

A comparison of designing practices in knitwear export units of Ludhiana and Tirupur

■ Lotika Gupta and Harminder Kaur Saini

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■ **ABSTRACT :** The textile industry in India is the chief segment contributing largely to India's economic development. Knitwear exports hold a major share in India's total exports. The ever growing advancements in yarn, colour, materials and composition have given an advantage to the technique of knitting to such an extent that knitted fabrics have started taking place of woven fabrics. Knitted fabrics have become very popular because of their qualities such as stretch ability, wrinkle resistance, comfortable and snug fitting which makes it most suitable for casual and sportswear. Knitwear industry has very short product lifecycles, enormous product range, and quicker rate of demand and fashion change. Designing holds an important place in knitwear industry. Designing is directly linked with the generation of orders in foreign markets. Designers create garments and accessories making them functional as well as attractive, in accordance with the needs of the client. A number of designing practices are being followed in the knitwear export units of Ludhiana and Tirupur, which are major export hubs of India. The knitwear export units of Ludhiana found the services of in-house designers the best but knitwear units of Tirupur ranked the services of upcoming designers from fashion institutes best. As a source of inspiration, sketches received from foreign buyers was ranked first by knitwear export units of Ludhiana, while in Tirupur, fashion shows were ranked first. In Ludhiana Knit Pro 2.0 software was considered the best for designing of knitweares, while the knitwear export units of Tirupur, gave first rank to Knit Visualizer 1.2. It was noticed that maximum percentage of the knitwear units in Ludhiana and Tirupur, came out with a new style in the market within 3-6 months. The present study was undertaken to compare designing practices of knitwear export units of Ludhiana and Tirupur.

■ **KEY WORDS:** Knitwear, Export, Designing

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The textile industry in India is the major sector contributing largely to India's economic growth. The sector is responsible for about 14 per cent to industrial production, 4 per cent to the gross domestic

product (GDP), and 17 per cent to the country's export income. India has a competitive edge in textile exports due to plentiful accessibility of raw materials and skilled workforce. India exports cotton textiles, readymade

garments, hosiery, manmade textiles, technical textiles etc. Out of these, the hosiery holds a major share in India's exports (Dorathy, 2014).

There is incredible growth potential in exports of hosiery products. India is one of the well established exporting countries. From the last ten years, clothing export from India has increased many times. Indian garments export business grew very fast in the past few years and today many of the chief fashion labels, all over the world, are known to source their products from India (Ramaraj, 2014).

The clothing sector plays a major role in providing employment. Many countries have graded their clothing sectors by moving from assembly of cut fabrics and accessories to full-package production over time. Trade liberalization has played important role in this up gradation, as a free trade regime provides adequate flexibility for the production networks to operate and rules of origin become less of a problem (Begum, 2015).

Knitting is one of the most popular methods of fabric construction. It has become very popular because of its qualities such as flexibility, wrinkle resistance and snug fitting which makes it most appropriate for casual and sportswear. Many new manmade fibers are being used for making knitted garments (Dhall and Sharma, 2014).

Ludhiana holds an important place in the textile industry of India. Ludhiana has shifted from manufacture of woollen knitwear to modern day all season fashion-wear. In order to maintain their position in export markets, the knitwear manufacturers will have to work on reducing the cost and enhancing the quality of knitted goods. This can be achieved by up gradation of technology and modernization of manufacturing processes (Sarkar, 2006). Ludhiana knitwear industry produces the entire range of winter and summer wear for gents, ladies and children, which includes hi-fashion garments, T-shirts, sweat shirts, pullovers, jackets and grey fabric. To cater to the markets, a diversified range of cotton, synthetic and wool-based yarns is being resorted to by Ludhiana knitwear manufacturers (Sharma, 2014).

Tirupur is widely recognized as a 'dynamic' cluster. Tirupur which is located 60 km east of Coimbatore district of Tamil Nadu, has emerged as the knitwear capital of the country in three decades (Devaraja, 2011). This small town situated in the Coimbatore district of Tamil Nadu accounts for nearly 3 per cent of India's export trade and 80 per cent of India's total hosiery exports. It had

assured but limited global market. Over the last two decades, Tirupur has emerged as a leading export cluster in knitwear and has marked its presence in Europe, US and in the Pacific (Kalita, 2008).

Knitwear industry involves with very short product lifecycles, vast product differentiation, and faster rate of demand and fashion change, technical limitation of materials from backward supply chain (Fibres and textiles). There is a growing demand for discount apparel in stores providing low cost fashionable products. (Balakrishnan and Murugappan, 2016). The readymade garment industry has always been changing but now-a-days, this change is much faster. Earlier, dress style change was slower and a popular fashion lasted for a long time. Moreover the variety of clothes was limited as compared to present times. During the last thirty years, this situation has changed and now the changes in styles and fashion are very quick. The garment industry is characterized by manufacturing firms of all sizes (Dhall and Sharma, 2014).

