles and clothing products rather than any perceived effects of liberalisation of trade in the sector.

If sustainable trade means the ability to maintain a steady improvement in well-being of societies, then it can be shown that more open trade can help to achieve this, *(though it must be stated that the aggregate numbers shown by official statistics mask real situation of poverty and environmental degradation in a growing number of countries, particularly in developing and least developed countries - Coordinator's note)*

If sustainable trade means ensuring that the environment is adequately protected, then the textiles and clothing employs environmentally clean processes relative to other sectors such as energy, agriculture, and transport.

If sustainable trade means achieving more equitable living conditions then it is through more flexible and timely reactions to changing economic conditions, which promotes new jobs, not doctrines stipulating a certain type of development.

If sustainable trade means achieving a more efficient use of scarce resources, then it is by allowing markets to correctly reflect relative scarcities that it can be achieved and not by prescribing and dictating how markets should react.

It is "doing what comes naturally" which makes economic, social and environmental development happen all the faster and more efficiently.

ANNEX 1

SUSTAINABLE TEXTILES & TRADE: FINDING NEW SYNERGIES

Ritu Kumar, Director, TERI-Europe, Commonwealth Science Council

1. Introduction

The garment and textile industry has been a major source of employment and income generation for South Asian countries such as Bangladesh, India and Sri Lanka. The size of businesses engaged in this sector varies from small and medium sized producers employing relatively labour intensive methods of production, to highly mechanised large scale units. The garment industry in particular employs a large number of workers, majority of which are women.

However, the textile and garment industries in South Asia are facing new competitive challenges from a number of sources: buyer pressure for improvements in social and environmental performance, local pressures to reduce environmental pollution, downward pressure on prices, and the phase out of the Multi-Fibre Arrangement at the end of 2004.

World-wide, the textile sector has been the focus of a multitude of initiatives to improve its social and environmental performance from the harvesting of raw materials through the manufacturing stage to consumption and disposal. For Bangladesh, India and Sri Lanka, the textile and garment sector is of critical importance, accounting for a bulk of current trade with the European Union, with a large proportion of production undertaken by small and medium scale enterprises. Four forces are now driving up the social and environmental requirements for exporters to the EU. First, European governments are introducing increasingly stringent health and environmental requirements on the use of toxic chemicals during textile production, such as Germany's 1994 ban on the use of certain azo dyes. Second, environment, development and consumer organisations are pressing for better working conditions and reduced environmental impacts in the textile trade (e.g. the Clean Clothes Campaign). Third, consumers are demanding textile products produced in an ecologically sound manner, with a growing niche market for organic cotton. And fourth, leading corporations, both in Europe and the USA are introducing codes of conduct both to respond to this mounting pressure and to demonstrate corporate responsibility for their supply chain.

As a result, South Asian textile exporters are increasingly required to demonstrate their social and environmental credentials, particularly in the European market through a variety of certification and labelling schemes. These requirements can bring new commercial opportunities for textile exporters able and willing to rise to the challenge, as demonstrated by India's Century Textiles corporation, profiled in a report entitled *Unlocking Trade Opportunities*¹. But small and medium sized producers, who make up a large proportion of India's textile sector, face a range of specific obstacles. First, SMEs often lack access to basic information on the changing social and environmental requirements in their export markets; this situation is exacerbated by the proliferation of overlapping and competing initiatives in Europe. Second, SMEs often have limited management and innovation capacity which

1. IIED, *Unlocking Trade Opportunities*, 1997.

constrains their ability to introduce new processes. Third, the costs of labelling and certification have often been prohibitive for SMEs.

Looking ahead, it appears clear that social and environmental performance will play an increasingly prominent part in the commercial success of textile exporters to the EU. While there have been a few initiatives taken to respond to specific transition issues, such as the ban on azo dyes, there is still no broad-based forum within which producers, traders, retailers, government agencies, environment, development and consumer NGOs from both Europe and Asia can both build mutual understanding of emerging social and environmental imperatives in the textile sector and improve trade links. To respond to this challenge, there is a need for a forward-looking initiative that can help developing country producers to anticipate emerging issues and strengthen commercial contacts along the textiles chain.

In order for the industry to sustain and improve its contribution to income generation, poverty reduction and foreign exchange earnings, there is a need to improve productivity levels even further and raise environmental and social (including working conditions) standards for the industry as a whole. As the search for market access becomes tougher, sustainable production could become a key factor in gaining a competitive edge, and contributing to poverty reduction.

Recognising this and the need to find new synergies to link export success with improved social and environmental performance in the most cost effective manner, it is important to identify elements of a sustainable production strategy for textiles and garments that would combine social and environmental improvements with productivity and financial gains for the sector.

2. What are the Challenges?

Social and Environmental Issues

Pressures to make social and environmental improvements are coming from both local and external sources. Buyer pressure for social and environmental improvement – for example on their use of dyes and wastewater treatment practices -- is coming at a time of a downward pressure on prices for garment and textile suppliers. Buyer pressure is ultimately a reflection of consumer expectations, actions by NGOs and human rights organisations, and civil society in general. These also get reflected in overseas legislation and international/bilateral agreements. Local communities affected by pollution from textile production in particular are also agitating to redress their grievances. These concerns can be picked up by the media and lead to actions by both regulators and buyers. Finally, pressure for change is also coming from textile and garment producers themselves.

The era of denial when producers refused to accept their responsibility for social and environmental issues is now past. Many of these problems have their roots in the way the textile and garments was established over the last 20 years, when these requirements were not in place. Existing industries can therefore find it difficult to make the additional investments required. In recent years, the industry in South Asian countries has been making significant progress to address a number of issues, including child labour, noise and dust reduction and replacement of toxic dyes.

The environmental and social problems of the textile and garment sector vary according to a range of factors. Differences are evident between large and small producers, old and new operations, as well as between public sector and private sector enterprises. In public sector enterprises, trade and labour unions may become a major barrier to social progress, whereas in private companies, where labour and trade unions are not obstructive, the pressure to comply with social regulations emanating from the market are most likely to bring about changes. Differences in perceptions of problems also vary depending on whether the firm has a short-term horizon or a longer term vision.

Some of the main social problems encountered in the textile and garment sector are:

- ◆ Child labour, health and safety, working conditions, minimum wages, provision of adequate child care facilities, non discrimination, provision of separate toilet facilities for men and women, training and skill upgradation, and recreation. In the garment sector, dominated by women workers, gender specific issues have to be given due importance.

The environmental problems faced by the textile industry would also vary depending on the process and type of industry. However some common problems are:

- ◆ Water effluents, use of toxic chemicals, high noise levels, dust in the spinning process, sizing waste in the weaving sections, severe problems due to non-biodegradable wastes in the manufacture of synthetics, inefficient use of raw materials including water and energy, and poor recovery and reuse of chemicals, water and energy.

Additional problems encountered in making sustainable productivity improvements include:

- ◆ Lack of knowledge and know how on practical applications of technological and managerial solutions.
- ◆ Technical solutions are often not available.
- ◆ Lack of incentives to comply with national regulations
- ◆ Weak enforcement of national regulations.
- ◆ Absence of supporting infrastructure, both physical and institutional.

Understanding Costs and Benefits of Compliance

Compliance costs may be high in the short run and could be higher for the small and medium companies. Specific measures will be needed to meet the higher costs incurred by small-scale industries. However, costs are likely to fall in the longer run and the benefits will exceed costs with an alert and well-informed management. Investment in environment protection will eventually result in an increase in productivity.

Some of the benefits of environmental and social improvements include:

- ◆ Better public image and market reputation
- ◆ Reduced material costs in terms of chemicals, water and energy
- ◆ Social benefits to local community and surroundings
- ◆ Fall in absenteeism and increase in labour productivity

The Status of South Asian suppliers

Pilot assessments of combined environmental, social and quality parameters conducted in selected factories in Bangladesh, India and Sri Lanka indicate that by and large textile and garment exporters in the region are well prepared to meet requirements imposed by their buyers in the European Union and United States. This is especially true of those that comply with either ISO 9000 or ISO 14000 requirements. As mentioned above however, the cost factor may be relatively high for the smaller companies. Areas where further attention is needed include proper documentation procedures, and, in cases where the supply chain is not owned by the company, on familiarising agents down the supply chain on the requirements. The latter poses a real problem for some companies as very often their suppliers are either located outside the country or are difficult to govern.

MFA Phase out implications

With the scheduled phase-out of the MFA at the end of 2004, the textile and garments industries in South Asian countries will face new competitive challenges. The sector needs to transform itself from a generally low quality and low value added production focus to one that is customer-driven, flexible and competitively priced. Bangladesh and Sri Lanka will be particularly affected by the removal of quotas.

For Bangladesh the main concerns are that it may lose a guaranteed market for the export of its garments unless it makes a concerted effort to find new markets in non-quota countries such as Australia, Japan and the Middle East. Added to this, new non-tariff barriers are emerging. New social requirements, such as SA8000, need to be handled intelligently and adapted to the specific conditions in countries such as Bangladesh. Furthermore, the growing range of standards set by garment buyers are often different and confusing for producers. Poor infrastructure facilities and the lack of a well developed textile industry will make it difficult for Bangladesh to compete with large scale producers like India and China which have relatively well developed infrastructure.

Sri Lanka too will face immediate problems after the phase out of the MFA. The garment and textile industry relies heavily on quota categories with high concentration on a few markets. Other drawbacks are heavy reliance on imported inputs and lack of direct marketing links with major purchasers. Sri Lankan industry is also characterised by relatively high labour costs and a lack of investment in advanced technology—resulting in decline in competitive position vis a vis other countries in the region.

India on the other hand may not be as adversely affected by the MFA phase out as Bangladesh and Sri Lanka. It has established markets in non quota countries, a large manufacturing base as well as local supplies of raw materials.

3. What are the solutions?

Responding to Information Needs

ACTION: The industry associations should take the lead in setting up information centres to collect and disseminate information on environmental and social requirements as well as on cleaner production and sustainable production methods for the textile industry. This may be done in collaboration with researchers, NGOS and the government. Newsletters and bulletins on specific issues and global developments should be issued on a regular basis. This may in some cases require strengthening the existing capacity of textile and garment associations, or of the trade bodies, to undertake this activity.

As part of this suppliers of machinery and equipment can be a source of information, and NGOs can also act as information brokers. There is also a need to increase consumer awareness about the social and environmental issues in the textile and garment sectors, and the progress being made by producers. Collective interaction between buyers and suppliers needs to be encouraged for wider information dissemination on social and environmental requirements.

Improving Skills and Capacity

ACTION: Training programmes need to be tailored for entrepreneurs, managers and workers. Training in social and environmental issues is an investment that will bring benefits to the business. Different types of training programmes can be developed such as:

- ◆ In house senior executive programmes.
- ◆ Productivity improvement techniques including know how on cleaner production.
- ◆ Skills upgrading for workers and sensitisation to the importance of maintaining a safe and clean environment.
- ◆ Gender specific programmes for garment factories.
- ◆ Pilot schemes to test new training methods that might involve sending a multidisciplinary team of experts to work with a cluster of small and medium sized companies on a number of issues.
- ◆ Courses for government regulators and officials on cleaner production methods.
- ◆ Training for financial institutions on environmental risks and investment strategies.

Applying the Tools

ACTION: A wide range of tools have been identified for improving performance, including:

- ◆ Information tools on cleaner production, EMS, corporate social responsibility and other sustainable practices to show how have they been applied in other developing countries.
- ◆ Benchmarking the performance of Bangladeshi producers with international norms and producers in other countries.
- ◆ Pilot projects to assess the costs and benefits of social and environmental improvements.
- ◆ Sector-wise needs assessment and dissemination to key stakeholders.
- ◆ Policy reforms and the use of market based instruments and incentives.
- ◆ Publication of corporate environmental statements.
- ◆ Environmental and social planning for zoning and clustering new facilities.
- ◆ Textile and garment villages for small and medium industries to enable the use of collective facilities, such as common effluent treatment plants.
- ◆ Technology assessment of the appropriateness of new technology and management practices. Here the Institute for Appropriate Technology can be involved.

In all of the above, the initiative should come from the industry association and may be facilitated by a development NGOs, research institutes and universities.

New Partnerships

ACTION: South Asian countries may wish to develop their own Code of Conduct for social and environmental performance in the textile and garment sector. This Code would be a proactive step by industry and could help to influence the agenda with foreign buyers, governments and NGOs. A number of options are available:

- ◆ the Code could be on a system of progressive standards that initially give special
- ◆ and differential treatment to developing countries (vis a vis international norms) but become progressively more stringent; or
- ◆ the Code could start with stringent standards and seek investments from developed countries to cover costs of technical, managerial and financial assistance to meet specific targets.

Preparations for the Code could start with a review of existing national and international standards and the identification of what is relevant for South Asia. To ensure the credibility of this process, all stakeholders should be involved in a participatory manner. The Code should include the core standards set in international agreements and conventions, with additional aspects tailored to the local situation. Targets could also be set for the achievement of certain goals, with a phased implementation.

Financing Change

ACTION: To implement these proposals, a fast-track, dedicated mechanism for financing environmental and social improvements should be established with the commercial banks. Financial incentives should also be explored by the government to encourage good social and environmental practices.

New partnerships should also be developed with existing initiatives, such as the US Asia-Environmental Partnership (US-AEP), the EU-Asia Regional Institute for Environmental Technology (RIET) in Singapore as well as specific donor agencies, such as DFID, GTZ and USAID. Options for financing 'soft loans' for environmental investments should also be explored, building on international examples, such as the World Bank programme in India

4. Conclusion: : How can it be done?

A proposal to set up a Sustainable Trade and Innovation Centre (STIC)

The Commonwealth Science Council, UK together with its partner, the European Partners for the Environment, Brussels and the International Institute for Environment and Development, UK has launched a new initiative to establish a centre for the promotion of trade in sustainably produced goods and services from developing countries.

The concept of a Centre for facilitating exports of sustainable goods and services from developing countries emerged from a three-year collaborative research initiative led by the International Institute for Environment and Development (IIED) which involved partners from Bangladesh, Ghana, India, South Africa and the UK. The research concluded that practical mechanisms are urgently required to promote integration of trade, environment and development considerations in export markets and to ensure that developing country producers benefit. Following positive signals from a number of quarters to an initial concept note for a sustainable trade centre, IIED and the Commonwealth Science Council (CSC) reviewed the need, viability and possible next steps for such an initiative. A scoping study was undertaken and presented to the Second European Rio+10 Coalition facilitated by the European Partners for the Environment (EPE), in Brussels on May 11, 2001. (Please see Annexe A for the scoping study report).

The scoping study concluded that the need for a Centre clearly exists, and that it should combine the following functions:

- ◆ To inform, raise awareness and create the demand for sustainable goods and services in export markets with a view to challenging existing misconceptions and building trust;
- ◆ To facilitate the harmonisation and mutual recognition of multiple standards, and the co-evolution of new standards and regulations through participative approaches, acting as a clearing house for the voices of developing country producers on the one hand and retailers/buyers on the other; and
- ◆ To strengthen capacities in developing countries for innovation in the design, management and implementation of positive environmental, labour and ethical initiatives.

An Advisory Board set up to guide a feasibility study presently being undertaken recommends that the Centre should concentrate in the first instance on very practical functions that link the production of sustainable goods and services to markets in developed as well as developing countries. It was agreed that the primary purpose of the Centre should be to *establish the links, at the production and trade level, between 'sustainably produced' goods and services and the market.* The Centre would

have a facilitating role in providing developing country producers with global market access for goods and services that are produced in a sustainable manner. This implies that the Centre would have to be demand oriented with access to international market information and trends. Since very often, domestic markets tend to back international market trends, the Centre should recognise that its work would have value for domestic markets as well as internationally traded goods and services

The Board recommended that the functions of the Centre could be gradually expanded over time to include, amongst others: facilitating the growth of sustainable businesses (e.g. technology mapping, foresighting etc.); creation of a breed of entrepreneurs that are engaged in sustainable production and trade; facilitation of certification which includes impacts on communities where production units are located.

Some preliminary thoughts with respect to the governance and structure of the Centre are:

- ◆ The Centre should have a lean secretariat manned by 3-4 persons. The Secretariat should maintain an analytical and evaluation function with links to research capacity in other institutions.
- ◆ The Centre should have a decentralised set up with functional nodes in different countries and regions—it should be a ‘bottom heavy’ network where the capillary effect is created by private institutions and NGOs at the country/regional level.
- ◆ The functions of the Centre should evolve on a gradual basis.
- ◆ Although the Centre should be self financing, it is clear that certain activities like information provision could be costly without immediate financial returns.
- ◆ One suggestion for raising finances is to charge a membership fee to clients, perhaps on a sliding scale. The ‘clients’ of the Centre may include not only producers in developing countries, but also buyers from large companies who are looking for access to sustainable products.

ANNEX A

International Trade for Sustainable Development: *Transparency, Equity and Innovation* *The Results of a Scoping Study for a Sustainable Trade Centre*

The International Institute for Environment and Development, UK , The Commonwealth Science Council, Commonwealth Secretariat, UK, European Partners for the Environment, Belgium, June 2001

The Report

This report presents the results of a scoping study to assess the viability of a recent proposal to establish a Sustainable Trade Centre, which would have the aim of facilitating exports of sustainable goods and services from developing countries. The proposal for the Centre emerged from a three-year collaborative research initiative involving partners from Bangladesh, Ghana, India, South Africa and the UK, which concluded that practical mechanisms are urgently required to bring real value to developing country producers from the integration of trade, environment and development factors. Following positive signals from a number of quarters to an initial concept note, the International Institute for Environment and Development (IIED) and the Commonwealth Science Council (CSC) decided to form a partnership to review the need, viability and possible next steps for such an initiative.

The study was carried out by Ritu Kumar at the CSC and involved:

- ◆ consulting with a range of business, government and civil society stakeholders on the initial

concept note produced by IIED;

- ◆ reviewing existing institutions to learn from experience and identify any gaps or overlaps;
- ◆ setting the scene for a more in-depth feasibility study.

The consultation revealed unanimous support for the approach underlying the Sustainable Trade Centre proposal, particularly the need for information sharing, the co-evolution of standards and support for innovation.

The review of existing institutions also highlighted some major gaps in the trade arena, notably the absence of a single body capable of bringing together in one place practical experience with export promotion, expertise in sustainability issues, full stakeholder representation, the ability to facilitate Southern input into standard-setting and linking all this to the strengthening of capacities for innovation within developing countries. Caution was expressed, however, among many in the South about the terminology of 'sustainable trade', based on historical concerns about the potential for 'green protectionism' through the linkage of trade, environment and development factors. What emerged, nevertheless, was a recognition that the trade and sustainable development debate needed to move beyond the current deadlock – and focus instead on delivering practical export opportunities for the South in the international marketplace.

The study therefore concludes that the need for a Centre clearly exists, and that the task is now to move to the next stage: carrying out a more in-depth and formal feasibility study, which would look in detail at issues relating to the proposed centre's strategy, governance, structure and finances. Leadership and commitment from key individuals and institutions in North and South, from business, government and civil society, will be essential to achieve success. In the words of a developing country trade official consulted during the study, it will take "courage from both sides" – North and South – to make such an initiative work, but rewards could be equally great.

The Consultation

A range of key organisations and individuals were contacted, and are listed below. Consultations were held with 30 individuals, and their views have been reflected wherever possible in this report. For the rest, documents and published material has been used as background information.

- ◆ Business representatives from the North and South, particularly those business and commercial associations with export oriented members, such as the Bangladesh Textile Mills Association; the Bangladesh Garment Manufacturers and Exporters Association; the Federation of Indian Chambers of Commerce and Industry; the Tirupur Exporters Association, India; the Electronic Component Industry Association, India; the Export Development Board, Sri Lanka; the Eco-Tex Institute, Germany; and the World Business Council for Sustainable Development.
- ◆ Government representatives from over 20 Ministries of Trade and Ministries of Environment from developing countries of the Commonwealth; a number of trade representatives at selected developing country missions to the EU in Brussels; and a number of EU government departments and agencies (such as Centre for the Promotion of Imports, Netherlands, GTZ, Germany and DFID, DTI, FCO, the UK).
- ◆ Intergovernmental organisations, including ITC, UNCTAD and UNEP.
- ◆ Civil society organisations including: Ecooperation, The Netherlands; Ethical Trading Initiative (ETI), the UK; European Partners for the Environment, Belgium; Foundation for International Environmental Law and Development, UK (FIELD); International Centre for Trade and Sustainable Development, Switzerland (ICTSD); International Institute for Sustainable Development, Canada (IISD), Canada; Latin American Centre for Competitiveness and Sustainable Development, Costa Rica (INCAE); Oxfam, UK; Rajiv Gandhi Foundation, India;

Social Accountability International, USA (SAI); Uvimba Ulwazi, South Africa; and the WWF European Policy Office, Belgium.

