

Facing the Future Challenges of the Sri Lankan Apparel Industry: An Approach based on Porter's Diamond Model for the Competitive Advantage of Nations

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Abstract - *Gaining competitiveness in the quota free trade has become a driving force for the apparel companies to adopt changes in technology and organizations to enhance productivity. While global expansion of the apparel industry historically has been driven by trade policy, by 2005, the Agreement on Textiles and Clothing (ATC) by the World Trade Organization had phased out many of the quotas that had previously regulated the world apparel industry. This caused a tremendous change in the global geography of apparel manufacturing and trade, and a restructuring of company strategies seeking to realign their manufacturing and sourcing networks to accommodate new economic and political realities. This change has brought other key factors for country competitiveness to the forefront, including labour costs, productivity, and competencies. Countries where the cost of labour is low are emerging as leaders in the lower-value assembly segments of the value chain, while countries with higher labour cost are being forced to upgrade into higher-value segments, such as branding and design that rely on high-quality human capital to maintain their competitiveness. As a result, skills of the work force in the apparel industry will become increasingly important element for developing economies to maintain and upgrade their positions in the global apparel value chain. The purpose of this study is to investigate the history of Sri Lankan apparel industry and challenges it faced in different eras and based on the experience gained propose recommendations to face the futuristic challenges of the world apparel trade based on the diamond model for competitive advantage of nations as proposed by Michael Porter.*

Key words: Sri Lanka, Apparel Industry, Competitiveness, Diamond Model, Future Challenges

1 INTRODUCTION

Sri Lanka's apparel industry is the most significant and dynamic contributor for Sri Lanka's economy. The industry has grown over the last three decades and has become the number one foreign exchange earner and the largest single employer in the manufacturing industry. The industry provides direct employment opportunities to over 300,000 and indirect to 600,000 (Wijendra, 2014). It is also the country's prime net foreign exchange generator since 1992. Apparel industry, recorded a historic level of US dollar 4.3 billion in 2013, and in the year 2014, year on year January to November apparel exports surged by a strong 10.35 percent to US dollar 4.458 billion, which is 94 percent of the annual apparel

exports target set for the year (Hewage, 2015). Further, apparel accounts for nearly 70 percent industrial exports from Sri Lanka (Abeysinghe, 2014).

Based on these statistics, one can easily conclude that the apparel is the only success story of the country's export oriented industrialization policy adopted in 1977. In the last decade, starting from 2005, Sri Lankan apparel industry has received much credit for successfully weathering competition from exporters of developing countries and for transforming itself from a low value exporter to a high value exporter. However, a deeper analysis of the available statistics depicts a different scenario which if not arrested early may lead to Sri Lanka losing out in the world apparel trade market.

The world market share of apparel exports from Sri Lanka has declined from 1.4 percent in 2000 to about 1.0 percent by 2012. During this period, the apparel market share of Bangladesh in the world has increased from 2 percent to 5 percent, Vietnam from 1 percent to 3 percent and China from 18 percent to 38 percent. Further, during the period starting from 2005 to 2011 apparel imports from China to the USA grew by 17 percent, Vietnam by 14 percent, and Bangladesh by 12 percent while imports from Sri Lanka declined by 3 percent (Abeysinghe, 2014).

In this backdrop, the pertaining question is how did the Sri Lankan apparel industry cope with the dynamic changes that had taken place in the global textile and apparel market during the different eras and how would the apparel industry continue to face the challenges of quota free era effectively in the future?

Therefore the objective of this paper is to study the past and current situations of the Sri Lankan apparel industry and identify the future challenges that are expected to be faced by the Sri Lankan apparel industry with reference to the competitive world scenario and propose effective strategies for the industry to gain competitive advantage in the global market in order to improve its effectiveness and thus address the identified challenges.

This study is undertaken by reviewing the history of the Sri Lankan apparel industry through various published records and research articles. The current situation of the Sri Lankan apparel industry is analyzed by undertaking a SWOT analysis, based on literature review, interviews with number of industry personnel and the insights the authors have gained through the various engagements they have had in the Sri Lankan textile and apparel industry over the years.

The recommendations for the Sri Lankan apparel industry to face the future challenges and compete and improve its world market share in the apparel trade are arrived at using the Diamond Model of Michael Porter for the Competitive Advantage of Nations (Porter, 1990).

2 WORLD APPAREL INDUSTRY

Textile and apparel is one of the oldest and largest export industries in the world. It is also one of the most globalized industries. Apparel manufacturing is a springboard for national development, and often is the typical starter industry for countries engaged in export-oriented industrialization due to its low fixed costs and emphasis on labour-intensive manufacturing (Adhikari and Weeratunge, 2006; Gereffi, 1999).

In the world trade, in 2013, the textiles and apparel sector contributed nearly 4.3 percent to world merchandise exports (World Trade Organization, 2014). 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 apparel industry have a long history tracing back to the 1930s, when the USA and the UK took action to limit textile imports from Japan. The emergence of some less developed countries as manufacturers of apparel together with excess capacity in many developed countries resulted in the UK and the USA negotiating Voluntary Export Restraints (VERs) with emerging economies. A series of short term and long term trading arrangements were then followed by Multi Fibre Arrangement (MFA).

