ISSN: 0973-4732 Visit us: www.researchjournal.co.in

A study on structure of knitwear export units of Ludhiana in comparison to Tirupur

Lotika Gupta and Harminder Kaur Saini

Received: 16.06.2019; Revised: 11.10.2019; Accepted: 25.10.2019

■ ABSTRACT: India is one of the leading exporting countries. Indian garments export business grew very fast in the past few years and today a number of top fashion labels, all over the world, are known to source their products from India. The knitwear industry is accountable for more than 50 per cent in terms of volume and about 35 per cent in terms of value of our total garment exports. A large number of small and micro knitting firms extend production and manufacturing support to the bigger firms and direct exporters through subcontracting. The Indian knitwear industry has a high growth potential due to its intrinsic strengths such as strong textile base, low labour costs and flourishing domestic and international market. There is a large variation in size, structure, investment, turnover and other structural properties of knitwear export units. It could be concluded that maximum percentage of the sample units in Ludhiana were small sized whereas maximum percentage of units were medium sized in Tirupur. In Ludhiana, maximum percentage of the knitwear export units were partnership concerns, whereas in Tirupur maximum percentage of the units were private limited companies. About half of the units, i.e. 53.34 per cent in Ludhiana and 56.67 per cent in Tirupur had an initial investment of less than Rs. 2 crores. Majority of units in both the places, had a turnover below Rs. 100 crores. No units in Ludhiana had a turnover above Rs. 300 crores. Half (56.67%) of the units in Ludhiana were mid price segment clothing companies whereas; about half of knitwear units in Tirupur, i.e.53.33 per cent were low cost mass producers. The present study was effectuated to study and compare the structure of knitwear export units of Ludhiana and Tirupur.

See end of the paper for authors' affiliations

Lotika Gupta

Department of Apparel and Textile Science, Punjab Agricultural University, Ludhiana (Punjab) India

Email: lotikagupta1975@gmail.

■ KEY WORDS: Knitwear, Export, Structure

■ HOW TO CITE THIS PAPER: Gupta, Lotika and Saini, Harminder Kaur (2019). A study on structure of knitwear export units of Ludhiana in comparison to Tirupur. Asian J. Home Sci., 14 (2): 313-319, DOI: 10.15740/HAS/AJHS/14.2/313-319. Copyright@ 2019: Hind Agri-Horticultural Society.

India is one of the well-established exporting countries. From the last ten years, clothing export from India has improved many times. 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 (Ramaraj, 2014). Many prominent apparel companies prefer to have the manufacturing done by subcontractors where labor rates are much cheaper. Due to the fact, developing countries are getting a perfect opportunity to move towards industrialization. The organizational large apparel companies provide design, fabric and accessories and

the contractor provides labour and supplies (Bulgun and Vuruskan, 2007).

The knitwear industry has grown astoundingly in a short period of time, and has acquired an significant position in industrial sector of India. The knitwear industry contributes more than 50 per cent in terms of volume and around 35 per cent in terms of value of our total garment exports (Kapila, 2015). The reason for such a growth in knitted garments is because of regular enhancement in technology. High variety in styles and designs can be observed. Knitted garments are highly comfortable, soft and absorbent. Cotton knitwear is emerging as a new fashion statement. Designing, printing, embroidery and dyeing techniques have been developed to a great degree. The knitwear products are exported from India to Europe and to the trend setting boutiques in USA and Canada. Other key markets for knitwear products include Japan, Australia and the Middle East (Duraipandian and Anitha, 2007).

Indian knitwear is very well known and is now being sold to almost every country in the world. Indian knitting industry has been able to win all the sophisticated world market including European Union, U.S.A., Canada and besides increasing its export growth rate in non-quota market. Of the non-quota countries, the top four have been the UAE, Japan, Switzerland and Russia Worldrenowned labels like Nike, Lacoste, St. Michael, Benetton, Jockey, Cabida, Marks and Spencer, and C & A are being manufactured in India (Malleshwaran, 2005).

