

02

LB/DON/44/09

AN ANALYSIS OF APPAREL EXPORTERS OF SRI LANKA

33

R MATARAARACHCHI
B.Sc Engineering, ACIM

LIBRARY
UNIVERSITY OF MORATUWA, SRI LANKA
MORATUWA

677 "08"
687(043)

DEPARTMENT OF TEXTILE & CLOTHING TECHNOLOGY
UNIVERSITY OF MORATUWA
SRI LANKA

TH



92946

92946

AN ANALYSIS OF APPAREL EXPORTERS OF SRI LANKA

By

R Mataraarachchi

B.Sc Engineering, ACIM

This thesis was submitted to the Department of Textile and Clothing Technology of the University of Moratuwa in partial fulfillment of the requirements for the degree of M.Sc in Clothing Studies.

N. K Heenkenda
Supervised by

Dr N K Heenkenda

Department of Textile & Clothing Technology

University of Moratuwa

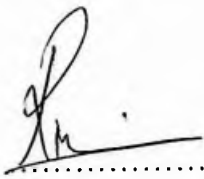
Sri Lanka

MAY 2008



Declaration

The work included in the thesis in part or whole has not been submitted for any other academic qualification at any institution.



.....

R Mataraarachchi



.....

Dr. NK Heenkenda
Supervisor

ABSTRACT

The global apparel industry is currently undergoing a significant process of transformation. The liberalization of the trade regime governing textiles and apparel with the phase out of the Multi-Fibre Arrangement (MFA) under the Agreement on Textiles and Clothing (ATC), has opened up the market for any apparel supplying country who remains competitive in the global apparel trade. This has given freedom for apparel retailers, to have a choice among the apparel manufacturers. They can source from any country where they can get the best product, which meet their requirements. Therefore global apparel trade has become much competitive in the market.

Although the results of the above transformation are predicted to an increase in global trade, the impact is likely to differ among countries and regions. For each country this represents both an opportunity and a threat. An opportunity for the countries who remains competitive in the apparel trade since markets will no longer be restricted, and a threat for the countries who are not very competitive in the trade of apparel because other apparel manufacturers will no longer be restrained. To get an opportunity form the liberalized apparel market apparel manufacturers should build comparative advantage over the competitors.

The study focuses on Sri Lankan apparel industry and it reviews the most recent market developments in apparel retailer sourcing strategies with the quota removal. The study builds a framework to assess the capabilities of apparel manufacturers, to be successful in the competitive apparel market. It examines the capability of Sri Lankan apparel manufacturers to fulfill the requirements of the apparel retailers in both country level and organizational level. The study applies Porter's Diamond Model in assessing the competitiveness of Sri Lankan apparel manufacturing industry from the data collected under the framework.

The study argues that Sri Lanka which aspires to maintain an export led strategy in textile & clothing need to shift their expertise from basic factors to more value added specialized factors in order to build competitive advantage in the global apparel trade. Also study concludes that Sri Lanka should expand the nation's competitive advantage through internationalization.

ACKNOWLEDGEMENT

I acknowledge Dr. Nilanthi Heenkenda, my M.Sc supervisor for her untiring reviews, and relentless feedback and unwavering guidance.

I also acknowledge the Head, Department of Textile & Clothing Technology, Dr. Sandun Fernando and post graduate research coordinator, Dr.Sanath Jayawardane, for their valuable support.

Special thanks to Mr. Samantha Senevirathne, General Manager, MAS Active (Pvt) Ltd. For his constructive criticisms which helped me to clear right direction of work and make this dissertation better.

I would deeply thankful to all the academic staff members of Department of Textile & Clothing Technology where I earned my first degree in Textile & Clothing Technology.

In addition, I would like to thank the non academic members in the department especially Mr. Wijesena, Technical officer, Computer laboratory for providing computer and internet facilities, for the support given in searching and installing the required softwares and solving out the technical problems encompassed.

My special thanks to Mr. N.G Kurunaratne, Director General of textile Ministry for his guidance and help in developing the research methodology and Mr. Upul Akmeemana Assistant Director Export Development Board for providing required export information needed.

This acknowledgment would not be complete, if I did not mention the respective organizations, which respond to the questionnaire. With out their support I could have found difficulties to complete the study properly.

Further all individuals who helped me in collecting data and information especially industry personnel who provide information.