While global expansion of the apparel industry historically has been driven by trade policy, by 2005, the Agreement on Textiles and Clothing (ATC) by the World Trade Organization had phased out many of the quotas that previously regulated the industry. This caused a tremendous flux in the global geography of apparel manufacturing and trade and a restructuring of company strategies seeking to realign their manufacturing and sourcing networks to accommodate new economic and political realities (Gereffi and Frederick, 2010). This change brought other key factors in country competitiveness to the forefront, including labour costs, productivity, and managerial and institutional competencies. As a result of these changes, low-cost countries such as Bangladesh, China, and India are emerging as leaders in the lower value assembly segments of the value chain, while countries such as Sri Lanka and Turkey, are upgrading into higher-value segments which rely on higher-quality human capital to maintain their competitiveness. As a result, workforce skills of the apparel industry are becoming increasingly important elements for developing countries to maintain and upgrade their positions in the global apparel value chain (Gereffi and Frederick, 2010).

The apparel industry is the ideal example of a buyer-driven commodity chain marked by power asymmetries between the suppliers and global buyers of final apparel products (Gereffi and Memedovic, 2003). Global buyers determine what is to be produced, where, by whom, and at what price. In most cases, these buyers outsource manufacturing to a global network of contract manufacturers in developing countries that offer the most competitive rates. These buyers include retailers and brand owners and are typically headquartered in the leading markets in Europe, Japan, and the United States. These companies tend to perform the most valuable activities in the apparel value chain – design, branding, and marketing of products – and in most cases, they outsource the manufacturing process to a global network of suppliers. Like all global industries, the apparel value chain relies on international standards to coordinate the activities of suppliers. By the turn of the century, most leading companies had implemented private standards and codes of conduct based on cost, quality, timeliness, and corporate responsibility in terms of labour and environmental standards (Bartley, 2005; Gereffi et al., 2001). Further, performance of the manufacturing company is measured regularly, and delivery, quality, and price are tracked over time.

While quotas were eliminated, tariffs still play a central role in global apparel trade. Average Most Favoured Nation (MFN) tariffs on apparel imports are on average around

11 percent for the EU and the US with considerable variations for product categories, in particular in the US where tariffs vary between 0 and 32 percent. In this context preferential market access has a substantial impact on global apparel trade patterns. Major preferential market access schemes can be divided into two types of agreements - regional and bilateral trade agreements and the Generalized System of Preferences (GSP) (Frederick and Staritz, 2012)

Developed countries, in particular the EU, Japan, and the US, have negotiated regional trade agreements to advance regional manufacturing networks. Developing countries have also increasingly negotiated regional trade agreements. However, negotiations and implementation have been slow, and apparel and textile products are often excluded. In addition to regional agreements, countries have increasingly negotiated bilateral trade agreements, with the EU and the US being most active in this regard. Twenty seven developed countries have provided tariff preferences to over 100 beneficiary countries through the GSP. Within the GSP, some countries have negotiated preferential access for lower-income countries. Canada and Japan have also improved preferential market access for Least Developed Countries (LDCs) in their GSP in the early 2000s.

3 SRI LANKAN TEXTILE AND APPAREL INDUSTRY

Sri Lankan apparel industry from its modest beginnings in the 1970s has emerged as the country's leading foreign exchange earner accounting for approximately 60 percent of the total industry exports from Sri Lanka for year 2000, generating direct and indirect employment to almost 1,000,000 people (The Island, 2002). The export-oriented manufacturing of clothing or the readymade apparel industry in Sri Lanka has begun in the 1970s and expanded rapidly after the introduction of trade liberalization of economy in 1977 (The Island, 2002). Direct foreign investment occupied a vital role in the early era of industry's establishment and growth, while lately domestic capital became similarly important. The MFA set up a quota system granted an assured market in EU, USA, and Canada for countries such as Sri Lanka, India, China, Hong Kong, Taiwan and Korea (Kelegama and Epaarachchi, 2003).

According to Tilakaratne (2006) during late 1990s, the apparel industry grew at 18.5 percent per annum and the export-led expansion of the industry led to the replacement of tea by apparel as the nation's largest foreign exchange earner. The growth of Sri Lankan apparel industry has been remarkable in terms of its contribution to GDP, exports, foreign exchange earnings and employment generation. Tilakaratne (2006) further discussed that a great proportion of the apparel companies in Sri Lanka are small and medium scale. Nevertheless, the small and medium scale companies export merely about 15 percent of the total exports and the apparel industry is dominated by a few large companies, which claim to about 85 percent of the total value of exports (Dheerasinghe, 2003).

The apparel industry currently has a very large installed capacity. The high level of technical and managerial skills available in the apparel industry, low cost land and the skilled and literate workforce provide the apparel industry with a comparative advantage in the region. English language proficiency is very high among the managerial levels and moderate to fair among the lower grades which is a great advantage to foreign investors.

The apparel industry's core strength lies in its ability to produce high quality goods at competitive prices, combined with an industry structure which is flexible and capable of servicing leading international brands. The Sri Lankan apparel industry is also recognized for its laudable standards of social compliance (The Island, 2002).

A wide range of reputed international branded clothing such as Victoria's Secret, Liz Claiborne, Pierre Cardin, Abercrombie and Fitch, Ralph Lauren, Tommy Hilfiger etc. are manufactured in Sri Lanka. Major global importers and retailers from the USA, EU, Australia and Japan are represented in Sri Lanka, some of whom have been carrying out operations in Sri Lanka for several years. These companies are locally owned companies and joint ventures or totally foreign owned (The Island, 2002).

