



MSME CLUSTERS IN TAMIL NADU



Department of MSME, Government of Tamil Nadu



PREFACE

The Ministry of Micro, Small and Medium Enterprises (MSME), Government of India (GoI) has adopted the cluster development approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs) and their collectives in the country. A cluster is a group of similar and related enterprises located within an identifiable and as far as practicable, contiguous area and producing same/similar products/services. The essential characteristics of enterprises in a cluster are (a) similarity or complementarity in the methods of production, quality control and testing, energy consumption, pollution control etc., (b) similar level of technology and marketing strategies/ practices, (c) channels for communications among the members of the cluster & (d) common challenges and opportunities.

Given the diverse nature of MSEs in terms of both geographical location and sectoral composition, the MSE-CDP scheme aims at addressing the needs of industries through well defined clusters and geographical areas. This will enable achieving the economies of scale in terms of deployment of resources as well as focusing on the specific needs of similar industries. The capacity building of associations, setting up of special purposes vehicle (SPV), consortia, etc., which are integral part of the scheme would enable the MSMEs to leverage their resources and also to have better access to public resources, linkages to credit and enhance their marketing competitiveness.

OBJECTIVES OF THE SCHEME:

- To support the sustainability and growth of MSEs by addressing common issues such as improvement of technology, skills and quality, market access, access to capital, etc.
- To build capacity of MSEs for common supportive action through formation of self help groups, consortia, upgradation of association, etc.
- To create/ upgrade infrastructural facilities in the new/ existing industrial areas/ clusters of MSEs
- To set up common facility centres (for testing, training centre, raw material depot, effluent treatment, complementing production processes, etc.)

CLUSTER SCENARIO IN TAMIL NADU:

Tamil Nadu has 11.10 lakh registered MSMEs. It accounts for a total investment of Rs.91,480 crores and provides employment to about 70.85 lakh persons. MSMEs produce over 6,000 varieties of products including engineering products, electrical, electronics, chemicals, plastics, steel, cement, paper, safety matches, textiles, hosiery, readymade garments, etc. The state accounts for the largest number of MSMEs in the country i.e. 14.30%. Similarly, it occupies largest number of micro enterprises (15.24%), second largest number of medium enterprises (9.21%) and third largest number of small enterprises (9.60%) in the country.

Tamil Nadu is the forerunner in implementing the schemes of setting up of Common Facility Centres under the MSE-CDP scheme. SIDCO has been nominated as the Implementing Agency for establishing Common Facility Centres in Tamil Nadu. In total, 53 projects have been identified in Tamil Nadu for implementation. Out of these, 7 projects under Safety Matches and Sago have already been implemented. Further, 10 projects under Ceramic, Brick, Printing, Rice Mill, Engineering, Wet Grinder, Coir etc. are in the stage of either under trial run or under machinery installation. Besides, 13 projects are in the stage of awaiting release of 1st instalment from Central Government as well as under tender finalisation. Out of the remaining 23 projects, some of them are pending with Government of India for approval and some of them are in the stage of preparing DPR/ resubmission of DPR etc. Some of the clusters under important sectors are presented as hereunder.



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MATCH CLUSTER

The handmade safety match industries are predominantly concentrated in the Southern part of Tamil Nadu. It is an artisan type cluster and about more than 2000 handmade safety match units are in the growth centres namely Virudhunagar, Sattur, Kovilpatti, Kalugumalai, Srivalliputtur and Gudiyatham providing employment opportunities to the extent of 2.5 lakh people both directly and indirectly for their very survival. The small players have to look for competing and surviving purely on the strength and competitive edge. A comprehensive strategy involving the Government and industry is the need of the hour to convert the threats and opportunities and sustain them. In view of the limitations of the units such as smaller in size and artisan type in nature, a network of SMEs in the form of consortium has been recognised. A holistic vision-based strategy aiming at cluster encompassing needs for bringing all the cluster players into one common platform is absolutely necessary for creating congenial business environment wherein the potential cluster actors can establish active business linkages. With the active support of Government of India and State Government, 6 consortia have been constituted by groups of like minded entrepreneurs, each group comprises 25 to 35 members. Since the players are unable to withstand in the threshold of competition emerged from the mechanised players it has been decided to form small groups to establish CFCs in the above 6 growth centres. The small players are being exploited till the cluster initiatives undertaken by the above consortia. It has been decided to avail financial assistance under the collective initiatives in accessing inputs/ services/ knowledge and improve efficiency of business operations, production and cost.