The above list of consultations is by no means complete, and a number of key organisations still need to be consulted. It is proposed that the in-depth feasibility study will ensure a more comprehensive consultation, including, for example: other intergovernmental organisations; additional business representatives in Europe and developing countries including the Caribbean and Pacific; the Ramsar Convention, Forest Stewardship Council (FSC), Max Havelaar, IFOAM etc.

The Need

New mechanisms are urgently required if international trade is to become a true engine of sustainable development – particularly driving the elimination of poverty and expansion of sustainable livelihoods across the developing world. Mutual mistrust continues to hamper multilateral discussions on trade, environment and development linkages, while in the marketplace, increasing numbers of developing country producers are facing the uncoordinated introduction of social and environmental criteria by clients and customers in Europe and North America. Rising consumer pressures and public expectations rather than regulatory requirements appear to be driving this process. Yet the result is still to make these issues an increasingly important factor in market access for export-oriented businesses in the South. Many businesses and exporters are responding positively to these supply chain pressures, yet the vast majority still need to be brought into the fold with practical assistance and guidance.

To date, attempts to bring together trade, environment and development – whether by governments, businesses or civil society organisations – have often failed to address three critical factors:

- ◆ the need for *transparency* in the setting of any new trade and sustainable development measure;
- ◆ the need for *equity* and fairness – particularly to ensure that those countries or stakeholders historically excluded from trade opportunities really benefit; and
- ◆ the need to ensure that social and environmental upgrading generates lasting value for developing countries in terms of the capacity for *innovation* in the future.

The result is a profound absence of trust that lies at the root of many of the tensions surrounding trade and sustainable development. In the South, there are fears that environmental requirements will hamper export prospects ('green protectionism') and are being introduced illegitimately, interfering in questions of national sovereignty. Although high standards are sometimes associated with premium prices in export markets, they are often simply an 'entry ticket' -- an additional cost rather than a source of competitive advantage. These fears are heightened by the mounting complexity of social and environmental aspects of international trade, with an array of measures, ranging from company-specific codes of conduct through systems of independent certification to national regulations. In fact, as the consultations during the scoping study revealed, this lack of trust has led to concerns about the terminology 'sustainable trade' which is perceived as being a precursor to 'green protectionism'.

Developing countries have also tended to be excluded from the process of standard setting. Policies and standards—both voluntary and mandatory—have traditionally been elaborated in the developed countries without proper consultation and engagement with suppliers in the developing world, who are then subjected to the outcomes. The result is an increasing demand from Southern producers and exporters to be a part of the dialogue that results in the evolution of regulations, norms and codes that affect their industry and export performance ('co-evolution'). Meanwhile, many developing countries have a comparative advantage in certain "sustainable" products but are unable to grasp export

opportunities due to a lack of capacity.

On the part of the North, there still appears to be a widespread distrust of the South and its capacity to move towards sustainable production and trade. This is reflected in inadequate information and understanding, not only of the pressures facing businesses operating in the South, but also of the potential for Southern businesses to meet the environmental and social challenges of their export markets. A new generation of enterprises has come to the fore in many developing countries committed and capable of achieving world-class standards in production, the environment and social matters (see box). However, media reports, which inform public opinion and NGO campaigns, tend to focus exclusively on poor performers where bad practice still exists. For sustainable development to take root, international trade should be used as a means to promote the widespread adoption of good practices on an industry wide basis in all countries. This increase in value addition requires a dedication to innovation and connection to market trends, especially in developing countries *and services from developing countries*² in order to achieve the following real benefits:

- ◆ improved trade performance among developing countries;
- ◆ strengthened capacities for management and innovation among developing country producers;
- ◆ enhanced management of the environment and social relations; and
- ◆ improved transparency of social and environmental standards.

Box: Business leaders in the South

*Rajah Bannerji, owner of **Makaibari tea estate** in Darjeeling switched to organic production in 1984, and has combined this with fair trade practices. Though the switch to organic production led initially to escalating costs and declining yields, such teething problems have since been offset by a stronger position in export markets, closer relations with customers and premium prices. The workers are healthier -- no longer poisoned by pesticides -- and there are more jobs as organic production requires double the labour input. The soil is more fertile too and resilient .*

***Beximco Textiles** in Bangladesh is part of a leading industrial corporation and a greenfield technology partnership. By early integration of sustainability into innovation and corporate strategy, it has achieved global competence in environmental and technological standards. It has also successfully demonstrated the market benefits of vertical integration. Beximco is now leading the Bangladeshi Textile and Mills Association efforts at establishing a home-grown code of conduct comparable to international standards.*

To realise these benefits, the consultations also revealed a felt need to clarify the proposed functions of the Centre as follows:

- ◆ first, to inform, raise awareness and create the demand for sustainable goods and services in export markets;
- ◆ second, to facilitate the harmonisation and mutual recognition of multiple standards, and the co-evolution of new standards and regulations, acting as a clearing house for the voices of developing country producers on the one hand and retailers/buyers on the other; and
- ◆ third, to strengthen capacities in developing countries in order to add value through innovations in design and management.

2. Sustainable goods and services are defined as those produced and traded in an environmentally sound, equitable and socially responsible manner.

All of these functions would together serve to fulfil the overall purpose of the Centre to promote the export of sustainable goods and services, and are elaborated in more detail below.

Objective 1: *Facilitate trade in sustainable products through encouraging local awareness and cultivating demand.*

Consumer preferences for products that have been produced in an environmentally and socially preferable manner will need to be cultivated in importing countries, through creative public education and social marketing.

The awareness of producers and other local stakeholders (in the North and South) has to be enhanced, through carefully targeted workshops and other initiatives at local and national sector level, backed up by clear and accessible information on market requirements and opportunities.

Functions: required to achieve this objective include:

- ◆ sharing information on: market opportunities, market processes that indicate clearly all parties in the supply chain including their fees; procedures for hallmarks; import and export taxes/duties; standards and regulations for environmental, labour and ethical practices in importing markets as well in developing country markets; sustainable product descriptions including procedures for certification and hallmarks;
- ◆ informing retailers in the North about production conditions and constraints faced by producers in developing countries;
- ◆ setting up sectoral market information boards for key products and commodities either on a regional basis or a country basis. This is particularly important for ensuring that the information needs of smaller producers are met.
- ◆ promoting and highlighting good practice through the dissemination of success stories and case studies of developing country producers that have penetrated and seized market opportunities in the North;
- ◆ lobbying authorities in developed countries (e.g. the EU) and private sector to facilitate imports of environmentally and socially preferable products from developing countries e.g. by easier import procedures, broader recognition of certification carried out by certification bodies in developing countries, more practical application of equivalence, mutual recognition procedures etc.

A possible structure for implementing some of these tasks may be to set up an “electronic market” similar to the One World Market being set up by *Ecooperation*, a Dutch initiative being launched to facilitate trade in sustainable products between the Netherlands and selected African countries.³ Ecooperation has also been active in standard setting and capacity building in the private sector for sustainable trade. Collaboration with *Ecooperation* should be explored.

Any information system that is set up under the Centre should explore and establish links with other related electronic networks and information providers. On the trade aspects, it would be important not only to tap into but also to learn lessons from the experience of the International Trade Centre’s (ITC) support networks in developing/transition economies. These include the World Tr@de Net and Capacity building and networking for business information services (CAPNET/BIS). The effectiveness of these networks is a cause for concern due to the absence of national network leadership in participating countries.⁴

3. Top Model One World Market, 2000, Ecooperation, the Netherlands.

4. ITC/UNCTAD/WTO Annual report, 2000

Another initiative which is presently being launched and which may have a more direct bearing on the work of the Centre is the Sustainable Markets Intelligence Service (SMIS) being set up by the Latin American Centre for Competitiveness and Sustainable Development, Costa Rica.⁵ SMIS will provide information on market trends and opportunities to Latin American firms to allow them to orient their products and processes towards high value markets for environmentally and socially preferable products.

Other information systems with which links should be explored and established include the GreenBuss system of the Centre for Imports (CBI) in the Netherlands, and the Green Trade Net database of the GTZ Protrade programme for organic products.

Objective 2: Harmonise and co-evolve standards and regulations

It is clear that a dialogue between developed and developing countries on standard setting and regulations pertaining to sustainability criteria is essential. This dialogue needs to bring three sets of stakeholders to the table: *business representatives*, such as buyers/retailers in developed countries and suppliers in developing countries; *regulatory and standard setting authorities* in developed and developing countries; and *civil society* representatives from developing and developed countries.

The task is difficult and sensitive, but not insurmountable. It requires commitment from both developing and developed countries. Given that the focus of the Centre is on market realities and forging practical linkages, it may be best to undertake this in a phased manner starting with dialogues between retailers in the North and producers in the South, resulting in mutually agreed upon codes of conduct. Civil society representation from North and South would also be essential in this phase.

The results of this dialogue between business and civil society groups in the developing and developed countries, may then pave the way and feed into the consultation process and dialogue between regulatory authorities. Whether or not the centre should engage in these consultations is a question that would have to be considered at a later stage. It is important however that the initial activities be focused on the market actors -- businesses and civil society groups represented by NGOs.

Functions: required to achieve this objective include:

- ◆ articulating and voicing the concerns and difficulties of developing country producers in implementing existing environmental and social standards imposed by export markets. These concerns would need to be conveyed to those that are currently setting the standards and codes;
- ◆ working together with standard setters to ensure that these concerns are taken in to consideration;
- ◆ facilitating dialogues between different stakeholder groups through professional and well facilitated seminars and workshops, using methods such as the Open Space technique etc. These events may be organised on sectoral and geographical lines. They should bring together consumer groups, industry, buyers, financial institutions, governments, NGOs, researchers from the North and South. Preparation for such dialogues would involve an analysis of:
 - the implications of EU and other Northern requirements for Southern producers
 - the possibilities and ways forward for elaborating a mutually agreed upon code of conduct for particular sectors
 - the requirements for implementing such a code, including the tools and techniques for:

5. Creating the Sustainable Markets Intelligence Service, 2000, INCAE, Costa Rica

managing sustainable supply chains; implementing social accountability improvements; and applying eco-efficient solutions

There are no existing initiatives that are undertaking these activities in a dedicated and singular manner with entrepreneurs as the main target beneficiaries. However, the potential for collaborating with a number of agencies like the World Business Council for Sustainable Development and UNCTAD definitely exists and must be established. International NGOs such as the International Institute for Sustainable Development (IISD), Canada and the Fairtrade Labelling Organisation are other players that have important skills and networks. IISD, for example, is helping to increase the participation of developing countries in standard setting through collaboration with the International Standards Organisation (ISO). IISD is working with ISO to bring national standards bodies and NGOs together in Argentina, Chile, Columbia and Peru. However this does not necessarily ensure that enough developing country standards bodies get adequate representation in the ISO drafting process.

Objective 3: Build capacity of entrepreneurs and traders to innovate

Moving to sustainable patterns of production and trade requires investments of time, commitment and finance, and this means the development of new support mechanisms for producers and other agents. Experience has shown that it is the innovative businesses, those that have introduced changes in product design as well as in management practices, that have been able to seize the opportunity and increase their exports of sustainable products and made profits in the bargain. The challenge is to ensure that the experience of these market leaders is replicated on an industry wide basis. An initiative dedicated to the promotion of trade in sustainable products would be an ideal hub for building such capabilities in developing countries.

Functions required to achieve this objective include:

- ◆ assistance to producers in bringing about changes in production design, incorporating eco-design methods and systems.
- ◆ strengthening the capabilities of producers, on a sectoral basis, to undertake foresighting and visioning for the future. This would be aimed at responding to emerging global requirements for sustainability;
- ◆ capacity building programmes for conformance to norms and standards, on a technical as well as managerial scale;
- ◆ training on tools and techniques such as the Integrated Product Policy, life cycle analysis, Eco-Design etc. (on a sectoral basis)
- ◆ programmes aimed at strengthening the enforcement of local legislation relating to sustainability criteria;
- ◆ dissemination of success stories of developing country producers that have led the market in innovation and sustainable practices;
- ◆ championing market leaders from the South

It should be noted that for all three objectives, the functions listed above need to be further expanded and detailed by an in depth feasibility study that will follow on from this paper. The feasibility study will also specify the implementation mechanisms for these functions, many of which will need to be undertaken through producer and industry associations.

Essential Elements

Given the scope of the proposed initiative, the following emerge as the six essential areas of competence that a Centre dealing with these issues would require:

- ♦ expertise in practical trade promotion
- ♦ technical and managerial expertise in environmental, labour, and equity considerations of production and trade (sustainability expertise)
- ♦ expertise in stakeholder engagement and participation
- ♦ international coverage
- ♦ facilitation of dialogue on co-evolution of standards/codes
- ♦ capacity building and support for innovation

Existing Initiatives

A quick comparison of existing institutions undertaken during the scoping study revealed that there is no one initiative catering to the needs of producers and traders that combines the above-mentioned expertise and functions. This reinforces the need for launching a dedicated initiative for the promotion of trade in sustainable goods and services, building on current experience.

The following table summarises a few existing institutions working in this area.⁶

	Practical Trade Experience	Sustainability Expertise	Stakeholder representation	Geographical coverage	Co-evolution of standards/codes	Innovation & capacity building
ITC	Yes	Partial	Government Business	International	No	Yes
ICTSD	No	Yes	Civil Society	International	No	No
Ecooperation	Yes	Yes	Business Government Civil Society	Africa; Central America; Asia	Yes	Yes
FLO	Yes	Yes	Civil Society	International	Partial	Partial
ETI	No	Partial	Government Business Civil Society	International	No	No

ITC: International Trade Centre; ICTSD: International Centre for Trade and Sustainable Development; FLO: Fairtrade Labelling Organisation; ETI: Ethical Trade Initiative

Evidently there is no single institution with adequate ‘sustainability experience’ working towards the co-evolution of standards and capacity building for innovation, whose primary targets are market players in developing and developed countries. Consultations during the scoping study emphasised the need for a dedicated initiative that could at the same time draw upon expertise available within existing institutions.

Structure and Governance

The scoping study examined two options regarding the structure of the proposed Centre:

6. There are a number of initiatives like the Forestry Stewardship Council, Max Havelaar etc. that are not included in the above table, as their focus is more sectoral. However, important lessons can be learnt from them and will be included in the feasibility study.

- ♦ the first, to set up a new institution: this idea has generally not found favour with those consulted during the course of this study.
- ♦ the second, to set up an initiative managed by a partnership of existing organisations representing Southern and Northern stakeholders (primarily producers and civil society): consultations revealed general support for this option.

In either case, whether a new institution is set up or a partnership of existing organisations is forged, the Centre would require an independent governance structure.

The scoping study did not seek to define the governance structure (which will be the subject of a follow on feasibility study), but found that the membership should be drawn from committed individuals and institutions from Southern and Northern countries, with expertise in the following areas:

- ♦ market analysis
- ♦ trade promotion
- ♦ environmental aspects of production in various sectors
- ♦ innovation and technology
- ♦ labour and ethics
- ♦ legal issues, standards and policy
- ♦ project management

The feasibility study will also need to examine alternative forms of partnership (which will vary according to the status of the proposed venture and prevailing national laws), the location of the centre and its financial structure.

Although donor assistance will be required for funding the feasibility study and providing seed money for the launch itself, consultations during the scoping study underlined the need for the Centre to be a self-financing initiative with a scheme for membership fees on a sliding scale. The feasibility study will elaborate the detailed financial plans for the Centre.

Next Steps

The aim of the scoping study was to ascertain the need for setting up a sustainable trade centre. This need clearly exists – along with an underlying imperative of building trust and confidence between North and South on the critical integration of trade and sustainable development. A new Centre could be one tool in this wider confidence building exercise, with an explicit remit to increase the trade in sustainable goods and services from developing countries

Given this confirmation of the idea, the scoping study recommends the following four next steps, which will be developed by IIED and CSC into a full proposal:

1. Holding a professionally facilitated stakeholder consultation (using, for example, the Open Space technique) to discuss the results of the scoping study and the proposal for a feasibility study.
2. Undertaking a six-month, in-depth feasibility study to elaborate on and determine the Centre's:
 3. Strategy and mission
 4. Functions and activities
 5. Governance and structure
 6. Location and implementation mechanisms
 7. Business plan and financial arrangements
8. Establishing an Advisory Group for the feasibility study consisting of committed individuals from

relevant organisations, including: businesses and producers, or their associations from Southern and Northern countries, international business and trade associations, civil society groups and NGOs, multilateral organisations, donor agencies.⁷

9. Launching an action learning programme to draw together the experience from the range of pilot programmes already working in the arena, such as those being implemented by: CSC; TERI-Europe, UK; EPE; Regional Institute for Environmental Technology, Singapore; Ecooperation; IIED; and UNEP/UNCTAD.

7. It is essential that the Advisory Group include individuals that have expressed fears about the centre becoming an initiative that gives recognition to new standards that may impose an additional cost burden on developing countries

ANNEX 2

WILL THE EMPEROR WEAR CLOTHES FROM BANGLADESH IN 2005 ?

*Dean Spinanger c/o Institute of World Economics, 24100 Kiel, Germany
Jan Peter Wogart, 22587 Hamburg, Germany, December 2000*

1. Introduction and Overview

The crucial role of exports in supporting economic development has been widely discussed in both, the theoretical and empirical literature. However, after the financial crisis in East and Southeast Asia damaged the long term growth prospects for the dynamic economies of the region, the role export sector has played in raising the incomes and employment of an increasing number of those countries has been -if not forgotten - so at least barely considered. Nevertheless, several South Asian economies did realize, after having experimented with import substitution strategies for decades, that export growth and diversification was a must to start catching up with the Eastern neighbors. Among the countries in the region, the most dramatic case of that export drive has taken place in Bangladesh during the last two decades.

Bangladesh has truly put in a stellar performance in tapping its comparative advantages and exporting labor-intensive clothing products to Europe and America. (For earlier reviews see, Rhee, 1990, Spinanger, 1987). Compared with the top sixteen major exporters of clothing products in 1998 (see Table 1a) none has grown faster than Bangladesh since 1980, knowing that Bangladesh grew at an annual rate of over 70% in the '80s. And even since 1990 no major Asian exporter of clothing products has exhibited higher growth rates than Bangladesh (see Table 1b). While still modest as a share of world exports, the growth of those exports and their impact on the Bangladeshi economy have been significant.

The question now is, how can the Bangladesh ready-made garment (RMG) sector maintain its international competitiveness? This question needs to be answered all the more urgently, knowing that in less than five years time the Agreement on Textiles and Clothing (ATC) reintegrates all textile and clothing products into WTO most favored nation (MFN) principles. It does this by eliminating all quotas that have been applied by industrial countries (ICs) to their T&C imports from developing countries (DCs) ever since the Multifiber Arrangement (MFA) was instituted in 1974 (for an analysis of this process see Baughman et al, 1997). Realizing that the availability of quotas has played a crucial role in the distribution of demand for T&C products across developing countries, then Bangladesh has at least profited in the past from the fact that during its early development several determined Korean garment exporters provided the impetus for Bangladesh to engage in intensive garment production and exports and that more recently the EU it has not subjected Bangladeshi exports of garments to strict quotas it treated the more developed East Asian tigers.

But what will happen in the future when all T&C exporting countries will have access to IC markets without being subjected to quotas? Will Bangladesh then still be able to maintain its market share, which had been increased by 200% between 1990 and 1998, moving thereby from the 35th to the 16th rank among all clothing exporters ? In the case of the EU, Bangladesh actually increased its share in imports by over 300% in the 8 year period, with some EU countries revealing an import share more

than double Bangladesh's share in world exports.

The overall purpose of this study is to examine the conditions shaping the global demand for textile and clothing products from a given country or rather determining whether a country is a suitable investment location for the production of T&C products. The country is, of course, Bangladesh. In this context one objective of this study is to highlight trends in Bangladesh's RMG exports and examine the medium to longer term prospects of Bangladesh's export-oriented garment industries, and in particular the impact of the removal of the Multi-Fibre Agreement in 2004/5. This, of course, also includes a study of the effects of more intensive use of backward linkages within the industry, which became a hot topic in Bangladesh in connection with discussions with multilateral lending agencies. While that topic is dealt with in a cursory matter, given the extent of such research, possible areas for future investment are noted.

Since garment production has become the dominant subsector within the overall textile industry, the study concentrates on analyzing first and foremost its structure, past growth and current development, as well as future issues affecting that sector decisively. Such an analysis alone requires a detailed investigation of its competitiveness, both within the more recent worldwide developments in international trade and the overall national policy framework and infrastructure in which the sector operates.

In that context the paper also examines the features of the WTO framework shaping the trade in T&C products and what has happened since its implementation in 1995. Next it looks at trade flows in T&C products in the EU and the US to not only determine what the ATC has accomplished, but also to see how Bangladesh has fared. In section V it reviews what China's entry into the WTO might mean for Bangladesh as well as dealing with other issues might be hindering Bangladesh's competitiveness in world markets. It concludes with suggestions on strategies aimed to continue Bangladesh's success in selling clothing products to the world in light of changing playing fields.

