

A Study on Supply Chain Network of Textiles and Clothing Industry in Sri Lanka

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Abstract:

Like many other emerging economies, Sri Lanka relies more on the performance of its textiles and clothing industry for its export-led growth. Textiles and clothing industry has many stages in its value chain: production of fibers, fabrics, other materials and finished clothing. The distribution of stages of production and marketing activities among countries is important in understanding the industry's value chain. This paper intends to identify the position of Sri Lanka in the value chain of the global textiles and clothing industry. Such information is important in shaping economic policies to improve the competitiveness in global market. We found that Sri Lanka's textiles and clothing industry has important linkages with South Asia, East Asia and ASEAN countries as it outsources a large part of textile materials from these countries. The market for the country's final clothing products is dominated by the US and the EU. Though Sri Lanka's textile material production industry is relatively small at present, the country exports such products to China, India and other South Asian countries, the US, ASEAN and EU countries and to countries where the clothing industry is rapidly expanding. Concentrating more on textile material production is important for Sri Lanka when advancing to the next level of industrialization. This will enable the country to enhance the domestic value addition and labour productivity in the industry.

Keywords: Supply Chain, Trade Directions, Textile Material Production, Clothing Production

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1. Introduction

Labour abundance in developing countries ensures that the comparative advantage for them is in labour-intensive exports. Export of labour-intensive goods such as textiles and clothing has been a first step for industrialization and export-led economic growth for many low-income countries. The textiles and clothing industry is a large and diverse sector that can be subdivided into several sub-sectors, which offers comparative advantage for countries with different resource endowments.

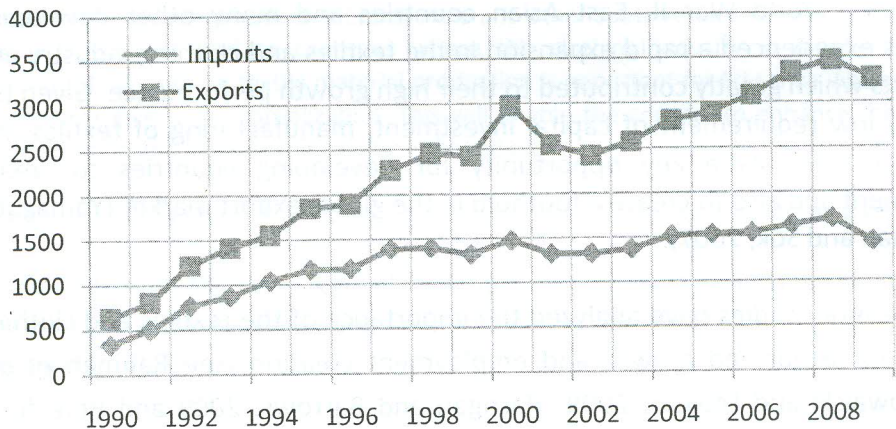
The traditional division of the textiles and clothing industry is between the production of materials such as fibres, fabrics, etc. and finished clothing. The production of natural fibres is the domain of agricultural economies while the production of synthetic fibres requires the ability to innovate or adopt new technologies. Fabric production is a highly automated capital-intensive activity and susceptible to technological advances. The clothing industry is basically labour intensive and requires specialization for competitiveness in the global market. As Nordus (2005) stated, the distribution of production and marketing activities among countries is important in understanding the industry's value chain. After World War II, East Asian countries and many other developing countries experienced a rapid expansion in the textiles and clothing industry and its exports which greatly contributed to their high growth performance. Given the relatively low requirement of capital investment, manufacturing of textiles and clothing is seen as a key opportunity for developing countries to create employment and also to create a foothold in the global export market (Yamagata, 2006; Chan and Sok, 2007).