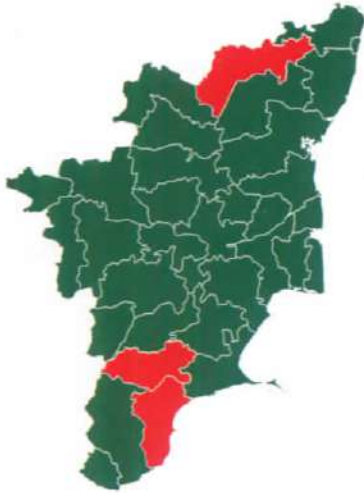
The consortium with the support of Government of India and State Government has set up a Common Production Centre with an investment of Rs.1.56 crore in each growth centre for the benefit of cluster groups to mechanise their production. It is a semi-mechanised operation which will help to enhance productivity by three times. A cost reduction of about 5-8% in annual cost of production is also expected. It will also facilitate to increase the contribution to the livelihood of the employees of the handmade safety match industries. Besides eliminating middlemen, which will help to export 15% of the products within 3 years. Creating common raw material procurement for reducing the cost by 20% and launching common marketing to facilitate direct market penetration will be the special features of this cluster. This will also help the enterprises to manufacture with lesser strain on environment and this will eliminate the drudgery of preparing the safety matches by hand. This will also pave the way for quality enhancement and standardisation.

The cluster offers Single Window Solution to its customers. The location and cluster cooperation are the inner most strength of the cluster. Injection of new technology and adoption of modern management system will enhance the quality of the cluster products. The pursuit of success depends on combined production base. The combined production base is embedded with spectrum of value added services likely to be offered with available sources within the cluster.

In Tamil Nadu, the CFCs i.e., setting up of dipping plants under MSE-CDP cluster in those 6 consortia have been completed and projects have been implemented. The SIDCO is the Nodal Agency to each SPV in the State.



MATCH CLUSTER



VIRUDHUNAGAR DISTRICT

Sivakasi
Sattur
Virudhunagar

TUTICORIN DISTRICT

Kovilpatti
Kazhugumalai

VELLORE DISTRICT

Gudiyatham



PRINTING CLUSTER

The printing industry plays an important role in the industrial development in the State. The printing community has been keeping abreast of itself with the latest technologies of printing. A revolution has been taken place in the printing industry from the level of a cottage industry and to that of automation. The main objective of the cluster is to improve the core competency by creating a strong technological base for the MSME players. The creation of CFC is one such technological intervention available under the MSE-CDP Scheme to increase the core competency of MSME players. The CFC is the growth model to bring in prosperity—opportunity with sustainability—to the majority by narrowing down the critical technological gap in the ambit of participative development by the cluster members. The presence of CFC will create a conducive ground for the development of inter-firm cooperation and specialisation as well as cooperation among public and local institutions to further promote the sector.

The cluster provides value added aesthetic graphic systems and visual art to industry in the region. It produces a variety of products such as multi-colour books, annual reports, wedding cards, calendars, catalogues, magazines, leaflets, posters and labels.

The creation of CFC under printing cluster accrues the following benefits to the printing sector:

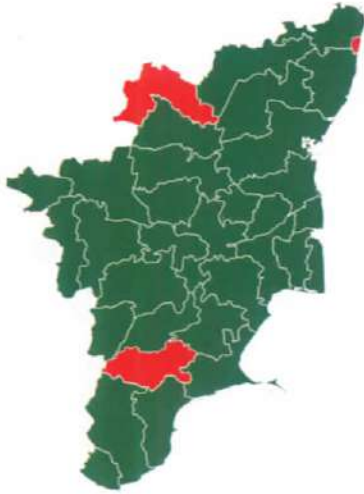
- Availability of the High-End, State-Of-The-Art 5 Colour Offset Press with Coater to the members as well as non-members in the printing fraternity
- The CFC unit mostly used by non-members
- Catering to certain critical and highly sophisticated print jobs like using the online coater unit to provide glossy but eco-friendly finishes to the printed packaging jobs
- Opportunities to use multi-printing facilities with the 5 Color press
- Provides computerised automatic ink feed control to give a uniform print output on the desired level
- Satisfying the needs of foreign and domestic buyers
- Increased levels of expertise in emerging technologies
- Tool to achieve inclusive growth
- Emerging from the felt needs of the beneficiaries
- Achieving economies of scale through specialisation of production and sharing the technology
- Creation of new ideas and new business
- Self-sustainability for continuous support
- Increased the impact and widened the support from other support institution

