### Garment Industry in Sri Lanka Challenges, Prospects and Strategies<sup>1</sup>

#### Rupa Dheerasinghe

#### Abstract

Garment industry has been the Sri Lanka's largest gross export earner since 1986 and accounted for more than 52 per cent of total export earnings of the country. It is also the country's largest net foreign exchange earner since 1992. Sri Lanka as a garment exporter has shown signs of improvement in many respects yet even at present, the quota system covers more than 52 per cent of the country's garment exports. However, Sri Lanka depends on quotas much less than other South Asian countries. Besides, dependence on the quota system, there are weaknesses in the domestic industrial and export structure, labour markets rigidities and strong competition in international markets. They need urgent attention for survival in a quota free market. Therefore, the future of the garment industry will depend on the competitive edge that Sri Lanka has over her competitors in Asia, Latin and Central America and emerging producers in Africa and Eastern Europe who benefit from favourable trading arrangements with major markets.

This analysis shows that, phasing out of quotas will close down nearly fifty per cent of existing garment factories, as they loss that protection. However, some of the medium and large scale factories are expected to survive exploiting opportunities in the free market. Sri Lanka's garment industry is highly concentrated in large scale factories. That concentration will save a large part of export earnings while preserving job opportunities. However, in the short-run there will be an adverse impact on employment. (JEL F14, L11)

<sup>1/</sup> The author wishes to express her sincere thanks to Dr. A .G. Karunasena, Director and Dr. H N Thenuwara, Additional Director, Economic Research Department for their useful comments and suggestions on an earlier version of this paper.

#### 1. Introduction

Garment industry has an important place in Sri Lanka's economy. It has become Sri Lanka's largest export industry since 1986. It is also the country's largest net foreign exchange earner since 1992. Total value of export earnings in the sector was at US dollars 2,424 million accounting for 52 per cent of the total export earnings in 2002. The contribution to the Gross Domestic Product (GDP) was 5.3 per cent in 2002. This industry provides more than 330,000 direct employment or 5 per cent of country's total employment in more than 1,060 garment factories.

Sri Lanka's garment exports have been largely governed by the Multi-fibre Arrangement (MFA) since 1978. The MFA is a system of export restrictions imposed by developed countries on textiles and garment exports originating in developing countries to protect the garment industry in developed countries. The Uruguay Round Agreement on Textiles and Clothing (ATC) of WTO succeeded MFA in 1995. According to the new rules, the sector is to be fully integrated into normal rules of WTO by phasing out MFA in four phases by 2005. Sri Lanka has already fulfilled its commitments under Phase I and Phase II of the elimination of MFA phasing out procedures. The government submitted to the Textiles Monitoring Body of WTO in 1996 and 1998 lists of items on which Sri Lanka is ready to accept the removal of quota. The third phase of integration became effective on January 2002.

The MFA, by providing a ready market, has restricted Sri Lanka's exports but has protected it from competitors. Phasing out of MFA will open up more markets to Sri Lanka's exports, and at the same time will intensify competition from other developing countries. The future of the garment industry depends, to a large extent, on the ability to compete in free market where both garment producing developed and developing countries in the world will be players in the market. Over the last 20 years, a strong foundation has been laid for the industry, on which the future of this sector could be strengthened further and safeguarded. Yet there is much to be done to meet the challenges of intense competition in the coming years. This paper identifies the threats and challenges faced by the industry and assesses the capabilities and prospects of the sector to face them.

The rest of the paper is structured as follows. Section II of this paper discusses the international and domestic trade policy relating to textiles and garment industry. Section III examines the nature of Sri Lanka's textiles and garment industry and its challenges. Section IV provides the challenges that the garment industry face in the global environment and possible challenges in the post–MFA period. Section V evaluates the impact of liberalisation of world textiles and garment industry and Section VI identifies the areas in

which the textiles and garment sector could maximize existing capacity to achieve its goals and objectives.

# II. Impact of International and Domestic Policies on Textiles and Garment Industry

#### A. International Policy

In the world economy, the textiles and garment sector contributed nearly 6 per cent to world merchandise exports. However, world trade in textiles and garments takes place in a highly protected market with tariffs and quantitative restrictions. The main impediment to trade in the past has been the quantitative restrictions that have been in force for several decades.

The restrictions on the textile and garment industry have a long history tracing back to the 1930s, when USA and UK took action to limit textile imports from Japan. The emergence of some less developed countries as producers of garments together with excess capacity in many developed countries resulted in UK and USA negotiating Voluntary Export Restraints (VERs) with emerging economies. A series of short term and long term trading arrangements were then followed by MFA.

#### The Multi-fibre Arrangement

The MFA had four successive phases consisting of about 100 bilateral agreements negotiated under a multilateral framework and covering about 80 per cent of world textiles and garment exports. The MFA was intended to provide temporary protection to domestic textiles and garment industry to adjust to foreign competition and to provide developing countries with 'orderly access' to industrial country markets. In addition to the restrictions imposed by MFA, there are various other restrictions on developing countries relating to countries who do not participate in MFA and textiles and garment items that are not included in MFA. Thus, in 1992 the textiles and clothing trade was subjected to 127 MFA and non-MFA restraints agreements. The industrial countries as well as many developing countries which export textiles and clothing used extensive and high protection through both high tariffs and quantitative restrictions to limit foreign competition.

The arguments for the benefits of restrictive markets, emphasis that these bilateral agreements provided opportunities to small exporting countries to access large market and enable them to increase earnings from market share

Table 1 – Voluntary Export Restraints on Textiles and Garments

Name of the Agreement	Effective Period
Short-Term Arrangement Regarding International Trade in Cotton Textiles	1961-62
Long-Term Arrangement Regarding International Trade in Cotton Textiles	1962-73
Multi-Fiber Arrangement I	1974-77
Multi-Fiber Arrangement II	1978-81
Multi-Fiber Arrangement III	1982-86
Multi-Fiber Arrangement IV	1986-July 1991 and extended 3 times, until December 1994.

Source: IMF, The Uruguay Round and Arab Countries

for textiles and clothing exports. However, protection against foreign competition resulted in substantial welfare costs to industrial as well as developing countries. Although some developing countries were able to achieve efficiency in many product lines in these sectors due to protection against international competition, the trade barriers impeded growth in the textiles and clothing industry, causing substantial losses in potential export earnings.

#### The Uruguay Round Agreement on Textile and Clothing

The Uruguay Round Agreement on Textiles and Clothing of 1994 envisaged the phased elimination of MFA over a ten year transition period. The process was to be implemented in four phases, starting with the entry into force of WTO on 1 January 1995. The importing industrial countries agreed to initially integrate at least 16 per cent of total import volume (1990) in 1995 followed by an additional 17 per cent and 18 per cent, respectively in January 1998 and January 2002. The remaining 49 per cent was to be integrated at the end of ten years. In addition, the Uruguay Round Agreement provided for an average reduction of 22 per cent in industrial countries' bound tariff on textiles and clothing. Efficient producers who are currently constrained by quotas are likely to gain the most from this liberalization. However, with the removal of barriers, the reverse may be true for exporting countries whose industry cannot become competitive and acquire the benefits of quota free markets, or if markets in importing countries do not expand as expected.

#### Progress in Sri Lanka towards the elimination of MFA

In 1996, Sri Lanka fulfilled its commitments under Phase I of MFA phasing out procedures by submitting a list of items to the Textile Monitoring

Body of WTO. Sri Lanka submitted a second list of items to be integrated under phase II in 1998. The third stage of integration came into effect on 1 January 2002. However, so far, the process of removing quota in USA and EU has been slow. The number of quota actually eliminated during the first two stages in USA and EU were 2 out of 291 in USA and 14 out of 750 in EU quota.<sup>2</sup>

Under the third stage of integration in force USA has fully integrated 20 categories of garments, 5 categories of fabric, 7 categories of made up articles and 4 categories of yarn and partially integrated 4 categories of garments and one category of made up articles. However, this covers only 8 of Sri Lanka quota categories. As a majority of the items are to be phased out in a latter stage, when industrial countries postpone liberalization of sensitive items to the end, exporting countries like Sri Lanka may face difficulties in phasing out the last stage of implementation.

There are positive developments in Sri Lanka, in several areas indicating that the garment industry is preparing for thrive in quota-free markets. The share of non-quota exports increased in the recent past. The importance of quota categories declined gradually and reached 61 per cent in 2000 from 67 per cent in 1990. Quota restrictions imposed by EU on Sri Lanka garment exports were fully withdrawn in 2001. Dependence on quota markets fell by about 8 percentage points to 53 per cent in 2002. During 1996-2002, value of exports to non-restricted markets increased by 11 per cent while garment trade has diversified to more than 80 countries. However, the value of garment exports to these countries accounted for not more than 4 per cent until 2000. Nevertheless, removal of quota restrictions on garment exports to EU countries helped to increase the share of non restricted markets to 35 per cent in 2002. Another development is that the country has moved towards higher value added product lines, increasing net foreign exchange earnings.

#### B. Domestic Export Policy relating to Textile and Garment industry

The textiles and garment industry began in 1950's when the government took steps to promote the textiles industry as an import substitution industry. At this stage Sri Lanka imported raw material and produced yarn, raw fabrics and finished fabrics mainly in a few large scale textile mills established under government ownership. Power-loom and hand loom centres largely owned by private sector too engaged in the production of yarn and fabric. The textiles produced in these industries were fully utilised in the domestic market. Domestic industries were highly protected by the government by controlling the imports of finished products. Importation and distribution of raw material

<sup>2/</sup> IMF/World Bank (2001), Market Access for Developing Countries Exports.

too were controlled by the government. Local products were limited to a few standard items. In a highly protected environment, no incentives for quality improvement and not much progress were seen. They were sold mainly in the lower end domestic market. Garments industry began in the mid 1960s, was mainly run by a few large private companies. As importation of textiles was banned or highly restricted, these industries had to depend on local raw material. Almost the entirety of garments produced by these industries was sold in domestic market. There were hardly any exports of textiles and garments.