Several studies have analyzed the importance of the textiles and clothing industry for export-led growth and employment creation (see Rahman *et al.*, 2008; Kowalski and Molnar, 2009; Harrigan and Barrows, 2009 and Beresford, 2009). Like many other emerging economies, Sri Lanka relies more on the performance of its textiles and clothing industry for its export-led growth and employment generation. Before 1977, the textiles and clothing industry in Sri Lanka was dominated by large-scale state-owned enterprises operated under high protection from the country's import substitution and infant-industry protection policy. The shift of the country's economic policy from import

substitution to export promotion in an open economic policy framework in late 1970s created an industrial base led by the production of textiles and clothing. The industry attracted investment from various multinational companies in East Asia and other countries (Kelegama, 2005). Multinational firms in the industry shifted their operations to Sri Lanka under foreign investment promotion policies which include the creation of Export Processing Zones (EPZs) and the provision of various fiscal incentives. The new economic policy led to a rapid expansion of the industry in the 1980s, thereby significantly increasing its importance in the economy. Figure 1 shows that Sri Lanka's export of textile and clothing products has increased at a rapid rate than its imports. At present, the textiles and clothing industry is the largest export industry of the country. It provides more than 330,000 formal employment positions and creates important backward and forward linkages with other sectors of the economy (Deerasinghe, 2009; Board of Investment (BoI) of Sri Lanka, 2011).

Figure 1

Sri Lanka's Exports and Imports of Textiles and Clothing (US\$ million)



Source: United Nations Commodity Trade Statistics Database, 2011.

Sri Lanka's clothing industry was initially heavily dependent on the quota system offered by developed countries, but this high dependency has gradually been lessened. The clothing industry of Sri Lanka, however, faces the issue of

weakening international competitiveness due to rising labour costs relative to other producer countries such as Bangladesh, Vietnam and Cambodia (Kelegama, 2005). Thus, reducing the cost of trade by eliminating barriers to trade is important to maintain its international competitiveness (Kelegama and Epaarachchi, 2002). This may require evaluating the country's performance at all stages of the production value chain in the industry and concentrating more on the most efficient stages of production. The distribution of different stages of production of intermediary and final goods across many countries would allow for such specialization in the supply chain network of this industry. In particular, specialization in the supply of textile materials is important as it uses advanced technology in which innovations bring large productivity increases.

The main objective of this paper is to identify the contribution of Sri Lanka to the value chain of the global textiles and clothing industry, which is important in shaping economic policies of the country to maintain its competitiveness in the global market. This paper pays more attention on the supply of textile materials by Sri Lanka to other clothing producer countries. The rest of the paper is organized as follows. Section 2 discusses the general background of the textiles and clothing industry in Sri Lanka. Section 3 analyses the trade directions of the industry with a discussion on trade in textiles materials and finished clothing. This section also presents the map of the supply chain of the industry. Section 4 draws conclusions and policy implications.

2. Sri Lanka in the Global Value Chain of the Industry

The presence of multinational firms in the country's textiles and clothing industry is an indication of Sri Lanka's integration with the supply chain network of the global textiles and clothing industry. Multinational firms are involved in cross-border transactions in investment, labour, technology, materials and finished products. From the late 1970s with the liberalization of the economy, the textiles and clothing industry attracted a large amount of Foreign Direct Investment (FDI). The total realized investment in the industry was nearly 6000 billion US\$ in 2009. More than 66 percent of this total was foreign investment.

Major investing countries were: Hong Kong, Germany, UK, Singapore, Belgium, Japan, US, China, South Korea and Australia.

During the 1970s and 1980s, textiles and clothing manufacturers operating in East Asia shifted their production plants to Sri Lanka searching for low cost labour and access to Western markets secured through Multi Fibre Agreement (MFA) quotas. The MFA quota system helped the expansion of the textiles and clothing industry in Sri Lanka. In addition, better infrastructure facilities in Export Processing Zones (EPZ) and various fiscal incentives offered by successive governments since 1977 have attracted more investors into the industry. Fiscal incentives and facilities given in EPZs for joint ventures/foreign investment also encouraged domestic entrepreneurs to operate in collaboration with foreign firms.¹ These firms mainly operated as joint venture companies² and invested in the production of clothing and clothing accessories, fabric and yarn, and other materials and, with their local partners, produce world famous brands of clothing products.³

¹ Major multinational companies operating in this industry in Sri Lanka are: MGT Group and Forbes Fashion from Australia; Ahier, Adler, Triumph and ALT United from Germany; Fountain Set and Mega Trend Management from Hong Kong; Indorama Corporation from Indonesia; YKK Zippers from Japan; Kabool, Tongyang, Samdo Corp., Gooryong Co. Ltd and Dae Yong Textile Company from South Korea; Courtaulds, Coats, Christy International, International Trimmings, SR Gents and Textured Jersey from the UK; and Mast, Kellwood, Playknits, Paxar and Shore to Shore from the US.