The installation and commissioning of the Computer To Plate (CTP) and its networking with the 5 Colour Offset Press would further enhance the capabilities of the press to a new level with CIP3 connectivity. The Testing Laboratory would be a boon to the Printing Cluster which would enable the members to do qualitative analysis of the inputs to match the customer specifications which are becoming very rigid. The Training Centre would impart training to existing as well as new workers with the latest trend in the printing technology.

In Tamil Nadu, 2 CFCs under MSE-CDP Scheme have been envisaged at Krishnagiri and Sivakasi and most of the machineries have been installed and they are under trial run. SIDCO is the Nodal Agency for these two clusters.



PRINTING CLUSTER



CHENNAI DISTRICT

Chennai

KRISHNAGIRI DISTRICT

Krishnagiri

VIRUDHUNAGAR DISTRICT

Sivakasi



AUTO COMPONENT CLUSTER

The establishment of Ashok Leyland in the late 50's and TVS group of companies in the early 60's had provided the impetus for starting of large ancillary/ components manufacturing units in this region for catering to the component requirement of the above units. In fact, the auto component clusters like Chennai, Hosur, etc., are induced ones and has been linked to the establishment of the larger industries like Ashok Leyland, TVS Group, Rane Group and Amalgamation group of companies. Initially it started with the establishment of some units then gradually expanded in line with the level of sophistication and product range of the larger units. Today, Chennai is popularly known as hub of automobile industry and also known as Detroit of India. Some of the advantages that this region had in attracting auto component industry are:

- Places like Chennai has the tradition of producing a large pool of intellectual workforce & trained hard working industrial labour
- Business friendly government policies & socio-cultural environment
- Traditionally very strong in Engineering & Auto sectors
- Chennai economy is well balanced with the infotech, industrial, entertainment & other service sector establishments playing equal role in the city's growth
- Chennai is home to world class automobile companies like Ford, Hyundai, Hindustan Motors, Ashok Leyland, Royal Enfield, Tafe, TVS, etc.,
- Chennai is located in the northern part of Tamil Nadu. Hence the Chennai port & Chennai International Airport act as the gateway to a substantial portion of southern India comprising Karnataka, Tamil Nadu, Andra Pradesh & Kerala, which have emerged as the fastest growing states in the post liberalisation era

Today auto component firms in the cluster have placed themselves on the world map, a few of them already getting prestigious awards like Deming award.

The core cluster actors in places like Chennai, Hosur, etc., under auto component cluster could be listed as follows:

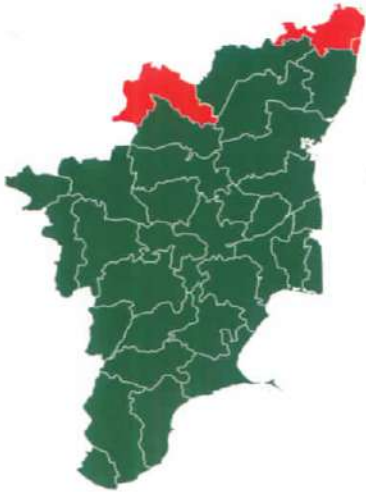
- Large and Medium enterprises
- Vendors to these large firms
- Small firms catering to replacement markets
- Job shops in metal cutting, grinding, metal forming
- Foundries
- Heat treatment units
- Forging units
- OEM manufacturers of vehicles- as customers
- Material supplier

Most of the industries in this region are sub assembly manufacturers supplying to OEMs in India. Some of these units have also entered the export markets recently. Two business houses control a majority of the large units. Most of these large units have got good exposure to world class manufacturing practices. Some of these units have completed tierisation of their vendors and some are in the process. These units are now insisting upon their vendors to go for quality certification in addition to offering warranty for their products. The concepts like Just In Time, zero percent rejection are insisted from the vendors. Some industries like TVS group of industries have got partnership approach with their vendors i.e. guiding vendors in choosing right machinery, process technology, training, implementation of quality upgradation.