Sri Lanka offers a wide range of incentives for investors. These incentives are available to both foreign and domestic investors, without preference, provided the investment is undertaken through a company incorporated in Sri Lanka (Sahoo et. al, 2003). Sites are available for investors in well-developed and fully serviced industrial estates at competitive costs within 30-50 km distance from the Colombo Port and the International Airport. The Katunayake Export Processing Zone in particular, has served as a model zone in the Asian region. Additionally investors have the option of locating their companies outside export processing zones or industrial parks and are able to lease the site or purchase land outright (The Island, 2002).

Both foreign and local companies have setup textile mills/finishing plants and many accessory manufacturing industries to support the thriving apparel industry. Raw material and accessories currently being manufactured are knitted fabric, woven fabric, buttons, zippers, hangers, yarn, thread, interlining, elastic, padding quilting and packaging (The Island, 2002). The services offered include dyeing and finishing, screen-printing, embroidery and washing. With the introduction of high tech machinery and capital infusion, many existing companies have been automated and upgraded (The Island, 2002). One of the most important factors which have contributed to the rapid development of the apparel industry in Sri Lanka has been the highly trainable, skilled and literate workforce (The Island, 2002). Sri Lanka has a proud record in human resource development and is among the leading developing nations that have made significant headway in this area. While many companies carry out in-house training for their workforce, the state training institutions and private sector training institutions provide specialized training courses to cater to the specific needs of the apparel industry (The Island, 2002).

The technology levels of companies vary considerably with the large companies having a higher standard than the small and medium companies. Foreign owned companies and joint venture partnerships with foreign collaborators have helped in the process of technology transfer and training, the main source for technical information have been the suppliers of machinery and equipment and local research organizations. Research and development activities in the companies are low. While most of the companies concentrate on manufacturing from sketches and designs received from the customer very few companies have design and design development capabilities (The Island, 2002). The comparative safety of an assured market on account of the quota regime has encouraged

the Sri Lankan apparel industry to develop a strong manufacturing culture. Accordingly the apparel industry has over the years geared itself to selling capacity to the buyers, and regrettably has neglected the need to strengthen the marketing capabilities and product design and development skills which are essential to prepare it to compete and sustain in a quota free era.

In the recent past, the global apparel industry has been subject to significant changes in terms of changes in consumer demands, changes in technology, and fierce competition. These changes have also filtered down to the Sri Lankan apparel industry and there is now considerable pressure on the industry to reach higher standard of manufacturing and service. As the apparel industry is a relatively low skilled and labour intensive operation, over time there has been a shifting of manufacturing from countries such as Hong Kong, South Korea and Taiwan to low wage countries such as Bangladesh, India and Sri Lanka. As this process of shifting (or shifting comparative advantage) has continued, Sri Lanka has gradually lost its low labour cost comparative advantage (Essays UK, 2013).

It is been broadly recognized in modern times that, without innovation, companies would quickly lose their competitive edge. Thus an innovation strategy is a fundamental tool for continued growth even in difficult times (Cooper and Edgett, 2000). According to Goffin and Mitchell (2005) there are four key dimensions of innovations in the manufacturing sector. Among these four factors, new product innovation is the most important element to companies in the manufacturing sector. Nevertheless, if a company focuses only on product innovation opportunities for sustainable competitiveness could be fail to see. Companies in the manufacturing sector could also generate services to assist differentiate their products; service innovation is the second dimension. Improvements could also make to the manufacturing along with delivery process, which referred to the next innovation dimension; process innovation. Finally, companies in the manufacturing sector can use business process innovation to make it easier for customers to do business with the company or to cut costs (Goffin and Mitchell, 2005).

4 SWOT ANALYSIS ON THE STATUS OF THE SRI LANKAN APPAREL INDUSTRY

For the purpose of this study a SWOT analysis on the Sri Lankan apparel industry was done and the important strengths, weaknesses, opportunities and threats are discussed below.

Strengths

One of the biggest strength of the Sri Lankan apparel industry is its higher product quality level for the current market segments. In fact among the apparel manufacturing countries, Sri Lanka is considered as one of the main countries supplying products for niche market with specialized products, especially intimate apparel (lingerie) and casual wear (Staritz, 2012).

The Sri Lankan apparel industry has also built a strong image of corporate social responsibility, in particular relating to compliance with internationally agreed employment practices, and improved social and environmental standards. As a result of

this, Sri Lanka has a reputation as a country which follows labour laws and maintains good working conditions.

Improvement in the human capital base and design capabilities of the industry has facilitated the industry to promptly respond to buyers' quest for variety. These initiatives have resulted in good on time delivery with further efforts towards reducing lead-times. These non-price factors seems to have played a fundamental role in securing export orders, even though Sri Lanka is no longer a low-cost manufacturing base compared to many other apparel manufacturing countries in the region.

Another important strength of the Sri Lankan apparel industry, over its competitors, is the availability of skilled labour, educated and trainable work force coupled with management of manufacturing capacity and ability to handle high volume orders. Universities, technical colleges and other government and non-government organizations are now offering training facilities at various levels to develop various skills relating to the textiles and apparel industry. As a result of this Sri Lankan apparel industry possesses a better skilled workforce compared to the countries that are in the same market segment.

Sri Lanka being a small country with very good road network facilitates easy movement within the country to various companies spread throughout the nation.

Weaknesses

Sri Lankan apparel industry has over the years geared itself to selling capacity to the buyers, and regrettably has neglected the need to strengthen the marketing capabilities and product design and development skills which are essential to prepare it to compete and sustain in a quota free era. Thus there is a lack of marketing skills with over dependence on buying officers, and allocation of quotas resulting in low levels of marketing information, and knowledge about export marketing with hardly any marketing activities.