The ever growing developments in yarn, colour, materials and composition have given an advantage to the technique of knitting to the extent that knitted fabrics have started replacing woven fabrics. A number of designing practices are being followed in the knitwear export units of Ludhiana and Tirupur. Knitwear designers actively search for sources of inspiration, which they use both to define the space of designs that will meet their purposes and tune their tacit perceptions of what is appropriate, and in the development of individual designs (Eckert and Stacey, 2003).

In recent times, developing new style of product and keeping pace with fast changing fashion is a big challenge. To meet this challenge knitwear export units use different softwares, avail different type of designing services and produce a variety of products at Ludhiana as well as Tirupur.

■ RESEARCH METHODS

The investigation was conducted in knitwear export units of Ludhiana district (Punjab) and Tirupur district (Tamil Nadu). These districts were selected as both the districts are renowned for their excellence in knitwear and both are major exporters of knitwear in India. Thirty knitwear export units each from both the districts were selected using random sampling technique. An interview schedule was formulated to collect the information using

survey method. The data were collected directly through personal interviews. The data was analysed using suitable statistical techniques.

RESEARCH FINDINGS AND DISCUSSION

Designing holds an important place in knitwear industry. Designing is directly linked with the generation of orders in foreign markets. Designers create garments and accessories making them functional as well as attractive, in accordance to the needs of the client. Designs are influenced by trends, market predictions and the climate. The designer keeps a close track with fit, style, colour, texture, size and material. The study of current fashion and making predictions of future trends is vital. Some designers study trends on their own, while others rely on fashion forecasting services. Fashion forecasting reports indicate what styles, colours, and fabrics will be popular for a particular season in the future. Knitwear manufacturers use these reports to begin designing fabrics and patterns (Kaur, 2014).

Designing practices:

Tries this means producing something that is fresh and different while being true to the company style and brand image, and meeting both the customers' needs and expectations and the company's commercial and manufacturing requirements. In the knitwear industry, designing is extremely important. This involves production of something innovative, which is in accordance to company style and brand image and fulfills the needs of the customers and the company. It was found that in Ludhiana, In house designer's services were given first rank, with mean score of 5.13 followed by the services of freelance designers and upcoming designers of fashion institutes, which were given second and third rank with mean scores of 2.8 and 1.93, respectively.

In Tirupur, the services of upcoming designers from fashion institutes were ranked first with mean score of 3.83, followed by freelance and in-house designers' services with second and third ranks and mean scores of 3.57 and 3.20, respectively (Fig. 1). It was also observed that the designs of candidates appearing for interviews in the knitwear units were also used for production with minor improvements by the designing departments of knitwear units. The absence of contemporary designing facilities and the failure to provide quality value added fabrics and garments act as

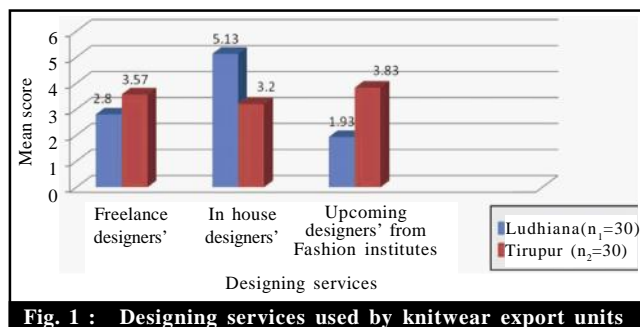


Fig. 1 : Designing services used by knitwear export units

a hindrance for India to move up in the value chain (Manoj and Muraleedharan, 2016). According to Fashion Design Council of India (FDCI), apparels created by Indian designers are going to play a major role in the growth of the apparel industry in the next few years (Rajput *et al.*, 2012).

Majority of knitwear units at Ludhiana and Tirupur had in-house designing facility. The knitwear export units of Ludhiana found the services of in-house designers best followed by that of freelance designers. The designing institutes in Ludhiana are not so active, due to which the knitwear units of Ludhiana ranked upcoming designers last. In case of Tirupur, National institute of fashion technology is strongly associated with Tirupur Exporters Association. The information brochure of NIFT states that the final year students are given opportunity to work in apparel industry as part time employee, which not only allows financial gain but also provides work experience (NIFT Tirupur brochure).

