

Ludhiana, the city of Acrylics and Woollen Knitwears

Ludhiana is a known cluster for Acrylics and woollen knitwears, though it is now producing all type of products from natural and manmade fibres. It is a place known for various Oswal families who had been in textile business for generations. Their contribution to textile business is immense, from pre partisan days. Entrepreneurs at Ludhiana are changing their image from being conservative and are gradually adopting to change. But still the momentum for change is not as desired. As a result, the overall image of Ludhiana has not yet picked up as of a technologically advanced set up. A lot is required to be done for improvement in infrastructure and technological upgradation for quality, productivity and economy of production. Here is a brief of this cluster :-

Location :

Ludhiana is located in the State of Punjab, the State of hard working Sikhs, the state which is meeting a major chunk of foodgrain requirement of Indian population and the state which is known for it's bursting industrial activities. The state of Punjab is known for it's cotton crop and so for it's textile manufacturing activities, of which wool & woollens, acrylics and knitwears are most common. While Amrtisar has established it's name for shoddy, woollens and worsted suitings, blankets and shawls, Ludhiana is known for it's Acrylic, woollen and blended knitwears.

Ludhiana is located at around 300 kms from the National Capital Delhi. It is well connected with road and rail network. It is situated in the centre of Punjab and hence provides better scope for easy sourcing of raw material, workforce and marketing network from nearby cities, towns and villages specific to the nature of requirement. Punjab has been a business hub with Lallas of Punjab, a great business community. The culture has inculcated in it's habitants and now not only Lallas, the entrepreneurs from other communities too have put up their business and industrial set ups and are contributing to the economy of State of Punjab.

2. Industrial Profile :

Ludhiana city consists of vast industrial areas with many focal points having industrial units around the city. Textile processing units are situated at city center, focal points near Sherpur Road, Mothi Nagar, Rahon Road, Sunder Nagar and Jalandhar Bye Pass. The processing activities in the cluster provide direct employment to around 35000 persons of which 70% are employed at small scale level and rest in organised composite mills. Number of processing units in the cluster are as under :-

Fibre dyeing units	35
Package Yarn dyeing units	128
Hank Yarn dyeing units	70
Knit fabric dyeing units	370
Woven fabric dyeing units	70
Made up units	20
Printing units (knits)	150
Printing units (woven)	30
Finishing units	170

(50 units are using compactors, 30 units stenters, 10 units zero zero shrinking machines, 30 units raising and 50 units bulking)

Approximately 13500 tons of knitted fabric and 300 lakh metres per annum of woven fabric is printed

The cluster also houses around 10000 hosiery / knit garment units. 60 woollen / worsted spinning units, 1 composite woollen unit, 20 cotton spinning units, 5 textile machinery manufacturing units, 15000 powerlooms in decentralised sector and 150 shuttleless looms.

3. Product profile :

Ludhiana now produces all type of textile products. Major natural fibres used are cotton, wool and silk. Manmade fibres used are polyester, acrylic, nylon, viscose and polypropylene. Shawls, blankets, shirtings, suitings are main woven products whereas Jerseys, mufflers, cardigans, pullovers, jackets, socks, children

knitwears are the main knitwear products. Ladies dresses, fancy knitwears, summer casuals, sport wears, under garments, caps etc are other products. Total value of production is around Rs.10000 crores. In value terms, 50% contribution is from dress material, 20% from suitings and shirtings, 15% from knits and 15% from woollens.

4. Consumption of Dyes and Chemicals :

Dyeing is one of the major activities. Dyes used are Disperse, Reactives, Acid and Basic. 22% share is of disperse dyes on polyester and blended dress material, polyester and blended suitings and shirtings etc. 17% share is captured by acid dyes used on shawls, blankets, blazers. suitings and shirtings etc. Reactive dyes with 39% share, dominate the dyes consumption pattern. Reactive dyes are used on cotton and cotton mixed products. 22% share comes from modified basic dyes for acrylic knitwears and yarn. Quantum of dyes consumed is around 3.24 lakh tons with the total value approximately Rs.80 crore. About 1.24 lakh tons of this is Reactive dyes, 0.71 lakh tons of Disperse dyes, 0.71 lakh tons Modified basic dyes and 0.58 lakh tons Acid dyes. Chemicals to the tune of around 12000 tons are consumed with the value of around Rs.3600 lakh.