The country's small textile industry does not possess the capacity to supply quality fabric inputs to the Ready Made Apparels (RMA) sector. Another distinct weakness is the lack of accessory industries to RMAs, such as hand embroidery, beading, printing and washing, particularly in the intimate wear sector. Thus, Sri Lanka's RMA industry is heavily dependent on imports of textiles and accessories: an estimated 80-90 percent of fabrics and 70-90 percent of accessories are imported (Kelegama and Wijayasiri, 2004). Workers skilled in pattern-making, brassier technology, fabric technology and moulding are scarce in number. The RMA industry is increasingly moving towards low replenishment sourcing and just-in-time sourcing. This desire by retailers to order small batches of different products with increasingly short lead time requires manufacturers and distributors to be able to quickly process, fill and ship new orders. The removal of the quota system will enable buyers to procure requirements from the most efficient manufacturers posing at threat to those manufactures competing solely on price.

Lack of a strong work ethic along with high absenteeism and labour turnover is another main impediment in the apparel industry. It is estimated that average labour turnover worked out per factory is about 60 percent per annum. Taking the labour migration within

the apparel industry into account, the net number of persons leaving the industry each year is estimated as 25 percent (Liyanage and Galhena, 2012).

Available studies on the Sri Lankan Apparel sector show that whilst overall factor productivity in the sector has improved since launching liberalization reforms in 1977, productivity in comparison to competitor nations has declined (Research Intelligence Unit, 2012).

Sri Lanka can no longer compete with the rest of the world as a low labour cost destination as increasing cost of labour and availability of employment in other industries and foreign employment opportunities resulting in estimated 15,000 vacancies in the apparel industry which has traditionally employed women who get a minimum wage around Rs. 20,000 (Daily Mirror, 2014).

Sri Lankan apparel industry is mainly dependent on a limited number of clients in the USA and EU markets. These two markets contribute to about 93 percent of the industries total exports. Furthermore, manufacturers have limited direct contact with leading global buyers, around 65 percent of the Ready Made Apparel (RMA) are exported via intermediary buying offices based in Sri Lanka, the disadvantage of this being that many foreign buyers and investors are simply unaware of Sri Lanka's potential to be a supplier of choice to many of them (Kelegama and Wijayasiri, 2004).

Other weakness faced by the Sri Lankan apparel industry includes inadequate focus on upstream linkage resulting in longer lead-time, limited knowledge about international environments and recent global industry developments, lack of product design and development, and low level of productivity based on international standards.

Opportunities

Sri Lankan apparel industry has the opportunity to establish a strong relationship with distributors and buyers and developing an expansion strategy for the markets with good potential. Further, there exists an opportunity to gain a higher market share by implementing an aggressive marketing strategy in the markets.

EU and USA are the leading importers of apparel in the world. The EU accounts for 34 percent and the USA for 20 percent of the imports. The three leading export destinations of Sri Lanka in the EU – the UK, Italy and France – just by themselves account for 14 percent of total apparel imports in the world. While Sri Lanka has been successful in penetrating the EU market its share in the EU market is less than 3 percent (Ceylon Today, 2014), thus there exists an opportunity to capture a bigger market share in the EU.

Further, opportunities exist in capturing the South Asian, East Asian, and other massive markets such as China, Japan, Russia, and Brazil, especially the 'high priced' apparel with designer wear and intimate apparel, a market where Sri Lankan manufacturers are now experts in manufacturing and marketing.

Another opportunity the Sri Lankan apparel industry has is the existence of free trade agreements between India and Pakistan which could be exploited to export finished apparel and to import fabrics and accessories.

As Sri Lanka is already known in the world market as a manufacturer of very high quality apparels, this reputation could be successfully exploited to increase the market share, especially in the high end market segments.

Threats

One of the bigger threats faced by the Sri Lankan apparel industry is the intensification of the competition, especially from the sub Asian member countries, before and after the phasing out of the MFA. Especially the arrival of new competitors in the Asian sub-continent such as Vietnam, Cambodia, Myanmar and Laos and increased the competition in the apparel product ranges in which Sri Lanka is involved.

Further, improvement of the former socialist economies, which have a good textile industry and a large domestic market which are highly potential and geared to meet the quality and delivery requirements especially from EU poses a threats to the Sri Lankan apparel industry.

The increase in Sri Lanka's labour costs at a faster pace than productivity is another threat faced by the Sri Lankan apparel industry. For the apparel industry to be globally competitive, they need to achieve higher productivity and on-time delivery while maintaining higher quality of finished products and competitive pricing.

The structural changes in the western retail markets have resulted in buyers changing the methods and time of sourcing. Traditional pre-season orders are being replaced by speed sourcing (last minute ordering), and more replenishment of orders (within season ordering). Change in the sourcing patterns will pose immense challenges to the Sri Lankan apparel industry in terms of shorter lead times, and improved supply chain management. Thus the necessity to reduce lead time from the manufacturers to the shop, and the distant suppliers' inability to deliver the value added apparel on time may become a greater threat to the industry.

Geographical location of the country is another disadvantage to the industry. This is because Sri Lanka is located at the furthest end of the Indian Ocean, when compared with other competitive apparel exporting countries, which export to the USA, EU and other wealthy nations.