The upcoming designers from fashion institutes have fresh and creative ideas, due to which they have been ranked first by the knitwear units of Tirupur.

Sources of inspiration for designing:

The data in Table 1 show the sources of inspiration used by knitwear export units for designing. 'Sketches received from foreign buyers' were ranked first with mean score of 4.9 followed by 'fashion magazines and catalogues' and 'fashion shows' which were ranked second and third by knitwear export units of Ludhiana, with mean scores of 4.17 and 3.07, respectively. In Tirupur, 'fashion shows' were ranked first with mean score of 4.2 followed by 'fashion forecasting services' and 'sketches received from foreign buyers', which were ranked second and third rank with mean scores of 4.13 and 3.97, respectively.

The findings were corroborated by Eckert and

Table 1 : Sources of inspiration used by knitwear units for designing of the products

Sources of inspiration for designing	No. of units	Ludhiana (n ₁ =30)		Tirupur (n ₂ =30)	
		Mean Score	Rank	Mean Score	Rank
Fashion forecasting services		2.13	IV	4.13	II
Fashion magazines and catalogues		4.17	II	2.77	V
Fashion shows		3.07	III	4.2	I
Fashion institutes		1.93	V	3.83	IV
Sketches received from foreign buyers		4.9	I	3.97	III

Stacey (2003) whose study showed that designers in knitwear industry need encouragement in renewing their stock of potentially fruitful experiences, and in finding sources of inspiration. For knitwear designers, this can be done by supporting visits to exhibitions and trade shows etc.

The sketches received from foreign buyers are used for production of that particular order. Afterwards the sketches are used as an inspiration for further design development. Fashion institutes and forecasting services were among the least used sources of inspiration. The findings were quite different in Tirupur as they used Fashion shows and fashion forecasting services the most as a source of inspiration.

Use of designing software:

Designing software greatly aids the work of the designers and improves their capability and creativity as well. These software packages helps the designers in the experimentation with the number of textures, colours and patterns for producing the perfect design along with the availability of sketch backgrounds in concept boards, tools for repeating patterns, texture mapping and product renderings. Design can be made faster and more precisely. A few simple design softwares are adobe Photoshop, corel draw and poster etc. The choice of right fashion designing software helps the designers in

the expansion of the creativity achieved in less time (Trivedi, 2015). It is evident from Table 2 that only twenty units in Ludhiana and twenty two units in Tirupur, disclosed this information. In Ludhiana, first rank was given to Knit Pro 2.0, followed by Stitch and Motif Maker 3.0 and Knit Visualizer 1.2 which were given second and third ranks, respectively. Print A Grid and Sweater Wizard Version 3 were given fourth rank each, respectively. In Tirupur, first rank was given to Knit Visualizer 1.2, where Knit Pro 2.0, Chart Minder and Stitch and Motif Maker 3.0 were given second, third and fourth ranks with mean scores of 2.13, 2.07 and 2.0, respectively.

Introduction of a new style in the market:

The data in Fig. 2 indicates that 43.33 per cent of the knitwear units in Ludhiana and 63.33 per cent of the units in Tirupur, came out with a new style in the market within 3-6 months whereas 36.67 per cent units in Ludhiana and 23.33 per cent units in Tirupur came up with a new style in less than three months. Only 10 per cent of the units in Ludhiana and 3.33 per cent of units in Tirupur developed new style in 6 months to one year of time. Ten per cent of the units from both the places did not develop/introduce their own style. The Chi square test value indicated a non-significant difference between the numbers of units with respect to introduction of new

Table 2 : Designing software used by knitwear export units

Designing software	No. of units	Ludhiana (n ₁ =20)		Tirupur (n ₂ =22)	
		Mean score	Rank	Mean score	Rank
Chart Minder		0.6	VI	2.07	III
Knit Visualizer 1.2		1.23	III	2.23	I
KnitBird		0.57	VII	1.83	V
Knit Pro 2.0		1.73	I	2.13	II
Print A Grid		0.97	IV	1.8	VI
Stitch and Motif Maker 3.0		1.27	II	2.0	IV
Sweater Wizard 3		0.97	IV	1.77	VII

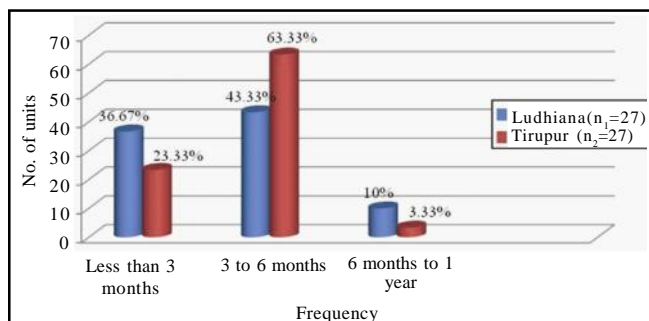


Fig. 2 : Frequency of introducing a new product/ style in the market

style in the market.