² As BoI of Sri Lanka reports, major firms in the country's textiles and clothing industry (the country of investment is given in parentheses) are: Brandix Apparel Ltd (Sri Lanka); Smart Shirts Ltd (Hong Kong); Omega Line Ltd (Italy); Slimline (Pvt) Ltd (UK, US, Sri Lanka); Bodyline (Pvt) Ltd (US, Hong Kong, Sri Lanka); Unichela (Pvt) Ltd (UK, Sri Lanka); Shadowline (Pvt) Ltd (Mauritius, Sri Lanka); Linea Clothing (Pvt) Ltd (Maldives, Sri Lanka); Hirdaramani Mercury Apparel (Pvt) Ltd (Sri Lanka); Crystal Martin Ceylon (Pvt) Ltd (Hong Kong); South Asia Textile Industries Lanka (Pvt) Ltd (Singapore, Sri Lanka); and Stretchline (Pvt) Ltd (Hong Kong, Sri Lanka). We reckon that many large investors in the textiles and clothing industry of Sri Lanka are from the East Asian region.

³ Such as Victoria Secret, Liz Claiborne, Abercrombie and Fitch, Tommy Hilfiger, Polo, Ralph Lauren, Gymboree, Adams, Tesco, Levi's, Nike, Pierre Cardin, Gap, Marks & Spencer, London Fog, C&A, Next, Calvin Klein, Lucky Jeans, etc.

Since the country does not have an extensive and efficient industrial base of producing textile materials and clothing accessories, the industry is largely dependent on the import of materials. As Kelegama (2005) noted, the industrial setup of the textiles and clothing industry in Sri Lanka was such that it produced finished clothing by importing most of the materials from various parts of the world. It seems that the textiles and clothing industry in Sri Lanka is highly dependent on foreign markets for the sale of finished clothing as well as for the import of materials.

The domestic textile materials industry is not large and does not have the capacity to supply yarn and fabric to the country's clothing industry adequately. The government has therefore followed a policy to import textile materials on duty-free or concessionary duty terms since the late 1970s to assist in the promotion of exports of clothing. Zero duty on imported materials made the domestic textile materials industry less competitive. However, during the 1990s the textile materials industry expanded with joint venture investments, as many clothing manufacturers invested in the production of textiles and other materials for their own clothing production. Domestic clothing manufacturers set up joint venture fabric plants. One example is Ocean Lanka (Pvt) Limited, a fabric knitting and dyeing plant started in 1996. This textiles factory is a joint venture of Fountain Set (Holdings) Ltd – the world's largest knit fabric manufacturer based in Hong Kong – and two leading clothing manufacturers in Sri Lanka. Fountain Set owns 60 percent of shares while two domestic companies have 20 percent each. This fabric plant produces two to three million meters of fabric per month. Most of the local clothing manufacturers purchase fabrics from this plant. Ocean Lanka imports raw cotton and other materials and yarn from China, Indonesia and South Asian countries and supply fabrics to local clothing manufacturers and exports fabrics. The company re-exports cotton waste and cotton yarn to China and other Asian countries. In addition to Ocean Lanka, many other companies engage in the production of yarn and fabric in Sri Lanka.

3. Trade Directions

As discussed above, the world's largest multinational firms in the textiles and clothing industry are operating in Sri Lanka as suppliers of materials, producers of materials, producers of clothing, trading agencies, etc. These firms are involved in several stages of the supply chain network of the industry. This section analyses the directions of imports of materials and exports of materials and finished clothing. Table 1 shows exports and imports of textiles and clothing under United Nations Harmonized System (HS) two-digit level product categories in 2009. Product categories from HS50-HS60 are materials of the textiles and clothing industry and HS61-HS63 are finished clothing products. From total textiles and clothing exports, HS50-HS60 product categories accounted for about five percent only. It signals that Sri Lanka does not export textile inputs and materials on a large scale. Though Sri Lanka's export of textile materials is relatively less compared to the export of final clothing products, it is still an industry worth US dollar 180 millions in 2009. However, out of total textiles and clothing imports of the country, more than 95 percent was from the HS50-HS60 product categories. This includes the import of fabric, cotton, fibres and man-made filaments. This indicates that the country's textiles and clothing industry is heavily dependent on the import of textile materials.