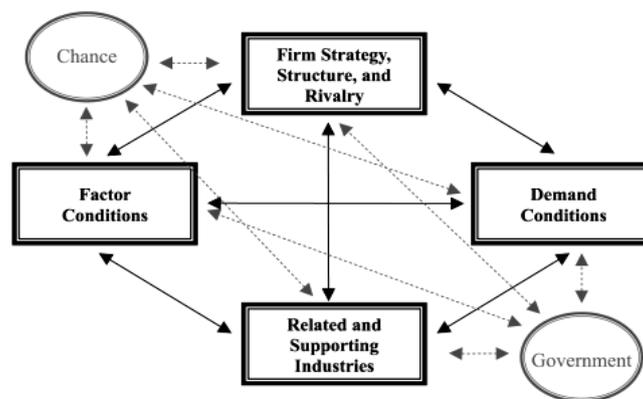
Another issue for the industry is the requirement to tighten the environmental and labour regulations in the importer's country and thus the obligation to conform to these standards.

5 RECOMMENDATIONS TO FACE FUTURE CHALLENGES

Despite the various challenges, for the period 2010-2016, Sri Lanka is ambitiously targeting a revenue of US dollar five billion from the apparel sector. According to the Sri Lanka Export Development Board's (EDB) five year strategic plan, Sri Lanka is to develop textile manufacturing and processing sector to reach a target of 30 million metres (10 million kg) and to bring in new areas such as technical textiles. Through these initiatives, the government and the EDB plan to facilitate the textile industry to play a significant role in supplying raw materials to the apparel industry and to cater to the demand (Hewage, 2014).

The future of Sri Lanka's apparel industry depends, to a large extent, on maintaining the momentum built up over the last twenty years while increasing the competitive advantage 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.

Thus in order to arrive at the recommendations for the Sri Lankan apparel industry to face the future challenges and continue to compete and improve its world market share in the apparel trade, Porter's national competitive advantage model (Porter, 1990) has been used as the basic tool, into which the findings of the SWOT analysis done have been incorporated. Porter's national competitive advantage model constitutes four factors. He calls those factors the "diamond of national advantage". The Porter's diamond model includes: factor conditions, demand conditions, related and supporting industries and firm strategy, structure and rivalry. Besides the above four factors, Porter gives weightage to a couple of factors, such as governmental policy and the role of chance of events. Governmental policy influences all the four factors through various regulatory / deregulatory measures. It can control the availability of various resources of change the pattern of demand through taxes and so on. It can encourage / discourage supportive industries through various incentives / disincentives. Similarly, chance of events, such as war or some unforeseen events like inventions / innovations; discontinuities in the supply of inputs; and so forth can eliminate the advantages possessed by competitors. This is illustrated in Figure 1.



Source: Porter (1990)

Figure 1 Porter's diamond model

Based on Porter's model, the recommendations for the Sri Lankan apparel industry to face the future challenges are given under six headings.

Factor Conditions

In the Porter's model, factor conditions show how far the factor of manufacturing in a country can be utilized successfully in a particular industry. According to this concept, for competitive advantage, contribution of the factors of manufacturing is crucial for the creation and upgrading of product. In the apparel industry the main competitive advantage factors are raw materials, labour, and production and process technologies (Matararachchi, 2008). Following are the recommendations that are given to improve the

factor conditions of the Sri Lankan apparel industry to improve its competitiveness in future.

Raw Materials: For the industry to continue to be competitive in its existing markets it needs to make efforts to strengthen the raw material base of the apparel industry. This would help the apparel industry to reduce the lead time which is increasingly becoming a threat in losing the existing markets. If delays involved in obtaining raw material could be eliminated by attracting world class fabric manufacturers, accessory manufacturers etc., the present long lead times could be reduced.

Therefore, there is an opportunity to develop the textile industry to provide raw materials and accessories for the apparel industry in the region.

Labour: In the Sri Lankan apparel industry there is an acute weakness in management skills especially in the medium and the smaller sized level companies and these have to be developed. More skilled staff and continuous training for them can help enhance manufacturing level but its importance is generally overlooked by many companies. In this respect as a long term strategy, human resources development should be go hand in hand with educational reforms with more investments being diverted to develop designer capabilities and the marketing and management skills of the employees of the Sri Lankan apparel industry.

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 manufacturing and close monitoring with efficient methods to detect errors and inefficiencies associated with manufacturing 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.

Production and Process Technologies: The apparel sector is one of the most globalised industries, with market characteristics of low predictability, short product- lifecycles, high volatility and a high level of impulse purchase (Bruce et al., 2004). In this phase product development occupy a major role in revenue generation. In the current dynamic and changing environment one way to remain competitive and sustain performance is through innovation. Rapidly rising international competition in the post MFA era is forcing apparel manufacturing companies in Sri Lanka to seek ways to become more innovative. Research proves that focusing on innovation management is an ideal strategic direction to uplift current industry performances. It can be noticed that most of the apparel manufactures have implemented various innovation practices as a competitive tool. However, at the same time they are facing several issues and challenges in those practices (Ranaweera, 2014). Research and development is one of the means by which business can experience future growth by developing new products or processes to improve and expand their operations. Investigative activities that a business chooses to conduct with the intention of making a discovery that can either lead to the development of new products or procedures, or to improvement of existing products or procedures. In this respect one of the main

interventions that need to be done is to increase investment for research and development by the private sector.