A large number of small and micro knitting firms extend production and manufacturing support to the bigger firms and direct exporters through subcontracting. The Ludhiana cluster mainly caters to domestic market, and yet to explore the vast export market. Proper vision, strategy and branding are required to explore new fields. Improvement in production systems, workforce up gradation, technical up gradation, regulatory compliances like environment, energy efficiency, right information in right time, and appropriate and well-organized production system within the firm is the need of the hour (Anonymous, 2014a).

Indian textile industry has been witnessing a big structural change, continuously reinventing and rediscovering it to meet the needs of the stringent global buyers. Indian Companies have started raising their standards and also aggressively pursuing their human resource strategies aimed at image building as well as overall growth. India is emerging to set up strong vertically integrated textile operations and aiming to become a leading source to the world for its high-end textile needs (Tandon and Reddy, 2013).

Ludhiana has developed as the hub of woolen knitwear industry. Ludhiana's knitwear cluster is diversified and has created backward linkage. Ludhiana almost monopolizes winter wear production for the country. Around 95 per cent of India's woolen and acrylic knitwear products are produced in Ludhiana. Ludhiana industry is the owner managed industry where owners execute all basic functions of marketing, procurement and finance, and as such, they do not want to employ professionals or believe in training their workforce (Kaur and Kaur, 2013).

Tirupur 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).

There are essentially three types of firms in the industry: Direct exporters, indirect exporters, and Jobworkers. Direct exporters are the ones who accept orders from abroad. Once they have an order, they often pass on a part of the order to one or more indirect exporters. Indirect exporters are autonomous garment producers who are exclusively responsible for their share of the order, delivering the finished product to the direct exporter preceding shipment. Job-work and the use of indirect exporters allow for decentralization in the production process and is one reason why there can be large variations in the capital intensity of production (Yoganandan et al., 2013).

Valued at around \$127 billion, the textiles and apparels industry is a huge foreign exchange earner, and second-largest employer in India. However, the country's share in global textiles exports is just 5 per cent, which is minuscule as compared to China's share of 38 per cent. Much smaller players like Bangladesh and Vietnam, having a share of 3 per cent in global exports, are more and more threatening India's exports (Anonymous, 2019).

The Indian knitwear industry has a high growth potential given its innate strengths such as strong textile base, low labour costs and thriving domestic and international market. However, realizing this potential has been constrained due to the fragmented and decentralized nature of the industry which makes large scale and steady production at competitive prices complicated. One of the solutions to this constraint is training and knowledge centre for the cluster (Anonymous, 2014).

The knitwear export is the main determinant of economic activity which includes foreign exchange earnings and employment opportunities. Recurrent changes in the markets, consumer demand, fashion changes and changes in legislations makes it crucial to recognize the work profile and impediments to the growth of knitwear export units so that they can maintain cost effectiveness and competitiveness in the global markets.

■ 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 famous for their brilliance in knitwear and both are main exporters of knitwear in India. Thirty knitwear export units each from both the districts were chosen 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

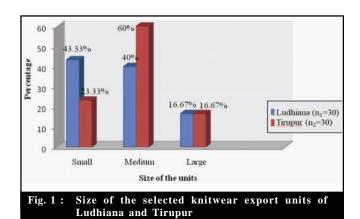
The results obtained from the present investigation as well as relevant discussion have been summarized under following heads:

Structure of knitwear export industry:

Knitwear sector is the organised sector consisting of spinning, apparel and garments segment which apply modern machinery and techniques such as economies of scale. There is a large variation in size, structure investment, turnover and other structural properties of knitwear export units. The structure of knitwear industry of Ludhiana and Tirupur which includes size of the unit, i.e. small, medium and large, form of organization, investment, turnover etc. are discussed.