In Tamil Nadu, one auto component CFC with decoiling, testing cum calibration has been envisaged at Hosur in Krishnagiri District and machines like decoiling machine, CNC profile projector, machine shop machines, 200 KVA generator, electronic weigh bridge have been installed in that CFC. The SIDCO is the Nodal Agency for this cluster.



AUTO COMPONENT CLUSTER



CHENNAI DISTRICT

Chennai

THIRUVALLUR DISTRICT

Ambattur

Gummidipoondi

KRISHNAGIRI DISTRICT

Hosur



LEATHER CLUSTER

The leather industry in Tamil Nadu has a long history. The unique feature of the industry is its strong tanning base. The traditional knowledge of tanning passed on from generation to generation, coupled with the application of modern tanning technologies have made the State one of the leading producers of the finest quality leathers in the world. Also, Tamil Nadu is a leading manufacturer and exporter of value added leather products and footwear.

The leather industry in the State derives its strength from the major clusters it has in tanning (Ambur, Ranipet, Vaniyambadi, Chennai, Thiruchirapalli, Erode, Dindigul & Pernambut), footwear (Ambur, Ranipet & Chennai), leather garments & gloves (Chennai & Vaniyambadi), and leather goods (Chennai, Ambur & Ranipet).

Ambur has been notified as a 'Town of Export Excellence' by the Commerce and Industry Ministry, considering the significant contribution made by this cluster for the exports of the leather sector.

According to Council for Leather Exports (CLE), export of leather, leather products and footwear from the State has shown a steady growth in the recent years, with exports rising from Rs.5,385.30 crore in 2007-08 to Rs.11,121.75 crore in 2012-13, showing a growth of 107% in value terms. Finished leather and leather footwear accounts for a share of about 70.5% in exports.

The leather industry aims to achieve an ambitious export target of \$18.50 billion by 2020 from the present level of \$6 billion. Assuming the State would account for 35% share, then the exports from Tamil Nadu should also reach a level of \$6.50 billion (Rs.39,000 crore) by 2020 from the present level of Rs.11,122 crore.

However, in order to achieve this share, new production centres have to be created. The leather industry has suggested establishment of a mega leather cluster in the State with the assistance of Ministry of Commerce and Industry. In this regard, CLE had sought the support of Tamil Nadu Government in identifying a suitable location at affordable land costs.

In order to achieve the envisaged export targets, the leather industry requires at least an additional 3 billion sq ft of leather, in addition to the 2 billion sq ft now available in the country. To ensure this, they need to not only upgrade the current tanning clusters but also to create more new tanning clusters. As far as upgradation is concerned, project proposals have already been sent to the Government seeking grant for upgradation of Central effluent treatment plants at Ranipet, Madhavaram; capacity augmentation of ZLD at SIDCO Ranipet; upgradation of ZLD projects at Vaniyambadi, Thuthipet (Ambur) and Maligai Thope (Ambur) at a cost of about Rs.180 crore.

However, as a long term solution, the industry has requested the Government to install a pipeline to carry the treated effluents from Vaniyambadi to the Bay of Bengal at the earliest. The pipeline could collect the treated waste water from tanning clusters namely, Vaniyambadi, Ambur, Pernambut and Ranipet and convey the same into the sea through a pipeline. Since the treated effluent contains only the dissolved salts, discharge of this treated water into the sea is not expected to have any adverse impact.



LEATHER CLUSTER



VELLORE DISTRICT

Ambur
Vaniyampadi
Pernambut
Ranipet

THIRUVALLUR DISTRICT

Madhavaram

KANCHEEPURAM DISTRICT

Chromepet
Pallavaram



PLASTIC CLUSTER

It is estimated that there are about 3,000 plastic/ polymer processors in Tamil Nadu converting about 6.00 lakh tons polymers/ resins into plastic goods every year. It is also estimated that 50% of the processors are located in the Chennai region. The industry is highly fragmented with and the small units are unable to compete effectively in the domestic and global markets. Talking of intrinsic values of plastics, more human life is practically impossible and unthinkable without this unique material.