Demand Conditions

With reference to demand, Porter is of the view that it is not merely the size of the market that is important, but it is the intensity and sophistication of the demand that is significant for competitive advantage. If consumers are sophisticated, they will make demands for sophisticated products and that, in turn, will help the manufacturing of sophisticated products. Thus Sri Lanka needs to look at and venture into new markets within the current market areas and outside the existing market areas. Thus the opportunities that are available in the new market segments in Europe, and North America should be probed into. This segmental market penetration will increase the opportunities in different markets and will open up new business opportunities, ensuring long term sustainability in the future. As the lead time from Sri Lanka is quite high compared to the western competitors such as Mexico and Turkey who are geographically much closer to the current main markets of Sri Lanka, the Sri Lankan apparel industry should focus on new markets that are closer to the country and by usage of air freight for faster delivery. The industry also needs to look at new potential markets such as China, Japan, India, Russia, and Brazil. The Government of Sri Lanka should look into the possibility of obtaining preferential access to these massive markets.

With the intention of penetrating into new markets the apparel industry should adopt strategies to overcome the existing weaknesses. In respect of this the following course of actions are recommended.

- As Sri Lanka is no more a low cost labour country the industry needs to adopt strategies that would reduce the cost of manufacturing in other areas of the manufacturing process. This would include initiatives in lean manufacturing which leads to reduction of waste.
- The apparel industry should undertake initiatives to improve the productivity, especially to the levels of the competitor nations. Productivity can be improved by increasing the outputs keeping the inputs constant or by giving the same quantity of outputs with reduced inputs or by increasing outputs and at the same time reducing inputs. This can be done by several methods such as: improving systems and methods of operations, including automation and investment in new technology; improving planning and scheduling of operations; improving control; improving motivation of people.
- Increase the skill of the labour force, especially in specialized operations. This should be done by training and developing the workforce on the necessary skills
- Enhance and encourage local and foreign investment to enlarge the industrial base
- Develop more product focused strategies. That is the apparel industry should identify the need/s of a particular market and the obsessively deliver a solution to

the consumer who has that need. This way the apparel industry will be able to capture new markets which are in need of new products.

With respect to products following are some of the recommendations that are being made.

- Change from simple products to more complex products
- Upgrade cotton based products into more value added products.
- Sri Lankan apparel companies should gradually increase higher value products in the countries' portfolio by providing niche market products to the end customer.
- 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. Therefore the apparel industry needs to have further shift towards casual and comfortable clothes.

Venturing into new markets outside the traditional markets should be coupled with measures to reduce costs of manufacturing, increase productivity, specialize and be product focused, to train and develop manpower skills, enhance investments and adopt new and efficient technology.

Quality improvement is a precedence area, with which Sri Lanka can maximize opportunities in the developed markets. An integrated approach in quality assurance in the process from fabric to apparel can be a powerful tool in using quality as a differentiation strategy for competitive advantage.

Firm Strategy, Structure, and Rivalry

According to Porter a company operating along with its competitors as well as its complementary companies gathers benefit through a close working relationship in form of competition or backward and forward linkages. If competition is acute, every company will like to produce better quality goods at a lower cost in order to survive in the market. In this respect following are some of the recommendations for the Sri Lankan apparel industry to remain competitive in respect of strategies and structural changes.

The Sri Lankan apparel industry needs to establish a provision of physical and legal infrastructure and human resources for a futuristic business centre. This need to be complemented with extensive network client connections with business advantages such as access to larger market in neighbouring or an international shipping or aviation route which demand frequent services together with competitive incentives.

Another main strategy that the industry needs to engage is to come up with exclusive brand names from leading manufacturers. In the local market a few niche brands such as Odel, Emerald, and Envoy have emerged, while in the export apparel sector, the country has introduced home grown brands such as Amante, Arugambay, Avirate and Adithi which have already gained recognition and acceptance in regional markets. However, Sri Lankan apparel industry need to be further develop these initiatives to target and

capitalize on the world top markets so as to compete with the overseas brands and establish a name for itself just like 'Ceylon Tea' has established its name in the world tea market.

As a strategy the Sri Lankan apparel manufacturers will have to target middle and upper level market (higher value apparel) and enhance the unit value realizations considerably to develop competitive advantage for the industry as whole. The leading apparel manufacturers will have to move from the "export marketing mode" to "international marketing mode". For this to take place the apparel industry needs to recognize the importance of innovations in the manufacturing sector.

Further, export alliance would be a strong means to capture the market. Small and medium sized companies with not so unique products and only limited funds available for export market development can form export alliances. This way they can exploit the market much more professionally than individual companies. In addition they can benefit by sharing the very heavy marketing expenses and the orders received from buyers.

Sri Lankan apparel industry needs to build a strategy to forge strong partner relationships by offering on-time delivery and quality performance throughout the supply chain. They need to further actively build sustainable client and supply bases by supporting the growth of customers and suppliers, through continuous value additions to products and services.

Within the apparel industry, there needs to be structural changes done to improve the efficiency of operations. Key elements of efficiency improvement are proper time management, collection of information and manufacturing, reduction of defects and wastages, work measurements, etc. These could be improved with the advanced technological compliance, improving health and safety, and building environmental friendly work practices, which would move the local apparel industry ahead of most of the other neighboring competitors. There is need for planning and programming of lead-times from the stage of raw materials sourcing to dispatching of finished apparels, which offers considerable opportunity for developing competitive advantage.

A long term plan to build professionalism and stable work force is necessary for further growth in the apparel industry. Introduction of modern machines will speed up the sewing process and assist the operator to use other advanced facilities of machines thus decreasing the needle down time. Improving the level of information availability is an important factor in building competitive advantage; timely fashion and market information is vital. Further, there is also need for continuous information follow on tracking of purchase orders.