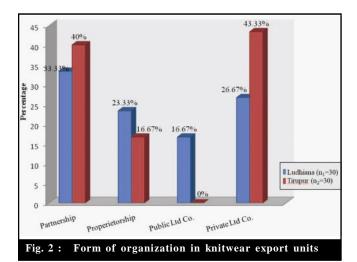
Size of the knitwear export units:

The size of any industry can be determined by its investment or turnover. Turnover is the value of annual sales volume net of all discounts and sales taxes, a company makes in one year. The size of the selected knitwear export units was based on their turnover. The units having a turnover between Rs. 5 to 75 crores were small scale units. The units with a turnover between Rs. 75-250 crores were medium sized and those having a turnover above Rs. 250 crores were large units (Press Information Bureau, 2018). The data in Fig. 1 show that 43.33 per cent of the knitwear export units in Ludhiana were small sized, followed by 40.00 per cent units which were medium sized. In case of Tirupur, 60.00 per cent units were medium sized followed by 23.33 per cent units which were small sized. Only 16.67 per cent knitwear units each, in Ludhiana and Tirupur, were large sized. It could be concluded that maximum percentage of units in Ludhiana were small sized whereas in Tirupur maximum percentage of units were medium sized.



Form of organization:

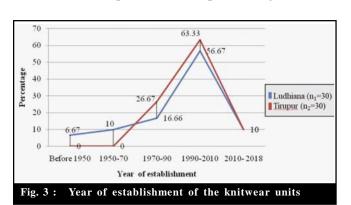
Proprietorship is a one person business that is inseparable from its owner. Partnership is the business owned by two or more people who share personally the liability of the entire amount of any business debt and claims. A private limited company is registered under companies Act 1956, and in a company capital is collected from private partners, while in a public limited company; the capital is collected from public by issuing shares (Bhasin, 2019). It is indicated from Fig. 2 that in Ludhiana, 33.33 per cent of the knitwear export units were partnership concerns followed by 26.67, 23.33 and 16.67 per cent of the units which were private limited companies, proprietorship and public limited companies, respectively. In Tirupur, 43.33 per cent of the units were private limited companies followed by 40 and 16.67 per cent of the units which were partnership and proprietorship concerns, respectively. There was no public limited company in the selected sample of knitwear export units in Tirupur. It could be deduced from the data that in Ludhiana, all types of ownerships were prevailing, while in Tirupur, most preferred form of organization were partnership and private limited company.



Year of establishment:

Fig. 3 shows that in Ludhiana, more than half of the knitwear units were established between 1990 and 2010. About 16.67 per cent of the units were established between 1970-90, followed by 10.00 per cent of the units each, which were set up between 1950-70 and 2010 onwards, respectively. Only 6.67 per cent of the units were established before 1950. In Tirupur also, more than half (63.33%) of the units were established between 1990-2010, followed by 26.67 per cent and 10.00 per cent of the units which were set up during 1970-90 and 2010 onwards, respectively. No units in the sample were established before 1970.

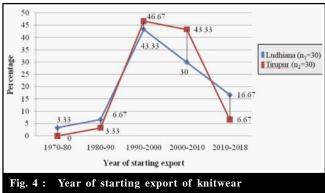
The knitwear production multiplied during 1950-1980



and real diversification took place during and after the decade of 1980s (Anonymous, 2014). Also the study of Venugopal (2012) corroborated the findings by stating that the modern knitting industry grew from the year 1984 only when people started importing circular knitting machines either second hand, reconditioned or brand new.

Year of starting knitwear export:

Export includes sending (goods or services) to another country for sale. The knitwear units of Ludhiana and Tirupur export knitwear to various countries. It was indicated that 43.33 per cent of the knitwear units in Ludhiana started to export during 1990-2000, followed by 30.00 per cent of the units which started exporting goods between the years 2000-2010. About 16.67 per cent of the units started exporting knitwear after 2010. Only 3.33 per cent of the units started export between the years 1970-80. In Tirupur, 46.67 per cent of the units started export during 1990-2000, followed by 43.33 per cent of the units which started exporting knitwear between years 2000-10. Only 3.33 per cent of the units started export between years 1980-90 as shown in Fig. 4.