CHAPTER 1: INTRODUCTION		1
1.1	Background of the study	1
1.2	Significance of the problem	1
1.3	Objectives of the study	2
CHAPTER 2: LITERATURE SURVEY		3
2.1	Global trade of textiles	3
2.2	Rise of the Asian garment industry	4
2.3	Quota export patterns	5
2.3.1	Short Term Arrangement (STA) – 1959	5
2.3.2	Long Term Arrangement (LTA) – 1962	6
2.3.3	Multi Fiber Arrangement (MFA) – 1974	6
2.3.4	Agreement on Textiles and Clothing (ATC) – 1995	7
2.4	Apparel manufacturing industry in Sri Lanka	8
2.4.1	History of Sri Lankan apparel manufacturing industry	9
2.4.2	Overview of Sri Lankan textile & apparel manufacturing industry	10
2.4.3	Significance of quotas for Sri Lankan apparel manufacturing industry	11
CHAPTER 3: METHODOLOGY		13
3.1	Methods used to collect data	13
3.2	Method of analysis	13
3.2.1	Analysis of section 1	13
3.2.2	Analysis of section 2	14
3.2.3	Analysis of section 3	14
3.2.3.1	Sample selection for primary research	15
3.2.3.2	Development of the questionnaire	16
3.3	Action plan	17

**CHAPTER 4: FACTORS AFFECT TOWARDS THE SOURCING DECISIONS
OF APPAREL RETAILERS . 18**

4.1	Structure of the apparel retailers	18
4.1.1	Luxury level	18
4.1.2	Department store level	19
4.1.3	Discount store level	19
4.2	Effect of price towards apparel retailer's sourcing decisions	20
4.3	Effect of quality and on time delivery towards apparel retailer's sourcing decisions	21
4.4	Effect of lead time towards apparel retailer's sourcing decisions	21
4.5	Effect of ethical & eco aspects towards apparel retailer's sourcing decisions	23
4.6	Effect of full service towards apparel retailer's sourcing decisions	24
4.7	Effect of relationship between apparel manufacturer and apparel retailer's towards the sourcing decisions	25

**CHAPTER 5: BUILDING THE FRAME WORK TO ASSESS THE
CAPABILITIES OF APPAREL MANUFACTURERS IN SRI
LANKA 27**

5.1	Factor Analysis: Price of product	28
5.1.1	Raw material cost	30
5.1.2	Freight cost	30
5.1.3	Import duty	30
5.1.4	Labour cost	30
5.1.5	Overhead cost	30
5.1.6	Cost of duty at importing country	31
5.2	Factor Analysis: Quality of product	31
5.2.1	Quality of samples developed	31
5.2.2	Quality of raw materials sourced	32
5.2.3	Quality of final product	32
5.3	Factor Analysis: On time delivery	32
5.4	Factor Analysis: Lead time	33

5.4.1	Time for designing and costing	33
5.4.2	Time for product development	35
5.4.3	Time for production	36
5.4.4	Time for transportation inside and outside the country of manufacturing	36
5.4.5	Time for communication process	37
5.5	Factor Analysis: Ethical and Eco aspects	37
5.6	Factor Analysis: Full service from design to delivery	38
5.7	Relationship with apparel retailer	40
5.8	Developing the framework	42

CHAPTER 6: ANALYZE THE CAPABILITY OF SRI LANKAN APPAREL MANUFACTURERS UNDER THE FRAME WORK:

	COUNTRY LEVEL	45
6.1	Political environment	45
6.1.1	Political stability	45
6.1.2	Market access with major markets	46
6.1.2.1	Market access to EU	46
6.1.2.2	Market access to US	49
6.1.2.3	Market access to Canada	49
6.1.2.4	Market access to India	49
6.1.2.5	Market access to Pakistan	50
6.1.2.6	South Asian Free Trade Agreement (SAFTA)	50
6.1.2.7	South Asian Preferential Trade Agreement (SAPTA)	51
6.2	Economic environment	51
6.2.1	Infrastructure facilities	51
6.2.1.1	Roads/ Ports/ Airports	52
6.2.1.2	Electricity / Telecommunication / Water	53
6.2.2	Lead-time for custom clearance and documentation	54
6.2.3	Tax and tariff	55
6.2.3.1	Import Tariff	55
6.2.3.2	Taxes and other charges	55
6.2.4	Investment policy in Sri Lanka	55
6.3	Social environment	56

6.3.1	Labour cost	56
6.3.2	Availability of skilled and trainable work force	57
6.3.2.1	Operator level work force	57
6.3.2.2	Management level work force	58
6.4	Legal environment	59