2. Tracking the Textiles & Clothing Industry in Bangladesh

Growth and structure. Until the early 1980's, India and Sri Lanka were major Southasian suppliers of ready made garments to USA and Western Europe. After the onset of political problems in Sri Lanka and a consistent anti-export environment in India, Western buyers and Eastern producers became interested to try their luck in Bangladesh, which was able to respond quickly. Within less than 20 years the garment firms were established in and around the two major cities Dhaka and Chittagong. Their number grew steadily from 180 units in 1983 to around 2750 in 1998.

At present, the industry is responsible for earning 73 % of the country's gross foreign currency income, and is vitally important for the country. It employs 1.5 million people directly, and it is estimated that another 10 to 15 million benefit indirectly by the emergence of that industry. The industry is largely in domestic hands. More than 95 % of the garment factories are entirely owned by Bangladeshi companies or families. Output consists of garments from woven fabric, goods made from circular knitted fabrics and a growing production of sweaters made on hand operated flat bed machines.

There are about 15 companies/groups which are the major holders of quotas and are capable of producing in excess of 10,000 dozens of garments per month. These organizations have fabric-sourcing capabilities. Around 500 companies producing between 5,000 and 10,000 dozens per month work mainly for importers or agents and produce about half their work on a CM basis and half on FOB basis. Some 1500 units producing up to 5,000 dozens per month work mainly on a sub-contracting basis. The remaining 200 companies are classified as sick companies usually as a result of

financial problems.

Machinery and Equipment. There are around 400- 500,000 sewing machines in the industry, of which 70 % are used to produce exported garments. Large and medium sized companies with more than 200 machines each account for about 35 % of the equipment. Most of them are basic lockstitch sewing machines for the woven goods and 4/5 needle overlock machines for the knits. The majority of equipment is not much older than 3 to 4 years and in good working order. However, there is a general lack of technical sophistication. Only 10 to 15 CAD/CAM systems have been installed to date throughout the country. Wastage is high and capacity utilization of the sector is quite low. According to official data for the industry as a whole the equipment is only used for about 50% of the available working hours. However, capacity utilization within well-established medium sized and larger operations are around 70 to 80 %.

Workforce and Wages. The workforce is reliable and adaptable and responds well to training. Additionally, neither has there been any major labor unrest among the workforce, nor are there any problems with organized labor in this industrial sector. However, the level of technical skills throughout the sector is low and there is an urgent need for training facilities to be introduced. In fact, at present there are no effective training institutions in Bangladesh capable of imparting the skills at a high enough level. Generally there is a high rate of labor turnover (up to 12 % p. month) of un- and semiskilled workers, possibly linked to the lack of training and an effective incentive systems in most of the garment operations. The levels of absenteeism is very high (up to 30%) in the case of unskilled workers, but much lower among the skilled labor force

As a result of inadequate process and production methods, productivity and thus efficiency is still relatively low. Throughout the sector there is visible incidence of over-manning, illustrated by the fact that the average number of operatives per sewing machine is 2.5 to 3, compared to just over 1 in up-to-date factories. The inefficiencies are compensated by wage levels which have remained low in the past decade. Compared to the other main competing countries where garments are being produced, Bangladesh scores well. Its garment firms currently enjoy a 30 % to 40 % labor cost advantage over China, and they are 20 to 30 % lower than in India. However, that advantage can evaporate quickly in the course of rapid currency devaluations of these two countries, or by infrastructure or non-price factors which are not or cannot be matched by Bangladesh.

Diversity and Quality of Output. The major share of garment production is made up of T-shirts, polo shirts, sweaters, woven shirts, trousers and shorts, anoraks and parkas. Menswear is predominant. The bulk of the items produced by the RMG industry are destined for the low to lower-middle end of the market. These goods are bought on price and the consideration of quality is not a high priority. The products are thus in the same category as those produced by the main competitors such as India and China. While Bangladesh has concentrated only on that level and consequently is also importing low cost fabric, India and China are also in higher quality garments, which increases value added significantly

US and EU buyers have confirmed that quality levels have improved considerably in recent years,. Nevertheless, quality control systems are still weak. Stitching quality varies widely between companies. Some of the faults may be due to a lack of machine maintenance, since there is an acknowledged lack of good sewing machine mechanics. Most of the stitching is free-hand, but with suitable training and sewing aids the level of competence could be raised significantly. One international company reckoned that their workers in Bangladesh were on a par with operatives in their other Asian units.

Exports. The major contributing factor in the rapid expansion of Bangladesh garment exports have been the preferential treatment afforded by the EU under the GSP scheme, and the substantial quotas made available in the US market, coupled with impositions of quota restrictions by the MFA on its main competitors, mainly India and China. Exports grew from US\$ 0.9 bn in 1990–91 to US\$ 3.5 bn. in 1998. (see Table 1b) This represents a threefold increase, giving an average annual growth rate of 22 % over the last 8 years. As noted above Bangladesh is now one of the 16 largest exporters of garments worldwide.

An analysis of the export product range shows a some change over the past 8 years. Woven garments such as shirts, trousers and jackets still make up the major share of exports, but this has declined from 85 % in 1990-91 to around 66 % at present. Bangladesh is now becoming better known for its inexpensive knitwear and the export-oriented knitwear manufacturing sub-sector is growing at a much faster rate than the woven sub-sector. The share of knitwear in total garment exports have risen from 15 % in 1990-91 to 34 % today, and in export value from US\$ 131 mn in 1990-91 to US\$ 1.2 bn, a growth factor of 9 times. In particular, 1997-98 saw a rapid rise to US\$ 1.2 bn from US\$ 0.8 bn in the previous fiscal year.

EU imports from Bangladesh amounted to US\$ 1.8 bn during the period from July 1997 to June 1998. In the last 5 years, the value of Bangladesh's apparel exports to the EU have grown by 174 %, faster than total exports which grew by 141 %. The main reason for this rapid increase is basically due to the duty-free and quota-free access to this market, even though subject to rule of origin regulations. The US is Bangladesh's second largest export market for apparel, accounting for US\$ 1.5 bn, 43 % of the total garment export value. As a result of the quotas imposed on Bangladesh knitwear to the US, woven garment represent nearly 80 % of total garment exports to this market. Exports to the US have increased by 115 % during the last 5 years, but this is slower than the growth rate achieved in the EU.

The level of product diversification of Bangladesh's exports to the EU as its major market has remained rather limited. In fact, only five product categories (i.e. woven shirts/blouses, knitted shirts and T-shirts, sweaters, jackets and trousers) account for more than 85 % of the total EU garment import value from Bangladesh. The majority of garments sold to the US are made up of a limited number of standard items. Although exports to the US are slightly more diversified than the EU, the same five product categories accounts for more than 70 %.

Pricing and Profitability. A large majority of Bangladesh's garment exporters are only able to produce basic qualities for the low end of the market, achieving low to lowest average prices. In fact, data which are derived from value and volume figures show that average prices achieved in the EU market for major product categories are 40 % to nearly 70 % lower than the Chinese counterparts and (with the exception of sweaters), 30–75 % lower than Indian garments. The picture in the US market is similar, where Bangladesh merchandise is generally priced 30 % to 70 % priced below comparative average US import prices.

It has to be noticed, however, that these differences are most likely linked to the fact that quotas are volume limitations not value limits. Those countries, which find the quotas very limiting, have pushed exports of their higher valued products in order to maximize export value. These other countries are able to do this because their level of product sophistication is generally considerably higher, or the respective garment industries are able to offer a wider range of product qualities.

At present, Bangladesh is undoubtedly price competitive in the manufacture at the low end of the market. For similar qualities Bangladesh garments are generally 5 to 20 % cheaper compared to China and India, with the price difference versus China being the more significant. According to key

buyers in the US and the EU, there is a good to excellent relationship between quality and price. The main reason for this is the very low cost of labor despite the insufficient levels of efficiency.

In order to remain price competitive, the sector has in general been forced to reduce margins significantly in recent years, when increases in efficiency did not keep in line with relatively small devaluations and increases in wages. In fact, margins in the industry, particularly for smaller and medium sized companies, are on average just below 5 %, which will be insufficient for the average firm to survive in the medium term, even in a quota protected world scenario.

Issues of Import and Export Dependency. Most of the operations in the industry are totally production oriented, since the companies do not sell any finished products but merely offer manufacturing capacities, i.e. cutting and sewing. Buyers and suppliers negotiate a Cost of Manufacture (CM) price on top of the costs for fabrics and accessories, which are generally selected by the buyer. As is the case in several other developing countries, where garment exports also consist predominantly of CM transactions, and where marketing capabilities and methods are lacking to a large extent.

Apart from a limited number of dynamic organizations, the attitude of the majority of Bangladesh's garment exporters in terms of selling, marketing and promotion is largely passive. It is estimated that only 20 % to a maximum of 25 % of Bangladesh's garment exports are sold directly to retail groups and brand suppliers overseas, or to their respective buying organizations. Bangladesh's garment exporters are therefore highly dependent on intermediaries (agents and importers) whose major role consists of supervising and financing garment business transactions. The intermediaries generally impose prices, which are significantly lower compared to those resulting from direct business, so margins achieved by the respective garment manufacturers are largely insufficient.

Lead times for orders placed in Bangladesh amount to not less than 120 to 150 days from the date of order to the date of shipment from Chittagong, representing a major obstacle to the development of direct business. Such long lead times result from the fact that generally garment exporters have no fabrics in stock, as they produce on a CM basis. More than 90 % of woven fabrics and around 60% of knit fabrics have to be imported. Particularly in the area of wovens the local supply is extremely limited, not consistent in quality and not price competitive. In terms of accessories, local suppliers can satisfy the demand for pocketing material and in some cases for labels, threads and buttons, but there is an acute shortage of interlining material.

The Issue of Backward Linkage

Given the fact that Bangladesh and its predecessor East Bengal has a long tradition as a jute and textile producer, it is not surprising that both the traditional industrialists and the government have great interest to use the dynamic growth of the garment sector to re-invigorate the spinning and weaving sectors. The use of local fabric would undoubtedly represent a certain advantage compared to using imported fabrics. In fact, lead times could be reduced by 4 weeks. It would be illusory, however, to believe that the responsiveness of Bangladesh's garment sector could be dramatically improved based solely on the availability of local supplies. The lack of domestic supply sources is only one factor responsible for the low level of responsiveness achieved by Bangladesh's garment manufacturers. The sheer distance to major buyers compared to the exporters in Eastern Europe and Latin America as well as inadequate infrastructure facilities and bureaucratic obstacles are often reckoned by key buyers overseas as more crucial factors causing long delivery times and delays.

While Bangladesh has benefited in various ways from the quota system to build up and develop its garment sector, efforts to stimulate investments in the basic textile manufacturing of weaving and

spinning have been less than successful. Yarn and woven fabric manufacturers are still numerous and experienced, but the ver more capital intensive production methods have made it difficult to either raise the required financial resources at home or abroad. For the few modern integrated textile factories it was found in a recent study that spinning and weaving activities cannot currently compete in price and quality with imported materials for garment exports, requiring a subsidy to maintain a modest share in that line of business.

In addition, there is currently a worldwide oversupply of yarns and fabrics in the qualities similar to those used in Bangladesh. The lack of raw materials and the high costs of finance in Bangladesh put the spinners and weavers at a disadvantage with their competitors, and the incentives they get now may not be available to them after 2004. Thus backward linkages in these areas are not considered viable at present. It should be no surprise that there has been little incidence of foreign investors moving into Bangladesh as compared to other developing countries, in South and Southeast Asia as well as Latin America.

A more favorable climate prevails in the knitting and fabric processing sectors. Establishing such units has been profitable, and new investments could be considered viable where it not for a relatively short time span up to 2004. To achieve the best results improvements in technical know-how will need to be introduced alongside any investments in production equipment and services. There is a serious need for better qualified technical and managerial personnel. To train the skills will take time, particularly in the case of fabric processing staff. (For a detailed discussion of that issue, see UNCTAD et al. 1999)

While outside help will be crucial, it should be pointed out that the responsibility for solving weaknesses and inadequacies at the firm level lies within the private sector itself. The actions which might seem necessary should be applied therefore for a limited period only, since the problems affecting Bangladesh's textile industry will not be solved permanently unless the respective entrepreneurs take steps to invest in the development of human resource skills at all levels, and provide additional training for middle management in particular.

3. The WTO Framework for T&C Products

The Uruguay Round (UR) Agreement on Textiles and Clothing (ATC), which laid down the framework and the procedures to phase out the Multi-Fiber Arrangement (MFA) by the year 2005 (after being in existence nearly a third of a century), was initially billed as a major negotiating achievement. Nonetheless, it did not take long before skepticism crept into the evaluation, particularly after the first tranches of liberalized product categories – containing no relevant items under quota restrictions – were submitted to the WTO by the USA, the EU and Canada (see Baughman et al. 1997). Furthermore, given the past performance in connection with the ever-widening spectrum of protection applied in the course of the MFA, the ATC soon began to be viewed as way of faking liberalization and finagling protection for as long as possible.

For sure – with some hindsight – the loopholes permitting a frontloading of protection and a watering down of the ATC's effectiveness should have become apparent right from the beginning. But aside from this, various other distortions have arisen, affecting an efficient allocation of resources in a world economy, which was to have become less distorted as a result of the UR. This section will cover the relevant issues affecting the current implementation of the ATC before drawing conclusions on what all this means for Bangladesh.

The initial UR mandate to reach an agreement on trade in T&C products was worded in very general terms.⁸ The results of the negotiations were first considered to be quite an achievement. After all,

- ◆ the MFA is to be phased out in four tranches over a ten-year-period (1/1/95–31/12/2004);
- ◆ products not liberalized but under quota, elsewhere restrained or merely on the list of ATC products will have their growth rates increased during the faced-out period;
- ◆ each of the four types of textile products (i.e. tops/yarns, fabrics, made-ups and clothing) have to be included in each of the four liberalization tranches during the ten years;
- ◆ the liberalization process for all members is binding and final; that is, there is to be no postponement of the quota phase-out process beyond the year 2004

In the real world of protecting one's interests, the "modalities" to "permit the eventual integration" of T&C products into MFN treatment obviously allowed substantial leeway:

- ◆ While the amount of ATC products to be integrated was specified and declared to be binding, there was no stipulation that T&C products not under quota or other restraints would be more quickly reintegrated into MFN principles.⁹ Hence the number of ATC products (in essence 8, 10 or even 10+ digit HS tariff lines) put up for liberalization is larger than the number specified in the UR Agreement and considerably larger than the number covered by actual restraints in the EU, the USA and other ICs. Furthermore, nowhere in the ATC agreement is it stipulated that for those MFA products under quota but with only minimal quota utilization (i.e. quota redundancy) integration should be effected more quickly. Finally, the volume treatment of ATC products ensured that the economic value of the products liberalized is only loosely correlated with the actual amount liberalized.
- ◆ The agreed-upon increase in growth rates during the course of the liberalization period means very little if the actual growth rates are small.¹⁰ Knowing that the assigned growth rates for major suppliers are quite low, little can be expected from this stipulation.¹¹ Generally speaking, for most Asian countries growth rates below 5 per cent prevail.
- ◆ The fact that there is no agreed-upon, more than just minimal distribution of the four types of T&C products to be liberalized, aside from the statement that some amounts from each group must be included, leaves the door open for a most perverting development. All those sensitive products (to a large degree clothing) can be shifted to the final liberalization tranches, e.g. 31/12/04.

The consequences of the above does not bode well for the future of trade liberalization of those crucial sectors. The EU, the US and Canada putting themselves in a position where it will become exceptionally difficult to liberalize the final 49% as of 1/1/05 all at once. Looking at the current protection data, it seems that the original strategy of eliminating the MFA was based on the philosophy, "don't liberalize today what can be liberalized mañana".

After putting the figures of the T&C industry into a proper perspective it can easily be seen why it is almost a special case. Whereas the average unweighted pre-UR tariff rate (in the EU) is 5.7% for all manufactured products, the rate for textiles is 10.1% and for clothing 12.3%.¹² And a glance at the

8. For instance (WT 1994: 85): "negotiations ... shall aim to formulate modalities that would permit the eventual integration of this sector into GATT...".

9. 16% of the volume of imports in 1990 had to be integrated as of 1/1/95; 17% as of 1/1/98; 18% as of 1/1/2002 and 49% as of 1/1/2005.

10. As of 1/1/95 the permitted growth rates are to be increased by 16%; as of 1/1/98 they are to be increased by 25%; as of 1/1/02 they are to be increased by 27%.

11. For instance, in the case of Hong Kong 85% of the products under quota have growth rates of 3% or lower. In the case of China 55% are lower than 4%.

12. The structure for the US is assumed to be quite similar, except that the US tariff rates are on average higher.

distribution of the pre-UR tariff rates shows that about 80% of the textile tariffs are equal to or above 10%, and in the case of clothing 80% are equal to or above 13% (see Table 3).

And how have the exports of the T&C industry been faring over the years? Glancing back over time, and using as a basis of comparison the 13 largest T&C exporters in 1997, it can quickly be seen that, while the major textile exporters have roughly maintained their shares since the MFA went into effect in 1974, the clothing exporters exhibit sizable changes. This is further examined in Table 4 where it is revealed that textile exporters from industrial and developing countries (ICs and DCs) merely changed shares among themselves over the period 1973–1997. Clothing exporters, however, showed major shifts out of both the listed ICs and DCs¹³ since 1973. Thereby the ICs lost over 40% of their shares and the DCs were able to pick up almost 20%. But gaining the most in this 24 year time period were those countries not listed, in particular the DCs.

Table 5 provides some insights into what happened in the 4 years prior to the UR agreements and in the following years, as well as information on those countries not included in Tables 2 and 3. It would seem to be saying that ever since the ATC has been in effect those countries, which were not among the top 53 exporters of T&C products in 1997, were those which were able to increase their share in world markets. This is particularly the case in the area of clothing exports (it amounted to an increase in their share from 3.7% in 1994 to 6.6% in 1997; see Table 6).¹⁴

To summarize: For sure, the EU, like the US, generally wanted to keep out the most competitive T&C exporters as long as possible, particularly in the area of clothing. Since most of these happened to be located in Asia, these countries were accordingly affected with lower growth rates and lower degrees of liberalization. More specifically, the EU seems to have pacified its Mediterranean member countries and EU-Rim countries by not liberalizing products these countries export. Since such products tended to overlap with products from Asia, protection vis-à-vis these products was maintained.

4. T&C International Trade and the Role of Regional Trade Agreements

Aside from the WTO framework, another major factor has been massively influencing T&C trade flows. Specifically, with over 100 RTAs¹⁵ in force and reported to the WTO as of June, 1998, as well as numerous others in force, but not notified to the WTO (sanctioned by the enabling clause; WTO, 1998: 29), there is a wide spectrum for trade to be affected.¹⁶ Aside from establishing formal RTAs with neighboring (e.g. USA and Mexico in NAFTA), regionally (e.g. EU and EFTA), or even cross-continent affiliated countries (e.g. EU and Mediterranean Rim countries), there is another measure, which can basically achieve a similar impact on trade flows (i.e. making closer geographical locations cheaper), namely the introduction of offshore processing trade (OPT) legislation.¹⁷ By applying tariffs only on the value added to exported domestically produced intermediate inputs when they are

13. ICs cover all OECD countries as of 1/1/94, except Turkey; DCs are accordingly all other countries. 14. This is calculated from the difference between 100% and 96.3% (total shares of 53 clothing exporting countries in 1994), or rather 100% and 93.4% (total shares of 53 clothing exporting countries in 1997).

15. The term RTA is interpreted here as being synonymous with preferential trade agreements (PTAs) and free trade areas (FTAs).

16. For an overview of the impact of RTAs see Galal, Hoekman (1997: 1–9); for newer developments in the theory of and evidence on RTAs see Lawrence (1997: 13–34).

17. As compared with the potential trade-distorting aspects of RTAs, the impact of OPTs must be considered to be relatively neutral, as basically only in the area of natural trade barriers (e.g. transportation costs) do they impact on trade. While the OPT legislation of the EU and the USA do not restrict the countries in which OPT can be carried out, in the case of T&C products they do have to be brought into concordance with still prevailing MFA restrictions. And in this respect there is a certain degree of distortion into the measure.

reimported as a partial or complete final product, considerable cost savings can occur vis-à-vis direct importation. Obviously the savings is not the same as in the case of being able to import duty free within a FTA. However, there could well be scale economies or certain externalities which make the domestic production of essential intermediate inputs more efficient and thus could well inhibit a complete shifting of the respective production facilities abroad.¹⁸

As far as the EU is concerned, the prevailing OPT legislation dates back to 1994 and has been instrumental in shaping the flow of the EU's T&C trade flows.¹⁹ The impact of the OPT legislation as well as the existence of regional trade agreements within and around Europe would seem to be evident (Diagram 1). There can be no question as concerns the overall shifting of trade in the 90s away from Asian suppliers to those located on the European Rim (EURORIM), whereby the Eastern European countries (EURO-East) profited more than those on the Mediterranean Rim (EURO-Med). Given the recent lifting of all non-tariff restraints in the area of T&C products from EURO-East (as of 1/1/99) such trends can be expected to continue and could well even be strengthened by Asian producers, who have been showing more interest in investing in EURO-East countries. All these trends lead to a shifting of trade away from those countries, which could possibly be more productive. Another factor which will be positively influencing the EU importation of clothing products from these countries is the possibility to now use textile inputs from Turkey for OPT production in EURO-East countries. This should particularly affect those countries more easily accessible from Turkey and whose interfacing with the EU market has been less intensive than those countries directly to the east of the former "iron curtain".