Table 1 shows that Sri Lanka heavily exports finished clothing products. HS61 and HS62 product categories accounted for 94 percent of the total textiles and clothing exports of the country in 2009. These two product categories mainly cover finished clothing products. Therefore, Sri Lanka mainly exports finished clothing products while it mainly imports textile materials. In the product categories of HS50-HS60, many categories show deficits in the trade balance. These trade deficits are very large in product categories such as cotton, fabrics, man-made fibres and filaments and wool. On the other hand, clothing accessories and finished clothing show large trade surpluses.

Import of textile materials

One of the major issues for Sri Lanka's textiles and clothing industry is its high dependency on foreign inputs. Many people argue this dependence on foreign inputs is associated with a low domestic value content (Kelegama, 2005; Deerasinghe, 2009). Of the total textiles material imports of US\$ 1944 million in 2009, fiber and yarn accounted for about 73 percent; fabric accounted for 16 percent; and lace, nets, etc, accounted for four percent. Textile covering and packing items; sewing thread; and labels, badges etc., each accounted for two percent of total material imports. It again implies that the country imports most of its yarn and fabrics necessary for the industry.

Table 2 gives a detailed composition of textiles material imports by Sri Lanka in 2009. Nearly 40 percent of total textile materials imports was of imports of cotton, cotton yarn and cotton fabric. Major source countries for these products were China, India, Pakistan, Indonesia and the US. These five countries accounted for 90 percent of the supply of cotton, cotton yarn and cotton fabric to Sri Lanka in 2009. The other largest material import category is synthetic fiber, yarn and fabric. It accounted for about 21 percent of total textile material imports in 2009. Major source countries were China, US, India, Netherlands, Thailand and Singapore. Imports of man-made filaments, sewing thread, etc. accounted for nearly 15 percent of total textile material imports. Sri Lanka imported these materials mainly from China, India, South Korea, Thailand and Indonesia. Labels, badges, lace, buttons and other materials constituted 12 percent of total textile material imports. Sri Lanka imported these items mainly from China, Italy, Thailand, India and the US. Wool, wool yarn and wool fabric is another important category of textile material imports.

It accounted for nearly 10 percent of total textile material imports in 2009 and was mainly imported from China, India, Bulgaria, US and Italy.

Table 1
Composition of Textiles and Clothing Trade, 2009

HS Code	Commodity description	Exports		Imports		Trade balance
		US\$ mn	%	US\$ mn	%	US\$ mn
50	Silk	0.0	0.0	5.4	0.3	-5.4
51	Wool; fine or coarse animal hair, horse hair, yarn and woven fabric	0.0	0.0	140.5	6.9	-140.5
52	Cotton	19.2	0.6	605.0	29.8	-585.8
53	Other vegetable textile fibers; paper yarn and woven fabrics of paper yarn	80.8	2.4	23.5	1.2	57.3
54	Man-made filaments; strip and other like man-made textile materials	5.1	0.1	312.7	15.4	-307.6
55	Man-made staple fibers	20.3	0.6	224.1	11.1	-203.8
56	Wadding, felt and non-woven; special yarn; twine; cordage, ropes and cables and articles thereof	15.3	0.5	22.5	1.1	-7.2
57	Carpets and other textile floor coverings	4.1	0.1	4.0	0.2	0.1
58	Special woven fabrics, tufted textile fabrics; lace; tapestries; trimmings; embroidery	15.4	0.5	139.6	6.9	-124.2
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	2.4	0.1	51.2	2.5	-48.8
60	Knitted or crocheted fabrics	17.8	0.5	415.8	20.5	-398.0
61	Articles of apparel and clothing accessories, knitted or crocheted	1,581.2	47.4	34.6	1.7	1,546.6
62	Articles of apparel and clothing accessories, not knitted or crocheted	1,538.1	46.1	42.0	2.1	1,496.2
63	Other made up textile articles; sets; worn clothing and worn textile articles, rugs	38.1	1.1	6.2	0.3	31.9
	Total	3,338.1	100.0	2027.1	100.0	1310.8

Source: Authors' calculation based on UN Commodity Trade database, 2011.

