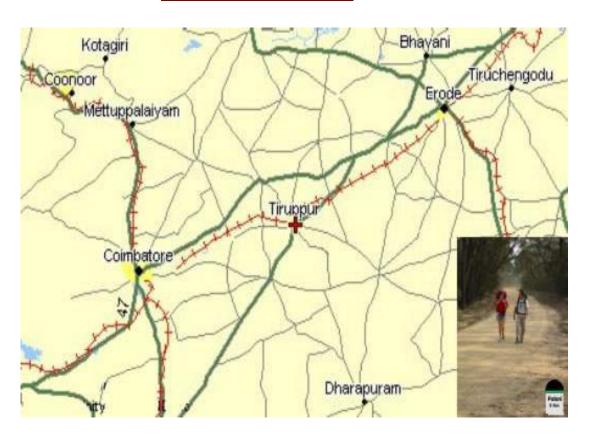
TIRUPUR - THE TOWN OF EXPORT EXCELLENCE

1. Tirupur, where it is located?

Tirupur is located about 55 kms east of Coimbatore, the





Manchester of South India. It is slightly away from NH-47, about 38 kms from Coimbatore Airport. Its' municiple area is over 27 sq kms and population about 7.00 lakh.

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2. Tirupur, a success story!

Tirupur has traditionally been known as cotton trading and ginning market. Gradually cotton trading and ginning have shrunk and it has emerged as a town of export excellence for knitwears.



WORK IN PROGRESS IN A GINNING FACTORY

Going down the memory lane, the first hand operated hosiery factory in Tirupur was set up in 1935 and thereafter Tirupur was producing mainly grey and bleached banians for about 30 years. It gradually entered into mechanised machines arena and few factories started production of other inner garments including underwears, largely for domestic market. In early 80s, T-shirts manufacture was taken up and Tirupur entered into export market. Other items of knitwear segment were introduced from 1985 onwards.

2.1 Tirupur what it is today :

Hope everyone involved in the development of Tirupur would agree that in addition to the enterprising of entrepreneurship Tirupur entrepreneurs collective work of forerunners of Tirupur knitwear industry, the credit to the present glittering face of Tirupur, goes to the dynamic leadership, untiring efforts and pragmatic approach of Shri A. Sakthivel, who, even as on date, is associating in almost all developmental projects in Tirupur. Mr Kandasamy, the other entrepreneur has been pushing up the interests of Tirupur Dyers and bleachers

2.2 Tirupur Exporters Association (TEA) :

It was in July 1990, when this Association of knitwear Exporters was started by Mr. A. Sakthivel, as the President. founder member and The knitwear manufacturing and export started gaining momentum from 1990 onwards, pushed by pragmatic approach of TEA. The export increased from a meagre of Rs.10 crores in 1985 to Rs.5000 crore in 2003 and has reached presently to Rs.10000 crore per annum with local market being worth Rs.1500 crore. The TEA also facilitates the foreign in conferencing and secretarial services, locating suitable buyers and resolving disputes.

2.3 Products and market:

Over 2500 textile businesses located in around 25 miles radius of Tirupur are earning around 2.25 billion US dollar annually. Tirupur dominates about 75% of total

SOME OF THE KIDS PRODUCTS



knitwear export of India. It manufactures and exports
varieties of products as under :-

Cardigans, Jerseys, Pullovers, Ladies blouses, dresses and skirts, Trousers, Nightwears, Sportwears, T-shirts, Sweat shirts, Banians, pyjamas etc. made from single Jersey, interlock, fleece, double Jersey, Pointelle Jersey, Rib, Pointelle rib, drop needle etc.

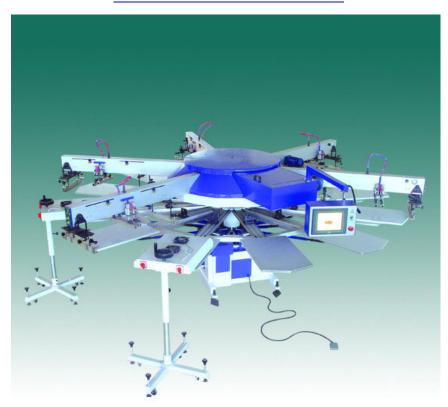
Tirupur supplies its products to around 50 countries in the world, including Europe and USA with majority of world renowned retailers like Mark & Spencers, J. C. Penny, C & A, Walmart, GAP, Karstadt Quell etc. selling Tirupur products through their marketing chain.