Economic liberalisation policies in 1977 paved the way for local handloom and garment industry to enter the world market. The market friendly economic environment created by liberalisation and supportive measures such as subsidy and duty rebate schemes, duty free import of raw material and machinery, lower taxes and tax holidays as well as the implementation of the Katunayaka Industrial Processing Zone in 1978 encouraged export led industries. The other important factor that was responsible for the rapid expansion in the textiles and garment industry were the changes in the world garments and textile markets, particularly the introduction of MFA which provided opportunities to enter the world markets under the quota system.

Even at present, more than 52 per cent of textiles and garment exports from Sri Lanka are governed by MFA. Under the quota system, garment are exported to USA and Canada. Until January 2001, a part of the garment exports to EU was also under the quota system. In 2002, 34 per cent of garments was directly exported to non-quota countries. The balance (about 14 per cent) was non-quota categories and was exported to the countries which imposed quotas.

#### Management of Textile Quota System in Sri Lanka

Export of textiles and garments from Sri Lanka under the quota system started in 1978 under the purview of the Secretary to the Ministry of Textiles Industry. In July 1, 1992, the administration of the quota system became the responsibility of the Textiles Quota Board (TQB) which was initially established as an inter-agency ad-hoc committee with the responsibility of allocating textile quotas. Later, in 1996, TQB was constituted as a statutory body by the Textile Quota Board Act, No. 33 of 1996. TQB consists of five ex-officio members and five others representing associations involved in the industry.

The objective of this scheme was to maximize the utilization of textile quotas available to the country. To serve this purpose, TQB allocates Textile Quotas (TQs) annually on the basis of past export performance. This is done in two stages during each year. The first allocation is made at least four weeks

before the commencement of the year and is based on the export performance during the first ten months of that year. After verification of export performance for the whole year, the final allocation is made in February of the succeeding year. Allocation on the basis of past performances is referred to as 'Main Quota' or 'Performance Quota' allocation.

Secondly, three per cent of quotas are allocated to small quota holders who have less than 4000 dozens in all categories on a pro-rata basis. Thirdly, approximately 50 per cent of the Quotas that are available in a year on account of growth and flexibility are earmarked for new investors and existing manufacturers who expand capacities by investment in new machinery and equipment.

In order to provide flexibility to the industry, exporters who hold Performance Quota are permitted to transfer unutilized quotas to other exporter through TQB on permanent or temporary basis. However, the sale or purchase of quota is not legally permitted. Yet, quotas allocated for hot categories are traded in the black market. The relevant serving agency can also authorize temporary transfers within a minimum period of two working days. Performance quota holders are encouraged to surrender the unutilized quota to TQB and credit for surrenders will be allocated on the basis of the time of surrendering the quota. Quota allocated under the 200 Garment Factories Programme (200-GFP) and small quota holder categories are not transferable during the first year. Re-transfer of transferred quota to another party is not permitted.

TQs that remain after the allocation on the criteria discussed above, TQs allocated and not accepted by exporters, unutilized TQs and quotas forfeited from exporters are transferred to a pool and allocated after calling for applications. This scheme is referred to as the "Main Pool Scheme" and generally starts before 31 March, and allocation will be on the basis of the number of employees. If the rate of utilization of TQs in any category was substantially low in the preceding year, a certain quantity of TQs are allocated to the pool named Cold Category Pool Quota Scheme (CCPQS) based on the extent of under utilization. TQB declares such CCPQS categories, at least one month before the end of quota year.

In the first instance, the quantity and basis of the allocation are decided by TQB. Remaining quotas are allocated to applicants on condition that shipments will be made within seven working days. If the exports under Seven Days Quotas (SDQs) did not take place by the end of the seventh day or a grace period of additional three days, the quotas will be added back to the pool and reallocated. In order for the SDQs to be effective, careful monitoring was required to optimise allocation while avoiding over-utilisation. A Special Pool Quota Scheme was also operated, if necessary towards the end of the

quota year. Applications were to be supported by firm orders valid on the date of application and quotas were allocated on a first come first served basis.

The Board of Investment (BOI) and the Textile Division of the Ministry of Enterprise Development, Industrial Policy and Investment Promotion issue export licences (export visas) against the TQs. Once exports are ready to be shipped under the TQs, the exporters should go to the BOI or the Ministry, depending on whether they hold of BOI or non-BOI status, in order to get the export licences. The licences are issued on the submission of shipping documents and are required by buyers to clear the export consignments from their Custom offices. Shipment of products against performance quota allocations is allowed only on proof of payment of Employees Provident Funds and Employees Trust Fund contributions. Exports made under the TQs are recorded in the BOI or the Textile Division of the Ministry, while issued TQs are recorded in the TQB. The BOI services about 82 per cent of the country's quota, while the Ministry services the balance. In order to keep a proper record of the utilization rate of the TQs and also to take timely action, exchange of accurate and up to date information between TOB and the other two authorities is essential.

However, this practice of issuing paper visas is vulnerable to counterfeiting, forging of signatures and illegal routing. The increasing number of visa forgeries in recent years has caused great difficulties to exporters as a whole and the TQB, and has threatened the integrity of the entire textiles and garment industry in Sri Lanka. To overcome such difficulties, Sri Lanka joined the Electronic Visa Information System (ELVIS)<sup>3</sup> which was designed in 1999 to transmit key statistics on textiles and garment export directly to the US Customs through electronic media.

The full operation of ELVIS minimizes forgeries, simplifies export documentation, and increases efficiency in issuing a visa. It also increases accuracy, security and reliability of transmitted information and speeds up the import clearance process in USA. A more accurate and updated database will be built-up with TQB providing a comparable source of information to exporters as well as the public. These are some of the basic necessities of the garment export industry today, which has to find ways and means to compete in a highly competitive international market and particularly to face the quota free market by 2005.

Even though quota requirements for an exports to EU had been eliminated, exporters to EU have to obtain export visa from BOI or the Textiles Division of the Ministry of Industrial Development because they want to

<sup>3/</sup> For further information on ELVIS refer article on Electronic Visa Information System, News Survey March/April 2000, Vol. 21/No.2.

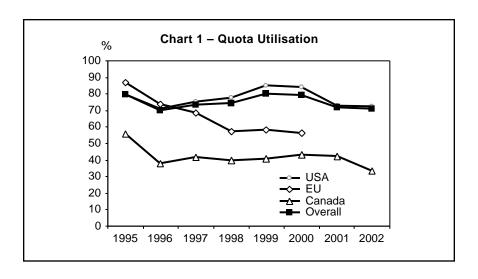
monitor exports and ensure that the export items have been produced in Sri Lanka. In addition to the four categories under quota, three new categories were brought under the visa requirements in 2001. With the objective of preventing forgeries of export visas and Certificates of Origin, TQB introduced an Electronic Data Exchange System in co-ordination with the European Commission on 1 September 2001. When export visas are issued to exporters to the EU, TQB transmits all relevant information to the European Commission in Brussels through the Electronic Data Exchange System. This system enables the European Commission to monitor the country of origin, product category and other relevant information instantaneously and prevent importing misclassified products and those not produced in Sri Lanka. As Sri Lanka has access to the EU market without quota restrictions, forgeries of this nature are to be expected.

#### Utilization of Textile Quota

Under the quota system, approximately 30 quota categories were opened for export to USA and 11 categories were Canada in 2001. Until end 2000, 4 categories were available for export to EU countries. From 1996 to 2000, quota allocations by these three countries were increased by 8 per cent. Overall quota availability to USA and Canada increased by 6.8 per cent in 2001. However, overall quota allocation in 2001 declined by 7.5 per cent due to the absence of EU quota. This will minimize the risk associated with the removal of a large number of quotas at the last stage of the phasing out process in 2005.

#### Under-utilization of Quota

Over the last decade overall utilization ratios varied between 70-80 per cent indicating an under utilization of quota. Under-utilization may occur because of (a) lower demand for a particular category from importing countries, (b) competition from other countries holding a quota, (c) local producers using their capacity to produce high value added garments under other quota categories or non quota categories or to meet demand from non quota countries and (d) mis-allocation of quota. However, under-utilization does not necessarily imply that the industry is not performing well. Exporters may have used their full production capacity to produce garments to non quota areas as Sri Lanka responds to phased elimination of quotas, shifting from quota to non quota items. However, maximum utilization of available quotas is a prime objective under quota system as it ensures the non-competitive access to industrial country markets. Once a market is acquired, it may provide access even under a non quota regime.



#### Over-utilization of Quota

Over-utilization occurs when exports under a particular category exceed its quota allocation. In general, when exports of a particular category exceed its quota allocation for the year, the importing country may impose an embargo by constraining the entry of these products to the country. In 1989, USA embargoed the entry trousers (category 347) and skirts (category 342) exported to that country in excess of permitted quantities. In 1994, following the 200-GFP, excess items were produced but the government was able to handle the situation by obtaining increased quota allocations. Similarly in mid September 1998, TQB announced that men's and boy's shirts not knit (categories 340/640) and men's and boy's coats non-suit *i.e.* jackets (categories 334/634) had been over-utilized, and requested exporters to defer their subsequent exports until December 1998. This decision was taken in order to avoid the possible imposition of an embargo by USA government on Sri Lanka's future exports.