In examining individual country developments, the dominant role of Germany in long since tapping the EURORIM potential to the east is just as evident as France's stress on the EURO-med countries, Italy's sudden and rapid shift to the RIM-east or the UK's – albeit shrinking – preference for Asian countries (the trends for the USA, Canada and Japan can be seen in Diagram 2). But perhaps most interesting are the developments which have been documented in Sweden. After 1990 Sweden exhibited not only a sharp drop in imports from the EU Mediterranean countries, but also a noticeable rise in imports from Asian countries, in particular those in East Asia. What lies behind this important to understand how the elimination of quotas in the framework of the ATC as well as the influence of RTAs might impact on general T&C trade flows as well as specific trade relations and opportunities of Bangladeshi exporters.

Sweden, as a member of the EFTA, was able to preferentially access EU countries and thus sourced an increasing amount of clothing products in Greece, Portugal and Spain through 1990 (Diagram 3).²⁰ Accordingly, the share of these three countries in Sweden's clothing imports rose rapidly over the course of the 80s.²¹ The dramatic shift after 1990 was primarily induced by a decision of the Swedish Government in 1991 to eliminate all non-tariff barriers on imports of T&C products. The more than 50% drop in the share of imports stemming from Greece, Portugal and Spain was accomplished within less than half the time that these countries needed in the 80's to double their share.

18. In the case of the textile industry one key point in the above connection could be the productive ties which exist between the industry and the textile machine producers. It has been shown that such close ties have been instrumental in producing machinery which is not only a "tick" better than competitors, but also more suited to the specific demands of the textile industry. This can be assumed to apply to the spinning, weaving and knitting sectors, as well as to the finishing sector. It is the latter, after all, which produces the all-important final quality touch to textile products and ensures that a sizable portion of the value added remains in domestic markets.

19. 17. EU regulation number 3036/94; it replaced No. 636/82.²⁰ Readers should note that Diagram 3 is based on a different total than the one used in Diagram 1. The total in Diagram 3 is equal to Sweden's Non-OECD imports plus imports from Portugal, Greece and Spain, whereas the total in the other diagrams is total imports from all sources. This was done in order to more clearly portray what had digressed.

21. The flip side of these developments can be seen in the rapid increase in Swedish textile exports to Greece, Portugal and Spain, approaching almost 40% towards the end of the 80s.

The winner were the East Asian countries in general and China in particular. They upped their share by 30% within just three years to the 50% level they had held some 10 years earlier. However, this surge was brought to a quick stop when Sweden joined the "protectionist" EU in 1995. Since then the East-Asian countries experienced a relative decline similar to the trend prior to 1991.

As in the case of other EU countries, Sweden also began to source more clothes in Euro-East as of 1990. This trend was to increase as various OPT operations were rapidly implemented or expanded. This can easily be seen in the diagram of Swedish textile exports where Euro-East had captured almost 70% of the market by 1998 – an increase of some 200% vis-à-vis just 10 years early. At the same time that Sweden joined the EU, the share of clothing imports from Euro-Med countries also began to noticeably increase, so that clothing imports from EURORIM countries now account for over 25% of the total clothing imports (as specified in Diagram 3), likewise an increase of some 200% from 8 years earlier.

The evidence presented above on the massive shift out of preferential imports (in this case from Greece, Portugal and Spain) to more efficient clothing producing countries (basically China) when quotas were unilaterally removed, can be backed up by similar evidence by the Canadian policies in 1997/98, which unilaterally removed quotas on several clothing articles, (shirts, blouses, etc). Examining the trends in Canada's importation of men's and boys' woven shirts,²² it can be shown that while the value of imports from the four major non-OECD suppliers in 1996 (i.e. India, Hong Kong, South Korea and Bangladesh) had **decreased by 25%** through 1998, the value of imports from China had **increased by 140%**. To put it another way: whereas Canadian imports from China originally amounted to 27% of the above four countries in 1996, they amounted to almost 90% in 1998.²³ This trend continued into 1999, as imports of the above products in the first three months from China (vis-à-vis the respective period in 1998) increased by 38% but those from the above four major suppliers decreased by 3%.²⁴

The above examples from the EU and Canada would seem to be conveying a rather clear message. The quota system established under the MFA and now being eliminated by the ATC has generated a structure of exporting countries which has little to do with comparative advantages and much to do with market sharing based on the availability of quotas. And if the above shifts in trends are indeed indicative of developments which will be forthcoming under a MFN regime without quotas as of 1/1/05, then some major lower cost suppliers today (including Bangladesh) will be losing out to countries like China. As can be seen in Diagram 2 the US has been profiting from importing clothing products from its southern neighbors roughly as long as Germany did (Diagram 1), when it began stressing trade with countries east of the former "Iron Curtain".²⁵ In both cases it was initially the existence of OPT legislation which was later enhanced by RTAs. In the case of the US it was, of course, the creation of NAFTA in 1994 which caused US imports from south of the border to very rapidly surge: Mexico's share in US clothing imports increased by over 200% in the period 1993–

22. This category consists of the following 4 HS categories by type of material: 620510 (wool/hair), 620520 (cotton), 620530 (man-made fibers) and 620590 (nes).

23. In terms of shares in total imports this corresponds to a change from 12% to 26% for China and 43% to 30% for the 4 big-four suppliers.

24. It is perhaps interesting to note that among these four major suppliers imports from Hong Kong and Bangladesh decreased the most (-19% and -16% respectively), those from India actually increased by 16%.

25. It should be noted that there is a major difference in accounting for OPT trade in official trade statistics. Whereas in the case of Germany (or the EU) the textile exports to be turned in clothing products abroad are included under textiles (SITC 65), in the case of the USA these exports must be classified under clothing (SITC 84). This of course heavily distorts the US clothing export statistics which are accordingly mainly directed towards Latin America. No attempt was made in this paper to adjust for these differences.

1998.²⁶ To a large degree this increase – including the growth in imports from the rest of Latin America – is reflected in the decrease in imports from E-Asia.

To what extent this trade shift can be considered to be a diversion away from more efficient sources is an open question. One reason for this is that demand parameters have changed in recent years so that time constraints play a far more crucial role in determining where and how production should be located or rather structured. The crucial question for the economist to determine whether general welfare has increased after all trade restrictions were removed. Would not seem difficult to answer. However in the political world of second bests, the examples cited above only show too clearly that there will be a number of losers.²⁷

As can be seen in the diagrams, imports of clothing from South Asia (with other Asian countries) increased its share across major EU countries, the USA and Canada, but not Japan. While in the case of the EU and Canada shares have leveled off in recent years, in the USA the share is increasing, seemingly at the expense of South East Asia. For Bangladesh, the data reveal that across four of the five EU countries and the US imports of clothing products have increased noticeably since 1990 (Diagram 4).

However, in the above mentioned case of Sweden's and Canada's quota eliminations in 1991 and 1998, Bangladesh's exports were negatively affected. While its share since Sweden's reimposition of ATC quotas in 1995 has increased remarkably, from roughly 1% to almost 5%, it may well be foreshadowing something which might be quite negative after all quotas are removed by 1/1/2005: Is Bangladesh only gaining shares because it has special quota-free access to the EU? And will demand shift away from Bangladesh once all other developing countries are also no longer subject to quotas?

5. Bangladesh's Competitive Position and WTO China's Entry

At that point in time when Bangladesh was just beginning to make itself known in world T&C markets – it had already been hit by restraints in the EU (the United Kingdom and France requested them) and by the US (it tried to more tightly restrict quotas) Earlier it was pointed out that Bangladesh could well profit from the trade obstacles they were encountering by overcoming the challenge through audacious action (Spinanger, 1987: 84): “If the entrepreneurial spirit, so vividly revealed in the brief history of the export of clothing from Bangladesh, remains vigorous, one can hope that the country’s entrepreneurs will learn, as those of Hong Kong, the Republic of Korea and Taiwan learned before them. These obstacles can, indeed, prove to be Schumpeterian medicine for entrepreneurs.”

There can be no doubt that they have learned some of the lessons well, otherwise they would not have fared so well over the past 15 years. But quotas helped them. In recent years, with relatively high quota utilization rates in important Asian T&C exporting countries, buyers were constantly looking for locations where quotas were available. And thus Bangladesh profited greatly, particularly from the more lenient treatment by the EU. However, there are the indications cited above that when quotas are eliminated, Bangladesh may be neglected, and production will shift even further to

26. Mexico’s rank among clothing exporting countries increased from #34 in 1990 to #8 in 1997 (see Table 5) – an increase within 7 years that is probably second to none.

27. At stake here are not only issues involving the impact of RTAs, but also the ramifications of industrial upgrading “to improve the position of firms or nations in international trade networks. Participation in global commodity chains is a necessary step for industrial upgrading because it puts firms and economies on potentially dynamic learning curves....The microfoundations of this upgrading pattern involve both forward... and backward...linkages from production...” (Ge reffi 1999: 39).

locations like China.

As revealed in the case of Sweden, when it eliminated all quotas on T&C products in 1991, a massive shift took place towards China, whereas countries in Southeast Asia and South Asia hardly profited. And even when quotas were re-imposed in 1995, the shift away from East Asia was quite moderate. As also revealed a few years ago when Canada unilaterally removed quotas on shirts/blouses, there was again a massive shift towards China and particularly a large shift away from Bangladesh.

Is this what is going to happen when quotas are now longer a necessary condition to export to IC markets (i.e. as of Jan. 1, 2005) and China has become a member of the WTO, enjoying thereby all the MFN benefits? Will companies actually shift activities into China or expand already existing operations in the PRC, thereby neglecting Bangladesh and other countries in Southeast Asia? Should such a redirection of demand towards China actually evolve, then Bangladesh must get its show on the road quickly.

But what are the essential steps for Bangladesh to take in order to ensure that it does not miss the boat when quotas no longer are a factor in determining where buyers purchase T&C products and/or where investors establish production facilities? To find this out a survey was carried out among 14 major T&C producers/traders in Hongkong, with activities throughout Asia and around the world, to estimate the relative importance of factors determining where they would buy clothes or invest. Respondents gave an answer of "10" if it was totally important and "1" if it was totally unimportant.

The total results of the Survey are presented in Diagram 5 . They clearly portray a world which fits well into the picture of how the MFA works and what makes countries competitive. The information provided in Diagram 12 plots the average score given to each question (on the vertical axis) against the coefficient of variation (on the horizontal axis). The resulting downward sloping pattern portrays those questions with but little variation in answering (low coefficient of variation) but high average values on the upper left and those answers with high variation, but lower average values on the bottom right.

Let us focus on the questions which received the highest values and had the lowest degree of variance. These are the issues which must be interpreted as being the essential factors shaping investment and sourcing decisions. The other factors, while also relevant, may be influenced by more subjective issues or rather more differentiated by type of operations.

- ◆ In a world in which quota's are essential to export T&C products to ICs, it is of course the availability of quotas (question 1) which is deemed the most important factor. In this context Bangladesh has an advantage, since it currently does not need quota for the EU, after it had benefited earlier from East Asian investment looking for export outlets.
- ◆ Business considered "politics and stability in the host country" as the second most important issue for investment and trade. This requirement has been shown to be crucial in numerous other studies, and in essence is not restricted to the T&C industry.
- ◆ Two further issues are significant, both in the high ranking and the close agreement of the respondents. They can be characterized as the need for a solid infrastructure and somewhat less important but still crucial, quantity and quality of labor.
- ◆ In the case of infrastructure, the major factor (question 3) determining operations in a country was the availability of good quality transportation. For sure in the ever faster moving fashion industry, where just-in-time operations, with quick turnarounds are essential, countries without such facilities are going to be left out ever more in the future.
- ◆ Close up was the fourth factor – quality of telecom infrastructure in the host country (question 4) – which complements the transportation infrastructure, and is generally mentioned in other

surveys of factors essential for attracting foreign investments.

- ◆ The next of the more important key factors deal with policies affecting trade and investment (question 5). In essence this could be conceived as those policies which are conform with liberal WTO rules and keep the economy open. That Bangladesh has much to do here can be easily seen in Table 7 where list measures affecting the importation of products or otherwise making it difficult to do business as a foreigner. While Bangladesh was better than India and Pakistan, it still was notably more distorted than faster growing countries.
- ◆ Labor costs (question 6) – is of course crucial in the in the case of such a labor intensive industry such as clothing. However, the fact that it is not mentioned earlier points to the fact underlined by numerous interviewees, that in many cases higher labor costs can be compensated by other factors.
- ◆ The final of the top seven factors – education and training of workers – was noted as something becoming more important over time. And given the ever tighter delivery times, it will be even more important in the future.

Once the quotas on T&C products are eliminated by the end of the year 2004, the other 6 of the above 7 factors can be said to incorporate all those essential ingredients which need to be in place if a country is to remain competitive in the T&C industry. While in one case or another the other 11 factors may well be crucial, most of the interviewees created the impression that they would be content if the above 6 were fulfilled. What does all this mean for Bangladesh?

6. Conclusions

Assuming that the political situation in Bangladesh does not differ from other competing countries, then the infrastructure issue – both for transportation as well as for telecommunications – must be rapidly improved. There was hardly an interviewee who did not note how important turnaround times were and how much more important they will be in the future. In particular the regional trade agreements in the Americas and Europe give those countries close to the USA and the EU locational advantages which Bangladesh cannot beat. Hence, it must do everything to ensure that getting in and out of the country and connecting up with the country is as easy as elsewhere. Particularly as concerns telecommunications must facilities be available that keep the T&C industry on par with its competitors or even ahead of them. After all, the era of e@commerce is rapidly engulfing the T&C sector and if Bangladesh cannot introduce all the standards, it will be avoided all the more.

While of course the training of workers and management is important, this is an issue which will take longer than just a few years. Of more importance is to insure that all those measures which hinder access, trade, investment and business – for instance in line with those listed in Table 7 – are eliminated. It was namely such measures which were mentioned by numerous interviewees in explaining why they had not invested in Bangladesh or rather had not sourced from the country. As can be seen from the table Bangladesh does indeed rank among those countries with the widest array of import barriers.

To conclude, while Bangladesh has profited from the existence of quotas, their removal will put the country to the test as to whether the T&C industry can undo an image which will hurt it. Whereas price was important in the past – and here too Bangladesh profited – in the future clothes need to be produced just in time and almost on a much shorter fashion season than now exists. If Bangladesh does succeed in clarifying the above issues, there is a good chance that the such clothes could also be produced there. If not, the rapid growth rates that Bangladesh exhibited in world trade will be a thing of the past.

References

- American Textile Manufacturers Institute (2000). Promises Unkept: A Report on Market Access for U.S. Textile and Apparel Products Five Years into the World Trade Organization. Washington, D.C.
- Baughman, Laura, Rolf Mirus, Morris Morkre and Dean Spinanger (1997). Of Tyre Cords, Ties and Tents: Windowdressing in the ATC?. *The World Economy* 20 (4): 407–434.
- Galal, Ahmed and Bernard Hoekman (1997). Overview. In: Ahmed Galal and Bernard Hoekman (eds.), *Regional Partners in Global Markets: Limits and Possibilities of the Euro-Med Agreements*. CEPR/ECES, London, pp. 1–9.
- Gereffi, Gary (1999). International Trade and Industrial Upgrading in the Apparel Commodity Chain. *Journal of International Economics* 48: 37–70.
- Lawrence, Robert Z. (1997). Preferential Trading Arrangements: The Traditional and the New. In: Ahmed Galal and Bernard Hoekman (eds.), *Regional Partners in Global Markets: Limits and Possibilities of the Euro-Med Agreements*. CEPR/ECES, London, pp. 13–34.
- Martelli Associates (2000). Bangladesh: Textile Sector Study (Study Commissioned by IFC Washington)
- Morawetz, David (1981). Why the Emperor's New Clothes are not made in Colombia. Oxford University Press for World Bank
- OECD Commodity Trade Statistics (CD-ROM)
- Rhee, Yung Whee (1990). The Catalyst Model of Development: Lessons from Bangladesh's Success with Garment Exports. *World Development* 18(2): 333–346
- Riedel, James (1974). *The Industrialization of Hongkong*. Tuebingen: Mohr.
- Spinanger, Dean (1987). Will the Multi-fibre Arrangement Keep Bangladesh Humble. *The World Economy* 10 (1): 75–84.
- Spinanger, Dean (1999). Textiles Beyond the MFA Phase-Out. *The World Economy* 22 (4): 455–476.
- World Bank (1999) Project Appraisal on a Proposed Credit to Bangladesh for an Export Diversification Project. Report No. 19250-BD, Washington D.C.
- WTO (1994). *The Results of the Uruguay Round of Multilateral Trade Negotiations*. Geneva.
- WTO (1995). *EU Trade Policy Review 1*. Geneva.
- WTO (1998). *Annual Report*. Vol. 1 and 2. Geneva.
- WTO (1999). *Annual Report 1999*. Geneva.

**Table 1a — Textile^a/Clothing^b Exports of Selected ICs/DCs: 1965–98 (Shares/
Rankings^c/Growth Rates^e)**

Source: Own calculations based on UNCTAD tabulations and WTO, Annual Report 1999 (1999: Tab. IV.73 and IV.81)