Knitwear exporters of Tirupur travel down to the earth to reach the new horizons.

2.4 Composition of manufacturing units in Tirupur :

Composition of units in various segments in Tirupur is as under :





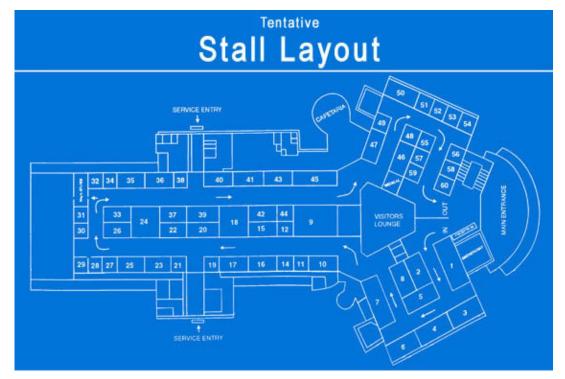
Knitting and / or stitching units	_	2500
Dyeing and / or bleaching units	_	750
Printing units	_	300
Embroidery units	-	200
Compacting, raising, calendering etc	_	200

Activities in the above units have given rise to many ancillary activities such as manufacturing of cartons, polythene bags, other packing material, zips, buttons, tapes printing of labels etc. Nearby areas are lined with the activities of spinning cotton into yarns, knitting of fabrics, separating and dividing the waste and scrap fabrics back into yarn for reprocessing etc.

2.5 India Knit fair Complex :

To attract buyers from all parts of the world to citadel of knitwear industry, India Knit fair Association, a body formed by Apparel Export Promotion Council (AEPC) and Tirupur Exporters' Association, has constructed a permanent complex of international standard at a place about 12 kms from Tirupur, for organising India Knit fair.

HALL LAYOUT OF INDIA KNIT FAIR COMPLEX



First India Knit fair was organised in the year 1995 and thereafter 22 knit fairs have been organised so far. India knit fair has now attained the importance of international fairs, to persue business interest in summer and autumn / winter knitwear trade throughout the world. The location of the complex gives easy and fast access from Coimbatore airport to the buyers visiting the fair. Substantial increase in export of autumn / winter wears from Tirupur is on account of these fairs.

2.6 Knitwear Fashion Institute :

This Institute has been set up at an investment of Rs.2.5 crore at Tirupur by TEA in collaboration with National Institute of Fashion Technology (NIFT) to take care of manpower requirement of high fashion knitwear segment of Tirupur.

STUDENTS AT NIFT-TEA



Institute awards 3 year diploma and one certificate course in fashion technology. Short term courses of 1 to 3 months are organised for the inservice personnels in various disciplines of knitwear industry. The institute has state-of-art machinery and equipments, including CAD and offers testing, training and designing services to the industry.

2.7 Logistic support:

Inland container depot for loading and unloading of export and import of cargo in Tirupur itself, Office of Registrar of Companies, Office of AEPC, Export Credit guarantee Corporations have been set up at Tirupur to facilitate export of knitwears from Tirupur region. Customs formalities can be completed at Tirupur itself sent in containers directly for and goods can be shipment through all Southern ports and Mumbai.

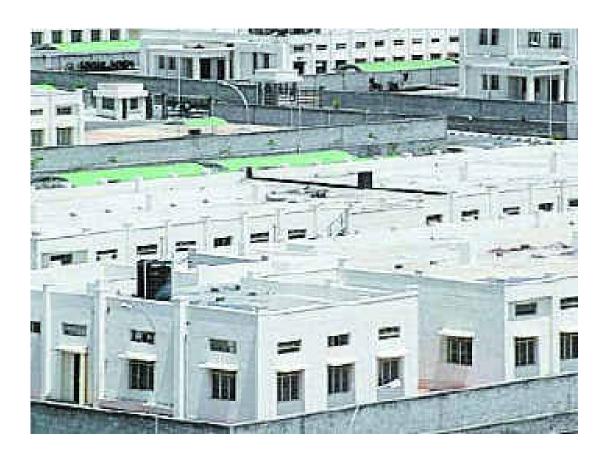
SHIPMENT AT PORTS



2.8 Apparel Park:

Under the Apparel Park scheme of Govt. of India, Ministry of Textiles, an apparel park namely Netaji Apparel Park (NAP) has been set up on NH-47 at New Tirupur, between Avinashi and Perumanallur. New Tirupur is developed about 12 kms away from Tirupur to reduce congestion at Tirupur. NAP was approved by Govt. of India in 2002, for creation of world class infrastructure and manufacturing facilities.