**CHAPTER 7: ANALYZE THE CAPABILITY OF SRI LANKAN APPAREL
MANUFACTURERS UNDER THE FRAMEWORK:
ORGANIZATION LEVEL** 60

7.1	Analyzing the organizational level factors affect for Cost of the final product	60
7.1.1	Productivity of the work force	61
7.1.2	Indirect cost of employers	63
7.2	On time delivery	64
7.3	Quality	65
7.3.1	Quality of the inspection process	65
7.3.2.	Quality of raw material sourced	67
7.4	Lead Time	67
7.4.1	Regional /Local raw material bases	67
7.4.2	Use of technology to increase the process efficiency	70
7.4.2.1	Use of technology in pattern construction	71
7.4.2.2	Use of technology in sample approval	71
7.4.2.3	Use of technology in cutting, making and packing the final products	72
7.5	Ethical and Eco aspects	72
7.6	Full service	74
7.6.1	Sourcing of raw materials	74
7.6.2	Design and product development	75
7.6.3	Marketing	78
7.7	Relationship with apparel retailers	79

CHAPTER 8: DIAMOND APPROACH FOR SRI LANKAN APPAREL

	INDUSTRY	81
8.1:	Porter's Diamond Model	81
8.1.1	Factor conditions	81
8.1.2	Demand conditions	82
8.1.3	Relating and supporting industries	82
8.1.4	Firm's strategy, structure, and rivalry	82
8.2	Assessing the capability of Sri Lankan manufacturers using porter's diamond model	84
8.2.1	Factor conditions	84
8.2.1.1	Human resources	84
8.2.1.2	Physical resources	86
8.2.1.3	Knowledge factors	86
8.2.1.4	Infrastructure	87
8.2.1.5	Capital	88
8.2.2	Demand conditions	89
8.2.3	Related and supporting industries	90
8.2.4	Firm's strategy, structure, and rivalry	92
8.3	Building competitive advantage for Sri Lankan apparel manufacturing industry	93

CHAPTER 9: STRATEGY FORMULATION FOR SRI LANKAN APPAREL

	MANUFACTURING INDUSTRY USING PORTER'S DIAMOND MODEL	96
9.1	Strategy formulation: Expand the factor conditions	97
9.2	Strategy formulation: Expand the demand conditions	97
9.3	Strategy formulation: Expand the related and supporting industries	98
9.3.1	Backward Integration	98
9.3.2	Forward integration	98
9.3.3	Encourage value addition through supporting industries	99
9.3.4	Encourage Information communication Technology providers / manufacturing specific technology providers	100

9.4	Strategy formulation: Expand the firm's strategy, structure & rivalry	100
	CHAPTER 10: CONCLUSION	104

List of table

Table 2.1:	Share percentage of trade integrated (Source: Nordas H, 2004)	7
Table 2.2:	Quota growth rates (Source: Nordas H, 2004)	8
Table 2.3:	Dependability of apparel exports (Source: SLAEA, 2005)	11
Table 2.4:	Significance of quotas (Source: Textile Quota Board, 2005)	12
Table 3.1:	Categorization of apparel manufacturing organizations in Sri Lanka based on export revenue (Source: Textile Ministry Sri Lanka, 2005)	15
Table 3.2:	Categorization of apparel manufacturing organizations in Sri Lanka based on number of employees (Source: Textile Ministry Sri Lanka, 2005)	15
Table 5.1:	Framework for country level and organizational level Analysis	44
Table 6.1:	Cost of electricity (Source: Kelegama, 2004)	53
Table 6.2:	Cost of water (Source: Kelegama, 2004)	54
Table 6.3:	Cost of labour in 2001 (Source: Werner International, 2000 cited in Kelegama, 2004)	57
Table: 7.1.	The number of organizations according to the productivity levels (source: Based on questionnaire survey)	61
Table: 7.2	Number of organizations according to the labour absenteeism per month (Source: Based on questionnaire survey)	62
Table: 7.3	Number of organizations according to the labour turn over per month (Source: Based on questionnaire survey)	62
Table: 7.4	Number of organizations according to the facilities provide (Source: Based on questionnaire survey)	63

Table: 7.5	Number of organizations according to the capability to meet delivery deadlines (Source: Based on questionnaire survey)	64
Table: 7.6	Number of organizations according to the cut ship ratio percentage (Source: Based on questionnaire survey)	65
Table: 7.7	Number of organizations according to the raw material imports percentage (Source: Based on questionnaire survey)	68
Table: 7.8	GSP+ advantages of duty savings (Source: Based on survey data)	70
Table: 7.9	Number of organizations according to the willingness to do Investments for programmable / specialized sewing machines (Source: Based on questionnaire survey)	71
Table: 7.10	Number of organizations according to the availability of certificates to prove social responsibility (Source: Based on questionnaire survey)	73
Table: 7.11	Number of organizations according to the sourcing capability (Source: Based on questionnaire survey)	75
Table: 7.12	Number of organizations according to the design and development capability (Source: Based on questionnaire survey)	77
Table: 7.13	Number of organizations according to the do sales through buying offices (Source: Based on questionnaire survey)	80
Table 8.1:	Implications of SWOT terminology for factor conditions	88
Table 8.2:	Implications of SWOT terminology for demand conditions	90
Table 8.3:	Implications of SWOT terminology for related and supporting industries	91
Table 8.4:	Implications of SWOT terminology for firm`s strategy, structure and rivalry	93
Table 8.5:	Traditional versus new competitive advantage factors using Porter`s Diamond model (1998)	94