	1965	1973	1983	1990	1998	Growth rates ^f			
						1965-73	1973-83	1983-90	1990-98
Textiles and Clothing									
China	3.4 (11)	3.0 (12)	5.9 (6)	7.9 (3)	13.0 (1)	13.8	18.5	17.7	12.4
Italy	10.3 (2)	8.5 (2)	9.5 (1)	10.0 (2)	8.4 (2)	13.0	11.9	13.6	3.4
Germany	8.5 (5)	11.9 (1)	8.6 (2)	10.3 (1)	6.3 (3)	20.8	7.2	15.6	-0.6
USA	6.8 (7)	4.5 (9)	3.5 (10)	3.6 (9)	5.5 (4)	10.1	7.9	12.9	11.4
Korea, Rep. of	0.5 (23)	3.6 (11)	6.7 (3)	6.5 (4)	4.8 (5)	49.7	17.8	12.5	1.7
Taiwan	0.6 (21)	3.8 (10)	5.2 (7)	4.7 (7)	4.3 (6)	44.8	14.2	11.3	4.3
France	9.3 (3)	8.2 (4)	4.7 (8)	5.0 (6)	4.0 (7)	13.9	4.7	13.8	2.7
Belgium/Lux.	7.2 (6)	6.8 (5)	3.8 (9)	3.9 (8)	3.5 (8)	15.0	4.6	13.1	4.1
Hong Kong	4.3 (10)	5.5 (7)	6.1 (5)	5.4 (5)	3.3 (9)	19.4	11.9	10.6	-0.4
Turkey	0.0 (39)	0.5 (30)	1.6 (15)	2.2 (14)	3.2 (10)	55.4	25.8	18.0	10.5
United Kingdom	8.8 (4)	5.7 (6)	3.5 (11)	3.5 (10)	3.1 (11)	9.6	5.4	12.8	4.3
India	5.7 (8)	2.4 (13)	1.5 (17)	2.2 (15)	3.0 (12)	3.7	5.7	19.3	10.0
Mexico	0.3 (28)	0.7 (26)	0.3 (34)	0.6 (26)	2.6 (13)	31.9	2.5	23.1	26.7
Netherlands	5.3 (9)	5.1 (8)	2.6 (12)	2.4 (12)	2.1 (14)	15.2	3.4	11.6	4.0
Japan	13.7 (1)	8.4 (3)	6.5 (4)	3.0 (11)	1.9 (15)	8.9	7.9	1.0	-0.1
Pakistan	1.5 (14)	1.4 (17)	1.7 (14)	1.7 (17)	1.9 (16)	15.0	12.8	13.3	6.6
Totalg	86.2	80.0	71.7	72.9	70.9	14.7	9.5	13.1	5.3
Worldh	10.30	33.27	91.95	213.41	330.59	15.8	10.7	12.8	5.6
Textiles									
Germany	8.6 (4)	13.7 (1)	10.6 (1)	13.4 (1)	8.8 (1)	20.9	5.9	14.7	-0.7
Italy	8.2 (5)	6.9 (5)	8.3 (3)	9.0 (2)	8.6 (2)	11.6	10.6	12.4	4.0
China	3.9 (10)	3.4 (9)	5.5 (4)	6.9 (3)	8.5 (3)	12.2	14.0	14.5	7.4
Korea, Rep. of	0.3 (23)	2.0 (16)	4.8 (7)	5.8 (6)	7.5 (4)	42.1	18.7	14.1	8.0
Taiwan	0.6 (20)	2.5 (12)	3.6 (10)	5.8 (5)	7.3 (5)	36.7	12.4	19.1	7.6
USA	6.8 (8)	5.5 (8)	4.7 (8)	4.8 (9)	6.1 (6)	11.1	6.8	11.5	7.8
France	9.2 (3)	7.6 (3)	5.1 (6)	5.8 (7)	5.0 (7)	11.3	4.4	12.9	2.8
Belgium/Lux.	7.6 (6)	7.6 (4)	5.5 (5)	6.1 (4)	5.0 (8)	14.0	5.2	12.5	2.0
Japan	14.5 (1)	11.0 (2)	10.5 (2)	5.6 (8)	4.0 (9)	10.1	8.2	1.4	0.2
India	7.4 (7)	3.1 (10)	1.4 (17)	2.1 (14)	3.8 (10)	2.3	0.2	17.4	12.7
United Kingdom	9.9 (2)	6.5 (6)	3.7 (9)	4.2 (10)	3.6 (11)	8.2	2.7	12.8	2.7
Pakistan	1.9 (12)	2.0 (15)	2.6 (13)	2.5 (12)	2.9 (12)	14.6	11.5	10.6	6.2
Netherlands	5.9 (9)	5.9 (7)	3.4 (11)	2.8 (11)	2.7 (13)	13.8	2.8	8.0	4.3
Turkey	0.1 (36)	0.4 (28)	1.7 (16)	1.4 (18)	2.4 (14)	47.7	24.2	7.8	11.9
Mexico	0.3 (25)	0.6 (27)	0.2 (37)	0.7 (23)	1.3 (17)	23.7	-1.9	30.9	14.0
Hong Kong	1.8 (13)	2.0 (13)	1.9 (14)	2.1 (15)	0.9 (23)	15.6	7.9	12.3	-5.4
Totalg	87.0	80.7	73.5	79.0	78.4	12.9	7.6	12.1	4.5
Worldh	7.77	22.12	50.65	105.04	150.95	14.0	8.6	11.0	4.6
Clothing									
China	2.0 (12)	2.1 (13)	6.3 (5)	8.9 (2)	16.7 (1)	21.1	27.1	20.6	15.2
Italy	16.8 (1)	11.7 (2)	11.0 (2)	10.9 (1)	8.2 (2)	15.0	13.3	14.7	2.8
Hong Kong	12.0 (2)	12.4 (1)	11.3 (1)	8.6 (3)	5.4 (3)	20.9	13.0	10.3	0.5
USA	6.8 (6)	2.6 (12)	2.1 (9)	2.4 (12)	4.9 (4)	6.5	11.9	16.5	16.7
Germany	8.1 (5)	8.2 (4)	6.2 (6)	7.3 (4)	4.3 (5)	20.4	10.9	17.5	-0.3
Turkey	0.0 (47)	0.5 (31)	1.6 (15)	3.1 (9)	3.9 (6)	115.9	28.5	26.4	9.8
Mexico	0.1 (30)	1.0 (24)	0.5 (31)	0.5 (34)	3.7 (7)	63.7	6.2	17.1	35.3
France	9.6 (4)	9.3 (3)	4.2 (7)	4.3 (6)	3.2 (8)	19.9	5.3	15.1	2.6
United Kingdom	5.5 (8)	3.9 (8)	3.2 (8)	2.8 (10)	2.7 (9)	15.5	11.5	12.8	6.2
Korea, Rep. of	0.8 (17)	6.7 (5)	9.0 (3)	7.3 (5)	2.6 (10)	56.6	17.3	11.4	-6.4
India	0.5 (22)	0.9 (25)	1.6 (13)	2.3 (13)	2.4 (11)	29.7	20.8	21.1	7.1
Belgium/Lux.	5.8 (7)	5.1 (7)	1.8 (10)	1.8 (15)	2.3 (12)	18.5	2.6	15.2	9.2
Taiwan	0.8 (18)	6.4 (6)	7.2 (4)	3.7 (7)	1.8 (15)	56.4	15.5	4.2	-2.8
Netherlands	3.5 (9)	3.7 (9)	1.6 (12)	2.0 (14)	1.6 (17)	40.6	5.1	18.4	3.5
Pakistan	0.1 (32)	0.2 (39)	0.6 (26)	0.9 (23)	1.0 (26)	31.8	29.6	23.8	7.7
Japan	11.3 (3)	3.3 (10)	1.6 (14)	0.5 (34)	0.2 (49)	3.2	6.0	-2.1	-4.0
Totalg	83.7	78.0	69.8	67.3	64.9	19.3	12.7	14.2	6.0
Worldh	2.53	11.15	41.30	108.37	179.64	20.4	14.0	14.8	6.5

aSITC 65, Rev. 2. – bSITC 84, Rev. 2. – cAverage annual growth rate (%) – dShare of world trade. – eRanking based on values in 1998; covering all available textile and clothing exporting countries; country selection for the table dictated by top 16 countries exporting T&C products in 1998; ranking in given year in (). – fBold typed numbers designate an above world average growth rate. – gSum of shares of listed countries. – hIn bill. US\$.

Table 1b — Textile^a/Clothing^b Exports of Asian Countries 1990–98 (Shares^c/Rankings^d/Growth Rates^e)

Source: Own calculations based on UNCTAD tabulations and WTO, Annual Report 1999 (1999: Tab. IV.73 and IV.81)

	1990		1994		1998		Growth rates ^f		
							1990-94	1994-98	1990-98
Textiles and Clothing									
China	7.91	(3)	13.13	(1)	12.97	(1)	20.46	4.79	12.35
Korea Rep.	6.54	(4)	6.04	(4)	4.82	(5)	4.03	-0.64	1.67
Taiwan	4.74	(7)	5.06	(5)	4.29	(6)	7.89	0.87	4.32
Hong Kong	5.36	(5)	4.21	(7)	3.34	(9)	-0.08	-0.77	-0.42
India	2.21	(15)	2.78	(11)	3.04	(12)	12.45	7.51	9.95
Japan	3.01	(11)	2.72	(12)	1.93	(15)	3.46	-3.52	-0.09
Pakistan	1.72	(17)	2.06	(16)	1.86	(16)	10.91	2.51	6.62
Thailand	1.75	(16)	2.27	(14)	1.62	(17)	13.23	-3.38	4.59
Indonesia	1.35	(20)	2.11	(15)	1.51	(19)	18.56	-3.29	7.08
Malaysia	0.78	(24)	1.07	(20)	1.03	(22)	15.02	4.03	9.39
<i>Bangladesh</i>	<i>0.42</i>	<i>(38)</i>	<i>0.67</i>	<i>(29)</i>	<i>1.03</i>	<i>(23)</i>	<i>19.57</i>	<i>16.84</i>	<i>18.20</i>
Philippines	0.87	(23)	0.89	(24)	0.81	(27)	6.56	2.88	4.70
Sri Lanka	0.31	(43)	0.59	(32)	0.77	(29)	24.77	12.10	18.27
Macau	0.58	(27)	0.50	(34)	0.55	(35)	2.25	7.45	4.82
Mauritius	0.30	(44)	0.29	(45)	0.27	(44)	5.58	2.96	4.26
Singapore	0.53	(30)	0.34	(41)	0.19	(51)	-5.01	-8.98	-7.01
Total ^g	38.39		44.75		40.03		10.27	2.24	6.18
World^h	213.41		270.65		330.59		5.12	5.13	5.62
Textiles									
China	6.87	(3)	9.07	(2)	8.49	(3)	13.11	2.05	7.44
Korea Rep.	5.78	(6)	8.21	(4)	7.47	(4)	15.18	1.34	8.04
Taiwan	5.83	(5)	7.88	(5)	7.30	(5)	13.75	1.80	7.61
Japan	5.58	(8)	5.21	(7)	3.96	(9)	3.72	-3.13	0.24
India	2.08	(14)	2.94	(12)	3.76	(10)	15.12	10.36	12.72
Pakistan	2.54	(12)	3.06	(11)	2.85	(12)	10.60	1.93	6.18
Indonesia	1.18	(20)	1.92	(14)	1.56	(16)	19.11	-1.42	8.36
Thailand	0.88	(21)	1.26	(20)	1.20	(21)	15.42	2.30	8.66
Hong Kong	2.07	(15)	1.49	(18)	0.92	(23)	-2.70	-8.07	-5.42
Malaysia	0.33	(30)	0.64	(25)	0.73	(26)	24.76	7.14	15.62
<i>Bangladesh</i>	<i>0.29</i>	<i>(31)</i>	<i>0.28</i>	<i>(34)</i>	<i>0.33</i>	<i>(33)</i>	<i>4.38</i>	<i>8.41</i>	<i>6.37</i>
Philippines	0.13	(48)	0.17	(42)	0.16	(44)	13.62	2.62	7.98
Sri Lanka	0.02	(56)	0.10	(54)	0.16	(45)	51.87	15.66	32.53
Singapore	0.13	(44)	0.19	(41)	0.14	(46)	15.16	-4.77	4.73
Macau	0.13	(45)	0.12	(47)	0.12	(49)	3.98	2.43	3.20
Mauritius	0.01	(58)	0.04	(58)	0.00	(60)	44.97	-41.99	-8.30
Total ^g	33.85		42.58		39.14		11.75	1.59	6.55
World^h	105.04		130.24		150.95		5.52	3.76	4.64
Clothing									
China	8.92	(2)	16.90	(1)	16.73	(1)	25.18	6.08	15.24
Hong Kong	8.55	(3)	6.74	(3)	5.38	(3)	0.50	0.55	0.53
Korea Rep.	7.27	(5)	4.03	(5)	2.59	(10)	-7.97	-4.76	-6.38
India	2.33	(13)	2.64	(11)	2.44	(11)	9.98	4.30	7.10
Thailand	2.60	(11)	3.21	(9)	1.98	(13)	12.47	-5.73	2.97
Taiwan	3.68	(7)	2.45	(12)	1.76	(15)	-3.59	-2.06	-2.83
<i>Bangladesh</i>	<i>0.54</i>	<i>(35)</i>	<i>1.04</i>	<i>(26)</i>	<i>1.61</i>	<i>(16)</i>	<i>25.62</i>	<i>18.68</i>	<i>22.10</i>
Indonesia	1.52	(18)	2.28	(14)	1.46	(18)	18.14	-4.83	6.03
Philippines	1.60	(16)	1.56	(16)	1.36	(20)	5.97	2.90	4.42
Malaysia	1.21	(19)	1.47	(18)	1.28	(22)	12.02	2.70	7.26
Sri Lanka	0.59	(31)	1.05	(25)	1.28	(23)	23.29	11.77	17.39
Pakistan	0.94	(23)	1.12	(23)	1.02	(26)	11.69	3.91	7.73
Macau	1.03	(22)	0.86	(27)	0.91	(31)	2.03	8.07	5.00
Mauritius	0.57	(32)	0.52	(35)	0.49	(35)	4.25	4.60	4.42
Singapore	0.92	(24)	0.48	(37)	0.24	(48)	-9.18	-10.68	-9.93
Japan	0.52	(36)	0.41	(42)	0.23	(49)	0.70	-8.50	-4.01
Total ^g	42.79		46.76		40.77		9.09	2.77	5.88
World^h	108.37		140.41		179.64		6.69	6.35	6.52

^aSITC 65, Rev. 2. – ^bSITC 84, Rev. 2. – ^cAverage annual growth rate (%) cShare of world trade. – ^dRanking based on values in 1998; covering all available Asian textile and clothing exporting countries; country selection for the table dictated by top 16 countries exporting T&C products in 1998; ranking in given year in (). – ^eAverage annual growth rate. – ^fBold typed numbers designate an above world average growth rate. – ^gSum of shares of listed countries. – ^hIn bill. US\$.

Table 2 — Bangladesh's Share (%) in Textile (SITC 65) and Clothing (SITC 84) Imports of OECD Countries: 1990–1998

Note: shares with a "grey" background highlight an increase vis-à-vis the year before (or over the 8 years) by more the "0.10" percentage points.

Source: Own calculations based on OECD Commodity Trade Statistics (CD-ROM).

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Change 90-98
Textiles										
EU15	0.20	0.21	0.20	0.22	0.20	0.20	0.24	0.20	0.21	+0.01
Austria	0.03	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.03	+ 0.00
Belgium-Luxem.	0.84	0.77	0.88	0.88	0.87	0.94	1.12	0.85	0.89	+0.05
Denmark	0.05	0.04	0.04	0.03	0.06	0.08	0.08	0.07	0.07	+0.02
Finland	0.02	0.01	0.01	0.02	0.02	0.07	0.06	0.05	0.09	+0.07
France	0.11	0.11	0.14	0.19	0.12	0.15	0.16	0.14	0.13	+0.00
Germany	0.11	0.11	0.09	0.08	0.08	0.08	0.10	0.07	0.10	-0.01
Greece	0.24	0.21	0.12	0.18	0.22	0.26	0.34	0.28	0.14	-0.10
Ireland	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	+0.01
Italy	0.08	0.07	0.08	0.09	0.09	0.09	0.09	0.07	0.05	-0.03
Netherlands	0.28	0.48	0.34	0.32	0.22	0.23	0.42	0.43	0.47	+0.19
Portugal	0.01	0.01	0.05	0.04	0.04	0.03	0.02	0.01	0.02	+0.01
Spain	0.28	0.24	0.18	0.36	0.42	0.20	0.16	0.13	0.14	-0.14
Sweden	0.16	0.03	0.03	0.01	0.01	0.01	0.02	0.03	0.03	-0.13
UK	0.33	0.34	0.32	0.39	0.32	0.28	0.31	0.32	0.33	0.00
USA	0.86	0.54	0.53	0.54	0.62	0.74	0.63	0.46	0.63	-0.23
Canada	0.21	0.14	0.13	0.14	0.16	0.12	0.07	0.08	0.10	-0.11
Japan	0.35	0.29	0.33	0.29	0.21	0.21	0.24	0.25	0.26	-0.09
Australia	1.34	1.29	0.85	0.74	0.75	0.62	0.67	0.69	0.69	-0.65
Clothing										
EU15	0.60	0.90	0.97	1.34	1.56	1.88	2.03	2.38	2.54	+1.94
Austria	0.12	0.25	0.27	0.36	0.40	0.30	0.48	0.97	0.98	+0.96
Belgium-Luxem.	0.18	0.22	0.20	0.45	0.66	1.04	1.69	1.97	2.63	+2.45
Denmark	0.45	0.74	0.74	1.06	1.19	1.44	1.54	1.93	2.19	+1.74
Finland	0.35	0.87	0.94	1.11	1.23	1.37	1.31	1.57	1.69	+1.34
France	0.86	1.22	1.38	1.85	2.16	2.29	2.52	2.98	3.01	+2.15
Germany	0.08	0.16	0.62	0.86	0.76	0.77	0.61	0.78	1.07	+0.99
Greece	1.44	2.71	2.50	2.84	3.26	4.06	2.80	3.49	3.55	+2.11
Ireland	0.68	0.86	0.92	1.32	1.71	2.02	2.44	3.33	3.45	+2.77
Italy	0.79	0.62	0.62	0.74	0.71	1.10	1.50	2.04	2.42	+1.63
Netherlands	0.19	0.21	0.24	0.72	0.98	1.38	2.25	2.56	2.32	+2.13
Portugal	1.26	1.54	1.69	2.05	2.13	2.39	2.33	2.00	2.07	+0.81
Spain	0.84	1.11	1.25	2.01	2.42	3.20	3.51	3.15	3.04	+2.20
Sweden	0.00	0.03	0.07	0.18	0.39	0.38	0.52	0.46	0.37	+0.37
UK	0.00	0.00	0.04	0.04	0.06	0.17	0.16	0.29	0.34	+0.34
USA	1.75	1.73	2.32	2.24	2.50	2.76	2.76	2.99	3.08	+1.33
Canada	0.98	0.94	1.14	1.43	1.76	2.44	2.28	2.48	2.57	+1.54
Japan	0.00	0.01	0.04	0.03	0.03	0.05	0.09	0.13	0.16	+0.16
Australia	0.00	0.00	0.01	0.01	0.01	0.03	0.05	0.06	0.08	+0.08

Table 3 — Structure of EU Pre- and Post-UR Tariff Rates by Sectors 1994, 2004

Source: Own calculations based on WTO UR schedules concorded to German industrial classification.

	No. of	Mean	Coeff. of Variation	Pre UR Tariff Rate Distribution (%)																						
	Positions			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Basic Industries	7442	5.13	0.5152	8.0	0.2	1.2	6.7	15.6	21.3	15.9	11.6	10.4	3.0	3.9	0.3	0.6	1.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0		
Iron and Steel	622	4.70	0.2678	3.4	0.0	0.0	3.1	16.2	41.8	34.1	0.8	0.6														
Mining and quarrying	171	3.39	0.5413	5.8	0.6	11.7	26.3	34.5	5.3	5.8	2.9	6.4	0.0	0.6												
Sawmilling, plywood,	128	4.57	3.1153	18.0	0.0	3.1	7.0	21.9	15.6	16.4	0.0	0.0	2.3	15.6												
Cold-rolled steel, etc.	3128	4.68	0.4731	8.3	0.0	0.7	7.8	18.7	24.7	16.9	9.7	8.5	1.6	3.0												
Rubber Products	95	4.44	0.5295	12.6	1.1	0.0	9.5	8.4	21.1	35.8	3.2	0.0	6.3	1.1	0.0	1.1										
Pulp, paperboard, etc.	148	6.78	0.4887	16.2	0.0	0.0	1.4	0.7	1.4	13.5	8.8	7.4	41.9	8.8												
Iron and Steel casting	1251	4.73	0.4532	5.4	0.0	1.0	9.6	24.4	27.2	7.2	11.1	10.8	1.4	1.9												
Mineral oil Products	73	4.33	0.6018	5.5	8.2	17.8	0.0	1.4	26.0	13.7	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4						
Non-ferrous metals, etc.	271	4.46	0.7396	23.6	1.1	4.4	4.8	8.5	10.7	19.6	7.4	5.2	4.8	10.0												
Chemical Products	1555	6.80	0.4479	7.1	0.2	0.3	2.5	3.2	7.1	13.2	23.0	21.5	4.6	6.9	1.5	2.7	5.0	0.5	0.1	0.2	0.1	0.1	0.0	0.1		
Investment Goods	4101	4.92	0.5451	10.2	0.0	0.2	5.3	17.1	29.9	14.2	8.8	4.6	3.8	1.2	0.4	1.8	0.2	1.6	0.1	0.0	0.4	0.0	0.0	0.1	0.0	0.2
Boats, ships, etc.	50	1.50	1.0622	50.0	0.0	0.0	32.0	14.0	4.0																	
Aircraft, spacecraft	46	2.53	1.1662	52.2	0.0	0.0	0.0	13.0	19.6	6.5	4.3	0.0	2.2	0.0	0.0	2.2										
Machinery, incl. tractors	1333	3.71	0.4704	11.3	0.0	0.5	11.7	32.1	32.9	6.8	2.5	0.0	2.0	0.0	0.2	0.1										
Steel products and RR-	141	4.80	0.2375	0.0	0.0	0.0	1.4	23.4	46.1	14.9	11.3	2.8														
Office equipment, etc.	61	4.12	0.5922	9.8	0.0	0.0	24.6	11.5	42.6	0.0	0.0	6.6	0.0	0.0	0.0	4.9										
Optical, measuring equipment, etc.	412	4.95	0.4935	15.3	0.0	0.0	0.0	4.6	19.9	28.6	14.3	13.3	0.7	1.9	1.2											
Iron and sheetmetal	852	5.04	0.4239	5.6	0.0	0.2	2.8	12.7	33.5	22.3	15.1	5.2	0.6	0.6	0.0	0.1	0.0	0.5	0.0	0.0	0.8					
Electro technical equipment	984	6.08	0.5722	10.5	0.0	0.0	0.5	8.8	27.0	13.8	7.8	6.0	10.7	0.9	0.1	6.7	0.4	6.1	0.6							
Motor vehicles	222	8.12	0.5340	0.0	0.0	0.0	0.0	3.2	23.9	10.8	19.8	9.5	5.9	12.6	3.2	0.0	1.4	0.0	0.0	0.0	4.1	0.0	0.0	1.8	0.0	4.1
Consumer Goods	6217	9.10	0.4082	2.8	0.0	0.1	1.5	4.6	5.1	10.8	4.8	4.8	5.9	21.6	20.8	4.6	2.6	6.0	1.8	0.5	1.2	0.0	0.0	0.4	0.0	0.0
Printing, publishing	113	3.17	1.2058	51.3	0.0	0.0	0.9	3.5	10.6	21.2	0.0	2.7	0.0	0.0	0.0	9.7										
Wood products, furniture	146	5.18	0.3466	6.8	0.0	0.7	2.7	4.1	14.4	47.3	18.5	4.8	0.0	0.7	0.0	0.0										
Musical instruments, toys	298	5.71	0.3672	3.7	0.0	1.0	3.0	5.0	23.5	27.2	10.7	20.8	2.0	0.7	0.7	0.3	1.0	0.3								
Plastic goods	778	6.08	0.5120	6.4	0.0	0.5	5.7	13.8	17.2	10.0	9.3	13.5	12.1	1.2	0.0	3.9	6.6									
Paper, cardboard	87	9.77	0.2594	1.1	0.0	0.0	2.3	0.0	2.3	5.7	4.6	0.0	23.0	11.5	23.0	23.0	1.1	2.3								
Glassware, etc.	149	6.87	0.4286	1.3	0.0	0.0	0.7	16.1	18.1	19.5	7.4	0.0	13.4	8.7	0.0	14.1	0.7									
Ceramic goods	71	7.10	0.3677	0.0	0.0	0.0	8.5	8.5	2.8	19.7	9.9	16.9	16.9	9.9	2.8	0.0	4.2									
Leather goods, shoes	185	8.10	0.6898	3.8	0.0	0.0	4.9	14.1	7.6	11.9	17.3	19.5	1.1	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	1.6	14.1		
Textiles	3943	10.05	0.2587	0.8	0.0	0.0	0.3	1.9	0.8	8.6	2.6	1.4	5.2	32.8	32.1	4.9	1.2	1.8	2.8	0.8	2.0					
Clothing	447	12.27	0.2626	0.4	0.0	0.0	1.1	4.7	0.9	2.5	2.2	3.6	1.8	1.6	1.1	0.0	13.6	66.4								
Total	17760	6.47	0.5336	6.7	0.1	0.6	4.6	12.1	17.6	13.7	8.6	7.1	4.2	9.5	7.5	2.2	1.4	2.5	0.7	0.2	0.5	0.0	0.0	0.2	0.0	0.1