5. Value Addition :

Value addition on dyed material over grey is approximately 53% for knit fabric dyeing, 43% for package yarn dyeing, 19% for hank yarn dyeing, 22% for knit goods dyeing, 26% for woven fabric dyeing and 20% for made ups and garment dyeing. Finishing, compacting, stentering, zero – zero preshrinking, raising and bulking provide 20 – 50% value addition. 20% value addition is achieved on knit fabric printing and 23% on woven fabric printing.

Some units at Ludhiana are manufacturing their own products while other do job work. Some units are doing both i.e. processing their own products and undertaking job work also. Average job charges are as under :-

Package Yarn dyeing in cone form	Rs.50 per kg
Yarn dyeing in hank form	Rs.30 per kg
Knit fabric dyeing	Rs.38 per kg

Made ups and garment dyeing	Rs.50 per kg
Knit fabric printing	Rs.30 per kg
Woven fabric printing	Rs.10 per metre
Woven fabric dyeing	Rs.9 per metre

6. Domestic consumption and Exports :

As mentioned in foregoing paras, the total value of production in Ludhiana is around Rs.10000 crore per annum. 14% of this comes from exports and rest goes for domestic consumption around the country. Exports are made to countries like USA, Canada, Western Europe, Japan, Middle east and Russia etc. Out of total sales realisation, 7.2% are from fibre dyeing, 29.14% from package yarn dyeing, 14.16% from hank yarn dyeing, 45.80% from knit goods dyeing, 2.6% from woven fabric dyeing and 1.1% each from made up and garment dyeing. Composite units like Oswal Woollen Mills, Genson and JCT are contributing from 20 to 50% in exports. Major buyers are Marks & Spencers, Adidas, Benetton, Rage, GAP, Monte Carlo, Casablanca and Pringle etc. Around Rs.7000 crore worth winter and Rs.2000 crore worth Summer wears are manufactured and marketed throughout the country and export. Rest are common for winter and summer.

6. Support facilities :

There are about 5 industry associations engaged in the alround development of textile processing sector and industrial infrastructure. These are as under :-

1. **Ludhiana Dyeing Association**
Plot no – 278, Industrial Area – A, Ludhiana.
Phone : 0161-2220741, 2224741
2. **Dyeing Industry Association**
C/o Adhinath dyeing, Bhadur Ke Road,
Near Dana mandi, Ludhiana.
Phone : 0161-2742023, 2744623
3. **Knitwear Club and FEKTTA**
Sutlej tower, Cemetery Road, Near fountain chowk,
Ludhiana.
Phone : 0161-2448251, Tele fax – 0161 – 2431864

4. **Apparel Exporters Association, Ludhiana**
Prathap chowk, Punjab trade center,
Behind DIC office, Ludhiana

5. **Shawls Club (India)**
R.O.544, National Road, Near Bhaiwala chowk,
Ludhiana(Pb)
98724 - 90200

There are various Central and State Govt. offices engaged in the development of processing sector of Ludhiana such as :-

1. **District Industries Center (DIC)**
Industrial Area – B, Near Pratap Chowk,
Mueller ganj, Ludhiana
Phone : 0161 – 2532052

2. **P.W.D(B & R) Division**
Old Court, Civil line, Ludhiana
Phone : 0161 – 2420262

3. **CPWD, Ludhiana**
315L, Model town, Ludhiana.
Phone : 0161 - 2401260

Powerloom Service Centre of North India Textile Research Association (NITRA) at Ludhiana and that under direct control of Textile Commissioner, at Amritsar, provide testing and training, trouble shooting and technical guidance in various fields of textile manufacturing activities as well as implementation of various developmental schemes of Govt. of India, Ministry of Textiles. Regional office of the Textile Commissioner at Amritsar works for around development of industry in Punjab and nearby States including implementation of Central Government sponsored schemes like Technology Upgradation Fund Scheme (TUFS), Scheme for Integrated Textile Parks (SITP), 10% capital subsidy & 5% interest subsidy scheme for specified processing machines, technical textiles and garments, 20% credit Linked capital subsidy scheme (CLCS) for powerlooms, Group Workshed Scheme for powerlooms, Group Insurance Scheme for powerloom workers, 15% upfront capital subsidy scheme for SSI textile and

garment units, creation of awareness for technology upgradation, environmental issues, quality and attending to various other problems faced by the industry.