The results were corroborated by the study of Narayanan and Badri (2008) which stated that phasing out of MFA quotas, based on the Agreement on Textiles and Clothing, resulted in an increase in export growth. The rates of growth increased from 16 per cent in 1995-1998 to 27 per cent in 2003 - 2005. It was also stated in the study of Yoganandan (2015) that for the entire period from 1989-2012, the share of exports from Tirupur doubled from 9.2 per cent in 1989 to 19.1 per cent in 2012.

Startup capital of knitwear export units:

At the time of starting a business, a business owner

needs capital. The capital may include business owner's own money or money borrowed from other sources like friends, relatives, banks, etc. The findings of the study revealed that about half of the units, i.e. 53.34 per cent in Ludhiana and 56.67 per cent in Tirupur, had a startup capital of less than Rs. 2 crores. In Ludhiana 23.33 and 20 per cent of the units had an initial investment of Rs. 4-6 and 2-4 crores, respectively. Only 3.33 per cent of units had invested more than Rs. 6 crores and none of the units had spent more than Rs. 8 crores. In Tirupur, 23.33 per cent of the units had spent Rs. 2-4 crores, followed by 13.33 per cent of the units who had invested more than Rs. 8 crores. None of the units had spent Rs. 6-8 crores as initial investment, as illustrated by Table 1. Maximum percentage of units at Ludhiana as well as Tirupur had a startup capital of less than Rs. 2 crores, while very less units had invested more than Rs. 6 crores.

The Chi-square values indicate no significant difference between Ludhiana and Tirupur with respect to initial investment. It could be concluded from the data that more than half of the units at both the places had an investment of less than Rs. 2 crores. This could be attributed to the fact that maximum percentages of the units were established between years 1990-2000. An amount of about Rs. 2 crores was a substantial amount of money during 1990's.

Table 1: Investment of knitwear export units at the time of establishment						
	No. of units	Ludhiana (n ₁ =30)	Tirupur (n ₂ =30)			
Initial investment	(Rs. Crore)					
Below 2		16 (53.34)	17 (56.67)			
2-4		06 (20.00)	07 (23.33)			
4-6		07 (23.33)	02 (6.67)			
6-8		01 (3.33)	-			
Above 8		-	04 (13.33)			

Figures in parentheses indicate percentages P = 0.802 = 0.07

Total investment of knitwear export units:

As the business grows, capital is invested and reinvested in the business with a target of growth, diversification, expansion and the likes. Total investment means the total amount of financial resources that a person or entity has in a project. The knitwear export units of Ludhiana and Tirupur both reported their approximate total investment at the time of data collection (2018).

Data in Table 2 indicated that 43.33 per cent of the knitwear units in Ludhiana had a total investment of below Rs. 10 crores, followed by Rs. 10-20 and 20-30 crores, which was reported by 23.33 and 16.67 per cent of the units, respectively. Only 6.67 per cent of the units had an investment above Rs. 40 crores. In Tirupur, 30.00 per cent of the knitwear export units had Rs. 20-30 crores as total investment, closely followed by 26.67 and 23.33 per cent of the units, who had invested Rs. 30-40 and above Rs. 40 crores, respectively. Only 6.67 per cent of the units reported their total investment below Rs.10 crores.

Table 2:	Distribution of investment	knitwear units	according to total
	No. of units	Ludhiana	Tirupur (n ₂ =30)
Current		$(n_1=30)$	
investment (Rs. Crore)	<u> </u>	
Below 10		13(43.33)	02(6.67)
10-20		07(23.33)	04(13.33)
20-30		05(16.67)	09(30.00)
30-40		02(6.67)	08(26.67)
Above 40		03(10.00)	07(23.33)
Figures in pa	arentheses indicate	percentages	P***=0.001

The Chi value at 1 per cent level of significance and 2df came out to be 13.11, which indicated a very significant difference between the total investments of the two places. It could be concluded that in Ludhiana, almost half of the units had a total investment of less than Rs. 10 crores, while in Tirupur, majority of the units had a total investment above Rs. 20 crores. This indicates a definite growth of knitwear industry in Tirupur.