It was concluded that almost half of the units at both the places required 3-6 months to introduce a new style in the market. Almost thirty per cent of the units at both the places came up with a new style in less than 3 months. There is a fast change in fashion. Popularization of internet may be a contributing factor to keep up with the changing pace of fashion trends. Knitwear units have to minimize the time of bringing out a style/product in the market and for that they need to understand consumer needs and requirements first.

Products exported:

A variety of products including casual wear, fashion wear, formals, leisure wear, sportswear and innerwear were exported by the knitwear export units of Ludhiana as well as Tirupur. Table 3 shows that majority of the units, i.e. 90.00 per cent exported casual wear for men in both the places. In Ludhiana, 83.33 per cent of the knitwear units exported men’s fashion wear, followed

by 73.33 and 70.00 per cent of the units who were exporting boy’s casuals and men’s sportswear, respectively. In case of Tirupur, 80.00 per cent of the knitwear units exported women’s casuals, closely followed by 70.00 and 63.33 per cent of the units who were exporting girl’s casual wear and boy’s casuals. Innerwear was being exported by 20.00 and 3.33 per cent of the units in Tirupur and Ludhiana, respectively.

It could be deduced from the data that majority of units at Ludhiana as well as Tirupur exported casual wear for all ages and genders. Comfort is the most desirable quality of the garment these days. This is the reason that casual knitwear, which was earlier used for children’s clothing, is now popular with every age group for all occasions. Majority of knitwear export units are producing and exporting knitted fashion wear also. A large number of units are exporting sportswear and leisure wear. A similarity was observed in the class of products exported from Ludhiana and Tirupur.

Conclusion:

Indian garments export business grew very fast in the past few years and today many of the leading fashion labels, all over the world, are known to source their products from India. Majority of knitwear units at Ludhiana and Tirupur had in-house designing facility. The knitwear export units of Ludhiana found the services of in-house designers the best but knitwear units of Tirupur ranked the services of upcoming designers from fashion institutes best. The designing institutes in Ludhiana are not so active, as compared to Tirupur, where NIFT has a strong association with knitwear industry. As a source

Table 3 : Distribution of knitwear units according to products exported

Class of products	No. of units	Ludhiana (n ₁ =30)					Tirupur (n ₂ =30)					
		CW	FaW	FW	LW	SW	IW	CW	FaW	FW	LW	SW
Men's wear	27	25	14	19	21	04	27	18	06	04	08	15
	(90.00)	(83.33)	(46.67)	(63.33)	(70.00)	(13.33)	(90.00)	(60.00)	(20.00)	(13.33)	(26.67)	(50.00)
Women's wear	14	13	07	10	09	02	24	17	06	03	07	13
	(46.67)	(43.33)	(23.33)	(33.33)	(30.00)	(6.67)	(80.00)	(56.67)	(20.00)	(10.00)	(23.33)	(43.33)
Girl's wear	14	12	05	11	09	01	21	11	09	07	09	10
	(46.67)	(40.00)	(16.67)	(36.67)	(30.00)	(3.33)	(70.00)	(36.67)	(30.00)	(23.33)	(30.00)	(33.33)
Boy's wear	22	20	11	12	16	03	19	11	09	07	08	09
	(73.33)	(66.67)	(36.67)	(40.00)	(53.33)	(10.00)	(63.33)	(36.67)	(30.00)	(23.33)	(26.67)	(30.00)
Infant's wear	08	-	-	-	-	01	16	06	-	-	-	06
	(26.67)					(3.33)	(53.33)	(20.00)				(20.00)

Figures in parentheses indicate percentages

Multiple response

CW=Casual wear FaW= Fashion wear FW= Formal wear LW= Leisure wear SW= Sportswear IW= Innerwear

of inspiration, sketches received from foreign buyers was ranked first by knitwear export units of Ludhiana, while in Tirupur, fashion shows were ranked first. In Tirupur, first rank was given to Knit Visualizer 1.2, where knitwear export units of Ludhiana ranked Knit Pro 2.0 software first for designing of knitwears. It was noticed that 43.33 per cent of the knitwear units in Ludhiana and 63.33 per cent of the units in Tirupur, came out with a new style in the market within 3-6 months. A variety of products like men's, women's, boy's, girl's and infant's wear were being exported from Ludhiana and Tirupur.

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