Table 2

Import of textiles materials as a percent of total textile and clothing imports,
2009

HS	Type of material	% share	Major importing countries
50	Silk	0.3	China (45%), Italy (43%), US (3%), India (1%), EU (45%), SA (1.4%), ASEAN (0.2%)
51	Wool; fine or coarse animal hair, horse hair, yarn and woven fabric	7.2	China (30%), India (18%), Bulgaria (12%), US (11%), Italy (7%), EU (27%), SA (18%)
52	Cotton	31.3	China (36%), India(30%), Pakistan (16%), Indonesia (6%), US (2%), EU (2%), SA (46%), ASEAN (8%)
53	Other vegetable textile fibers; paper yarn and woven fabrics of paper yarn	1.2	China (53%), India (22%), Bangladesh (5%), Pakistan (4%), Italy (3%), EU (6%), SA (31%), ASEAN (0.4%)
54	Man-made filaments; strip and other like man-made textile materials	16.1	China (21%), US (11%), India (9%), Netherlands (7%), Thailand (7%), Singapore (7%), EU (21%), SA (9.5%), ASEAN (18%)
55	Man-made staple fibers	11.5	China (33%), India (15%), Korea (9%), Thailand (8%), Indonesia (4%), US (3%), EU (7%), SA (17%), ASEAN (16%)
56	Wadding, felt and non-woven; special yarn; twine; cordage, ropes and cables and articles thereof	1.2	China (47%), India (10%), Malaysia (9%), Germany (7%), Thailand (4%), EU (15%), SA (10%), ASEAN (14%)
57	Carpets and other textile floor coverings	0.2	India (33%), China (15%), US (12%), UK (10%), Singapore (8%), EU (20%), SA (33%), ASEAN (13%)
58	Special woven fabrics, tufted textile fabrics; lace; tapestries; trimmings; embroidery	7.2	China (46%), Italy (15%), Thailand (9%), India (5%), US (3%), EU (23%), SA (5%), ASEAN (13%)
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	2.6	China (32%), Singapore (10%), Australia (9%), US (8%), Japan (6%), EU (8%), SA (4%), ASEAN (14%)
60	Knitted or crocheted fabrics	21.2	China (43%), Italy (16%), India (13%), Korea (4%), Pakistan (3%), EU (19%), SA (16%), ASEAN (5%)
	Total	100.0	

Note: Sri Lanka's total import of textile materials (HS50-60 product) is US\$ 1944 million in 2009. Group figures include relevant country figures given in the Table.

Source: Authors' calculation based on UN Commodity Trade database, 2011.

Fiber and yarn; fabric; lace, nets, etc.; textile coverings, packing items and thread accounted for nearly 97 percent of the total textile material imports in the year 2009. In all categories of material imports, China has been the dominant source country. As shown in Chart 1, in all textile material imports China accounted for nearly 40 percent while India accounted for about 18 percent and the US for 2.5 percent. With regard to trading blocs, EU countries accounted for about 12 percent of total material imports, and South Asian countries accounted for 24 percent of which India's contribution was about 18 percent. ASEAN countries accounted for about 10 percent of the total.

Chart 1

Major Trading Partners in Sri Lanka's Textiles and Clothing Industry, 2009

Import of textile materials (per cent)		Export of clothing (per cent)		Export of textile materials (per cent)	
•China	37.8	•US	41.1	•China	17.1
•India	17.6	•UK	26.9	•India	7.5
•US	2.5	•Italy	11.1	•US	6.0
•EU	11.6	•EU	51.7	•EU	20.2
•ASEAN	9.5	•ASEAN	0.3	•ASEAN	10.6
•South Asia	24.4	•South Asia	0.3	•South Asia	14.5

Note: Group figures include relevant country figures given in the Table.

Source: Authors' calculation based on UN Comtrade database, 2011.

Export of clothing products

Sri Lanka's textiles and clothing industry is mainly restricted to the export of finished clothing products. In 2009, finished clothing products accounted for about 94 percent of the total textiles and clothing exports of Sri Lanka. Of the total textiles and clothing exports, knitted and crocheted clothing products and clothing accessories (HS61) accounted for 47 percent while articles of non-knitted and non-crocheted clothing products and clothing accessories (HS62) accounted for 46 percent (see Table 3). Other made-up clothing products (HS63) accounted for only one percent of total exports of the textiles and clothing industry. Major

destinations of Sri Lanka's clothing exports in 2009 were the US (41 percent) and EU (52 percent). The major importers of Sri Lanka's clothing products in the EU were the UK, Italy, Germany, Belgium and France. Sri Lanka exports a very limited amount of its clothing products to ASEAN and South Asian countries. Therefore, the finished products of Sri Lanka's clothing industry are not dependent on the markets of China and South Asian and ASEAN countries.