Over-utilization may occur mainly because of (a) poor coordination between issuing and servicing authorities and mismanagement and poor monitoring of TQs. Conscious over-allocation of quota of low performing categories under CCPQS has been a practice in order to maximize the utilization of quota. This is done in the best interests of the industry but needs to be carefully monitored. If TQB does not monitor carefully and manage the quota pool schemes properly, industrialists may produce more because of over allocation, and will be worse off if the category exceeds the available quota to over needs. Close coordination between issuing and servicing agencies is required and must be monitored on a regular basis, particularly, when SDQs

are allocated and reallocated. If the servicing authority does not report utilization in time, un-utilised quota may not be reallocated.

Other causes for over-utilization may be (b) mistakes made by the Customs authority in the importing country which records imports under the wrong category and (c) shipments based on forged export documents. When the demand for a certain quota category is high, some exporters produce forged documents to export more garments which have high demand, exceeding their quota limits. They obtain visa for one category, which can be exported under quota but export a different category, which is in high demand. For example, in 1998, the USA Customs import data revealed that about 90 per cent of the category 334/634 quota had been utilized by end September. Subsequent investigations showed that because of the high demand for the category, some exports had been made using fraudulent documents.

The immediate impact of over-utilization will be deferment or cancellation of export orders. The exporters have to bear the total cost of cancelled orders, face problems of storage and related costs and overcome difficulties in servicing bank loans. Loss of credibility in exporters due to postponements and cancellations of shipments *etc*. will divert buyers away from that country. Imposition of an embargo will hinder possibilities of future enhancement of base limits of the TQs under the flexibility facility until such time as both parties come to an agreement. The industry is in a transition period with the gradual phasing out of quotas. It is becoming very competitive due to new procedures and regional groupings in the West. Maintenance of the country's image among buyers is imperative to survive in the future in a highly competitive environment under the quota free system.

Meanwhile the industry should use the opportunity of entering large markets through the quota system not only to sell their production today but also to build up relationships with buyers and to look for new markets for the future. Sri Lanka is in the process of moving into more non-quota exports and high value added products. However, progress has been slow in finding new markets in non quota countries. The share of garments exported to non-quota countries (excluding EU) is still around 4 per cent of total garment exports from Sri Lanka. Sri Lanka should move fast in this direction, and be well equipped to deal with market conditions when quotas will be dismantled by 2005.

# III. Nature of Sri Lanka's Textile and Garment Industry and its Challenges

Sri Lanka as a garment exporter has shown improvement in many respects. However, even at present, under the quota system more than 52 per

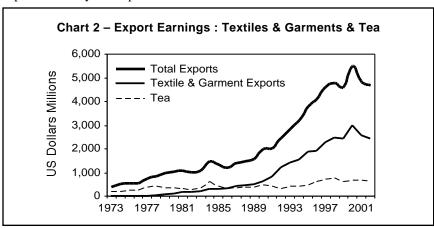
cent of Sri Lanka's garments exports to the world. Besides, heavy dependence on the quota system, inflexible labour markets and competition from emerging garment procedures are the major issues that need urgent attention for survival in quota free markets.

#### A. Overdependence on a Single Product

Following liberalisation in 1977, the export structure of the economy changed drastically from the agricultural base to an industrial base until 1995; no significant changes has been seen thereafter. Textiles and garments, which became Sri Lanka's largest single item of exports in 1986 continued to maintain that position, increasing its share from 28 per cent in 1986 to 52 per cent in 2002.

Although gross earnings from the textiles and garment sector are high, tea remains the country's largest net foreign exchange earner until 1991. Textiles and garment sector became Sri Lanka's largest net foreign exchange earner in 1992 (Chart 2 and 3) partly as the industry shifted from low value added garments to high value added garments and as the sector as a whole expanded rapidly. Some industries such as rubber based products, machinery and equipment, diamond and jewellery, travel goods and footwear, ceramic products, fish products emerged. However, the prominence of textiles and garments exports has remained unchanged and this product accounted for 70 per cent of industrial exports.

This sector used 40 per cent of all intermediate good imports of the country in 2001. Therefore, vulnerability to the external sector continued, perhaps, somewhat reduced as Sri Lanka depends heavily on one single industrial commodity *i.e.* garments for exports earnings. That commodity itself depends heavily on imported raw material.



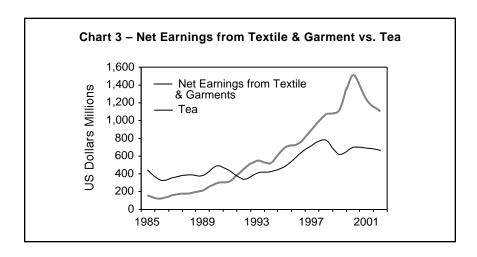


Table 2 – Structure of Export (Percentage Share)

Product	1977	1985	1990	1995	2002
Agricultural	79.3	52.5	36.4	21.6	20.0
Industrial O/w: Textiles & Garments	14.2 2.1	39.5 21.9	52.2 31.6	75.5 48.4	77.3 51.6
Mineral	4.8	2.4	4.4	2.3	1.9
Other	1.7	5.6	7.0	0.6	0.8

Source: Central Bank of Sri Lanka

#### B. Heavy Dependence on a Few Export Markets

Sri Lanka's textiles and garment exports are concentrated in a few export markets. USA accounted for 64 per cent of the total garment exports and the share of EU was 30 per cent in 2001. Canada, accounted for 2 per cent of total garment exports. More than ninety countries, including Australia, Japan, Switzerland and Israel accounted for balance 4 per cent. Even though USA and EU accounted for more than 94 per cent of Sri Lanka's garment exports Sri Lanka supplies only 2.3 per cent and 0.9 per cent of USA and EU garment markets, respectively.

Heavy dependence on quota markets is a major concern in the textiles and garments industry. Even though phasing out of quota restrictions under the Agreement of Textiles and Clothing (ATC) had been started since January 1995, Sri Lanka had not felt much of these changes until December 2000 as in the first two stages, USA and EU chose items with less restrictions or which

Table 3 – Country-wise Classification of Garment Exports

G 4	Pe	Percentage Share				
Country	1990	1995	2002	1997-2002		
USA	66.3	60.7	63.3	6.0		
EU	27.0	34.2	31.0	3.8		
O/w: UK	6.2	13.7	19.9	12.2		
Germany	9.6	9.0	3.4	-8.7		
Netherlands	3.4	3.8	1.5	-7.9		
Canada	2.2	1.7	1.8	13.4		
Other Countries	4.5	3.4	3.9	6.7		
O/w: Australia	0.2	0.3	0.4	13.4		
Japan	1.0	0.7	0.6	4.6		

Source: Central Bank of Sri Lanka

were less competitive in US and EU markets. This was very clear in the US market, where Sri Lanka's share of garments exports under quota restriction declined from 97.9 per cent in 1990 to 84.1 per cent in 2001 whereas share of quota garments to the EU increased from 24.1 per cent in 1990 to 26.8 per cent in 2001. However, Sri Lanka's dependence on quota market was much lower than that of her South Asian competitors. (Table 4)

During the period 1996-2000, quota allocation by the USA increased by an annual average rate of 7.5 per cent (in volume terms) while EU quota allocation increased by an annual average rate of 12.5 per cent. As a result more than 60 per cent of Sri Lanka's garment exports are covered by the MFA in 2000. The removal of quota restriction on Sri Lanka's exports to the EU countries by 1 January 2001 will clear about 10 per cent of existing quota restrictions on Sri Lanka's garment exports. Even though adverse developments in the western world reduced the demand for garments in 2001, quota allocated by USA and Canada increased by 6.7 per cent and 9.5 per cent, respectively in 2001.

Table 4 – Exports of Garments Under Quota System –South Asia

Country	Quota Based Exports (%)
Bangladesh	95
India	73
Nepal	80
Pakistan	90
Sri Lanka	53(a)

(a) 2002 estimate Source: Garment Industry in South Asia Rags or riches ILO-2002

Table 5 – Quota vs. Non-Quota Garments

Country	Value of	Exports	Exports under Quota (%)		
	1990 (Sq. Mtrs.)	2002 (US \$ Million)	1990	2001	
USA	412.5	1,421.1	97.9	81.0	
EU	168.5	696.6	24.1	_	
Canada	13.8	40.5	n.a.	80.0	
Other	27.6	88.3	_	_	
Total	622.4	2,246.4	67.0	52.7	

Source: Textile Quota Board, Sri Lanka Customs

Notes: 1990 - Calculations are based on Squire Meters

2001 - Estimates are based on Value

#### C. Insufficient Product Diversification

Insufficient product diversification is another problem in the industry. The composition of the textiles and garments exports showed a marginal change over the past 2 decades. Garments exports accounted for more than 96 per cent of total textiles and garments exports in 1980. Textiles, other than made up articles and yarn emerged as export items in early 1990's and increased their shares to 3 per cent each while garments exports accounted for more than 90 per cent of total textiles and garments exports in 2001. Sri Lanka expanded its product coverage from four items (shirts, blouses, trousers and jackets) in 1977 to a broader base of more than 50 items in 2000, but is still highly concentrated on a few product categories, particularly casual ware for men and women. The quota restrictions imposed by major importing countries limit the export of most of these popular items.

Table 6 – Struture of Textile and Garment Exports (Percentage Share)

Product	1990	1995	2002
Textiles	0.4	2.8	2.8
Garments	96.5	89.3	92.6
Yarn		2.4	1.1
Made up articles	2.1	3.5	19.0
Other	1.0	2.0	1.6
Total	100.0	100.0	100.0

Source: Central Bank of Sri Lanka

#### D. Heavy Dependence on a Few Large Scale Industries

Heavy dependence on a few large scale producers is another important feature of the industry today. Out of 1,061 large and medium scale garment factories operated in Sri Lanka, about 26 per cent are small scale with less than 100 employees. Another 51 per cent are of medium scale. Only 23 per cent belongs to the large and very large category with 500 or more employment. However, these large (244) manufacturers accounted for 62 per cent of total employment in the industry. Local entrepreneurs currently own about 80 per cent of total garment factories while balance are owned by foreign companies or partnerships of well known companies.