PHOTO OF NETAJI APPAREL PARK-PUBLISHED BY THE HINDU (ONLINE EDITION OF INDIA'S NATIONAL NEWSPAPER)
ON OCTOBER 09, SUNDAY, 2005



This park with Shri A. Sakthivel as it's CMD, is spread in 220 acres area having excellent 60 feet wide roads

for easy travel of containers, excellent water supply, drainage and training facilities. NAP houses 60 knit garment units of international standard with captive power plant of 4 mega watt. A standard unit in NAP will produce about 7500 pieces per day with unit value realisation of US\$ 3.00. This park is expected to generate additional foreign exchange earnings approximately Rs.1500 crore. The park has got provision of rain water harvesting, while there is no need of ETP since no dyeing or printing is involved. Units in NAP have availed funds under Technology Upgradation Fund of Ministry of Textiles. Auditorium, R & D facilities, conference halls, buyer's lounge, working women hostel etc are the essential components of the park.

2.9 TEKIC (Tirupur Export Knitwear Industrial Complex) :

TEKIC, is another modern industrial complex to relieve congestion within Tirupur town. Spread in 100 acres area, 8 kms away from Tirupur, the project on completion of 2nd phase will have 189 industrial sheds exclusively for the manufacture of knitwears for export. The complex is eligible for state subsidies meant backward areas. It will have 2000 lines electronic telephone exchange, power substation, workers and staff canteens, wide roads, plentiful water supply, rainwater drainage, sewerage, security, school, post office, recreation facilities, shops etc. The investment in this industrial complex has crossed Rs.200 crores and value of production is estimated at Rs.800 crore per annum.

2.10 Other factors facilitating dramatic transformation of Tirupur :

- Central and State Govt. Schemes and their adoption in true spirit facilitated by dynamic leaders of Tirupur entrepreneurs
- Disbanding of labour oriented garment manufacturing by Asian tigers on account of high labour cost and pollution
- Export culture
- Availability of cheap labour
- Flexibility in the size of order and other issues
- Easy availability of raw material. Nearby areas are cotton producing centres and spinning mills are in abundance in and around Coimbatore
- Parallel decline in agriculture and migration of landlords to Knitwear manufacturing and dyeing activities
- Presence of direct and indirect exporters and job workers
- Increase in investment limit in garment manufacturing sector and hence input of capital intensive high technology and machines
- Quality culture, maintenance of delivery schedules, introduction of information technology, consistency in quality, emphasis on training, economising and cost cutting efforts
- Dynamic entrepreneurship
- In cluster facilities for dyeing, bleaching and processing.

3. Dyeing and bleaching support and environmental concern :

In knitwear export, dyeing and bleaching play an important role. High quality export and expanding market has seen the introduction of printing and finishing in a big way. These activities while on one hand promote primary and secondary employment and generate income to many people, on the other, these processes being water intensive industrial activities, cause severe water pollution.

WATER POLLUTION



In Tirupur, the textile manufacturing activities alone utilize around 28.8 billion litres of ground water, which is around 1% of present water demand of Tamilnadu. Heavy water utilization has severely depleted the ground

water table in Tirupur and surrounding localities viz.

Avinashi, Palladam, Annur, Kangeyam and several parts of neighbouring Erode district from where the water is transported in lorries.

Many dyeing and bleaching units do not adopt scientific methods of production and to save time, cost and processing steps, their water consumption is on lower side. Even then around 30 litres of water is consumed for processing of 1 kg of textile product. This roughly works out to per day requirement of somewhere 1 to 1.5 lakh cubic metre of fresh water, which after process, is to be discharged to the drainage and hence to surface water bodies and on land. It is estimated that around 80 thousand to 1 lakh cubic metre water is discharged daily.