2 = 13.11

*** indicates significance of value at P=0.01

Annual turnover:

Annual turnover is the value of annual sales volume net of all discounts and sales taxes, a company makes in one year. Majority of knitwear export units in both the places, i.e. 80.00 per cent in Ludhiana and 70.00 per cent in Tirupur had an annual turnover below Rs. 100 crores. Only 10.00 per cent of the units each had a turnover of Rs. 100-200 and Rs. 200-300 crores, respectively. None of the units in Ludhiana had a turnover above Rs. 300 crores.

In Tirupur, 16.67 per cent of the units had a turnover of Rs. 100-200 crores and only 6.67 per cent of units each had a turnover of Rs. 200-300 crores and above Rs. 300 crores, respectively (Table 3). The Chi value for difference in turnover came out to be 0.80, which is

Table 3: Annual turnover of the knitwear export units					
	No. of units	Ludhiana (n ₁ =30)	Tirupur (n ₂ =30)		
Annual	_				
Turnover Rs. (Ca	rore)				
Below 100		24 (80.00)	21 (70.00)		
100-200		03 (10.00)	05 (16.67)		
200-300		03 (10.00)	02 (6.66)		
Above 300		-	02 (6.67)		

Figures in parentheses indicate percentages P=0.372 = 0.80

indicative of a non-significant difference. It could be deduced from the data that majority of the units at Ludhiana and Tirupur were small and medium sized industries.

Types of units:

A low-cost producer is a company that can provide products in budget price zone. Low-cost producers utilize economies of scale in order to execute their strategy of low prices (Kenton, 2019). Companies with premium pricing strategy charge higher prices than their competitors for their products with a goal to create the perception that the products must have a higher value than competing products. Product specific companies often specialize in the manufacture of one or a few products over a larger scale of output. A mid-price segment company generally keeps its price in middle range. Niche market is simply a very specific segment of a much larger market. Generally niche market is composed of a tight, specific range of products sold to a tightly focused target group. Niche market designer wear is specially designed for such tightly focused target group.

It was found that about half (56.67%) of the units in Ludhiana were mid price segment clothing companies, followed by 30.00 and 13.33 per cent of the units which were product specific manufacturers and low cost mass producers, respectively. Whereas, about half of knitwear units in Tirupur, i.e. 53.33 per cent were low cost mass producers, followed by 30.00 and 26.67 per cent of the units which were mid-price segment companies and high cost premium segment companies, respectively. None of the units in Tirupur and only 3.33 per cent units in Ludhiana were niche market designer wear clothing companies (Table 4).

The Z test indicated significant difference upto 1 per cent level of significance between low cost mass producer companies of Ludhiana and Tirupur, as well as

Table 4: Types of knitwear export units						
No. of units Type of unit	Ludhiana (n ₁ =30)	Tirupur (n ₂ =30)	Z-value			
Low cost mass producer	04 (13.33)	16 (53.33)	3.29***			
High cost premium segment	02 (6.67)	08 (26.67)	2.08**			
Product specific manufacturer	09 (30.00)	01 (3.33)	2.77***			
Mid-price segment	17 (56.67)	09 (30.00)	2.08**			
Niche market designer wear	01 (3.33)	-	-			

Figures in parentheses indicate percentages

Multiple response

** and *** indicate significance of values at P=0.05 and 0.01, respectively

product specific manufacturing companies of both the places. A significant difference at 5 per cent level of significance was found between high cost premium segment clothing companies of Ludhiana and Tirupur and mid-price segment clothing companies of both the cities.

Almost half of the units in Ludhiana were mid price segment companies while in Tirupur, almost half of the units were low cost mass producing companies. Mass production of a product leads to economies of scale of a product, which may be a reason for the growth of knitwear industry in Tirupur, whereas Ludhiana knitwear industry holds its position due to its quality and product specific manufacturing.