Table 3
Composition of Sri Lanka's Clothing Exports, 2009

Code	Type of material	% share	Major markets
HS 61	Finished clothing and clothing accessories (knitted or crocheted)	49%	US (35%), UK (29%), Italy (13%), Germany (5%), Belgium (3%), EU (58%), SA (0.1%), ASEAN (0.2%)
HS 62	Finished clothing and clothing accessories (Not knitted or crocheted)	50%	US (47%), UK (25%), Italy (9%), Germany (7%), Turkey (2%), EU (46%), SA (0.3%), ASEAN (0.3%)
HS 63	Other made-up clothing products	1%	US (33%), France (10%), UK (10%), Australia (7%), Netherlands (7%), EU (45%), SA (3%), ASEAN (2%)
	Total	100%	

Note: Sri Lanka's total export of clothing (HS 61-63 products) is US\$ 3157.4 million and total export of textile and clothing (HS50-63 products) is US\$ 3338.1 million in 2009. Group figures include relevant country figures given in the Table.

Source: Authors' calculation based on UN Commodity Trade database, 2011.

Textile material exports

In 2009, Sri Lanka exported textiles and clothing products worth US dollar 3,338 million. Around five percent of this was textile materials (HS50-60 categories). Out of this five percent, fiber, yarn and woven fabric accounted for four percent, linen and other textiles accounted for one percent and other textile materials accounted for another one percent. Though its share to total exports of the industry was low, the textile material industry is worth about 181 million US dollars. It is therefore an important segment of the industry and has large potentials for future growth. Since the textile material production is relatively

capital intensive and requires advanced knowhow, it is worthwhile to pay more attention to explore its growth potential as it generates more forward and backward linkages with the domestic economy. The expansion of textile material production will benefit clothing production significantly.

Table 2 gives information of importance of different items of textile material exports of Sri Lanka and major markets. Sri Lanka mainly exports vegetable fibers, paper yarn and woven fabrics of paper yarn, man-made staple fibers, cotton yarn and fabrics, knitted or crocheted fabrics, special woven fabrics, tufted textile fabrics, lace, tapestries, etc, wadding, twine, cordages, etc. and man-made filaments. These products accounted for more than 95 percent of total textile material exports of Sri Lanka in 2009. Interestingly, the country exports most of its textile material products to Asian clothing producer countries such as China, India, Bangladesh, Pakistan, Thailand, Vietnam, Malaysia and Indonesia (see Table 4). Sri Lanka exports textile materials to countries such as Brazil, the UAE and Turkey. Further, developed countries such as the US, the UK, France, Germany, Netherlands, Italy, South Korea, Japan, Singapore, Australia purchased a large amount of textile materials produced by Sri Lanka. In terms of trade blocks, EU countries received 20 percent, South Asian countries received 15 percent and ASEAN countries received 11 percent of Sri Lanka's textile material exports. Thus, the market of Sri Lanka's textile materials is quite diverse and dynamic and has the potentials to expand.

Domestic value addition

The textiles and clothing industry of Sri Lanka in its present form has failed to create significant backward and forward linkages with the rest of the economy. Kelegama (2009) argued that the MFA quota system and other trade agreements between Sri Lanka and some important trade partners have not improved the competitiveness of the industry. Because of the lack of a fabric and accessory production base, the degree of vertical integration in the industry is also less compared with other competitive producer countries.

Table 4
Export of Textile Materials, Share of Total Textiles and Clothing Exports and
Major Markets -2009