First of all, plastics meet the basic human socio-economic needs of shelter, clothing, food and health care through direct and indirect usage. Secondly, plastics serve all sectors of our economy be it in the form of raw-materials and intermediaries or finished goods and componentry. Thirdly, it plays a key role in techno-economic supplementation and substitution of traditional materials in multifarious applications thereby again fulfilling compelling economic needs. Fourthly, plastics help to conserve scarce natural resources through supplementations and substitutions. Fifthly, the contribution of plastic in the field of conservation of energy needs no re-emphasis. Sixthly, the plastic industry has been a major revenue contributor to our national economy.

As already stated above, it is the time to upgrade the plastic industry by way of providing design and tooling facilities which will help SMEs to benefit from the latest technological developments in product design, development and manufacturing processes. The following are the target industry segments:

- Automotive & Engineering Plastics
- Pharmaceutical disposals
- Telecommunications
- Consumer goods- Household segments
- Packaging- Rigid & Flexible
- Consumer goods packaging

The target groups are micro and small enterprises engaged in manufacturing of plastic products in and around Chennai. These groups have already been identified and adopted by the Government of India and Government of Tamil Nadu under Micro and Small Enterprises Cluster Development Programme (MSE-CDP). It is a level playing exercise to improve the capabilities and capacities of the smaller groups by injecting all soft and hard intervention supports to enhance their competitiveness under this nascent scheme.

There are more than 2,700 plastics manufacturing units in Chennai and its surroundings accounting for over 35% of the plastic units in the state. Investment in plant and machinery in the cluster is around Rs. 480 crore and average investment per unit works out to Rs.18.00 lakh approximately.

Over 85% of the units are micro enterprises. Majority of the micro units have an average investment of less than Rs.2.00 lakh in plant and machinery. There are very few medium and large plastic industries in the cluster. The turnover of the cluster is estimated at Rs.1,050 crore with exports over Rs.100 crore. The cluster provides direct employment to 18,685 persons. The products range from household consumer products, plastic auto components, PVC-irrigation and electrical products, plastic films and bags, electronic component, plastic textile products, toys and reprocessing plastics. The path-breaking exercise and the value added services initiated by the MSME-DI, Chennai under the cluster approach is well recognised by the industrial fraternity.

Two plastic cluster proposals one at Kancheepuram and another one at Ambattu in Thiruvallur District have been formulated, out of which the Government of India accorded approval to the Kancheepuram woven sack plastic cluster. The other one at Ambattur is under preparation of the DPR. SIDCO is the Nodal Agency for these two clusters.



PLASTIC CLUSTER



CHENNAI DISTRICT

Ekkattuthangal

Guindy

Ambattur

MADURAI DISTRICT

Madurai



HOSIERY CLUSTER

The booming garment industry of Tiruppur has earned the city numerous acronyms like 'Knitwear capital of India', 'T-shirt town' and 'Dollar City' of India for its large-scale production of T-shirts, hosiery and knitwear garments. The city is credited for earning millions in foreign exchange. According to one estimate, Tiruppur generates as much as 4% of India's total export trade.

The Hosiery cluster of Tiruppur witnessed rapid growth after it came in direct contact with the global market. Over the years it has established itself as one of the major garment export hubs. According to a survey carried out by the Planning Commission, the town has over 1,500 knitting units, of which 700 are related to dyeing and bleaching. It has 500 fabric printing units and 300 units which specialises in compacting and calendaring. The city has over 2,500 export units which assembles the final products for export. Around 250 units are directly linked to embroidery activities and another 500 units deal in providing accessories to bigger manufacturing units. Under the new Exim Policy, Tiruppur Knitwear industry has been given cluster-based industry status. It means the city will be given additional benefits under the new scheme.

The hosiery industry of Tiruppur produces middle-priced casual wear including T-shirts, men's shirts, ladies' blouses, ladies dresses and skirts. It manufactures large number of white underwears for global export market. Most of the garments manufactured in Tiruppur are exported to European countries, US, Canada, Australia, UAE and Japan. Some of the world's largest retailers including Walmart, Primark, Oviessa, C&A, Switcher SA, Polo Ralph Lauren, Diesel, ARMY, Tommy Hilfiger, M&S, FILA, Respect, H&M, Whale, Reebok import their textile clothing from Tiruppur.