About 80% of this water comes from lorries from the nearby villages as the water of Tirupur has become badly contaminated with salt, colour and chemicals and is unsuitable for dyeing and processing. Fetching of water from nearby villages has depleted ground water table there and has attracted resentment and protest the nearby villages. Most of the units are producing cotton goods and are using reactive dyes, salts and chemicals. Reactive dyes do not react 100% with the fibres and about 30 - 40% goes in water. unreacted dye alongwith chemicals such as caustic soda, peroxides, wetting agents, hypochlorite, acids, soaps, fixing agents, finishing chemicals and salts, even after treatment in effluent treatment plants, is serious environmental hazards. As per a conducted in 2001, Tirupur dyeing and bleaching units consumed around 78000 tonnes of salt and 6600 tonnes of bleaching powder annually and whole of this or little less goes to earth's water system in one way or other. Effluents of dyeing and bleaching units amounting to around 70 - 80 million litres per day were being discharged when the above study was made and the same somehow or other were leading to Noyyal river which It is a seasonal river and passes through Tirupur. during dry season all polluted water would accumulate and pollute cauvery river at the point of confluence at Kodumudy. Orathupalayam dam constructed in 1991 at the cost of Rs.16.46 crore with a water spread area of 1049 acres to help in irrigation of downstream areas of Noyyal river adjoining Tirupur i.e. Erode and Karur district, has closed for almost 6 ½ years since this dam has been totally contaminated with effluents from dyeing and processing units and it's water has been rendered unsuitable for agriculture. study has estimated that pollution of Noyyal river has resulted in loss to agricultural production, fisheries and public water supply scheme to the tune of Rs.50 crore annually.

This apart, transport of fresh water from nearby areas costs around Rs.115 crore annually. Rs.52 crore worth fuel is burnt into the atmosphere for this purpose, contributing to increased green house gases.

All these miseries to the public have lead to filing of court cases by the social groups and farmers against the Tirupur dyeing units and honourable high court has taken serious note of it.

4. Judiciary's Action:

Hearing the various petitions, the Honourable Madras High Court ordered the dyeing units of Tirupur to pay a Rs.6 compensation of crore towards clean Orathupalayam dam, of which Rs.1 crore has been paid by The green bench of Hon'ble High Court the units. further issued a cease and desist order, preventing effluent discharge into Novyal river directly indirectly. The units were advised by Pollution Control Board to take suitable pollution control measures to achieve the TDS norms (2100 PPM) and also to ensure zero discharge of effluents.

On subsequent hearings and progress of implementation of it's order, the Hon'ble Court appointed an independent Committee to go into the details and considering the report of the Committee and submissions of the Counsel of Association of Dyers and Bleachers, the Hon'ble Court on 27.5.05, directed the units to file individual affidavits with regard to progress in installation of Reverse Osmosis (R.O.) System for zero discharge.

From thereon, the units that have taken substantial steps by paying 25% advance of the total cost of R.O. to suppliers, have been allowed to operate and 660 dyeing and bleaching units that have not complied with Hon'ble Court's Order, were ordered in December 06 to close down or pay 6 paise per litre for each litre of effluent discharge. Since this was hampering around 80% processing requirement of Tirupur knitwear industry Shri A Sakthivel persuaded the matter with the Tamilnadu

Govt. and Judiciary and the units have been given a further breathing time on a specific formula.

5. Tirupur water Project :

is another brain child of Shri Sakthivel, example of public private partnership water project in the history of India's water sector, with the capacity to supply 185 million litres per day of potable water from Cauvery river, about 55 kms away from Tirupur and to treat 30 million litres per day of domestic sewage. This is an ambitious project costing 220 million US\$, financed by IL&FS and USAID & Banks. For commercial funding a SPV namely New Tirupur Area Development (NTADCL) was floated as Corporation Ltd. venture company with equity participation from the State Govt., Central Govt. IL & FS and TEA. The project is conceptualised in three forms. Two parts were on engineer, procure and construct (EPC-I and EPC-II) basis and one to operate and manage (O & M) basis. EPC-1 involved building the water intake, transmission pipeline from the river to Tirupur and the master balancing reservoir. EPC-II covered the main feeder pipelines and distribution networks, overhead ground level storage tanks and sewerage network in the Tirupur town area.

INDIA IS NO STRANGER TO LARGE WATER TRANSMISSION SCHEMES
55KM OF NEW PIPELINE WERE CONSTRUCTED AS PART OF THIS PROJECT.

(PHOTOGRAPH COURTESY OF WHO/P. VIROT)



EPC-1 contractor was the Hindustan construction company while for EPC-II it was Mahindra & Mahindra / Larsen & Toubro. O &M contractor is Mahindra water utilities Ltd., a Mahindra / United Utilities JVC. NTADCL worked as Project sponsor.