Table 7 – Distribution of Factories - By Size

G.	No. of Employees	No. of I	actories	Percentage (%)		
Category		1998	2001	1998	2002	
Small	0-100	286	271	32.8	25.5	
Medium	101-500	430	546	49.3	51.5	
Large	501-1,000	139	183	15.9	17.2	
Extra	Over 1,000	17	61	1.9	5.7	
Total		872	1,061	100.0	100.0	

Source: Survey conducted by the Textile Training and Services Centre

According to Customs' records 1,045 manufacturers exported garment products. However, 55 companies exported garments worth less than US dollar 100 each in 2002. These 55 companies accounted for a negligible amount of total export earnings in 2002. Out of the balance 990 exporters more than 50 per cent accounted for less than 1 per cent of total garments exports. The top ten per cent of exporters accounted for more than 70 per cent of total garments exports (Table 8). Out of this ten per cent 39 exporters (top 3.9 per cent)

Table 8 – Distribution of export earnings by Companies

Exporters as a percentage	Export earning as a percentage of total earnings (%)				
of total exporters	1999	2002			
Top 10 per cent	72.0	72.3			
2nd top 10 per cent	16.2	17.4			
3rd top 10 per cent	6.9	6.6			
4th top 10 per cent	3.0	2.4			
5th top 10 per cent	1.3	0.9			
Lowest 50 per cent	0.6	0.4			

Source: Sri Lanka Customs

supplied 50 per cent of the total garments exports. These two indicators demonstrate the top heavy structure of the garments industry.

The distribution of export earnings and employment according to size of the factory, showed that a large share of employment and export earnings in the garment industry was concentrated on a few large companies. Large companies with more than 500 employees each which contribute 23 per cent of all garment factories accounted for 90.7 per cent of total garment exports and provide employment of 61.9 per cent of total employment (Table 9).

Table 9 - Distribution of Factories, Employment - by Size

Category		Factories (%)	Employment (%)	Export Earnings (%)
Small Medium Large	0-100 101-500 501or more	25.5 51.5 23.0	3.1 35.0 61.9	0.3 9.0 90.7
Total		100.0	100.0	100.0

Source: Survey conducted by the Textile Training and Services Centre

The geographical location of garment factories show that the industry is not well scattered in the country. Labour migrated from rural areas to towns and create social and economic problems as residential facilities are expensive in these area. Owing to the high cost of living in relation to their income, female employees leave employment to stay with their families after marriage. Most of the garment industries are located in Colombo and Gampaha districts because of better infrastructure facilities and close proximity to Colombo harbour. Accordingly, more than 65 per cent of garment factories are located in these two districts. Under the 200 Garment Factories programme which aimed at encouraging the establishment of other factories in rural and difficult areas, 189 industries were located in 21 districts. Of these 153 were located outside Colombo and Gampaha Districts. Under the New Garment Factory Programme introduced in the 1998 Budget, 60 factories were in commercial operation in 19 Districts outside Colombo District in 2002.

#### E. Lack of Solid Raw Material Base

Lack of a solid raw material base is considered as one of the major factors weakening Sri Lanka's competitive strength among its major competitors in Asia. Textiles and garments industry in Sri Lanka depends heavily on imported raw material and accessories. More than 70 per cent of the raw material and

70-90 per cent of the accessories used in this industry are imported. Since fabrics and accessories account for more than 70 per cent of the cost of production, lack of backward linkages is a major constraint to the development of this industry. Availability of raw material in the close proximity, most importantly within the country, is an essential factor in today's context where lead time (the time between ordering the goods and having it arrived in the stores) play a major role in international competitiveness. Backward linkages will not only provide employment and save foreign exchange, but will managed the time of transporting inputs efficiently thus reducing lead-time.

Wastage takes place because of several reasons. There are rejects and over production. Wastage takes place in transport within the factory premises and between the factory and warehouses. Idling machines add to wastage. Waste also access in stocking and in handing. More efficient supporting services can reduce wastage. Attention to reduce waste will increase the competitive edge in most Sri Lankan factories.<sup>4</sup>

#### F. Wage Differentials

Wage differences between industrialised western countries and developing countries was the main reason for shift of textiles and garments industry from the western world to Asian countries. All over the world average labour cost has increased. However, average hourly wage rates given in Table 10 suggest that Sri Lanka no longer has the advantage of lower labour cost in relation to her Asian competitors although, she has an advantage over developed countries.

Table 10 – Average Hourly Labour Cost (Wages and social charges - in US \$)

Country	1992	1998	2000	Country	1992	1998	2000
USA	10.00	12.97	14.24	Sri Lanka		0.49	0.46
Canada	10.50	13.93	14.29	Pakistan		0.40	0.37
Mexico	1.70	2.23	2.20	Philippines		1.12	
Germany	18.40	21.48	18.10	Indonesia		0.24	0.32
France	13.40	14.16	13.85	Turkey		2.48	2.69
UK		13.58	12.72	Hong Kong	3.70	5.65	6.10
Switzerland		24.08	13.85	Korea	3.80	3.63	5.32
Thailand		1.09	1.18	China	0.42	0.62	0.69
Bangladesh		0.43		Taiwan		5.85	7.23
India		0.60	0.58	Japan	10.30	20.70	26.10
Italy	15.70			South Korea		2.05	1.82

Sources: World of Work – 1996 & 1999 Werner International – 2000

<sup>4/</sup> Juji Hasumi (1999)

In Sri Lanka the cost of labour was about 15 –16 per cent of the total cost of production. This was relatively a low percentage in comparison to that in industrialised countries. However, Vietnam, Cambodia, Caribbean nations and sub-Saharan countries are emerging as lower cost producers. They also have a preferential access to US and EU markets.

#### G. Lack of Skilled Labour

As the industry expanded rapidly job opportunities increased significantly. There is now apprehension that job opportunities will be lost rapidly, if the industry cannot successfully face competition after removal of quota in 2005.

Over the last three years employment in the textiles and garments sector increased by 21 per cent. The industry faces many problems in developing and maintaining the required manpower. Estimated cadre requirement given in Table 11 shows that the industry find it difficult to recruit sufficient employees in all categories, particularly, in operational grades. Even in the managerial grades, about 8 per cent of the vacancies are unfilled due to lack of suitable persons. The operational category comprised 94 per cent of the total workforce of which 90 per cent are female. Management category

Table 11 - Composition of Employment

Category	Employment		Vacancies	(%)		Age Structure (%)				
	1998	2001	2002	2002(a)	Male	Female	18-24	25-29	30-39	>40
Management Grade	12,354	19,794	21,499	1,705	42	58	25	54	18	2
Senior Managers	2,122	1,586	1,639	53	84	16	9	17	48	26
Middle Level										
Managers	3,240	2,664	2,781	117	64	36	20	48	29	3
Front Line Managers	6,992	15,544	17,079	1,535	34	66	28	59	13	0
Operative Grade	245,994	290,736	316,803	26,067	10	90	64	30	5	1
Mechanics	3,162	4,054	4,305	251	99	1	38	48	13	1
Operators	129,349	176,663	198,376	21,713	6	94	64	30	5	1
Helpers	70,344	65,345	68,281	2,936	10	90	66	30	4	0
Checkers	22,158	23,188	23,242	54	12	88	66	31	3	0
Line Leaders	3,225	1,289	1,305	16	5	95	22	62	15	1
Cutters	2,289	2,515	2,592	77	87	13	20	30	48	2
Others	15,467	17,682	18,702	1,020	12	88	69	20	10	1
Total	258,348	310,530	338,302	27,772	12	88	62	31	6	1

(a) Vacancies at the beginning of 2002

Source : Survey conducted by the Textile Training and Services Centre

accounted for the balance 6 per cent. Most of the female workers leave the industry after marriage while a considerable number of trained workers leave the industry for foreign employment. The average labour turnover worked out per factory is about 60 per cent per annum. Taking the labour migration within the industry into account, the net number of persons leaving the industry each year is estimated as 25 per cent.

There is the problem of maintaining a stable work force and much effort required to maintain quality and productivity in the labour force. More than 64 per cent of the labour force in the operational grades are in age group 18-24 years. Even in managerial grades, nearly 79 per cent are below 29 years of age and another 18 per cent are between 30-39 years. Exceptionally 74 per cent of senior managers are older than 30 years.

Table 12 - Educational / Vocational Training

		Е	ducation	al (%)	1				
Category	Deg- ree	G.C.E. (A/L)	G.C.E. (O/L)	Below G.C.E. (O/L)	Total	Certifi- cates	Trai- ned	Experi- -ence	Industry Preference
Management Grade	9	64	27		100				GCE (A/L)
Senior Managers	30	62	8		100				GCE (A/L)
Middle Level									
Managers	8	80	12		100				GCE (A/L)
Front Line Managers	7	62	31		100				GCE (A/L)
Operative Grade		9	69	22	100		14	86	Experience
Mechanics		10	86	4	100	5	12	83	Experience
Operators		6	72	22	100		20	80	Experience
Helpers		3	65	32	100		5	95	Experience
Checkers		41	54	5	100		4	96	Experience
Line Leaders		19	75	6	100		1	99	Experience
Cutters		20	80	0	100		2	98	Experience
Ironers		10	62	28	100		2	98	Experience
Others		16	71	14	100		7	93	Experience
Total	1	12	66	21	100		14	86	Experience

Source: Survey conducted by the Textile Training and Services Centre, 2001

Only 4 per cent of the workforce currently engaged in the operational grades has acquired vocational training; the balance acquired skills through work experience. Even in the managerial and technical grades professionally qualified managers and supervisors are in short supply. In many instances, these positions are held by persons promoted from operator level without any

additional training. Among senior managers, almost 70 per cent have had no more education than GCE Advanced Level or GCE Ordinary Level.<sup>5</sup>

#### H. Productivity of Labour

Productivity of labour is considered very low in comparison with competitors. However, labour productivity in the garment sector improved slowly and gradually over last several years. Better working conditions, on the job training and better management techniques contributed these improvements. Some of the factors responsible for low productivity are lack of properly trained labour, rigidities in labour legislation, poor working conditions, high labour turnover, difficulties in obtaining seasonal labour and outsourcing labour. An other major concern is the large number of holidays each year due to statutory, religious, and social obligations. They contribute low productivity in labour while reducing the number of effective manhours per year. The large number of strikes and loss of man days also adversely affects the productivity of labour.