The textiles and fabrics account for about 12% of India's total exports. About 45% of these are in the form of knitwear. Tiruppur alone generates as much as 4% of India's total export trade and has achieved an annual growth rate of 10-15%. Over 80% of the garments manufactured in Tiruppur are exported. The total export from the city is estimated to be \$ 1.02 billion in 2001-2002. The domestic consumption is estimated to be \$ 306.12 million.

The Apparel industry of Tiruppur employs over 6 lakh people but the city faced severe crisis during the slowdown process post 2008. More than 3 lakh workers were employed in the Tiruppur knitwear industry and 70,000 to 1 lakh are said to have moved out because of the diminishing prospects. The industrial cluster of the city faced another crisis in February 2011 when 700 textile processing units were closed down following a Madras High Court order for not achieving zero liquid discharge. As of now, more than 100 of these units have resumed operations after meeting the pollution control norms.

Some of the major issues that concern this industry for the sustainability of growth in the future relates to infrastructure and organisation. Water scarcity, electric power supply and increasing pressure on the roads has put considerable strain on the growth of the industry. With the firms increasing moving towards higher value addition, quality and design inputs are becoming more crucial. Tiruppur Exporters Association has undertaken some initiatives with the help of government and non government agencies to overcome the deficiencies build capacities to prepare the industry for future growth. The local service suppliers are also geared to provide linkages with the international arena by providing access to the global information and latest machinery. The industry has grown considerably over the last one decade and the future for now looks promising.



HOSIERY CLUSTER



TIRUPPUR DISTRICT

Tiruppur



TEXTILE CLUSTER

South India is well known for its natural beauty, but along with that also famous for its textile industry. Coimbatore, Tiruppur, Salem and Erode all four major cities of Tamil Nadu have their contribution in the growth of this industry. All these major cities are very much known for different products. Coimbatore, a city residing in the hills of Nilgiris is a second largest in Tamil Nadu. This is also known as a cotton town. Kovai is the other name of Coimbatore. It has a flare of cotton production because of the black soil of that land which suits cotton growing. If Coimbatore is known for cotton production, Tiruppur is known for knitting. Tiruppur is also known as a knit city. Tiruppur has many cotton ginning factories and has main cotton market of Tamil Nadu. 35 countries are buying from Tiruppur and they are visiting regularly. Tiruppur is the only city which is doing 56% of knitwear export alone. That is the reason why it is known as Town of Export Excellence. The city, Erode is known for handloom weaving and carpet manufacturing. It also has large scale cotton ginning mills. Erode along with Salem is known as the home of textile weavers.

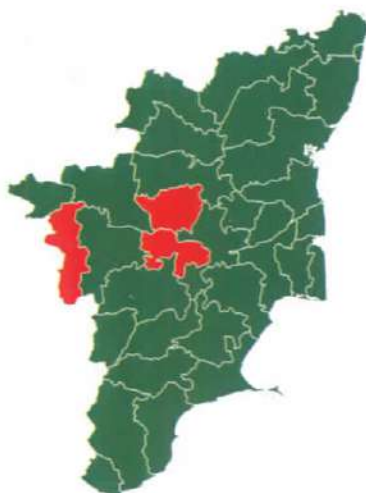
Coimbatore, Tiruppur, Salem and Erode, these four are known as textile belt of South India and the export revenue it generates is more than Rs.25,000 crore. In it the share of only Tiruppur is Rs.11,000 crore and the expected rise is 20-25%. The expected flow of investment is Rs.90,000 crore in this region in various textile activities during next five years. Rs.50,000 crore will be used only for the textile industry of the Coimbatore region. The future plan with the hope of increase in export and production of textile is Rs.2,70,000 crore and Rs.4,95,000 crore. This belt has 2,000 textile mills, large and small both.

Coimbatore is known as the Manchester of South India. It has about 600 cotton mills which manufacture blended yarns and cotton. Most of the Textile Mills of South India have joined South India Textile Research Association known as SITRA. This association helps the textile units in research and development. Cotton is the crop growing in this region because of the black soil and so the farmers started cultivating the cotton crop and it was the start of industrialisation. Growing and cultivating of cotton prospered during the year 1920s-1930s. Nowadays the crop cultivated in the southern region of this belt is only 3-5%. Though there is a decline during 1930, Tamilnadu makes 50% production of cotton yarns in the country. The yarn which has 100 count is a high quality cotton whereas 10s, 20s and 30s are other varieties of cotton yarn.