There are around 8 institutions situated in and around the cluster to produce technically trained manpower for the industry :-

1. **Dr. B. R. Ambedkar National Institute of Technology**
G. T. Road, Bye-Pass, Near Village Vidhipur, Jalandhar – 144011
Phone : 0181 – 2690301/02
4 Years Degree B. Tech. (Textile Technology)
2 Years M. Tech (Textile Engg. & Management)
1 ½ Years P.G. Diploma in Garment Manufacturing Technology
2. **Department of Clothing & Textile College of Home Science**
Punjab Agriculture University, Ludhiana
Phone : 0161 – 2401960-79, Mob : 981452800
2 Years MSc. (Clothing & Textiles)
2 ½ years PhD (Clothing & Textiles)
3. **Government Institute of Textile Chemistry & Knitting Technology**
Rishi Nagar, Ludhiana. Phone : 0161 – 2302262
3 Years Diploma Textile Processing
3 Years Diploma Textile Knitting Technology
4. **Government Polytechnic for Women**
Rishi Nagar, Chhoti Habbowal, Ludhiana
Phone : 0161 – 2303223
3 Years Diploma Garment Manufacturing Technology
3 Years Diploma Fashion Designing
5. **The Apparel Training & Design Centre**
B-XX-2597/570, Nobal Enclave, 1st Floor, Bhaiwala Chowk,
Ferozepur Road, Ludhiana (Managed by AEPC, Ministry of Textiles)
Phone : 0161-2404082, 2407850
3 months to 1 year Diploma / Certificate in Apparel Manufacturing
Technology (AMT) & Allied Services
6. **National Institute of Fashion Technology**
Satluj Tower, Cemetery Road, Fountain Chowk, Ludhiana.
Phone : 0161-2411820, 2411194, 2411820-F
3 Years Course in Fashion Design, Interior Design, Textile Design

7. **Pinnacle Institute of Design & Technology**
119/1, Rani Jhansi Road, Civil Lines, Ludhiana
Mobile : 0981465199
2 Years Course in Diploma Knitwear Design Technology & Diploma Fashion Design Domestic Retail

8. **J. D. Institute of Fashion Technology**
88, Green Field, Pakhowal Road,
Ludhiana. Phone : 0161 – 3943844
½ Year Course in Creation Fabric Design & 1 Year Fashion Designing

7. **Environmental Issues :**

Textile processing effluents contain salt/dyes, auxiliaries, enzymes, surfactants, oxidising and reducing agents, organic and inorganic chemicals, which are hazardous in nature. There are around 600 dyeing units (fibre, yarn, knit and woven fabric dyeing etc.) discharging around 1000 KL of effluents. About 100 units out of these in organised and independent processing sector have installed their own effluent treatment plants. But all these are not effectively operated. There are hardly few units resorting to recycling of treated water. A PIL has been filed against the discharge of hazardous effluents by textile processing units and the case is on in honourable high Court. There is dire need of Common Effluent Treatment System for small and medium scale units, while large independent processing and composite units should ensure installation of appropriate effluent treatment system and their effective operation.

8. **Major problems :**

Technology wise there are few modern units set up at Ludhiana by leading groups. However, overall there is reign of low technology dyeing and processing units. Conservative nature of some of the entrepreneurs has still not accepted the wind of change and are ignorant of the global trend. There are people who still believe in saving on initial investment on technology and trained manpower, thus resorting to low technology and second hand old technology machines and non technical shop floor personnels, thereby affecting the quality, productivity and economy of their business set up. Technology upgradation through TUF

Scheme of Govt. of India and employment of technically qualified and experienced personnels will help in upliftment of quality of the product and economy of the textile processing units.

Infrastructure is poor and a lot is required to be done to create world class infrastructure with proper roads, drainage, marketing set up, meeting and display halls, exhibition set up, well augmented power and water supply, information technology and communication set up etc. SITP of Govt. of India, Ministry of Textiles may help the cluster appropriately in this regard. There is need to realise the social responsibility of environmental protection through installation of environment friendly processes and technology. Installation and effective operation of environment protection equipments, effluent treatment plants should not be considered as unproductive investment but as social and legal compliance. Net effect of such strategy is saving in cost by way of saving in waste, economy in use of water, dyes, chemicals and energy, saving in cost of water on water recycling, saving on penalties and fines that may be imposed by Govt. and judiciary, saving in the cost of litigation etc, while maintaining neat and clean environment for future generations. Further the world is moving to the situation where the consumer is increasingly demanding the environmental compliance of the manufacturers / suppliers. If Ludhiana fails to take timely appropriate action, it may find difficult to sustain in ever demanding market, in future.

Source : Material used in this coverage is based on the cluster profile prepared by NITRA PSC and Regional Office of the Textile Commissioner, Amritsar, under the guidance of Shri Ram Asrey Lal, Dy. Director (Chemical Processing), O/o the Textile Commissioner, Mumbai and under the instruction of Textile Commissioner, Mumbai.