#### I. Rigidity in the Labour Laws

Rigidity in the labour laws is one of the areas that government should pay attention to. In a competitive environment, industrialists are under pressure to deliver orders on time and reduce lead time. Some international buyers require compliance with local labour regulations. Our regulations are sometime not in compliance with international standards. International buyers stipulate that workers should not work in excess of 60 hours per week unless local legislation permit other wise. Until recently, Sri Lanka labour laws restricted overtime for female workers to 100 hours per year or 6 hours per week. That restriction make Sri Lankan industrialist lose competitiveness to those in other countries which practise more flexible labour legislation. This legislation was amended to increase the number of overtime hours to 60 hours per month or 720 hours per annum effective from 6 August 2002. Furthermore, wage policies should contain provisions to link wages with productivity. Our laws have many loopholes in that respect. Labour laws need to be revised to suite the requirements of the modern economies. Draft legislation has already been prepared to amend laws relating to termination of employment, dispute settlement and other matters and are expected to be presented to Parliament soon.

<sup>5/</sup> Employment data are based on a survey conducted by the Textile Training and Services Centre. Author wishes to place a note of appreciation to Mr. A.H.H. Saheed of the TTSC for providing most recent information.

#### J. Lead Time

Lead time has become one of the principal factors considered by western importers. In order to respond to fashion trends and meet competition, importers are now looking for delivery services of 8-12 weeks after placing an order. Lead time heavily depends upon overseas locations. Shorter delivery time makes production and marketing process more efficient providing opportunities for quicker responses to changing demand. Specially US and EU buyers are demanding fast response. Shorter lead time is partly responsible for the increase in market share by Mexico and Caribbean countries in the US market from 6 per cent in 1984 to 41 per cent in 1999. As there are several countries with competitive labour costs and shorter lead time in Latin America, South Asian and Far Eastern countries are now face a growing competition from those countries. According to a recent study <sup>6</sup> Canadian buyers have indicated concerns on perceived long delivery time, high prices and unreliable supply in Sri Lanka garments sector as well as political instability in the country.

#### K. Product Quality

Product quality is one of the crucial factors in determining the sources of the US and EU garments imports. A survey <sup>7</sup> conducted with 23 of 35 top retailers in the USA confirmed that over 70 per cent of buyers indicated relative product quality as the most important factor in selecting a garment producer. Where quality is concerned, buyers go for particular producers not for the country because quality varies among factories within countries. Lead time and cost were ranked numbers two and three. However, the mass merchants and department stores ranked lead time slightly above quality. A more recent study found that almost 40 per cent of the respondents indicated price as the most important factor in selecting an apparel producer. The same source concluded that 'the most successful manufacturers will be those who create and market their own brand names to the consumer'. Brand recognition, brand identity and consumer acceptance of these brands will enable manufacturers to create better margin opportunities. Quality improvement is the area where Sri Lanka can maximise her potential for wining buyer's confidence which is essential for retaining customers. Most recent studies on the North American market for Sri Lanka apparel found that both US and Canadian buyers believed in the high quality of Sri Lankan garments.

<sup>6/</sup> Goss Gilroy Inc. (2001)

<sup>7/</sup> Hathcote and Nam (1999)

#### L. Investment in Technologies

The garments industry has became a hi-tech industry worldwide. For Sri Lanka to develop competitive edge in international markets and survive, it has to concentrate on move higher value added products. If Sri Lanka remains as a producer of standard low value added, low price garments, buyers will find other cheaper sources in Asia, Africa and Eastern Europe. To be competitive Sri Lanka must produce specialized, high quality up-market garments which are not highly price sensitive. To achieve the quality required to meet up-market products it is necessary to invest in advanced technology. During the past several years investment in machinery and equipment increased at a moderate level but most of them were concentrated in a few large factories. Most small scale factories are unable to invest in hi-tech machinery due to massive capital costs. Sometimes, unwillingness to bear the large costs in long term investment has worsened the situation.

#### IV. International Markets and Challenges

Sri Lanka's textiles and garments industry is adversely affected by many of the emerging regional blocks which erode Sri Lanka's market share in the world market. This situation will be further aggravated as these agreements are fully established in the next few years. A recent study<sup>8</sup> found that sourcing strategies in the USA were increasingly driven by government policy towards specific regions. USA has already entered into a number of preferential trading agreements and these agreements influence sourcing decisions world wide. Beyond 2005, sourcing will tend to value those with favoured trade relations with the USA.

#### A. Trade Agreements

#### North American Free Trade Agreement (NAFTA)

North American Free Trade Agreement (NAFTA) made Mexico a privileged supplier of clothing to Canada and USA and diminished Sri Lanka's access to the USA and Canada markets. Although, the cost of labour in Sri Lanka is very much lower than in Mexico, Mexico is in close proximity to USA and receives tariff and non-tariff concessions under NAFTA. Mexico overtook China as the largest exporter to USA and now contributes 4.2 per cent to world garment exports. Its share in the world market was less than

<sup>8/</sup> Overview of the North American Market for Sri Lankan Apparel – GOSS GILROY INC, Management Consultent.

0.1 per cent in 1980. During the last seven years, garment exports from Mexico to US increased by an average rate of 15.4 per cent per annum. Mexico captured 14.8 per cent of the market in 1999 but the share declined to 13 per cent in 2002. Sri Lanka's exports to US increased by an average rate of 6 per cent per annum, during the same period. Although Sri Lanka slipped in rank from 12th in 1995 to 16th in 2002, her market share has been stable around 2.5 per cent during last 7 years.

#### The 'African Growth and Opportunity Act' (AGOA)

The Trade and Development Act of 2000 enacted in USA, which provides tariff and quota preferences for garments produced in Sub-Saharan African countries (SSA) and Caribbean Basin (CB) countries would place these countries in an advantages position over other garment producing countries. Under this agreement 24 Caribbean and Central American countries and 48 SSA would be eligible for duty and quota free access to the USA market for garments made with USA fabric and yarn. The 'African Growth and Opportunity Act' (AGOA) which aims at establishing a comprehensive trade and development policy for SSA signed by the US president in May 2000, would provide similar but limited market access to garments made out of African fabrics as well. Those countries in SSA with a per capita income below US dollars 1500 gives duty and quota free access to garments made from third country fabric for a period of 4 years. Mauritius, Lesotho, South Africa, Kenya, and Madagascar who has a production base would be the first to benefit out of this legislation. Nine others were identified as having potential. USA who imports from AGOA eligible countries will be exempt from paying import duties of 17-33 per cent. As dramatic growth cannot be expected in US demand for textiles and garments in the near future, the wide opportunities provided by the AGOA will help SSA countries to increase their exports to US at the cost of Asian countries. The AGOA and other TDA eligible countries are expected to reach their annual export cap to USA of US dollars 8.75 billion by 2008. More important US mass market retailers, who will save their duty payments will encourage their suppliers to relocate in TDA eligible countries. This would direct large inflows of foreign capital investments to those countries.

The second section of TDA 2000, is entitled the United States - Caribbean Basin Trade Partnership Act (Caribbean Basin Initiative - CBI). This provides duty and quota free treatment to garments cut in US and assembled in the Caribbean using US fabric and yarn, garments cut and assembles in Caribbean using US fabric, yarn and thread and limited quantities of certain other items. In addition to concessions under TDA 2000, cheaper labour in the Caribbean and Mexico, close proximity, lower shipping cost and less lead time give them

an advantage over Asian countries. CBI promotes US investments in the Caribbean Basin and helps strengthen the international competitive position of the US textile industry.

Even before TDA 2000, Caribbean exported wide range of cotton garments to US. These exports grew by an annual rate of about 15.1 per cent 1996-1999. Garment exports from Mexico to US increased by an annual rate of 16.8 per cent during 1990-1993 prior to the implementation of NAFTA. From 1994 until 2000, the Mexican garments exports increased by an annual rate about 30 per cent. Some project similar growth in Caribbean garment exports to US in the initial stage. However, they might lose a part of their market share again to Asia, once quota restrictions are removed for all WTO countries in 2005. However, one should not under estimate that the Caribbean countries will continue to enjoy advantages over Asia on several fronts.

#### An Agreement between the EU and Sri Lanka

In 2000, Sri Lanka signed a Memorandum of Understanding with EU. EU removed quota restrictions on textiles and garments exports to EU countries in January 2001. In reciprocity, Sri Lanka agreed to bind tariff rates at 0 per cent for raw materials, 5 per cent for yarn and fabric, 10 per cent for fabrics and 17.5 per cent for clothing products (current rates are 0, 0, 25 and 10 per cent, respectively). As some of the binding rates are lower than currently effective rates, some local industries were protected by the extension of exemptions on selected products, such as coir twine, rope *etc*. used in producing fishing nets, coconut coir, sanitary articles *etc*. In line with the bound tariff rate, import duty on carpets and other textile floor coverings were reduced from 25 per cent to 10 per cent with effect from 11 January 2001. Sri Lanka will also refrain from introducing any non-tariff barriers on imports of textiles and clothing.