	No. of Positions	Mean	Coeff. of Variation	Post UR Tariff Rate Distribution (%)																						
				0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Basic Industries	7206	2.70	1.3458	20.1	0.5	13.6	20.4	14.7	12.6	9.1	8.4	2.4	0.6	1.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Iron and Steel	552	0.17	4.8610	81.0	0.0	1.1	3.3	10.9	15.0	0.5	0.9															
Mining and quarrying	171	1.70	2.3239	18.7	0.6	48.0	17.5	7.6	0.6	1.2	5.8															
Sawmilling, plywood, etc.	91	2.09	1.3841	35.2	0.0	8.8	38.5	13.2	4.4	22.0	15.4	0.0	3.3													
Cold-rolled steel, etc.	3099	2.44	0.6329	12.1	0.4	19.0	31.7	16.4	12.6	4.6	1.0	2.5	0.0	1.2												
Rubber Products	89	2.68	0.7012	25.8	0.0	1.1	22.5	18.0	11.2	18.0	2.2	1.1	6.7													
Pulp, paperboard, etc.	148	2.92	0.7855	22.3	0.0	0.0	1.4	43.2	0.7	19.6	8.8	4.1														
Iron and Steel casting	1257	2.65	0.6009	7.5	0.5	22.2	24.6	17.6	21.5	2.9	0.0	1.4	0.0	1.9												
Mineral oil Products	73	2.91	0.6064	5.5	26.0	0.0	5.5	13.7	26.0	13.7	8.2	1.4														
Non-ferrous metals, etc.	271	3.01	0.9824	41.3	0.0	1.8	9.2	3.0	17.0	8.1	5.5	9.2	4.4	0.4												
Chemical Products	1455	4.35	0.5798	20.1	0.1	0.7	3.0	10.1	6.0	25.8	34.9	3.0	1.3	1.0	0.3	0.4	0.1	0.1								
Investment Goods	3909	2.54	0.8399	18.2	0.1	14.2	30.3	16.8	12.8	4.3	1.5	1.6	0.4	1.1	0.0	1.7	0.1	1.1	0.2	0.1	0.2	0.0	0.1	0.0	0.0	0.2
Boats, ships, etc.	50	0.97	1.0473	50.0	0.0	38.0	12.0																			
Aircraft, spacecraft	46	1.41	1.2062	52.2	0.0	8.7	26.1	8.7	2.2	0.0	0.0	2.2														
Machinery, incl. tractors	1316	1.71	0.8011	24.5	0.0	27.7	23.9	15.6	7.0	1.4	0.3	0.8	0.2	0.1												
Steel products and RR-equipment	141	2.17	0.7661	17.0	0.0	27.0	23.4	15.6	7.1	8.5	1.4															
Office equipment, etc.	49	2.20	0.8720	20.4	0.0	12.2	61.2	14.3	2.0	14.3																
Optical, measuring equipment, etc.	405	2.48	0.7428	25.9	0.7	0.5	29.4	16.0	18.3	6.9	4.2	0.0	0.5													
Iron and sheetmetal	839	2.70	0.5759	9.4	0.1	10.8	39.0	19.0	12.6	6.4	1.7	0.8	0.8	0.5	0.0	0.0	0.0	0.5								
Electro technical equipment	841	3.11	0.6978	12.7	0.0	3.1	35.7	20.6	17.6	5.5	2.5	4.9	0.4	0.4	0.1	8.1	0.5	4.8	0.7							
Motor vehicles	222	5.67	0.8498	5.9	0.0	1.8	20.3	9.9	31.5	1.8	0.0	2.3	0.9	16.2	0.0	0.0	0.0	0.0	0.5	1.4	3.2	0.0	1.4	0.0	0.0	3.2
Consumer Goods	6209	6.47	0.6826	5.2	0.0	3.0	6.0	13.9	4.2	2.4	5.5	44.4	0.3	5.5	0.4	7.3	0.2	0.5	0.3	0.5	0.4	0.0	0.0			
Printing, publishing	113	1.48	1.5024	53.1	0.0	0.0	15.9	12.4	5.3	8.8	0.0	4.4														
Wood products,	146	1.58	1.2435	54.8	0.0	4.1	6.8	13.0	6.2	3.4	10.3	0.7	0.0	0.7												
Musical instruments,	298	2.71	0.6446	17.8	0.0	5.4	29.5	24.8	13.4	4.7	3.7	0.3	0.3													
Plastic goods	776	3.72	0.6037	7.7	0.3	13.8	19.8	10.6	12.1	3.1	26.3	1.9	0.0	1.0	0.0	3.9										
Paper, cardboard	87	4.50	0.4751	10.3	0.0	0.0	3.4	36.8	3.4	36.8	0.0	8.0	1.1													
Glassware, etc.	146	4.64	0.6390	4.1	0.0	14.4	24.7	6.2	26.7	4.1	6.8	0.7	1.4	0.0	13.7											
Ceramic goods	71	5.05	0.4299	1.4	0.0	9.9	9.9	1.4	42.3	11.3	14.1	0.0	5.6	0.0	0.0	4.2										
Leather goods, shoes	184	6.72	0.7485	3.8	0.0	12.0	12.5	15.2	2.2	6.0	10.9	18.5	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	14.1	0.0	1.6			
Textiles	3941	7.27	0.2446	0.9	0.0	0.2	0.2	15.4	0.8	0.9	1.6	67.9	0.1	8.1	0.0	2.4	0.3	0.0	0.5	0.8						
Clothing	447	10.63	0.2948	2.0	0.0	0.0	6.3	0.0	1.1	0.9	2.2	3.6	2.0	0.7	1.1	72.7	0.0	7.4								
Total	17324	4.01	0.9601	14.3	0.3	9.9	17.5	14.9	9.7	5.6	5.8	17.3	0.4	2.6	0.2	3.0	0.1	0.5	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0

**Table 4 — Structure of and Shifts among Leading^a Textile^b and Clothing^c Exporters:
1965–97**

Source: Own calculations based on sources in Table 1a.

	Shares ^d					Change in shares ^e				
	1965	1973	1983	1990	1997	65-73	73-83	83-90	90-97	73-97
Textiles and Clothing										
Total ^f	79.2	72.7	67.2	68.3	65.3	-6.5	-5.5	+1.1	-3.0	-7.4
ICs ^g	64.6	54.0	40.1	39.3	32.2	-10.6	-13.9	-0.8	-7.1	-21.8
DCs ^h	14.6	18.7	27.1	29.0	33.1	+4.1	+8.4	+1.9	+4.1	+14.4
Textiles										
Total ^f	78.9	72.5	67.3	72.8	72.1	-6.4	-5.2	+5.5	-0.7	-0.4
ICs ^g	64.8	58.8	48.4	48.9	39.6	-6.0	-10.4	+5.0	-9.3	-19.2
DCs ^h	14.1	13.7	18.9	23.9	32.5	-0.4	+5.2	+5.0	+8.6	+18.8
Clothing										
Total ^f	80.1	73.1	67.1	63.9	59.3	-7.0	-6.0	-3.2	-4.6	-13.8
ICs ^g	63.9	44.1	30.1	30.0	25.4	-19.8	-14.0	-0.1	-4.6	-18.7
DCs ^h	16.2	29.0	37.0	33.9	33.9	+12.8	+8.0	-3.1	+0.0	+4.9

^a Based on top 13 textile and clothing exporting countries in 1997. — ^b SITC 65 Rev. 2. —
^c SITC 84 Rev. 2. — ^d Percentage share of specific country groupings in total world exports of
respective products. — ^e Absolute changes in percentage shares. — ^f The top 13 exporting
countries listed in Table 1a. — ^g The 7 industrialized countries listed in Table 1a. — ^h The 6

Table 5 — The Top^a Textile^b and Clothing^c Exporting Countries in Pre-UR Period (1990-94) and Post-UR Period (1994-97): Shares in World Exports and Rankings

Source: See Table 1a.

	1990			1994			1997		
	Textile Shares	Clothing Ranking	Textile + Clothing Ranking	Textile Shares	Clothing Ranking	Textile + Clothing Ranking	Textile Shares	Clothing Ranking	Textile + Clothing Ranking
World (Mill US\$)	105040	108370	213410	130240	140410	270650	155280	176610	331890
Total	96.43	95.50	95.96	97.18	96.30	96.72	96.73	93.42	94.97
TOP 13e	72.78	63.88	68.26	73.05	62.11	67.38	72.15	59.31	65.32
1. Next 20f	18.27	23.00	20.67	18.12	26.11	22.27	18.96	26.29	22.86
2. Next 20g	4.82	7.94	6.41	5.00	7.15	6.12	4.93	6.87	5.96
(1) China	6.87	8.92	7.91	9.07	16.90	13.13	8.91	18.01	13.75
(2) Italy	9.04	10.92	10.00	8.34	8.92	8.64	8.31	8.41	8.36
(3) Germany	13.36	13.36	10.27	9.72	7.14	7.14	8.41	4.13	6.13
(4) USA	4.80	2.37	3.56	5.06	4.00	4.51	5.92	4.91	5.38
(5) Korea Rep.	5.78	7.27	6.54	8.21	4.03	6.04	8.59	2.37	5.28
(6) Taiwan	5.83	3.68	4.74	7.88	5.24	5.06	8.20	1.93	4.86
(7) France	5.77	4.31	5.03	4.78	3.54	4.14	4.65	3.03	3.78
(8) Hong Kong	2.07	8.55	5.36	1.49	6.74	4.21	1.05	5.28	3.30
(9) UK	4.17	2.81	3.48	3.45	2.93	3.18	3.62	2.99	3.28
(10) Turkey	1.37	3.07	2.24	1.68	1.53	2.50	2.16	3.79	3.03
(11) Belgium-Lux	6.07	4.18	3.92	5.22	6.14	3.31	4.51	1.70	3.02
(12) India	2.08	2.33	2.21	2.94	2.64	2.78	3.48	2.49	2.95
(13) Japan	5.58	0.52	3.01	5.21	7.7	4.35	0.27	4.2	2.18
(14) Mexico	0.68	0.54	0.61	0.72	2.1	0.98	1.16	3.00	2.14
(15) Netherlands	2.77	2.02	2.39	2.07	1.3	1.96	1.94	2.07	2.01
(16) Pakistan	2.54	0.94	1.72	3.06	1.12	2.06	2.96	1.02	1.93
(17) Thailand	0.88	2.60	1.1	1.26	2.0	2.27	1.24	2.13	1.72
(18) Indonesia	1.18	1.52	1.35	1.92	2.28	2.11	1.45	1.64	1.55
(19) Portugal	1.26	3.22	2.26	1.03	2.34	1.71	1.05	1.87	1.49
(20) Sri Lanka	0.02	0.56	0.31	0.10	1.05	0.59	1.16	1.19	1.17
(21) Spain	1.43	0.55	0.98	1.49	1.7	1.03	1.79	0.62	1.17
(22) Malaysia	0.33	1.21	0.78	0.64	1.47	1.07	0.83	1.32	1.19
(23) Austria	1.98	1.08	1.52	1.42	1.9	1.07	1.23	0.79	1.00
(24) Canada	0.65	0.30	0.46	0.90	2.2	0.74	1.15	0.82	0.98
(25) Bangladesh	0.29	0.31	0.54	0.28	1.04	0.67	0.23	1.50	0.90
(26) Poland	0.27	0.35	0.31	0.30	1.32	0.83	0.42	1.26	0.87
(27) Philippines	0.13	1.60	0.87	0.17	1.56	0.89	0.18	1.31	0.78
(28) Switzerland	2.43	0.63	1.52	1.62	1.6	1.03	1.15	0.38	0.74
(29) Tunisia	0.11	1.04	0.58	0.12	1.31	0.74	0.08	1.30	0.73
(30) Denmark	0.67	0.79	0.73	0.51	0.76	0.64	0.55	0.87	0.72
(31) Dom. Rep.	0.03	0.88	0.46	0.05	0.57	0.24	0.05	1.23	0.68
(32) Greece	0.48	1.57	1.03	0.33	1.19	0.78	0.25	0.92	0.61
(33) Macau	0.13	1.03	0.58	0.12	0.86	0.50	0.10	1.02	0.59
(34) Romania	0.12	0.33	0.23	0.10	0.71	0.42	0.11	1.00	0.58
(35) Czech Rep.	0.22	0.14	0.18	0.52	0.26	0.39	0.64	0.35	0.49
(36) Slovenia	0.21	0.90	0.56	0.21	0.44	0.33	0.21	0.58	0.41
(37) Hungary	0.24	0.35	0.29	0.20	0.71	0.46	0.17	0.60	0.40
(38) Sweden	0.59	0.36	0.42	0.48	0.23	0.35	0.51	0.30	0.40
(39) Brazil	0.73	0.23	0.48	0.76	0.27	0.51	0.70	0.09	0.38
(40) Israel	0.26	0.44	0.35	0.27	0.45	0.36	0.29	0.34	0.32
(41) Ireland	0.54	0.42	0.40	0.41	0.34	0.37	0.34	0.28	0.41
(42) Morocco	0.19	0.67	0.43	0.12	0.53	0.33	0.04	0.53	0.30
(43) Costa Rica	0.02	0.37	0.20	0.02	0.52	0.28	0.05	0.51	0.29
(44) Mauritius	0.01	0.57	0.32	0.40	0.44	0.35	0.00	0.52	0.28
(45) Egypt	0.53	0.13	0.33	0.48	0.16	0.31	0.34	0.15	0.24
(46) Australia	0.14	0.09	0.12	0.23	0.15	0.19	0.30	0.16	0.22
(47) Colombia	0.13	0.42	0.39	0.16	0.37	0.27	0.19	0.25	0.22
(48) Croatia	0.09	0.86	0.27	0.48	0.31	0.28	0.06	0.36	0.22
(49) Singapore	0.13	0.92	0.53	0.19	0.48	0.34	0.16	0.25	0.21
(50) Slovak	0.07	0.08	0.57	0.25	0.36	0.21	0.21	0.19	0.20
(51) Finland	0.23	0.46	0.37	0.22	0.18	0.20	0.24	0.14	0.19
(52) Argentina	0.15	0.09	0.53	0.14	0.07	0.10	0.23	0.09	0.16
(53) Peru	0.21	0.38	0.16	0.12	0.14	0.13	0.13	0.18	0.16

^aThe top 13 textile and clothing exporting countries in 1997 (as in Table 2) and the next 40 largest exporters also in the year 1997. — ^bSITC65. — ^cSITC84. — ^dShare of top 13 countries in total exports. — ^eShare of next 20 countries in total exports. — ^fShare of next 20 countries in total exports.

Table 6 — The Top^a Textile^b and Clothing^c Exporting Countries in Pre-UR Period (1990–94) and Post-UR Period (1994–97): Shares and Changes in Shares

Source: See Table 1a.

	Shares			Change in shares		
	1990	1994	1997	90-94	1994-97	1990-97
Textiles and Clothing						
Total^d	96.0	96.7	95.0	0.8	-1.8	-1.0
Top 13 ^d						
Total	68.3	67.4	65.3	-0.9	-2.1	-2.9
ICs	39.3	33.6	32.1	-5.6	-1.5	-7.1
DCs	29.0	33.7	33.2	4.8	-0.6	4.2
1. Next 20 ^d						
Total	20.7	22.3	22.9	1.6	0.6	2.2
ICs	10.9	9.0	8.7	-2.0	-0.3	-2.2
DCs	9.8	13.3	14.2	3.6	0.8	4.4
2. Next 20 ^d						
Total	6.4	6.1	6.0	-0.3	-0.2	-0.4
ICs	1.4	1.1	1.1	-0.3	0.0	-0.3
DCs	5.0	5.0	4.8	0.0	-0.2	-0.1
Textiles						
Total^d	96.4	97.2	96.7	0.8	-0.5	0.3
Top 13 ^d						
Total	72.8	73.1	72.2	0.3	-0.9	-0.6
ICs	48.8	41.8	39.8	-7.0	-2.0	-9.0
DCs	24.0	31.3	32.4	7.3	1.1	8.4
1. Next 20 ^d						
Total	18.3	18.1	19.0	-0.1	0.8	0.7
ICs	11.7	9.4	9.1	-2.3	-0.3	-2.6
DCs	6.6	8.8	9.9	2.2	1.1	3.3
2. Next 20 ^d						
Total	4.8	5.0	4.9	0.2	-0.1	0.1
ICs	1.5	1.3	1.4	-0.2	0.0	-0.1
DCs	3.3	3.7	3.5	0.3	-0.1	0.2
Clothing						
Total^d	95.5	96.3	93.4	0.8	-2.9	-2.1
Top 13 ^d						
Total	63.9	62.1	59.3	-1.8	-2.8	-4.6
ICs	30.1	26.1	25.4	-3.9	-0.7	-4.6
DCs	33.8	36.0	33.9	2.2	-2.1	0.0
1. Next 20 ^d						
Total	23.0	26.1	26.3	3.1	0.2	3.3
ICs	10.2	8.6	8.4	-1.6	-0.2	-1.8
DCs	12.8	17.5	17.9	4.7	0.4	5.1
2. Next 20 ^d						
Total	7.9	7.2	6.9	-0.8	-0.3	-1.1
ICs	1.3	0.9	0.9	-0.4	-0.0	-0.5
DCs	6.6	6.3	6.0	-0.4	-0.3	-0.6

^aThe top 13 textile and clothing exporting countries in 1997 (as in Table 1a) and the next 40 largest exporters also in the year 1997. – ^bSITC 65. – ^cSITC 84. – ^dShare of country groupings in total exports.