The knitting industry is also in changing phase. The quotas have opened up new doors for the knitting industry of Coimbatore. The multi-fibre agreement gave new vibrant look to the textile clusters. The mid-cap knitwear is expanding and has gathered more strength in financial structures. The new opportunity is opened up in the domestic market for the Tiruppur knitters. Right now the textile industry has two great challenges, one is low productivity and the other is low level of skills. The government has approved grants to this region still they are not getting those grants. Still some more changes are needed in infrastructure.



TEXTILE CLUSTER



COIMBATORE DISTRICT

Coimbatore

KARUR DISTRICT

Karur

NAMAKKAL DISTRICT

Tiruchengode

Kumarapalayam

Pallipalayam



LORRY BODY BUILDING CLUSTER

The body building process is divided under two heads such as whole body building and part of the body building. The whole body building represents the complete construction of a lorry undertaken by the body builders including tinkering and painting. The lorry owner gives only the chassis to the body builders for constructing the lorry completely and the same will be delivered to him making them road-worthy. The part of the body building represents construction of the lorry with or without the tinkering and painting. In some cases, even the body building is entrusted to many persons under job contract system.

Lorry Body Building industry provides employment to about 40,000 workers comprising of both skilled, semi-skilled and unskilled in Tamil Nadu. Of that, 30,000 workers are from Namakkal District alone, which is 75% of the total workers employed.

Various types of machines are being used by the Lorry Body Building industry. The Lorry Body Building Industry has been started in the earlier stages by the artisans like carpenters and blacksmiths as a domestic occupation. Only simple machines like driller and welding rods were used in the beginning. Most of those early starters continue using only the simple machines till now, though advanced technology has produced a number of sophisticated, capital intensive and labour saving devices. If a lorry is constructed, without using machines, it will take approximately 1,500 manhours. But when machines are utilised, this can be reduced to 1,000 manhours. Consequently, the finish of these lorries will also be more attractive and present a beautiful look.

Changes in technology may lead to improvement in processing of raw materials, savings in wastage, greater productivity and more speedy production. All these improvements enable the firm to reduce investments in inventory. Thus, changes in technology affect the working capital requirements. If the firm decides to go in for automation, this would reduce the working capital. If the firm adopts a labour intensive process, the requirements of working capital will be larger. The shorter the manufacturing process due to adoption of improved technology, the lower the working capital requirements.

Namakkal and Tamil Nadu Lorry Body Builders Cluster is contributing to the lorry body and cabin building in a substantial manner, that with capacity to build 30,000 per annum and bodies that can be built by nearly 1,000+ micro/ small lorry body building units. This is a substantial capacity contributing by the cluster to the automotive industry of India.

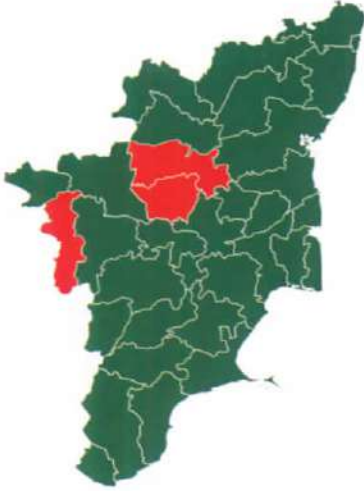
At present the country is producing nearly 2.5 lakh + trucks per annum and of this, only few of them have set up cabin and body building units as per ARAI standards.

Namakkal lorry body building cluster, for the benefit of truck body and cabin building units is not only in Namakkal District but also in other parts of Tamil Nadu, it will help the country to boost its production capacity as per ARAI norms to at least 10,000 more.

The cluster also has developed an exclusive industrial estate for truck body builders, to house 307 units at Velagoundarpatty Village about 15 kms away from the town at a total project cost of Rs.13.68 crores out of which the grant from the Government of Tamil Nadu is Rs.12.68 crores. The SPV has also proposed to establish CFC. With the CFC support, it complements the national capacity to build safe cabins and body, as the current capacity is inadequate and the members can produce nearly 5,000 vehicles per annum in compliance to the norms. The SIDCO is the Nodal Agency for this cluster.