Sri Lanka is the 20th supplier of textile and garments to EU while EU is the second largest importer of Sri Lanka's textiles and garments exports. Therefore, it is expected that the phasing out of the textiles and garments quota on exports to the EU market would have a positive impact on the Sri Lanka's textiles and garments industry. This will result in higher production and exports while allowing exporters to utilize their unused capacity. This will also build up confidence in exporters to plan for the future while easing fears of facing a quota free market environment.

Advantages that Turkey and Central and Eastern European economies had in the EU market due to preferential agreements with those countries were

<sup>9/</sup> Garment exports by Mexico to USA declined by 7 per cent and 5 per cent respectively in 2001 and 2002.

diminished to a certain extend, when quota restrictions on Sri Lanka garments exports to EU were removed. At present, Sri Lanka has an advantage over India and Pakistan to EU. However, India is negotiating with the EU to make bilateral arrangements. Bangladesh and Cambodia have separate bilateral agreements with EU. However, in October 2000, EU approved duty and quota free access to 48 least developed countries including Bangladesh which is one of the competitors with Sri Lanka in the Asian region. These 48 countries are eligible for exporting any product, excluding arms, to EU without any duty or quota restrictions.

#### Scheme of Generalised Preferences

The Scheme of Generalised Preferences of EU, gives some advantages to Sri Lanka over India and Pakistan. Sri Lanka is eligible to obtain the tariff cut of 15 per cent of the common EU duty rates for textiles and garments. If the country fulfils the requirements of (a) maintaining sufficient labour standards and (b) protection of environment, additional tariff cut of 15 per cent of common EU duty rates will be granted. However, the utilization rate of this facility so far is not very attractive. The most important bottleneck was the lack of local fabric base on the island which prevent for obtaining rule of origin status.

The European Union has recognised South Asian Association for Regional Co-operation (SAARC) as a regional grouping for the purpose of extending "Cumulative Rules of Origin" to the member countries of the South Asian Preferential Trade Agreement (SAPTA). This decision was effective for the fulfilment of Rules of Origin Criteria Under the Generalised System of Tariff (GSP) from 1 October 2000. This was a result of negotiations member countries of SAARC and the SAARC Secretariat had with the EU to obtain special concessions for its members on the local content requirement under the 'Cumulative Rules of Origin' criteria for the grouping. Under this criteria, material imported from SAARC member countries and used in production in any member country could be considered 'local material' in deciding the local content requirement. However, this is also ineffective since for technical reasons Sri Lanka's garment producers need to source from other Asian Countries outside SAARC. Import content of fabric from non-SAARC countries is mostly too high to satisfy the value requirement under the rules of origin though Sri Lanka continued to receive tariff concessions from the participating developed countries of the GSP, without any reciprocity.

#### Other Competitors

Central and Eastern Europe, especially, Bulgaria, Hungary, Poland, Romania, and the Czech Republic are gradually becoming important suppliers to the European market. Since 1992 investors and entrepreneurs have shifted their activities from former Yugoslavia to other countries such as Croatia, the Russian Federation, Slovenia and Ukraine and relocated garment factories in these countries. Some factories in these countries with ultra-modern technology enable them to produce articles complying with European quality standards. They are capable of competing with Western counterparts. Morocco, Mauritius, Tunisia and, more recently, Madagascar have become important garments producers. These countries export their products to industrialised countries. Vietnam has became a major competitor with Sri Lanka in the US market in 2002. Vietnam textiles and garments exports to USA picked up remarkably in 2002 and overtook Sri Lanka in the US textiles and garments market during the first quarter of 2003 recording 1,563 per cent growth in textiles and garment exports to USA. This phenomenal growth was a result of the US-Vietnam Trade Agreement (BTA) signed on 13 July 2002. Vietnam overtook 13 other exporters and rose to the 5th position during the first quarter of 2003.

#### B. Impact of China's entry in to WTO

With China's entry into WTO, China will have the same market access to the USA and other markets as Sri Lanka by 2005. Lower wage rates, large labour force, expertise, raw materials base, flexibility and efficiency give China an advantageous position in many areas of textiles and garments industry over Sri Lanka. However, most of these advantages are not new to Sri Lanka or other Asian countries, as China has been a competitor over the last several years.

China's entry into the WTO is not a new challenge to world trade because China has been in world trade for the last 50 years and its trade relation have expanded to almost every country. The importance of the accession of China to the WTO is that China will now be governed by the same rules and regulations of WTO as other countries and as a result provide trading partners access to its huge market. China has a large market with over one billion population. China is the sixth largest economy in the world and Chinese trade accounts for about 4.4 per cent of World trade. Similarly, China will have access to member state's markets on equal terms. This event provides both challenges and opportunities for all members of WTO, including Sri Lanka.

A number of developments in the international arena will minimise threats from the China's entry into WTO. The favourable development will be

that, China itself committed to reduce its import tariffs on textiles and clothing from 20.1 % to 11.5 % by January 1, 2005. It has also bound its import duties at 5-6 % for yarn, 10-18 % for fabric and made ups and 14-20% for garments. Moreover, all quantitative restrictions on imports, including the one on US exports, would be abolished as required to the agreement on Textile and Clothing of WTO. With downward adjustments to the tax system recently, China's general tariff level has dropped from 15.3 per cent to 12 per cent on 1 January 2002 and those reductions affected more than 5,300 taxable items. China has also reduced the scope of commodities under quota and license controls.

China has nearly completed the work of sorting out and revising laws and statutes relevant to the fulfilment of commitments to WTO. Therefore, other WTO member countries can challenge China in the event of (export) subsidies and dumping. By end June 2002, anti-dumping cases against Chinese products by the EU totalled 91, including restrictions on Chinese textiles, canned mushrooms and garlic.

Within the multilateral negotiation system, the bargaining position of developing countries have been strengthened. Furthermore the agreement between China and USA signed in 1999 offers some restrictions to the expected serge in the Chinese garment industry. Without needing to prove damage to the local industries, WTO members can reimpose quotas on Chinese garments till 2008. Some specific categories of imports can be restricted till 2013. Meantime the growing trade union movement in China which decries the abuse of workers' rights in China, will provide cause for developed nations to impose restrictions on China without violating WTO commitments.

#### C. Restrictions Other than Quota

So far, the implementation of Uruguay Round has not significantly increased market access for developing countries. Although the legal commitments under ATC have been met by most members, there has been criticism of the way the agreement has been implemented. The selection of quota free items is at the discretion of importing countries and the integration list must encompass products from each of four group *i.e.* (a) tops and yarn, (b) fabric, (c) made up textile products and (d) clothing. However, after 2 stages of implementing ATC, the selection of higher value – added items, particularly clothing has been rather limited. In the case of USA the percentage (basis is volume of 1990 imports) of clothing imports integrate during the two stages amounted to only 3.9 per cent. <sup>10</sup> With the implementation of the third stage of integration under the MFA phasing out programme on 1 January 2002,

10/ AITIC (1999)

USA removed 36 quota categories while 4 categories were partially integrated. However, none of the Sri Lanka's quota categories were included in the list of fully integrated quota categories. Only four categories are in the list of partially integrated quota categories. With this integration, allocation of garment quota to Sri Lanka declined by 10 percent in 2002 as against that of 2001. This will reduce dependence on quota to 50-52 per cent. It has been estimated that by 2004 the 11 principle developing country exporters will face quota restrictions on 80 per cent of their textiles and garments exports. Although ATC cannot be extended, some other form of protection could substitute for quota. Tariffs and quantitative restrictions other than quota imposed by developed countries on developing countries may continue even after the removal of MFA. Many developing countries who export textiles and garments also use extensive and very high degrees of protection through high tariff and quantitative restrictions to limit foreign competition. Although the results of an Uruguay Round was expected to reduce tariff rates and simplify tariff structures, both the level and frequency of tariffs remain matters of concern in a number of key sectors of direct interest to developed countries. Although non-tariff restrictions and subsidies were not allowed, industrialized countries use measures consistent with WTO agreements. In addition to tariffs, contingent measures such as anti-dumping or technical barriers could become more common means of protecting against imports from developing countries. 11

#### **Bound Tariff**

Uruguay Round Agreement on Agriculture (URAA) required members of WTO to replace non-tariff measures (NTM) with tariffs and to bind them against future increases. It also required them to reduce these bound tariffs by 36 per cent on average by industrial countries during 1995-2000 and 24 per cent on average by developing countries during 1995-2004. With the full implementation of UR, average duty rate of 7 per cent is expected for all merchandised trade. Eighty per cent of textile and garments is covered by bound tariffs and bound rate is 12 per cent.

Even though a bound simple average rate of 12 per cent was expected this figure covers significant differences between industrial and developing countries and across the products (Table 13). Furthermore, average applied tariff rates are lower than bound rates. Thus, there is considerable scope for textile and garment exporters to raise the apply tariff protection to be consistent with UR commitments.

In practice, some countries express their tariffs in absolute or specific terms which make them far less transparent and difficult to quantify. In USA

<sup>11/</sup> Spinanger, 1999

Table 13 - Post-UR Average Tariff Rates - Textiles and Garments

	Bound Rate	Applied Rate
Industrial countries	11	8
Developing countries	24	21
World	12	10

Source: Market Access for Developing Countries' Exports, IMF and World Bank - 2001

and UK, about 44 per cent of agricultural tariff lines have specific tariffs. These conditions provide opportunities for developed economies to continue with hidden non-tariff barriers to protect their markets at the cost of exports in the developing countries.

#### Incidence of Tariff Measures

The incidence of applied tariff across deferent countries is compared using trade weighted tariffs. There is greater differentiation in the incidence of tariffs in industrial markets than in developing markets. Developing countries face much higher tariff for their agricultural goods than manufactured goods.