Related and Supporting Industries

The fourth factor deals with related and supporting industries. For the apparel industry in Sri Lanka to grow it is necessary that resources must be invested 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. Rising energy prices in the country is a big concern. Some of the initiatives that can be adopted to overcome this issue are:

- Investments on multi-fuel boilers that meet the requirements of steam requirements for manufacturing.
- Investment on new machinery to facilitate new manufacturing processes that consume lesser energy and are more efficient
- Relook at the traditional dyeing processes that are practiced in the textile / apparel industry with the objective to reduce dyeing time, energy costs, and margin of error.
- Development of infrastructure to provide training facilities as well as a change in attitudes to match the new challenges in the textile / apparel industry is essential to provide sufficient manpower as well as to improve quality and productivity.
- Need to have a high caliber telecommunications infrastructure along with state-of-the-art information technology system to facilitate modern trading, exchange and transfer platforms.

Government Policies

As discussed earlier as the cheap labor factor is not in existence anymore when compared to the markets such as of China, and Bangladesh, it is much advisable to concentrate on the labour cost per product than the labor cost per hour to thrive in the future.

In this respect an important area where the Sri Lanka needs to improve is governance and marketing environments. Some of the issues in this area are already discussed under the SWOT analysis. Following are some of the interventions that are required to improve the governance and marketing environments in the country.

- Environment for apparel industry growth in future
- Less political intervention in labour matters
- Improved and consistent macroeconomic environment
- International policy negotiations
- Better coordination with the industry manufacturers would be encouraging to develop a more conducive environment for apparel industry growth in future
- Need to build a conducive business environment and follow international practices.
- The apparel industry should adhere and comply with certifications such as eco-labeling, ISO 9000 and ISO 14000 to enter the new markets which would enable to build better brand image.
- The Government must improve infrastructure facilities; ensure minimum disruptions in the working environment to support the industry.

Chance of Events

These are disruptive developments outside the control of companies and governments that allow in new players who exploit opportunities arising from a reshaped industry structure. For example, radical innovations, unexpected oil price rises, revolutions, wars, etc. some of the events that cannot be controlled by the Sri Lankan government or the industry. As these are unexpected events which are beyond the control of the industry and the government nobody can have strategies to counter them. However, the industry and the governments should have the capacity built in for quick responses for such unexpected eventualities.

6 CONCLUSIONS

The Sri Lankan apparel industry is expecting to achieve US dollars 8.5 billion apparel exports by 2020. In order to achieve this target, the apparel industry needs to record year on year 12 percent growth rate (Hewage, 2015). Considering the fact that year on year growth in 2013 was 13 percent and in 2014 it was nearly 10.3 percent, on the surface, the target of 12 percent annual growth per annum may not look that difficult. However, these targets were achieved through notable increments in few specific market segments. For example, in 2013 a growth rate of 20.2 percent in knit apparel export contributed towards the overall double digit growth. Sri Lanka's exports to Japan, China, Russia and Brazil increased to 12 percent of total exports in 2014 thus contributing to the overall growth.

Thus, in order to sustain the targeted 12 percent growth per year in the next six years the apparel industry needs to be continuously bullish and continue to improve on its buyer solutions by providing them with the total solution. The Government also needs to constructively engage with the country's trade partners to obtain more concessions, especially from the emerging markets, to sustain the planned levels of growth. Further, there is a need to formulate new policy frameworks, creating new avenues to penetrate into emerging markets, particularly China. It is paramount that the Sri Lankan apparel industry implements brand promotion activities, especially in the niche market where its reputation of providing quality products to top global brands is unquestionably one of the best in the world. In this regard, the bold initiative taken by the Sri Lankan apparel industry to mark its signature in the global apparel arena by building the competitive edge over the 'Value' as opposed to the 'Volume' is highly commendable.

In conclusion, with proper strategies and focused initiatives from all the stakeholders of the Sri Lankan apparel industry, the goal of the Sri Lankan apparel industry, as stated by the Joint Apparel Association Forum, to be the premier fashion and apparel outsourcing hub and elevating Sri Lanka to "Fashionably to its Mastery" is indeed an achievable mission.