HS	Type of material	% share	Markets
50	Silk yarn and fabric	0.005	Maldives (78%), US (21%), China (1%)
51	Wool and other animal hair yarn and fabric	0.024	China (60%), Bulgaria (34%), Maldives (5%)
52	Cotton yarn and fabric	10.653	Bangladesh (33%), India (17%), Turkey (10%), Indonesia (6%), Viet-Nam (5%), EU (10%), SA (51%), ASEAN (14%)
53	Other vegetable textile fibers; paper yarn and woven fabrics of paper yarn	44.754	China (31%), South Korea (9%), Japan (8%), US (6%), France (5%), EU (29%), SA (0.9%), ASEAN (0.5%)
54	Man-made filaments; strip and other like man-made textile materials	2.839	India (36%), Australia (27%), Pakistan (11%), US (10%), China (4%), EU (2%), SA (50%), ASEAN (1%)
55	Man-made staple fibers	11.221	Turkey (48%), Brazil (22%), UAE (7%), Pakistan (4%), US (3%)
56	Wadding, felt and non-woven; special yarn; twine; cordage, ropes and cables and articles thereof	8.474	US (33%), UK (25%), South Korea (11%), China (6%), India (5%), EU(8%), SA (7%), ASEAN (1%)
57	Carpets and other textile floor coverings	2.293	Australia (18%), Germany (16%), Netherlands (13%), Italy (10%), France (9%), EU (62%), SA (2%)
58	Special woven fabrics, tufted textile fabrics; lace; tapestries; trimmings; embroidery	8.551	India (31%), China (25%), Bangladesh (13%), Thailand (8%), Indonesia (7%), EU (4%), SA (45%), ASEAN (19%)
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	1.332	UK (24%), Singapore (18%), Netherlands (9%), South Korea (9%), UAE (8%), EU (35%), SA (0.3%), ASEAN (21%)
60	Knitted or crocheted fabrics	9.858	Singapore (38%), India (17%), Viet-Nam (15%), Thailand (5%), Cambodia (3%), EU (4%), SA (20%), ASEAN (66%)
	Total	100.000	

Note: Sri Lanka's total export of textile materials (HS50-60 product) is US\$ 180.6 million and total export of textile and clothing (HS50-63 products) is US\$ 3338.1 million in 2009. Group figures include relevant country figures given in the Table. Group figures include relevant country figures given in the Table.

Source: Authors' calculation based on UN Commodity Trade database, 2011.

Figure 2
Domestic Value Addition in Textiles and Clothing Industry
US \$ million (2003-10)



Source: Authors' calculation based on Annual Report of the Central Bank of Sri Lanka, 2010.

As Figure 2 shows, the domestic value addition in the textiles and clothing industry does not show a clear increasing trend from 2003 to 2010. Both the textile materials and clothing production together create domestic value addition of about 40 percent of the industry's total export value in 2010. The domestic value addition has increased slightly in recent years as domestic production of fabric and other material expanded. In addition, the increased supply of embroidery, lace and other related materials by domestic Small and Medium Enterprises (SMEs) also contributed to the increase in domestic value-added component of the clothing industry exports. However, in Jayawickrama and Thangavelu (2010), one manufacturer revealed that the local content of the material accounted for, on average, less than 20 percent of the market price of the final clothing product.

Supply Chain Network

Chart 2 summarizes the above discussion of the supply chain network of Sri Lanka's textiles and clothing industry. It identifies main destinations of Sri Lanka's textile and clothing exports and imports and highlights how Sri Lanka's textiles and clothing industry link with major global markets.