List of Figures

Figure 1.1:	Transformation of Sri Lankan apparel industry (Source: Amalean M, 2004)	2
Figure 3.1:	Action plan	17
Figure 4.1:	The structure of the apparel market (Source: Sorenson C., 2002, modified)	18
Figure 4.2:	Trends in US Textile & Clothing import prices 1993-2001 (Source: Textile Outlook International 2005 cited in Knappe 2005)	20
Figure 4.3:	Effect of lead time under “lean retailing”	22
Figure 5.1:	Change in retailer sourcing decisions (Source: Weerathne B, 2005 modified based on survey data)	27
Figure 5.2:	Breakdown of cost of a basic shirt (NFE) (Source: Kelegama, 2004)	28
Figure 5.3:	Breakdown of cost of a basic shirt (FOB) (Source: Kelegama, 2004)	29
Figure 5.4:	Classification of cost structure	29
Figure 5.5:	Activity break down in designing and costing cycle of an apparel product (Source: Modified version of a Critical path from a Sri Lankan apparel manufacturing organization)	34
Figure 5.6:	Activity breakdown in product development process (Source: Modified version of a Critical path from a Sri Lankan apparel manufacturing organization)	35
Figure 5.7:	Steps to be taken to be a full service provider (Source: Modified version from Knappe M, 2003)	39
Figure 5.8:	Relationship of apparel manufacturers, apparel retailers and final consumers	41
Figure 5.9:	Stages of the loyalty ladder (Source: CIM Lecture notes, 2006)	42
Figure 6.1:	Impact of Sri Lankan civil war towards the apparel exports (Source: Data compiled from Export Development Board Sri Lanka)	45

Figure 7.1:	International marketing sophistication (Source: Kelegama, 2004)	78
Figure 7.2	Communication process from apparel retailer to apparel manufactures	80
Figure 8.1:	Porter's Model – Nation's competitive advantage (Source: Porter, 1998)	81
Figure 8.2:	Strategies for organizations (Source: Porter, 1998)	83
Figure 9.1:	Model for Sri Lankan apparel industry to build it's competitive advantage	102

List of Abbreviations

Gross Domestic Product (GDP)
International Trade Center (ITC)
Multi Fiber Arrangement (MFA)
World Trade Organization (WTO)
Short Term Arrangement (STA)
Long Term Arrangement (LTA)
General Agreement on Tariffs and Trade (GATT)
Agreement of Textiles and Clothing (ATC)
Board of Investment (BOI)
Small and Medium Enterprises (SMEs)
European Union (EU)
United States (US)
Textile & Clothing (T&C)
Electronic Data Interchange (EDI)
Electronic Point of Sale (EPOS).
Ethical Trading Initiative (ETI)
Non-Governmental Organizations (NGO),
Codes of Conduct (COC)
Research and Development (R&D)
No Foreign Exchange (NFE)
Freight On Board (FOB)
Landed Duty Paid (LDP)
Code of Conduct (COC)
Standard Garment Sourcing Model (SGSM)
Full Value Sourcing Model (FGSM)
Computer Aided Design (CAD)
Computer Aided Manufacturing (CAM)
Political, Economical, Social and Technological Environment (PEST)
Joint Apparel Association Forum (JAAF)
Clothing Industry Training Institute (CITI)
Textile Training & Service Center (TT&SC)
Chartered Institute of Marketing (CIM)

International Trade Center (ITC)
Freight Trade Agreements (FTA)
Preferential Trade Agreements (PTA)
Generalized Scheme of Preference (GSP)
Generalized Scheme of Preference + (GSP+)
Multilateral Environmental Agreements (MEAs)
Rules Of Origin (ROO)
South Asian Association for Regional Cooperation (SAARC)
Pakistan- Sri Lanka Free Trade Agreement (PSLFTA)
Association of Southeast Asian Nations (ASEAN)
India Sri Lanka Free Trade Agreement (ISLFTA)
Electronic Visa Information System (ELVIS)
Foreign Direct Investment (FDI)
Least developed developing countries (LDDC)
Small and Medium Enterprises (SME)
South Asian Association for Regional Cooperation (SAARC)
Freight On Board (FOB)
Joint Consultive Council (JCC)
Strengths Weaknesses Opportunities Threats (SWOT)
Export Processing Zones (EPZ)
Value Added Tax (VAT)
International Direct Dialing (IDD)