Conclusion:

It could be concluded that about 43.33 per cent of the sample units in Ludhiana were small sized whereas maximum percentage (60 %) of units were medium sized in Tirupur. In Ludhiana, 33.33 per cent of the knitwear export units were partnership concerns, whereas in Tirupur, 43.33 per cent of the units was private limited companies. About half of the units, i.e. 53.34 per cent in Ludhiana and 56.67 per cent in Tirupur had an initial investment of less than Rs. 2 crores. Majority of units in both the places, i.e. 80.00 per cent in Ludhiana and 70.00 per cent in Tirupur had a turnover below Rs. 100 crores. No units in Ludhiana had a turnover above Rs. 300 crores. Half (56.67%) of the units in Ludhiana were mid price segment clothing companies whereas, about half of knitwear units in Tirupur, i.e. 53.33 per cent were low cost mass producers.

Authors' affiliations:

Harminder Kaur Saini, Department of Apparel and Textile Science, Punjab Agricultural University, Ludhiana (Punjab) India (Email: harminderct@pau.edu)

■ REFERENCES

Anonymous (2014). Knitwear industry in Ludhiana. Retrieved from http://www.bktkindia.com on 8th May, 2019.

Anonymous (2014a). Ludhiana knitwear and apparel cluster diagnostic study report submitted to Small Industrial Development Bank of India (SIDBI) Submitted by Apex Cluster Development Services Pvt. Ltd. (ACDS).

Anonymous (2019). India's readymade garment (RMG) export update APPAREL India (Export promotion council magazine), **3**(12): 4-5.

Bhasin, H. (2019). Types of business ownership. Retrieved from www.marketing91.com on 5th May, 2019.

Bulgun, E. and Vuruskan, A. (2007). Development of a software about calculating the production parameters in knitted garment plants. Internat. J. Soc. Behavioral, Educational, Econ., Business Indus. Engg., 1(9): 461-67.

Duraipandian, R. and Anitha, R. (2007). Knitted garment exports in post-quota regime. Retrieved from http://www. indiantextilejournal.com on 15th April, 2018.

Kalita, G. (2008). The emergence of Tirupur as the export hub of knitted garments in India: A case study. Retrieved from www.econ-jobs.com on 25th September, 2016.

Kapila, P. (2015). Assessment of attributes of supply value chain in circular knitwear industry of Ludhiana. J. Krishi Vigyan, 4(1): 1-4.

Kaur, P. and Kaur, N. (2013). CSR'S Ethical spirit in knitwear

industry of Ludhiana. Internat. J. Mgt., IT & Engg., 3(6): 494-

Kenton, W. (2019). Capital investment. Retrieved from www.investopedia.com on 25th May, 2019.

Malleshwaran, C. (2005). A Study on Retrospects, Problems and Prospects of Knitwear Exports from Tirupur. Ph.D. Thesis Bharathiar University, Erode.

Narayanan and Badri, G. (2008). Effects of phasing out of MFA quotas on Indian garment exports. Regional & Sectoral Economic Studies, 8(1):1992-2003.

Ramaraj, B.G. (2014). A study on export performance of hosiery entrepreneurs in Tirupur district. Ph.D. Thesis Periyar University, Tamil Nadu.

Tandon, N. and Reddy, E.E. (2013). A study on emerging trends in textile industry in India. Internat. J. Advancements Res. Tech., **2**(7): 267.

Venugopal, G. (2012). An inter regional study on knitting industry with special reference to growth productivity and production function. Ph.D. Thesis, Bharathiar University, Coimbatore (T.N.) India.

Yoganandan, G. (2015). Growth of apparel export industry in Tirupur. Internat. J. Res., 2(3):183.

Yoganandan, G., Jaganathan, Saravanan, R. and Senthil Kumar, V. (2013). Factors affecting the export performance of textile industry in developing countries. Internat. J. Commerce, Business Mgmt., 2(4): 173-176.