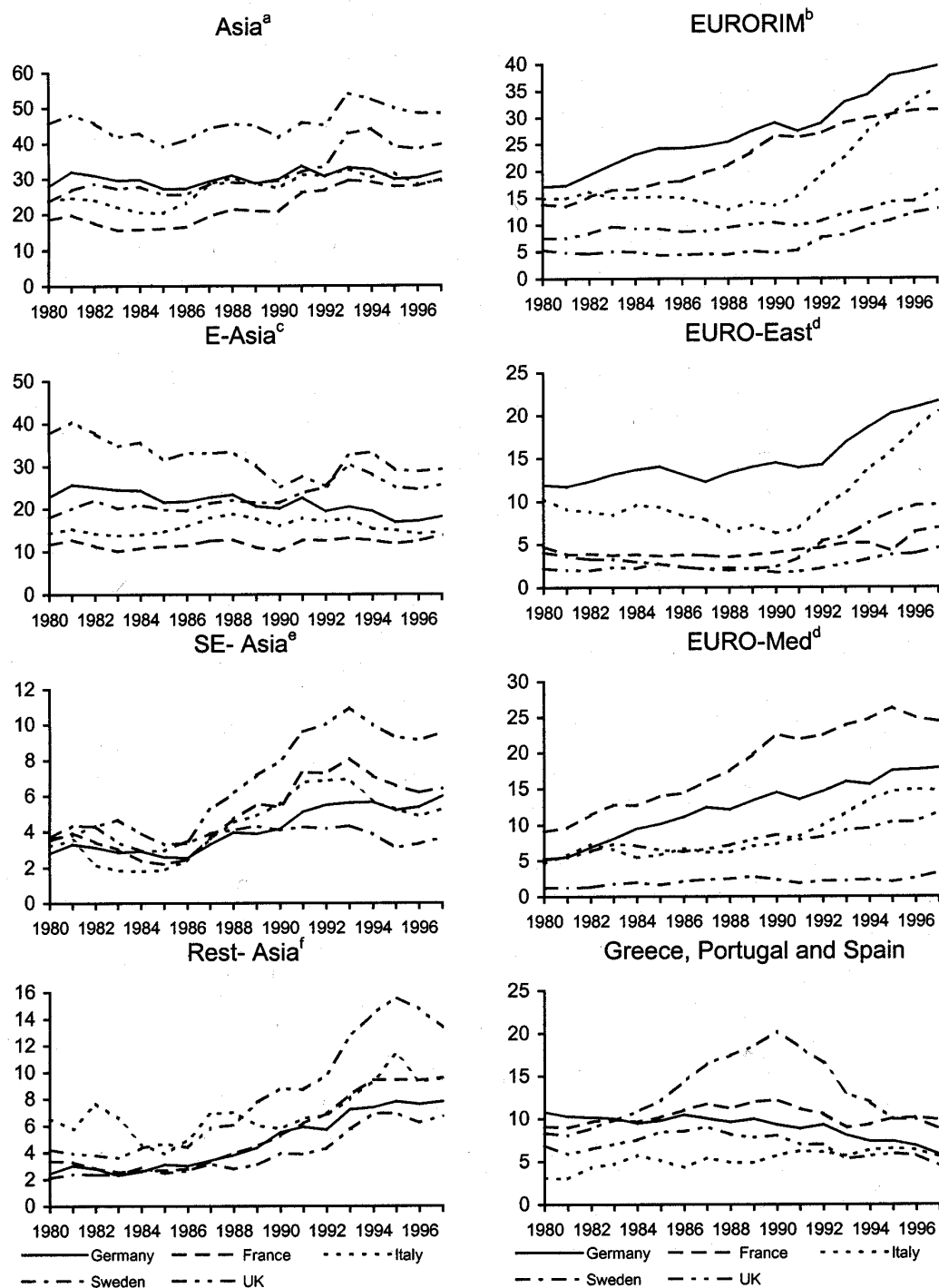
Table 7 — Trying to Keep Markets Closed: Some Examples

Source: Adapted from ATMI (2000: 27).

	A R G	A U S	B G L	B R A	C H L	C O L	E G Y	I D A	I D O	J A P	M A L	M A R	M O R	P A K	P H I	P R C	R O C	R O K	R O M	R S A	R U S	S R I	T H A	U K R	U R U	V N M
1. Creating difficult, expensive customs procedures	x		x	x			x	x	x					x		x		x			x			x		
2. Allowing/tolerating corruption	x			x		x	x	x	x		x	x	x	x	x			x	x	x		x	x	x	x	x
3. Intellectual property rights (designs, etc.)	x	x	x		x	x	x	x						x		x	x	x	x	x	x		x	x	x	x
4. Lowering tariffs but adding new taxes	x			x			x	x	x			x	x					x					x			x
5. Keeping tariffs prohibitively high	x	x	x	x			x	x	x			x	x			x		x					x	x		x
6. Difficult marking rules	x						x	x										x				x				
7. Avoiding applying VAT to domestic goods	x							x	x					x		x								x		
8. Lower tariffs but imposing (specific) duties	x	x		x			x	x				x				x		x	x	x	x	x	x	x	x	x
9. Subsidizing domestic industry	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x		x	x			
10. Changing customs rules without notification	x	x	x		x						x		x		x						x		x			
11. Changing applied rates frequently	x	x	x				x								x			x			x			x		x
12. Not binding tariffs	x	x	x	x		x	x	x	x			x	x		x		x	x	x				x			
13. Restricting imports for unusual reasons			x				x	x						x									x			x
14. Making LCs unacceptable, demanding cash				x														x								
15. Valuating imports by ad hoc means		x	x		x	x	x	x	x	x			x	x	x		x	x	x		x		x			
16. Faking "automatic" licensing systems			x		x	x																				
17. Preinspection of imports for high fees	x				x										x											
18. Adherence to strange rules of origin	x				x	x																				
19. Imposition of arcane technical/quality standards							x			x					x		x				x			x		
20. Keeping distribution system hard to breach							x			x					x											
21. Forming domestic cartels								x	x	x					x		x									
22. Buy-domestic policies by government															x											
? (Ø= 7.3)	14	2	10	12	2	9	16	12	10	3	3	3	5	11	1	16	2	9	6	6	8	3	9	8	2	7

ARG = Argentina; AUS = Australia; BGL = Bangladesh; BRA = Brazil; CHL = Chile; COL = Colombia; EGY = Egypt; IDA = India; IDO = Indonesia; JAP = Japan; MAL = Malaysia; MAR = Mauritius; MOR = Morocco; PAK = Pakistan; PHI = Philippines; PRC = China; ROC = Taiwan; ROK = South Korea; ROM = Romania; RSA = Rep. South Africa; RUS = Russia; SRI = Sri Lanka; THA = Thailand; UKR = Ukraine; URU = Uruguay; VNM = Vietnam.

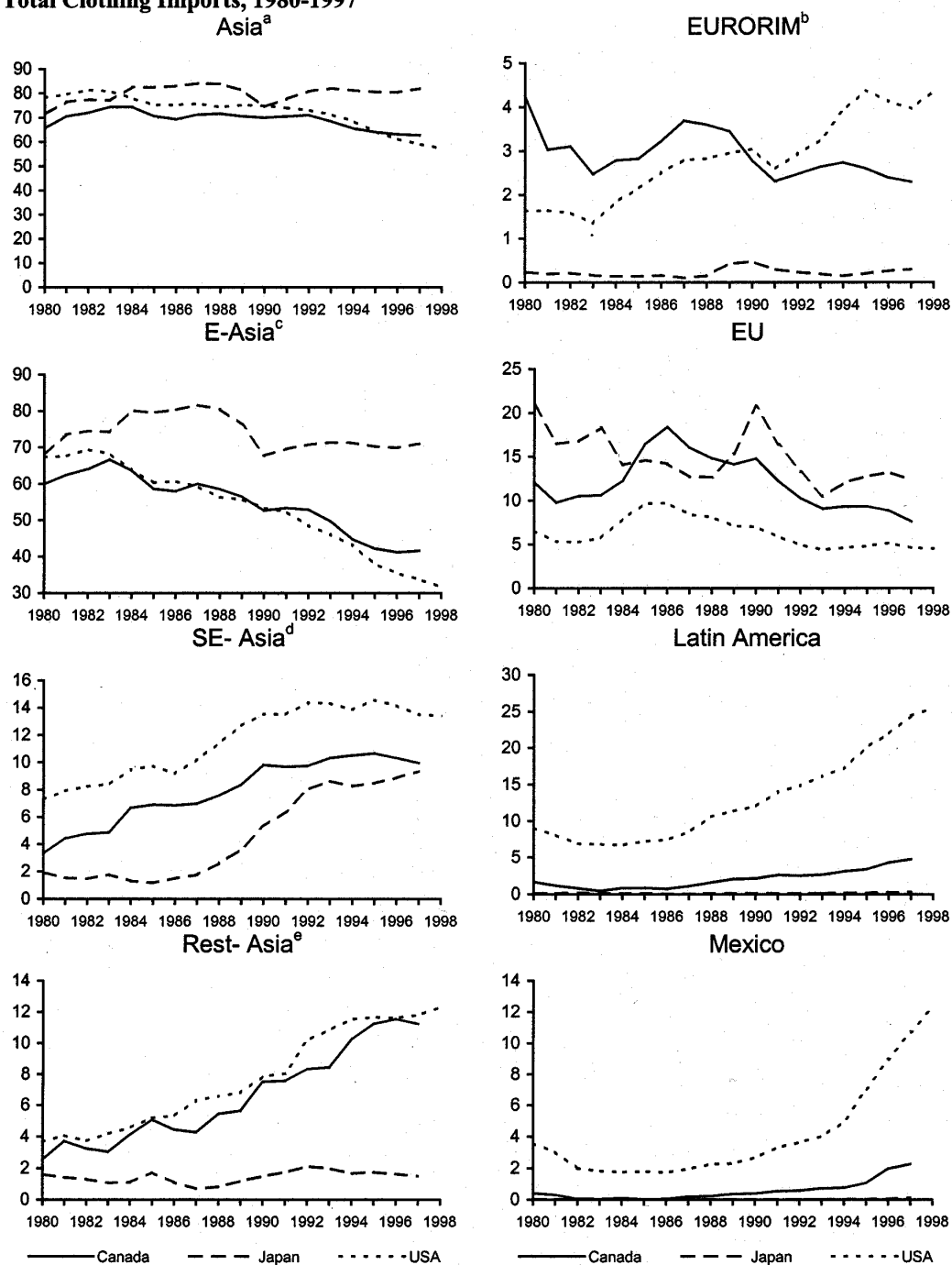
Diagram 1 — EU Clothing Imports (SITC 84) from Selected Regions in % of Total Clothing Imports, 1980-1997



^aFrom Gulf Countries to Korea (excl. Japan).— ^bAll countries east of former „Iron Curtain“ (EURO-East) and Morocco to Turkey plus Cyprus and Malta (EURO-Med).— ^cHongkong, Macau, China, Taiwan and Korea.— ^dSee footnote b.— ^eASEAN countries.— ^fAsia minus E-Asia and SE-Asia.

Source: OECD, ITCS. – Own calculations.

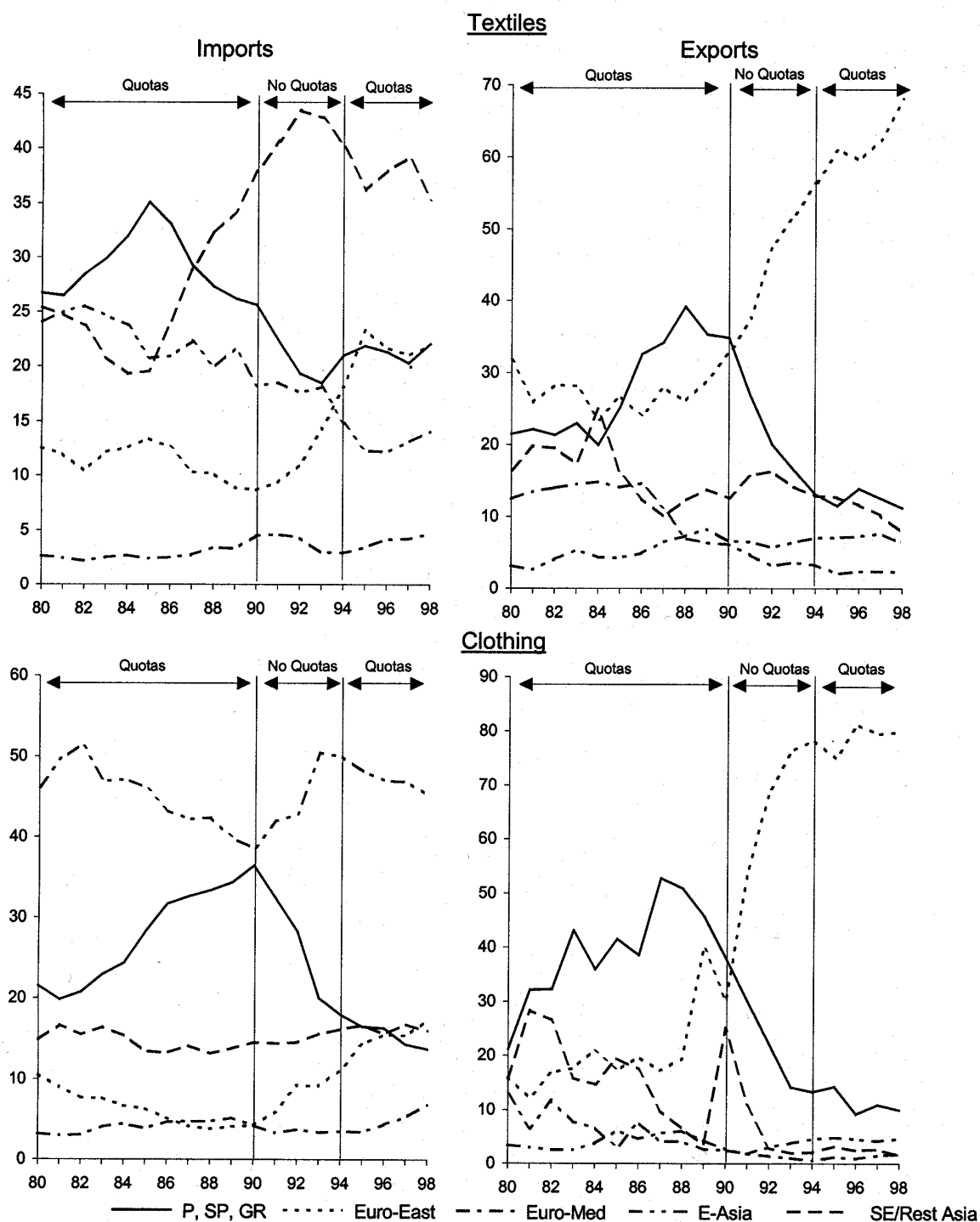
Diagram 2 — USA, Canada and Japan Clothing Imports (SITC 84) from Selected Regions in % of Total Clothing Imports, 1980-1997



^aFrom Gulf Countries to Korea (excl. Japan).— ^bAll countries east of former „Iron Curtain“ (EURO-East) and Morocco to Turkey plus Cyprus and Malta (EURO-Med).— ^cHongkong, Macau, China, Taiwan and Korea.— ^dASEAN countries.— ^eAsia minus E-Asia and SE-Asia.

Source: OECD, ITCS. — Own calculations.

Diagram 3 — Sweden Textile (SITC 65)^a and Clothing (SITC 84)^a Imports and Exports from Selected Regions^b in % of (NON-OECD+P; GR; SP) Textile Imports/Exports, 1980-1998

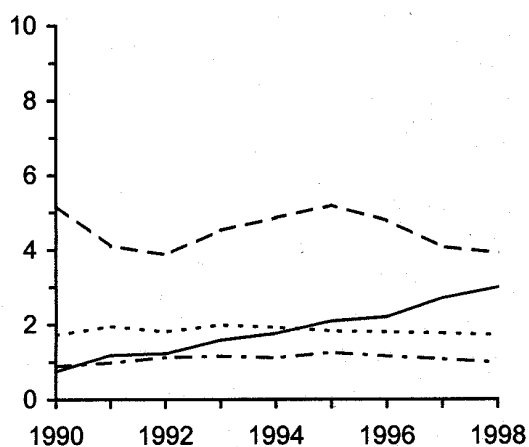


^aTextile yarn, fabrics, made-up articles, related products. — ^bFor a definition of the regions see Diagram 1.

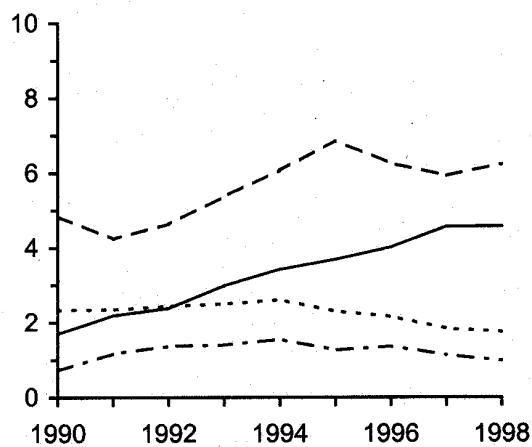
Source: OECD, ITCS and unpublished Swedish data.

Diagram 4 — Clothing (SITC 84) Imports of Major EU Countries and USA from Selected South Asian Countries in Percent (%) of Non-OECD Imports, 1990–1998

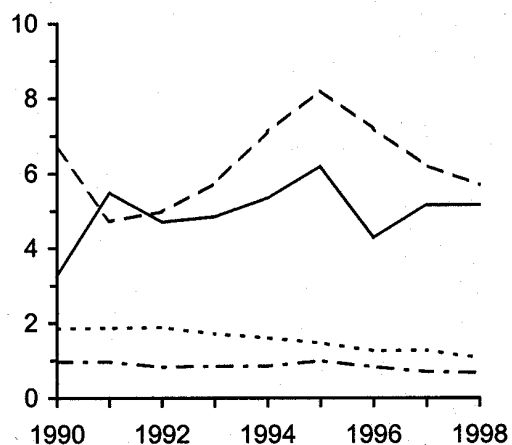
Germany



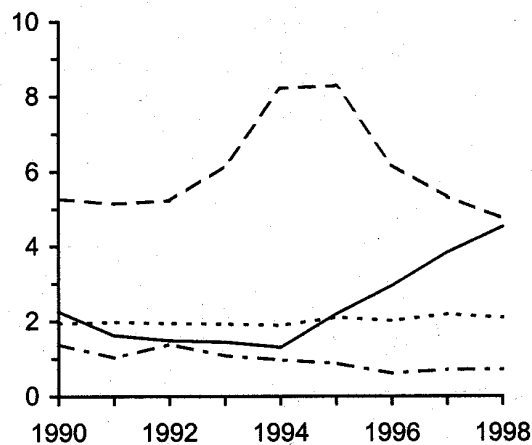
France



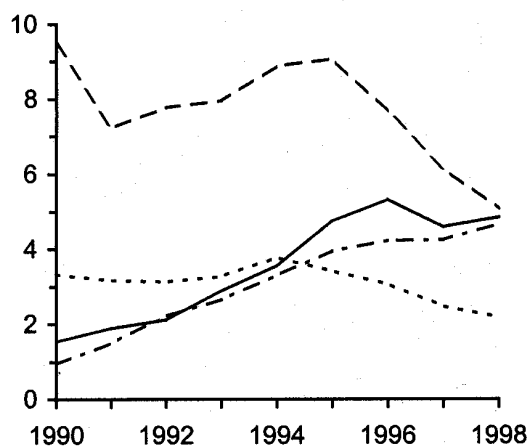
Italy



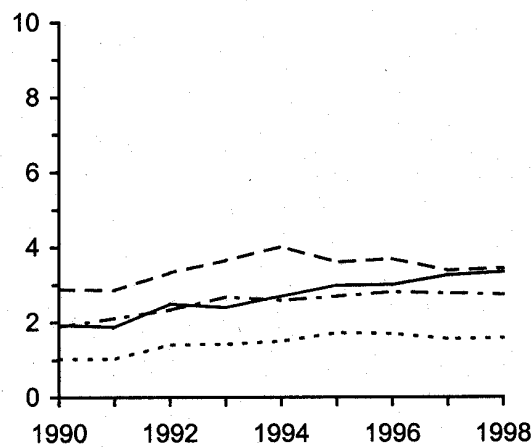
Sweden



United Kingdom



United States

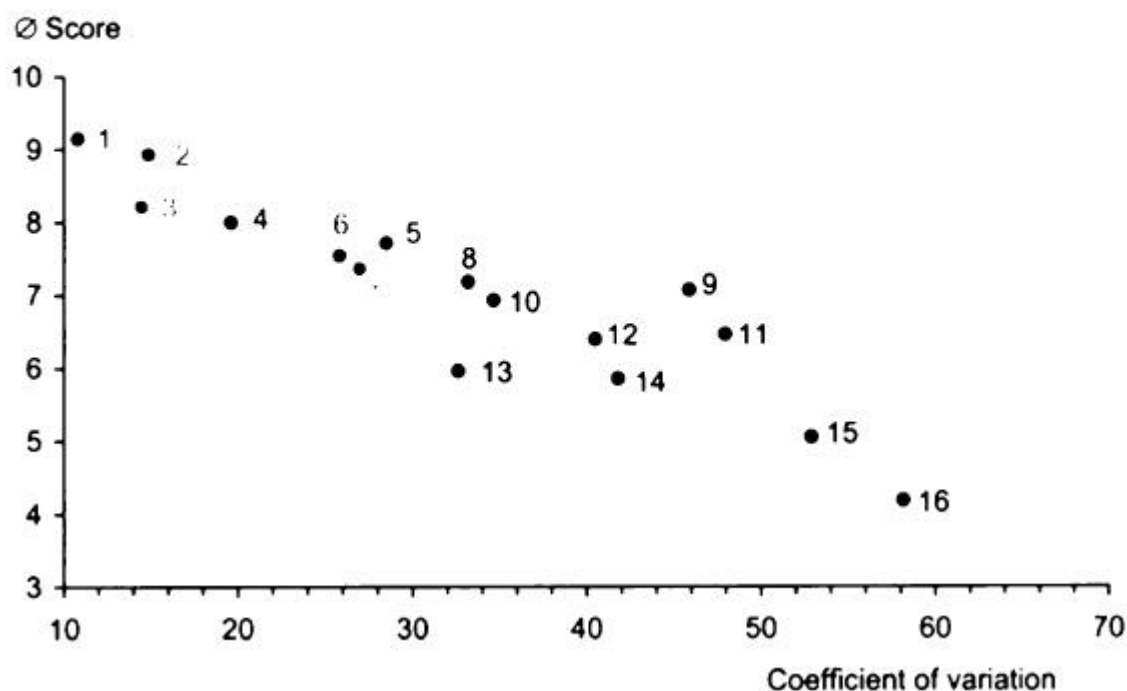


— Bangladesh
 Pakistan

--- India
 -.-.- Sri Lanka

Source: OECD, ITCS, own calculations.