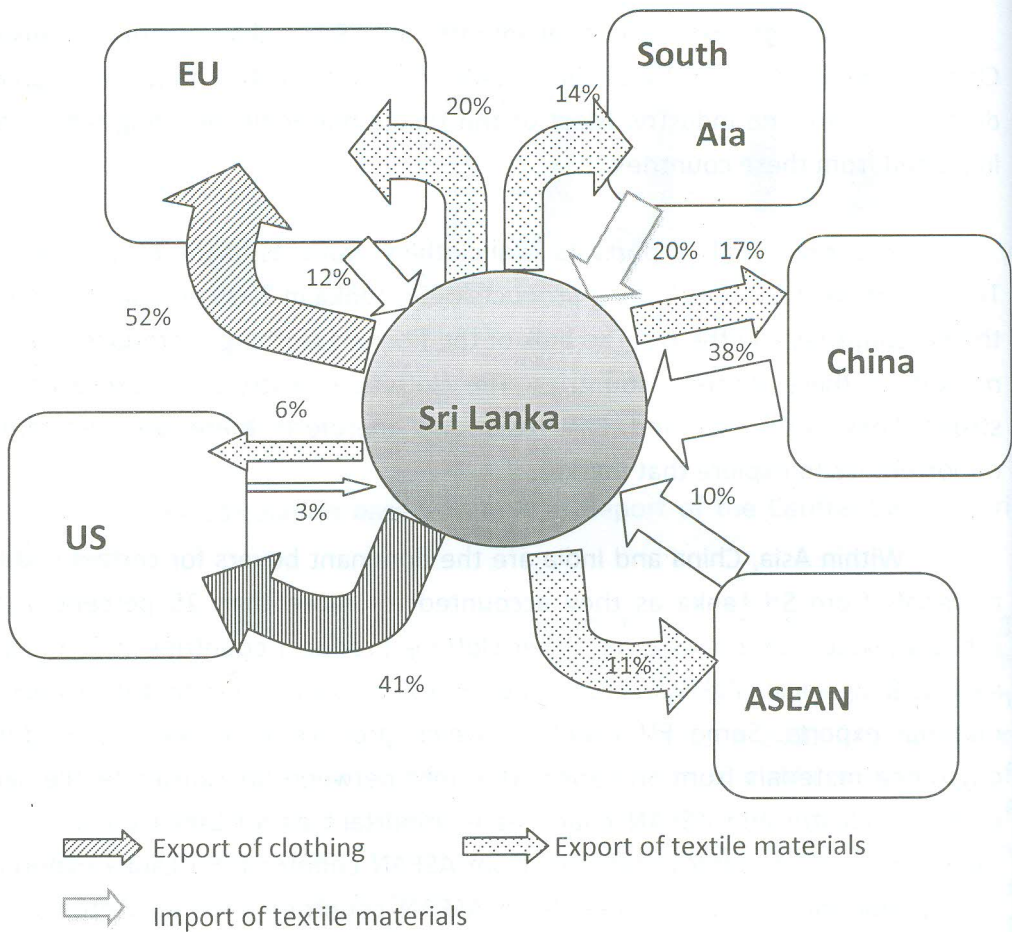
In terms of textile material imports into Sri Lanka's clothing industry, China, South Asia, the EU and the ASEAN countries are the major outsourcing destinations for the industry. Most of the textile materials including fabrics are imported from these countries.

Sri Lanka mainly exports its final clothing products to the EU and the US. The final market for the clothing products of Sri Lanka in 2009 was dominated by the EU countries and the US. The bulk of the finished clothing is produced for the markets in these Western countries. The clothing industry in Sri Lanka has no strong links with Asia and East Asia and therefore there are substantial opportunities to explore that market.

Within Asia, China and India are the dominant buyers for certain textile materials from Sri Lanka as they accounted for more than 25 percent of Sri Lanka's textile material exports. Other clothing producer countries in South Asia such as Bangladesh, Pakistan accounted for a significant part of Sri Lanka's textile material exports. Some EU countries which produce final clothing products outsource materials from Sri Lanka. The links between Sri Lanka's textiles and clothing industry and ASEAN countries is important as Sri Lanka outsources a significant part of textile materials from ASEAN countries. Sri Lanka exports a sizable amount of textile materials to ASEAN countries such as Vietnam and Cambodia that are expanding their clothing industry at present.

Chart 2

Supply Chain Network of Sri Lanka's Textiles and Clothing Industry



Source: Author's compilation based on UN Commodity Trade data for 2009.

4. Conclusion and Policy Implications

This paper has examined the supply chain network of the textiles and clothing industry in Sri Lanka. Sri Lanka's textiles and clothing industry has important backward linkages with South Asia, East Asia and ASEAN countries. It outsources a large part of textile materials from these countries. However, the market for the final clothing products of Sri Lanka is dominated by the US and the EU. About 95 percent of total textiles and clothing exports are final products which are exported to the EU and the US. The supply chain map of the country's textiles and clothing industry clearly illustrates that it is highly integrated with Asian countries in terms of import and export of textile materials, while its markets for final clothing products depends on Western countries.

One of the important finding of this paper is the close link of Sri Lanka's textile material trade with Asian countries and Western countries, especially with the EU. Though Sri Lanka's textile material production industry is relatively small at present, the country exports such products to the various parts of the world. Sri Lanka exports a significant amount of its textile materials to the Asian region. China, India and other South Asian countries, ASEAN countries, South Korea and Japan are major buyers of Sri Lanka's textile materials. The US and the EU countries also purchase a significant amount of its textile materials. Further, countries such as Brazil, UAE, Bangladesh, Vietnam, Cambodia where the clothing industry is rapidly expanding at present tend to purchase these from Sri Lanka. Concentrating more on the production of textile materials is important in increasing domestic value addition of country's exports.

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