REFERENCES

1. Abeysingha, Subhashini (2014), The Time Has Come For Sri Lanka To Look Beyond Apparel Exports, Daily Financial Times, March 21, 2014, Colombo, Sri Lanka
2. Adhikari and Weeratunga (2007), Textiles and Clothing Sector in South Asia: Coping with Post-quota Challenges, in BS Chimni, BL Das, S Kelegama and M. Rahman (eds), *Multilateralism at Cross-roads: Reaffirming Development Priorities*, South Asian Yearbook of Trade and Development 2006, pp. 109-45. Centre for Trade and Development and Wiley India: Delhi, India
3. Bartley, T. (2005). Corporate Accountability and the Privatization of Labour Standards: Struggles over Codes of Conduct in the Apparel Industry. In H Prechel (Ed.), *Politics and the Corporation* (Vol. 14, pp. 211-244). Emerald: Bingley, UK
4. Bruce, M., & Daly, L., and Towers, N. (2004). Lean or Agile: A Solution for Supply Chain Management in the Textiles and Clothing Industry?. *International Journal of Operations & Production Management*, 24 (2), 151- 170.
5. Ceylon Today (2014), Solving the Dilemma of Export Diversification, March 24, 2014, Colombo, Sri Lanka
6. Cooper, RG, and Edgett, SJ. (2000). Developing a Product Innovation and Technology Strategy for Your Business. *Journal of Research Technology Management*, 53(3), 33-40. Industrial Research Institute: Arlington, USA
7. Daily Mirror (2014)., Apparel Industry in Sri Lanka Mulls Automation To Overcome Labour Woes, *Mirror Business*, November 21, 2014., Colombo, Sri Lanka
8. Dheerasinghe, R. (2003). Garment Industry in Sri Lanka Challenges, Prospects and Strategies. *Staff Studies*, 33(1 and 2), 33-72, Central Bank of Sri Lanka: Colombo, Sri Lanka
9. Essays, UK. (November 2013). Can Sri Lanka Face Financial Challenges Economics Essay. Retrieved from <http://www.ukessays.com/essays/economics/can-sri-lanka-face-financial-challenges-economics-essay.php?cref=1>
10. Frederick, S. and Staritz, C., (2012)., Apparel Industry Developments after the MFA Phase-out. In: *Sewing Success? Employment and Wage Effects of the end of the Multi-fibre Arrangement (MFA)*. Volume I, The World Bank: Washington DC, USA.
11. Gereffi, G., (1999)., International trade and industrial upgrading in the apparel commodity chain. *Journal of International Economics* (48), 37-70. Elsevier: Amsterdam, Netherlands
12. Gereffi, G. and Frederick, S. (2010): The global apparel value chain, trade and the crisis: challenges and opportunities for developing countries. In: Cattaneo, O., Gereffi, G., Staritz, C. (eds.): *Global Value Chains in a Post-crisis World.*, 157-208. The World Bank: Washington DC.
13. Gereffi, G. and Memedovic. O. (2003): The global apparel value chain: what prospects for upgrading for developing countries, *Sectoral Studies Series*, UNIDO: Vienna, Austria.
14. Gereffi, Gary, Ronie Garcia-Johnson and Erika Sasser. (2001). The NGO-industrial complex. *Foreign Policy* (125): 56-65. Slate Group: Washington DC, USA
15. Goffin, K., and Mitchell, R. (2005). *Innovation Management* (1st ed.). Palgrave Macmillan Publications: New York, USA.
16. Hewage, Indunil (2014), Lankan Apparel Exports Sees Double Digit Growth, *Daily News*, July 14, 2014, Colombo, Sri Lanka
17. Hewage, Indunil (2015), Apparel exports top US dollar 4.3bn up to Nov 2014, *Daily News*, January 19, 2015, Colombo, Sri Lanka
18. Kelegama, S., and Epaarachchi, R. (2003). Garment industry in Sri Lanka. In G. Joshi (Ed.) *Apparel Industry in South Asia: Rags or riches? Competitiveness, productivity and job quality in post-MFA environment* (197-226). United Nations Publications: Delhi
19. Kelegama, S and Wijayasiri, J., (2004). Overview of the garment industry in Sri Lanka. In Saman Kelegama (ed), *Readymade Garment Industry in Sri Lanka: Facing the Global Challenge*, pp 13-45, Institute of Policy Studies: Cololmbo, Sri Lanka
20. Liyanage, D M., and Galhena, B L., (2012)., Determinants of Turnover Intention of Sewing Machine Operators: Case from leading Apparel Company, *Kelaniya Journal of Management*, Vol. 1. No. 2, pp 107-123, University of Kelaniya: Kelaniya, Sri Lanka

21. Matararachchi, R (2008)., An Analysis of Apparel Exports from Sri Lanka, MSc Thesis, University of Moaratuwa: Moratuwa, Sri Lanka
22. Porter, ME., (1990)., The competitive advantage of nations. Free Press: New York, USA
23. Ranaweera, HRAT., Uplifting Sri Lankan Apparel Industry Through Innovation Management to Face the Challenges in the Post MFA Era, Reshaping Management and Economic Thinking through Integrating Eco-Friendly and Ethical Practices, Proceedings of the 3rd International Conference on Management and Economics, 26-27 February 2014, Faculty of Management and Finance, University of Ruhuna, Sri Lanka
24. Research Intelligence Unit, Foot-loose: Garment sector realities, found at http://www.riunit.com/news_det.php?NewsID=17, Accessed on January 5, 2015
25. Sahoo, Pravakar., Nataraj, Geethanjali. and Dash, Ranjan Kumar., (2013)., Foreign Direct Investment in South Asia: Policy, Impact, Determinants and Challenges., Springer Science & Business Media, 383 pages
26. Staritz, Cornelia (2012)., Apparel Exports – Still a Path for Industrial Development?, Dynamics in Apparel Global Value Chains and Implications for Low-income Countries., Austrian Research Foundation for International Development: Vienna, Austria
27. The Island (2002)., Overview of the Sri Lanka Apparel Export Industry, The Island Business, April 01, 2002, Colombo, Sri Lanka
28. Tilakaratne, WM., (2006). Phasing out MFA and the emerging trend in the readymade apparel industry in Sri Lanka. In M. Murayama (Ed.), Employment in readymade garment industry in post MFA era: The case of India, Bangladesh and Sri Lanka., Joint Research Programme Series: 140, pp 1-30, Institute of Developing Economies – Japan External Trade Organization: Tokyo, Japan
29. Wijendra, Harshani, (2014), Sri Lankan Apparel Export Position in Global Market, Textile Learner, found at <http://textilelearner.blogspot.com/2014/01/sri-lankan-apparel-export-position-in.html>, Accessed on January 31, 2015
30. World Trade Organization (2014), International Trade Statistics – 2014, WTO Secretariat, Geneva, Switzerland