Diagram 5 — Average Score (\bar{X}) and Coefficient of Variation (CoV) on Ratings of Questions Re. Production and Investment for 14 Hong Kong T&C Companies



	#	\bar{X}	CoV
Potential new customers/new markets	1	6,46	47,96
Potential for exports to USA	2	7,07	45,90
Potential for exports to region	3	4,18	58,17
Potential for exports to EU	4	5,96	32,63
Host government tax policies/incentives	5	5,85	41,81
HKG tax policies	6	4,64	66,32
Policies affecting labor, health and environment	7	7,18	33,19
Policies affecting international trade and investment	8	7,71	28,50
Labor costs	9	7,54	25,82
Education and training of workers	10	7,36	26,98
The "culture" of host country	11	6,39	40,49
Politics and stability in host country	12	8,93	14,87
Quality of transportation infrastructure in host country	13	8,21	14,47
Quality of telecom infrastructure in host country	14	8,00	19,61
Availability of quotas in host country	15	9,15	10,78
Lack of restrictions on capital/profit transactions	16	6,93	34,65
Existence of Overseas Chinese Community	17	3,85	44,84
Availability of ready-made factory units	18	5,05	52,90

ANNEX 3

THE IMPLEMENTATION OF THE AGREEMENT OF TEXTILES AND CLOTHING & THE WTO FRAMEWORK FOR TEXTILES & CLOTHING

Richard Hughes, Counsellor, Textiles Division, WTO, Geneva, Switzerland, January 2002

Introduction

To develop a view on what might happen when textile and clothing quotas are fully eliminated by the end of 2004, it is necessary to be aware not only of the progress in the implementation of the Agreement on Textiles and Clothing, but also the potential impact on trade in this sector to several related factors. These include the influence of the trade liberalisation and rule setting programmes of the WTO; the current trends in global textiles and clothing trade and the possible direction they might take in the coming years; and the impact of market forces and technological advances on this sector.

The Functioning of the WTO

The WTO is an assembly of 144 countries, about three-quarters of which are developing and least-developed countries, representing over 90 per cent of world trade, which oversees a system of rules for the conduct of international trade. The objective of the WTO member countries is to develop and maintain a fair and open trading system, providing producers and buyers of goods and services with predictability and transparency in conducting their international business. At the heart of the WTO are the numerous agreements, negotiated and signed by the member countries, which provide the legal ground rules for international commerce. These agreements cover not only the traditional area of trade in goods, such as tariffs, agriculture, dumping, subsidies, customs valuation and import licensing, but also extend, since 1995, to trade in services and to the protection of intellectual property rights. The WTO provides the forum for the negotiation of these rules, for the on-going examination of their implementation, and for the settlement of disputes which arise.

The Implementation of the ATC

My view of what might happen when the textile and clothing quotas are fully removed, begins with the implementation of the Agreement on Textiles and Clothing (ATC), which is a key aspect of the work in the WTO for many developing countries. This Agreement, which entered into force on 1 January 1995, is a ten-year programme to progressively bring all textile and clothing trade fully under WTO rules and, thereby, to dismantle the extensive network of bilateral quotas that has had such a profound effect on this trade over the past four decades.

The central element of the ATC is the transitional process for the integration of all textile and clothing products fully into WTO rules and disciplines. As products are integrated, quotas on them must be removed and no further bilateral quotas can be applied in the future. Operationally, when the ATC began in 1995, all existing quotas under the former Multifibre Arrangement (MFA) were carried over into it, which amounted to over 1,300 individual quotas maintained by the EC, US, Canada and

Norway on exports from about 30 developing countries and transition economies.

The agreed rate for the integration of textile and clothing products into WTO rules in the first stage (1995-97) was 16 per cent of the total volume of each country's imports in 1990; a further 17 per cent was integrated on 1 January 1998 at the beginning of the second stage (1998-2001), and a further 18 per cent of products was integrated on 1 January 2002, the beginning of the final stage (2002-2004). The process will be completed on 31 December 2004 with the integration of all remaining products and the full removal of the quota regime.

Another key aspect of the ATC's transitional process is the requirement for the progressive enlargement of the quotas until they are removed, through automatic increases in the annual quota growth rates which were also carried over from the former MFA. For products remaining under quota, the rates of annual growth applicable to these quotas have been increased by a factor of 16 per cent in stage 1; by a further factor of 25 per cent in stage 2 and by a factor of 27 per cent at the beginning of stage 3.

As we begin the eighth year of this process, and looking particularly at the countries maintaining the quotas, the EU, US, Canada and Norway, it can be seen that, thus far, in the implementation of the Agreement, the legal requirements of the ATC have been met, both in respect of the integration of products and in the application of quota growth rates. However, as has been forcefully pointed out by the developing country Members of the WTO, the integration of products into WTO rules by the developed countries has begun with the least sensitive products, mostly those of little commercial interest to the developing country exporters. It is now clear, therefore, that the textile and clothing products of greatest export interest to developing countries, many of which are subject to quotas, will not be fully liberalised until the end of the transition period on 31 December 2004.

Therefore, as matters stand today, through the operation of the first three stages of the ATC implementation process, 51 per cent of textile and clothing products have been integrated into WTO rules and about 20 per cent of the quotas have been removed. The remaining 49 per cent of products will be integrated and the remaining 80 per cent of the quotas still in place will be eliminated at the end of the process, on 31 December 2004. At that time, trade in textile and clothing products will be conducted on the basis of market forces under the regular rules of the WTO.

The Impact of Other WTO Agreements

Beyond the central role of the ATC, the operation of other WTO agreements also has an important impact on textiles and clothing trade. A central area of WTO work for many years has been the reduction and binding of customs tariffs as a means of lowering barriers and encouraging trade. While it is generally held that textiles and clothing tariffs have not benefited from these reductions to the same extent as many other industrial sectors, nevertheless, textile and clothing tariffs have been reduced and increasingly bound and work in this area will continue in the future. Textile traders also have access to the WTO rules which respond to certain "unfair" trade practices such as the injurious dumping of goods and illegal subsidisation. In fact, anti-dumping actions have been taken on a number of occasions in recent years, by both developed and developing countries, affecting mainly fibres, yarns and fabrics.

Other WTO agreements aim at promoting greater uniformity and certainty in trade relations, for example, rules exist for the valuation of goods for customs purposes; for determining the origin of goods; to prevent the erection of barriers to trade through the application of technical measures such as product standards; etc. Also of interest to textile and clothing traders are the negotiations on trade in services. These negotiations seek to establish commitments to liberalise trade in services in the

areas of movement of natural persons, finance, telecommunications, distribution and transport, in order to ensure that foreign suppliers of these services are given improved market access, and equal opportunities to offer their services in Member countries. These negotiations affect the commercial relations between textile and clothing exporters in developing countries and the importers in developed countries in the areas of communications, financial arrangements and transport of their products. Another area of work in the WTO is intellectual property protection which, in this sector, refers to the protection of brand names and trademarks, including product logos, in international trade. The TRIPS Agreement aims to bring intellectual property protection under common international rules. In respect of all of the above-mentioned aspects of trade in goods, services and intellectual property, the WTO provides a dispute settlement process to ensure that the rules are fully and fairly applied. In the WTO, there have been four dispute cases directly related to the application of the ATC rules and several others under other Agreements, in respect of textiles and clothing trade. The message here is that determined and on-going efforts are being made by the governments which make up the WTO, to ensure that trade can be carried on with fairness, predictability and transparency.

Developments in Textiles and Clothing Trade

This brings me to the third aspect, namely, the actual developments which have occurred in textiles and clothing trade during the past decade. First, total textile and clothing trade has increased substantially in value terms, with clothing trade up 83.6 per cent between 1990 and 2000, and textile trade up 50.1 per cent, reaching a total level of \$ 354 billion. Looking at the components of this growth, one can see the impact of changing trading structures, particularly in the growth of regional arrangements and of outward processing trade. A prime example is NAFTA, where Mexico has moved from being a small supplier of clothing to the US, to being the number one supplier. Mexico's exports of clothing advanced from about \$ 0.5 billion in 1990 to \$ 8.7 billion in 2000. The special access programmes which the US extends to the Caribbean and Central American countries is another example. In 2000 the value of clothing exports from the Dominican Republic to the US was almost equal to total US clothing imports from the European Union, while Honduras exported more than any of the ASEAN or South Asian countries.

In the EU as well, the preferential trade arrangements which have been negotiated with some Mediterranean countries and the free-trade agreement with Turkey have had a strong impact. In fact, Turkey and Tunisia are now in the top five clothing exporters to the EU. Also, the EU has removed its quotas with several countries in Central and Eastern Europe.

When considering changes in the structure of the trading system, it is of primary importance to examine developments in China. China's clothing exports grew from \$ 9.7 billion in 1990 to \$ 36.1 billion in 2000 (+273 per cent), going mainly to Japan (41 per cent), EU (22 per cent) and US (24 per cent). China became a WTO Member in December 2001; therefore, the demise of the textile and clothing quota system through the operation of the ATC will ultimately release China's currently restrained export potential onto the world markets. At the same time, it must be borne in mind that China will implement measures to bring its trading system into line with the global rules, which should lead to a greater opening of its market to foreign imports. China is already a major textile importer, reaching \$ 12.8 billion in 2000, an increase of 142 per cent from 1990. What is also important, in considering global trade, is the picture in the importing countries. Here we note that, between 1990-2000, textile imports into the US more than doubled (+ 134 per cent), while clothing imports increased 146 per cent to over \$ 66 billion. The US imported one third of the world clothing exports in 2000, up from 25 per cent in 1990.

Impact of Market Forces and Technology

This brings me to the fourth aspect, that is, the impact of market forces and technological advances on trade in this sector. With the removal of the quota system and the continued strengthening of the rule-based trading system, normal market forces will become the main determinants of the future course of textiles and clothing trade. While price will remain a key factor in this trade, other aspects, including product quality, dependability of the suppliers, and efficient transportation systems will determine the most successful participants. The application of the rapid advances in production technology and electronic communication will also be important factors in global trade. Another critical point is the role of government policies in responding to the needs of textile and clothing traders. The extremely high level of global competition means that those governments which maintain policies to facilitate the importation of raw materials and the export of finished products with a minimum of costs and delays will contribute significantly to their manufacturing sector's competitive advantage.

Consideration of the Factors

How these market forces, technology and government policies will come together in the real trading world is, of course, very difficult to anticipate. Let us consider some of the factors. World trade, particularly in clothing, has been expanding at a solid rate for many years, even under the influence of the quota system. There is every reason to believe this will continue and even increase in the absence of the quota system. Exports of clothing and some textiles from developing countries should increase at a faster rate than the global average when the quotas are removed, due in large part to their unquestioned comparative advantage in this sector. As to changes that one might expect to see in individual countries, it is clear that certain countries and regions have expanded their exports substantially over the past decade. Mexico, some Caribbean region countries and some Mediterranean countries have grown rapidly in response to favourable regional trading arrangements with the US and the EC, particularly the development of outward processing trade. These arrangements have had a major impact on the direction of trade and could continue to expand if such arrangements are extended in the Americas and in the regions geographically close to Europe. China has benefited from its long experience, immense resources and very high level of competitiveness to maximise its export levels. With the removal of quotas, the outlook can only be positive for China. Many other developing countries have also maintained export growth over the past decade to varying degrees, even in the face of the rapid expansion of China and Mexico. At the same time, large exporters, Korea and Chinese Taipei, have decreased clothing trade considerably, while Hong Kong, China has shown little or no growth in recent years, as they diversify their economies into other sectors, particularly electronics and their cost structures increase. On the importing side, we have seen continued growth in imports into the developed countries which, in all likelihood, will continue under more open market conditions. What is also important is to realise that the term "importing country" is no longer synonymous with "western, developed country". In 2000, 29 per cent of clothing trade was among Asian countries and this has been one of the most rapidly growing regions for clothing trade.

As to technology, it is clear that the latest electronic systems, such as CAD/CAM are universally available; there are no borders to technology. The situation for business-to-business communication by telephone, fax and email is the same: immediate contact world-wide. This effectively removes distance as a factor in this equation.

Turning to government policies, we are seeing determined efforts in all regions to encourage and facilitate production and trade with favourable treatment for the importation and exportation of

product components and production machinery, as well as the development of export-processing zones. In view of the intense competition, the exploitation of regional advantages, and the competitive strength of many long-established traders, it is critical that governments in all exporting countries lend their full support to the efforts of business to improve efficiency.

All of these factors, touching upon every aspect of trade in this sector, give every indication that there will be continued strong competition among developing countries calling for on-going adjustments and adaptation in the structures of textile and clothing production and trade. New, lower cost producers will continue to enter the trade and some others with increasingly high cost structures will diversify to other sectors, and will exit the sector. Nevertheless, the clear comparative advantage of many developing countries in the production of clothing and of some textiles, when combined with the removal of the quota system and further overall liberalisation of trade relations should lead to substantial growth in trade levels, to the greatest benefit of the most efficient producers.

ANNEX 4

LIST OF PARTICIPANTS

EPTSD TEXTILES DIALOGUE, PROMOTING SUSTAINABLE TRADE IN TEXTILES AND CLOTHING

LONDON, 24-25 JANUARY 2002

Asian Suppliers

Mr S.Sundura Murthy

Proprietor

HERO FASHION (A Govt of India
recognised Export House)

Manufacturer and Exporter of Knitted Garments

372 Mangalam Rd

Tirupur - 641 604

Tamilnadu State

India

Tel: (+91 421) 745118, 705118,

Fax: (+91 421) 704118 or 749118

Email: herofash@eth.net

Dr. M I Sharif

Bangladesh Centre for Advanced Studies

House 23, Road 10A

Dhanmondi R/A

Dhaka 1209

Bangladesh

Tel: (+88 02) 811 58 29

Fax: (+88 02) 811 13 44

Email: bcas@bdonline.com

Mr Mustafa Anowar

Chairman

**Bangladesh Garment Manufacturers &
Exporters Association**

(BGMEA)

7-9 Kawran Bazar

Dhaka 1215

Bangladesh

Tel: (+880 2) 81 15751

Fax: (+880 2) 88 02 81 13 957

Email: bgmea@dhaka.agni.com

Mr Julian Davis

Managing Director

Sanchia Pvt Ltd

Welmilla, Aluthgama

Bandaragama

Sri Lanka

Tel: (+ 94 38) 90 950

Fax: (+94 39) 91762

Email: buying@sltnet.lk

Mr Daya D.K. Gamage

Chairman

DAYA APPAREL EXPORT (PVT) LTD

171, Kesbewa Rd,

Boralesgamuwa,

Sri Lanka

Tel: (+94 1) 509 641, 509 713, 509 190

Fax: (+94 1) 509 161

Email: dayadk@cga.lk

Mrs Daya Gamage

Managing Director

DAYA APPAREL EXPORT (PVT) LTD

171, Kesbewa Rd,

Boralesgamuwa,

Sri Lanka

Tel: (+94 1) 509 641, 509 713, 509 190

Fax: (+94 1) 509 161

Email: dayadk@cga.lk

Ms Pamela Sumitrarachchi
Assistant Director
Sri Lanka Export Development Board (EDB)
Level 8
No 42 Navam Mawatha
Colombo 2
Sri Lanka
Tel: (+94 1) 300 722/300 721
Fax: (+94 1) 300 715
Email: pamela@edb.tradenetsl.lk

European Retailers

Ms Carena Huelsz
Trade Policy Adviser
Foreign Trade Association
Avenue de Janvier 5
1200 Brussels
Belgium
Tel: (+32 2) 762 05 51
Fax: (+32 2) 762 75 06
Email: carena.huelsz@fta-eu.org

Mr Åke Weyler
Managing Director
Textilimportörerna, Textile Importers Association in Sweden
S-103 29 Stockholm
Sweden
Tel: (+46 8) 762 76 10
Fax: (+ 46 8) 762 76 18
Email: ake.weyler@textileimporters.se

Mr Jimmie Lewis
Director
Iaf
International Apparel Federation
5 Portland Place,
LONDON W1B 1PW
United Kingdom
Tel: (+44 20) 7636 7788
Fax: (+44 20) 746 8261
Email: iaf@dial.pipex.com

Mr William H. Lakin
Director General
EURATEX
Rue Montoyer 24B
1000 Brussels
Belgium
Tel: (+32 2) 285 48 81
Fax: (+32 2) 230 60 54
Email: william.lakin@euratex.org

Ms Claudia Carillon
Director
Comtex Limited
16, Rue Pasteur
92140 Clamart
France
Tel: (+33 1) 46 01 91 66
Fax: (+33 1) 46 01 92 99
Email: carillon@club-internet.fr

Mr Willie Beuth MD
ECO-TEX
Institute for Applied Ecology
Gleueler Str. 373 a
D-50935 Koeln
Germany
Tel: (+49 221) 943 67 20
Fax: (+49 221) 943 67 23
Email: wb@eco-tex.com

Mike Barry
Marks and Spencers
Marks & Spencer p.l.c
Michael House, Baker Street,
London, W1U 8EP
United Kingdom
Tel: +44 20 7935 4422
Fax: +44 20 7487 2670
E-mail: Mike.Barry@marks-and-spencer.com

Abigail Garner
Vericott Ltd
Bexin House
2/3 St Andrews Place
Lewes BN7 1UP
United Kingdom
E-mail: abi@gossypium.co.uk

Regional/intergovernmental bodies

Mr Fernando Perrau de Pinnick

Textiles Division

European Commission DG TRADE E1

Office: CHAR 08/128

B-1049 BRUSSELS

Belgium

Tel: (+32 2) 296 19 32

Fax: (+32 2) 299 47 64

Email:

Fernando.Perreau-De-Pinninck@cec.eu.int OR

Textiles@cec.eu.int

Mr Munir Ahmad

Executive Director

International Textiles and Clothing Bureau

15 Route des Morillons

1218 Grand-Saconnex

Tel: (+41 22) 929 1616

Fax: (+41 22) 929 1617

Email: itcb@bluewin.ch

Mr Richard M. Hughes

Counsellor,

World Trade Organization

WTO

154 Rue de Lausanne

1211 Geneva 21

Tel: (+41 22) 739 5251

Fax: (+41 22) 739 5780

Email: richard.hughes@wto.org

Academic/ Research Institutes

Mr Raymond van Ermen

European Partners for the Environment

EPE Executive Director

67, avenue de la Toison d'Or

1060 Brussels

Tel: (+32 2) 771 15 34

Fax: (+32 2) 539 48 15

Email: raymond.vanermen@epe.be

Mr Dean Spinanger

Kiel Institute of World Economics

Düsternbrooker Weg 120

24105 Kiel,

Germany

Tel: (+ 49 431) 8814 297

Fax: (+ 49 431) 8814 524

Email: dspinanger@ifw.uni-kiel.de

Dr Joan Farrer

RCA Design Consultant

Consultant on Textiles and clothing

Research Fellow

64, Hadley Way

London N21 1AN

United Kingdom

Tel: (+44 208) 36 42 062

Email: docfarrer@hotmail.com

Ms Ritu Kumar

TERI Europe

Commonwealth Science Council

Pall Mall

London SW1Y 5HX

United Kingdom

Tel: (+44 207) 747 6212

Fax: (+44 207) 747 6174

Email: ritukumar@aol.com

Mr Rahul Deep Singh

Research Associate, Oil and Gas

Teri

Darbari Seth Block

Habitat Place

Lodhi Road

New Dehli 110 003

India

Tel: (+91 11) 468 2100

Fax: (+91 11) 468 2144

Email: rdsingh@teri.re.in

Mr Miguel Jimenez-Pont

Sustainable Trade Centre

Rte des Baillets 69

1281 Russin

Tel: (+41 22) 754 00 64

Email: jimenez-pont@bluewin.ch

Secretariat

Aimee Gonzales

Coordinator

WWF International

Ave Mt Blanc

1196 Gland

Switzerland

Tel: +41 22 364 9002

Fax: +41 22 364 8219

E-mail: agonzales@wwfint.org

Delwyn Dupuis

Assistant

WWF International

Ave Mt Blanc

1196 Gland

Switzerland

Tel: +41 22 364 9012

Fax: +41 22 364 8219

E-mail: ddupuis@wwfint.org

Facilitator

Philip Mix

Organisational Consultant

128 Church Road

Teddington

Middlesex TW11 8QL

United Kingdom

Tel: +44 208 977 0473

Fax: +44 208 943 5127

E-mail: philip.mix@totalise.co.uk



WWF is one of the world's largest and most experienced independent conservation organizations with over 4.7 million supporters and a global network active in 96 countries

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- Conserving the world's biological diversity
- Ensuring that the use of renewable natural resources is sustainable

WWF International

Ave du Mont-Blanc
1196 Gland
Switzerland

Tel: +41 22 364 9111
Fax: +41 22 364 0640