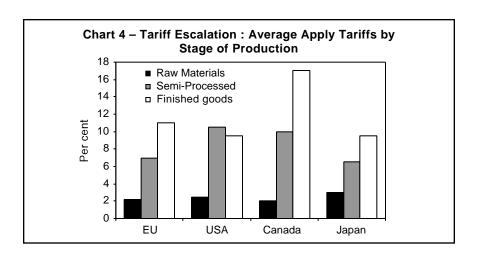
#### Tariff Peak and Escalation

Both industrial and developing countries use tariff peaks and tariff escalations. In USA and Canada, the largest import category subject to tariff peak is textiles and clothing, where more than 90 per cent of LDC exports to these countries is concentrated. Similarly the tariff structures of developing countries contain a significant number of tariff peaks. This indicates the importance of barriers facing developing countries exporting to other developing countries.

Tariff escalations are common in both developed and developing countries. Tariff escalations reduce the demand for processed goods from developing countries and hamper the expansion of their processing industries. Among 18 a major processing chains of developing country exports to industrial countries majority suffers from tariff escalation (Chart 4).

#### Other non-Tariff Measures

Trade remedies permitted under the WTO agreements include antidumping measures, countervailing duties against 'actionable' subsidies



and safeguard measures to protect against serious injury from import surges. During the last decade, antidumping has became the popular safeguard instrument among high income developed countries and has gained increased popularity among developing countries.

In 1997, out of 239 cases initiated in WTO, 143 concerned developing countries and countries in transition. Between late 1980 and 1994, the EU alone brought at least 179 anti-dumping measures or proceedings against China. During 1995-1999, over 1,200 antidumping investigations were initiated. As shown in Table 14, developing countries appeared to be the major object of antidumping cases from both industrial and other developing countries. According to antidumping investigations, initiated during 1995-1999, more than 58 per cent were initiated by developing countries of which 36 per cent were against developing countries. More than 41 per cent were initiated by developed countries. Less than 1 per cent originated from transition countries.

Table 14 - Initiations of Antidumping Investigations

Initiatina	Affected Countries				
Initiating	Industrial	Developing	Transition	Total	
Country	Countries	Countries	Countries		
Industrial Countries Developing Countries Transition Countries	126	244	129	499	
	252	258	201	711	
	4	0	4	8	
Total	382	502	334	1,218	

Source: WTO -2001, Table II.8

#### Technical, health and safety standards and regulations

The Agreement on Technical Barriers to Trade (TBT) and Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) attempt to strengthen international rules governing product standards in order to minimise their use for protectionist purposes. Developing countries have to incur additional expenses to upgrade their infrastructure for maintaining quality controls, testing, certifications *etc*. and upgrading production methods to meet quality standards. The associated cost will be higher for exporters if they have to meet the standards different from those in their home markets.

One indicator of the relevance of standards in restricting trade is the increasing number of trade disputes over standards and technical barriers that have been initiated during the last 6 years. Most of the cases have been brought by industrial countries against other industrial countries. Except India, no other low income country has brought cases to WTO under TBT or SPS. The need to conform to technical, sanitary, and phytosanitary standards imposes costs on exporters. An increasing number of disputes over standards and technical barriers also constrains trade in developing countries. This makes it difficult for poorer countries to shift exports towards higher value added manufactures. Complex and inefficient Customs procedures can also deter trade. Excessive control, inefficiency in customs procedures and documentary red tape in customs procedures has been estimated to increase the cost of imports, substantially by around 7-10 per cent of world trade.

#### Tariff Preferential Schemes

The restrictive effect of tariff and non-tariff barriers are lessened by preferential Access Schemes for poorer countries. However, these are often applying to products that already enjoying low tariffs. In many cases, these preferential schemes are subject to various eligibility criteria and conditions. Therefore, these schemes are not an effective as they appear.

## V. Welfare Gains and Loses from Liberalization in Textiles and Garments

#### A. Gains from Liberalization

Recent estimates  $^{12}$  of potential gains from the further liberalization of merchandized trade  $^{13}$  shows that full implementation of UR in 2005 will

<sup>12/</sup> Anderson and Others (2000)

<sup>13/</sup> Computable General Equilibrium (CGE) models are commonly used for estimating potential gains from further liberalisation of merchandised trade *i.e.* Anderson and others (2000 and 1999) Hertel (2000), Dee and Hanslow (2000) *etc*.

improve welfare in both developed and developing countries. Developing countries gain most from industrial country liberalization on textiles and garments, industrial countries gain more from liberalization in developing countries. MFA quotas in industrial countries on textiles and garments imports from developing countries impose substantial costs for both developing and industrial countries. Therefore the removal of those barriers will increase welfare gains substantially. Removal of MFA quotas is estimated to improve developing country welfare by US dollars 13-22 billion. <sup>14</sup> Global trade in textiles and garments is expected to increase by about 34-60 per cent once MFA quotas are completely eliminated. <sup>15</sup>

Table 15 – Welfare Gains from Post UR Liberalisation of Textiles and Garments

Liberlising Region	Benefiting Region (in billions of 1995 US \$)				
	Industrial Countries	Developing Countries	All Countries		
Industrial Countries Developing Countries All countries	-5.7 10.5 4.8	9.0 3.6 12.6	3.3 14.1 17.4		

Source: Anderson and others (2000)

#### B. Impact on Employment and Exports

Even though, there are different opinions among industrialists and other parties concerned, there is a common fear that the garment industry will suffer significantly after the phasing out of quota in 2005. Some surveys <sup>16</sup> revealed that 50 per cent of the industry would be forced to close down. Most of the medium and small scale factories are not considered up to the level of export markets. Distribution of export earnings and employment according to size of the factory, showed that a large share of employment and export earnings in the garment industry was concentrated in a few large scale companies. Large scale companies with more than 500 employees which cover 23 per cent of total garment industries accounted for 90.7 per cent of total garment exports and provided employment to 61.9 per cent of total employment. Customs Statistics showed, out of 1,061 garment companies <sup>17</sup> 50 per cent together

<sup>14/</sup> Anderson and others (2000) and Australian department of Foreign affairs and Trade (1999)

<sup>15/</sup> Deardorff (1994)

<sup>16/</sup> Gopal Joshi, Garment industry in South Asia.

<sup>17/</sup> Ministry of Industries records for 2001.

exported less than US dollars 10 million of garments in 2002. These factories will face severe competition from large scale industries as from the out side world and may be wiped out. Closing down these industries will cause a loss of less than 1 per cent of export earnings. However, they may have a greater impact on employment as these establishments provide approximately 20 per cent of total employment. However, some of the small companies are not in the list of exporters. Although, there is a scheme to transfer unutilised quota through TQB, some small companies get their quota and sell them to large firms and exports are recorded under the latters' names. According to survey conducted by TTSC, out of 175 firms drawn from 1,061 companies in the list in the Ministry of Industries 47 were not in operation. Therefore, the loss of employment may be less than estimated. Although, some employment will be lost in the short run, labour is likely to be absorbed into recovering stronger firms. Even at present, the industry is facing difficulties in recruiting skilled and trained labour. As most of the existing firms have to be expanded and became stronger to survive in the emerging competitive environment more demand for labour can be expected from these firms. Some of the small scale firms may sub-contract, utilizing their capital and labour while some others may be acquired by large companies. Therefore, in the long run, employment loss will be looked after within the industry itself.

#### VI. Prospects and Strategies for Future Development

Global trade in textile and garment is expected to gain from liberalization. It is expected that the liberalization of textiles and garments industry in both developed and developing countries will have a positive impact on the industry. It is observed that, phasing out of quotas will close down nearly fifty per cent of garment factories. However, as production in the Sri Lanka's garment industry, is concentrated on a few large factories, a large part of export earnings and job opportunities will be saved. However, in the short run there will be a negative impact on employment, which may not be very serious. Large scale firms and at least a some of the medium scale firms will have to be strong enough to face the competitive environment emerging after the phasing out of quota in 2005. Therefore, the future of Sri Lanka's garments industry depends, to a large extent, on maintaining the momentum built up over the last 20 years while increasing the competitive edge that Sri Lanka has in the international environment. A firm foundation has been laid, on which the future of this sector could be strengthened and safeguarded. Yet there is much to be done to meet the challenges of intense competition in the future.

In the past, Sri Lanka's garments industry competed with other countries protected by quotas, government incentives, competitive labour costs and Free Trade Zones. However, nowadays competitiveness is not defined as something

emanating from abundant natural resources, cheap labour, continuous currency depreciation or government incentives. It has to be achieved by increasing value addition (and profits) through efficient and effective management. These include (a) identifying and serving specialized markets, (b) adding unique features to products, (c) adding value and service dimensions to export products and (d) developing complex products which cannot be easily replicated. Industries can build competitive advantage through superior economic and business strategies. They should emulate the strategies which are being adopted by other competitors. Venturing into new markets outside the traditional markets should be coupled with measures to reduce costs of production, increase productivity, specialize and be product focused, to train and develop manpower skills, enhance investments and adopt new and efficient technology. The Government must improve infrastructure facilities, ensure minimum disruptions in the working environment to support the industry.

Strategies based on labour cost advantages are not a sustainable source of comparative advantage due to existing labour market rigidities and lower labour costs in other markets. In regard to labour costs, other emerging markets such as India, Bangladesh, Indonesia, Vietnam and China will continue to be major competitors. As reducing of labour costs per hour is not feasible, the way out should be reduce labour costs per product. Sri Lanka's garment industry is considered as operating at an average of 40 per cent efficiency. <sup>18</sup> Hence, there is much room for improving efficiency. High literacy rates and in easily trainable workforce are the advantages possessed by the country. A long term plan to build up professionalism and a stable work force is necessary for further growth in the industry. Development of infrastructure to provide training facilities as well as a change in attitudes to match the new challenges in the industry are essential to provide sufficient manpower as well as to improve quality and productivity. As a long term strategy, human resources development should be go hand in hand with educational reforms. Universities, technical colleges and other government and non government organizations such as Industrial Services Centre and Textiles Training and Services Centre are now offering training facilities to develop various skills relating to the textiles and garments industry. More investments should be diverted to develop designer capabilities and the marketing and management skills of entrepreneurs.