The project completed recently, would service nearby 1000 textile units and over 1.6 million residents in Tirupur and it's surrounding areas en route the pipeline. A daily total of around 125 MLD will be supplied to knitwear dyeing and bleaching units, reducing their dependence on water fetched in lorries from nearby areas. 25 MLD water will be supplied to

Tirupur Municipality, which would include 60000 slum dwellers and 35 MLD would be shared between the regions remaining rural towns, villages and settlements. Sanitation provision within the scheme includes 88 of the city's designated slum areas. Water treatment plant is of 185 MLD based on rapid gravity filter with lamella clarifier. The waste water facility takes domestic sewage and uses activated sludge system to achieve secondary treatment standards. The plant would discharge into Noyyal river. Initially built with a capacity of 15 MLD, it's design allows eventual expansion to double that when sewer provision is extended to the remaining 15 of the town's 52 wards.

THE NEW WATER PLANT. BUILT TO A CONVENTIONAL DESIGN, IT HAS A CAPACITY OF 185 MILLION LITRES PER DAY. (PHOTOGRAPH COURTESY OF M.C. SHRIKANT, NEW TIRUPUR AREA DEVELOPMENT CORPORATION)



6. Other Initiatives :

6.1 MoU with Microsoft Corporation (India) Private Ltd.,

Tirupur Exporters' Association has entered into a Memorandum of Understanding with Microsoft Corporation (India) Private Ltd., to set up e-readiness centers which offer e-readiness programme, e-learning modules and enhance solution delivery capability for local system integrators, resellers and independent solution vendors.

Microsoft will also develop a Tirupur Cluster Portal, which will have public interface and accessibility to SME community in Tirupur. Microsoft will help and provide online platform to facilitate collaborative exchange for addressing issues like regulatory issues compliances, environmental quality and certification procedures, Project Management and Textile design development.

6.2 MoU with Indian Institute of Foreign Trade

Tirupur Exporters' Association has entered into a Memorandum of Understanding with Indian Institute of Foreign Trade, New Delhi and Textiles Committee, Tirupur. The objective of the MoU is creating a data base for TEA members, conducting need based programmes and seminars, advisory services on international trade issues, consultancy support to individual units for growth in exports, technology transfer facilitation and coordination for institutional support for government organizations and associations.

6.3 Marine Discharge Project

A Marine Discharge Project by which treated dye effluents of entire textile belt of Tamilnadu will be sent to Marine through pipeline after following Marine norms is also a part of development of Tirupur cluster. "Cost of this project is estimated at Rs.700 crore. A company namely "Textile Eco solutions Tamilnadu Ltd." has been set up to implement this project.

6.4 Arbitration Council of Tirupur :

An Arbitration Council of Tirupur, with its registered office at SIHMA HALL # 34A (44) Sidco, Harvey Road, Tirupur, 641 602, has been set up since 1996 for rendering services to hosiery industry and members of various associations at Tirupur Knitting & Processing units, to avoid delay caused in legal remedy. Members have to provide arbitration agreement clause in their invoices or order sheets so that the council could bring the opposite party for negotiation / arbitration / mediation in the matters of non payment of bills / quality claims etc.

6.5 TEA is empowered to issue the certificate of origin for exports:

Certificate of origin is the instrument to establish evidence on the origin of goods imported into any country. Textiles Committee, Govt. of India has been an agency to issue such certificate of origin for textile items. Tirupur Exporters Association (TEA),

has been approved by the Ministry of Industry and Commerce, Govt. of India, New Delhi to issue such certificate of origin. This is another milestone achieved by TEA to facilitate speedy export from Tirupur.

7. Conclusion:

Tirupur is a success story of less than two decades. is a model to be copied elsewhere. It shows how a sleepy town, off the National highway can be converted into a place busted with full of industrial and allied The dynamic entrepreneurs, their energetic activities. leaders who have perhaps not learned the "Impossible", support of Central and State Govt. etc have transformed Tirupur, a major employment provider, foreign exchange earner and a glittering star on the world textile map that is difficult to be ignored by any major international of domestic buyer of knit goods or by any policy planner attributed the development of textile industry in India.

Prepared by Ram Asrey Lal, Dy. Director (Chemical Processing) under the guidance of the Textile Commissioner, Mumbai and material based on :

- i) TEA Website
- ii) Yellow Pages
- iii) AEPC Website
- iv) Report in Hindu Business Line, Aug 2, July 28
- v) www.water technology.net / projects / Tirupur
- vi) Project of EPIC In under TCIDS, November 04

- vii) Report on pollution problems in Tirupur received from Regional Office of the Textile Commissioner, Coimbatore.
 - viii) Details regarding Tirupur received from Tirupur Exporters Association.

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