Increasing productivity and efficiency of labour is associated with technology enhancements as well. This should be associated with work plans and targets set according to international standards. Proper time management, maintaining accurate work measurements, proper tools to collect information pertaining to production and close monitoring with efficient methods to detect

<sup>18/</sup> Mr. R.U. Kuruppu, Seminar on Cost Reduction through Efficiency Improvement, Phoenix College of Clothing, Ratmalana.

errors and inefficiencies associated with production are essential to minimize losses. Quick responses to correct errors and to avoid inefficiencies and use the most appropriate method to correct them are key elements in efficiency improvement.

Working condition and effects on the environment have been brought in to the limelight. This is one area when Sri Lanka can capitalise as it has a better record than many of her neighbouring competitors. Some large companies have already taken steps to obtain certificates of conformity is accepted standards in labour, health and safety and the environment. Eco-labelling, ISO 9000, ISO 14,000 etc. should be taken as advantages for building up marketing strategies in future competitive markets.

Quality improvement is a priority area, with which Sri Lanka can maximise opportunities in the developed markets. Sri Lanka can focus on developing brand names to build an image as the best garment manufacturer in Asia. Our exporters have already selected this as their vision for the future. Sri Lanka's product base is highly concentrated on casual ware. Future trends in European and American markets are for casual ware rather than designer attire. The garment industry is expected to have a grater shift towards casual and comfortable clothes. The newest generation of children, 'eco boomers' are the force behind the success of the children's ware industry. Sri Lanka can specialize in these products with her existing experience and skills to meet the future demand in those countries.

The geographical location of Sri Lanka places it far from the main markets. This is a disadvantage to some extent, because quick responses are crucial to keeping up with fast changing fashions. Sri Lanka and India have the higher lead time (19-45 days) compared to competing countries such as Mexico (6-8 days). The industry has to focus on exploring new markets and making efforts to strengthen the raw material base for the industry and to reduce lead time. If delays involved in obtaining raw material could be eliminated by attracting world class fabric producers, accessory manufacturers etc., the present long lead times could be reduced. Therefore, there is an opportunity to develop the textiles industry to provide raw materials and accessories for the garment industry in the region. Indo Sri Lanka Free Trade Agreement opened a window of opportunity to break through to the huge Indian market and source fabric from internationally reputable textiles manufacturers. The industry must focus upon taking advantage of the Free Trade Agreement with India. Although quotas available for Sri Lanka are limited to 8 million pieces, the development of India as a supply source of textiles to Sri Lanka will solve the problem of lead time to a large extent. The industry should explore market access in India. This opportunity can be used to explore the possibility of inviting fabric manufacturers to establish joint ventures/ strategic alliances.

The emerging regional trade blocks have adversely affected Sri Lanka's textiles and garments industry eroding Sri Lanka's market share in the world market. This situation will be further aggravated when these agreements are fully established in the next few years. However, Sri Lanka has also achieved considerable development towards regional and international co-operation. An agreement with the EU and Sri Lanka to remove all quota restrictions on textiles and garments exports to the EU enabled it to reduce advantages that Turkey and Central and Eastern European economies had in the EU market. At present, Sri Lanka has an advantage over India and Pakistan. India is negotiating with the EU for bilateral arrangements. Bangladesh and Cambodia also have separate bilateral agreements with the EU.

The Scheme of Generalised Preferences of EU gives the advantages to Sri Lanka over India and Pakistan. Sri Lanka is eligible for the preferential rate of 15 per cent of the common tariff rate for textiles and garments. Under special arrangements, another 15 per cent of the common tariff rate is granted to countries that country fulfil the requirements of (a) maintaining sufficient labour standards and (b) protecting the environment. Recognition of SAARC as a regional grouping for the purpose of extending 'Cumulative Rules of Origin', by EU will help SAARC members to use the facilities available under GSP more effectively.

Government provides a generous incentive package (liberalisation of imports of raw material and machinery, establishment of free trade zones etc.) for sustained development of the textiles and garments industry. However, such incentives are no longer a sustainable source of competitiveness. Given the budgetary constraints, Sri Lanka cannot spend continuously to provide these incentives. Any available resources must be diverted to improve infrastructure facilities such as transportation, power and energy, telecommunications and waste disposal system etc. Sri Lanka would have to attract fabric mills, accessory manufacturers, marketing and training institutions, designing centres etc. Incentives and encouragement should be diverted to foster areas such as fabric design capabilities and information technology to build up a full service industry. The government has taken steps to improve efficiency in customs procedures (introduction of ASYCUDA++) and successfully implemented the Electronic Visa Transformation System to reduce the malpractices and inefficiencies in quota utilisation. The industry initiated the use of electronic media in the textiles and garments industry. Internet has proven to be a viable alternative to traditional distribution channels in developed countries. Accordingly firms can explore the opportunities that internet offers to build up relationships with customers and suppliers through these channels. Government can take initiatives to canvass in major exporting centres to obtain concessions some of which are already enjoyed by our competitors. Such canvassing must be supported with world class negotiators on behalf of the country.

Furthermore, cultivation of more innovative ideologies among public institutions, minimisation of political intervention in labour issues, transparency in economic policies, maintenance of consistency in macro economic framework, better co-ordination among public sector institutions and development of a continuous dialogue between the government and the private sector would be the responsibilities of the government to ensure an environment conducive to the growth of the industry to grow in a more competitive market in the future.

#### References

- **Agency for International Trade Information & Co-operation (AITIC)** 1999, "Textiles and Clothing. Implication for Less Developing Countries" (Geneva).
- Central Bank of Sri Lanka, Annual Report 2002, Box 11, "Future Challenges of the Apparel Industry."
- **Central Bank of Sri Lanka**, The External Trade Data Base for 1996-2002, Unpublished.
- **Dheerasinghe R.,** 2001 "More & More" News Survey, Jan-Feb 2001, Vol. 22 No.1.
- **Dheerasinghe R.**, 2001, "Electronic Visa Information System", News Survey, March/April 2000, Vol. 21/No.2.
- Economic and Social Commission for Asia and Pacific (ESCAP), 2001, "Prospects for BIMSTEC for Asia and the Pacific."
- Federation of Chambers of Commerce and Industry of Sri Lanka, 2002, "Challenges to SAARC Countries", Seminar on Chinese Entry into WTO held on 27 August 2002, Colombo.
- **Fernando Lakdas D.**, 1997, "Sri Lanka's Apparel Industry 2005 and beyond", Textile and Clothing, September 1997.
- **Gunawardana D. P.**, 1999, "The Human Resources Needs of the Apparel Industry Sri Lanka Experience", Textile and Clothing, April June 1999.
- Goss Gilroy Inc., 2002, "Overview of the North American Market for Sri Lankan Apparel". (Preliminary findings of the study funded by the Commonwealth Secretariat and prepared for Sri Lanka Export Development Board.)
- **Hasumi Yeji**, 1999, "What is necessary for the Industry of Clothing in Sri Lanka?", Textile and Clothing, March 1999.
- **Hathcote Jan** and **II-Ji Nam**, 1999, "Advantages of Sourcing Apparel from China, Taiwan, South Korea and Mexico."
- International Monetary Fund, 2001, "The Uruguay Round and Arab countries."
- International Monetary Fund, 2001, International Financial Statistics Year Book 2001.
- **International Monetary Fund** and **World Bank**, 2001, "Market Access for Developing Countries Exports."

- **International Labour Organization**, 1996, Globalization Changes the face of Textile, Clothing and footwear Industries-World of Work, No.18, 1996.
- **Kelegama Saman** and **Frikz Foley**, 1999, "Impediments to promoting backward linkage from the Garment Industry in Sri Lanka", World Development, Vol. 27, No.8, 1999.
- **Larmer Crook**, 2002, "From Rags to Richer", Newsweek Article, 12 August 2002.
- People's Bank, 1999, Economic Review, June/July 1999.
- South Asia Multi-disciplinary Advisory Team (SAMAT), 2002, "'Garment Industry' in International Labour Organisation South Asia Rags or Riches", (ILO), Gopal Johshi, April 2002.
- **Spinanger, D.**, 1999, "Faking Liberalization and Finagling Protectionism, the ATC at the Best" (KIEL: Kiel Institute of World Economics).
- Sri Lanka Apparel Exporters Association, 2000, Sri Lanka Garments Vol.1/2000 Issue No. 76, Vol. 2/2000 Issue No.77, Vol. 1/2001 Issue No.78 and Vol. 2/2001 Issue No.79.
- **The World Trade Organisation**, 1999, Guide to the Uruguay Round Agreements.
- The World Trade Organisation, 2000, International Trade Statistics, Geneva.
- **The World Trade Organisation**, 2001, Market Access: The WTO's unfinished Business: Post Uruguay Round Inventory and issues, Geneva.
- **Textile Training and Services Centre**, 1998-2001 Survey on Garment Industry.
- The World Bank, 2000, World Development Report 1999/2000.
- The United Nations Development Programme (UNDP), 2000, Human Development Report 2000.
- Warner International, 2001, International Business Pages, November 2001.
- Yang Yongzheng and Znong Chuanshui, 1998, "China's Textile and Clothing Exports in a Changing World Economy", The Developing Economics XXXVI-1, March 1998.
- **Yuji Hasumi** (1999), "What is necessary for the industry of clothing in Sri Lanka?", Textile and Clothing, March 1999.