LORRY BODY BUILDING CLUSTER



COIMBATORE DISTRICT

Mettupalayam

NAMAKKAL DISTRICT

Namakkal

Tiruchengode

SALEM DISTRICT

Sankagiri



PHARMACEUTICAL CLUSTER

The vision of the Department of Pharmaceutical (DoP), Ministry of Chemicals & Fertilizers is to catalyze and encourage quality, productivity and innovation in pharmaceutical sector and to enable the Indian pharmaceutical industry to play a leading role in a competitive global market. For this, world class quality manufacturing facilities with high level of productivity with innovative capabilities are required. However, these are on one hand very capital intensive and cannot be established and opened by Pharma Manufacturing Units, especially the SMEs at their own due to financial constraints, while on the other hand global level technical expertise is an adverse handicap. Cluster based approach is increasingly being recognised as an effective and sustainable strategy for competitive enhancement of Pharmaceutical Industry. Such an approach, which leverages the geographical proximity of the enterprises on 'collaborating while competing' principle, is participatory and cost effective. As it provides critical mass for customisation of interventions, the DoP seeks to implement Cluster Development Programme for Pharma Sector to enhance quality, productivity & innovative capabilities of the SME Pharma sector in the country.

Objective:

- Increase the competitiveness, easy access to standard testing facilities and value addition in the domestic pharma industry especially to SMEs
- Strengthening the existing infrastructure facilities in order to make Indian Pharma industry a global leader in pharma exports
- Reducing the cost of production by 20% in the clusters
- To help industry meet the requirements of standards of environment at a reduced cost through innovative methods of common waste management system
- Exploit the benefits arising due to optimisation of resources and economies of scale

The Scheme termed as 'Cluster Development Programme for Pharma Sector' (CDP-PS), is proposed as a Central Sector Scheme and would be implemented on a Public Private Partnership (PPP) format through one time grant-in-aid to be released in various phases for creation of identified infrastructure and common facilities to a Special Purpose Vehicles (SPVs) set up for the purpose. The scheme is for setting up of new cluster as well as upgradation of existing cluster. However, the purpose of the grant is for activities of common facilities and some of the indicative activities under the Common facilities are: i. Common Testing Facilities ii. Training Centre iii. R&D Centres iv. Effluent Treatment Plant v. Common Logistics Centre. The CFC may be utilised by the SPV members and as also others in the cluster.

The Chennai Pharma Industrial Infrastructure Upgradation Company (CPIIUC), a joint initiative of the pharmaceutical manufacturers in Tamil Nadu and the State Government to attract major global drug companies to invest in the State, to be set up under the cluster development scheme of the Central Government at the Alathur Pharmaceutical Complex. The State Government's, Tamil Nadu Industrial Investment Corporation (TIIC) and the Small industries Development Corporation (SIDCO) are the Nodal Agencies to develop the infrastructure. The Industrial and Technical Consultancy Organization of Tamil Nadu (ITCOT) will monitor and guide in setting up the infrastructure. Various banks have assured to fund for the project with an outlay of Rs.20.00 crore. Though the project could be up to Rs.50.00 crore under the cluster development scheme, CPIIUC is planning phased growth of the pharma cluster with prioritised sectors. Emphasis will be given to develop infrastructure of world standards at the pharmaceutical complex in the first stage. Other facilities envisaged in the first phase include a common Business Information centre, a World Class Product Display Centre to showcase the products of Tamil Nadu manufacturers as part of attracting investments from worldwide, advanced storage facilities, etc.

PHARMACEUTICAL CLUSTER



CHENNAI DISTRICT

Chennai

THIRUVALLUR DISTRICT

Alathur



CERAMIC CLUSTER

The Third Five Year Plan had made remarkable change in the industrial development of Vriddhachalam area. During the year 1960-65, the Vriddhachalam area was underdeveloped and no industrial activity prevailed during that time. The establishment of Neyveli Lignite Corporation boosted the industrial activity of this area by way of catering the china clay, ball clay and fire clay, which were dugged out along with the lignite. In order to use the huge quantities of clay materials effectively and also to improve the underdeveloped area, Vriddhachalam Ceramic Industrial Estate was started during 1964. The raw material such as china clay and ball clay from NLC and fire clay from Panruti were used by ceramic industries for manufacturing the Ceramic and Refractory materials. The development of Industrial Estate had given wide opportunity for Ceramic products as a result of which small entrepreneurs emerged in and around Vriddhachalam area. The cottage industries were flourished in this area, giving multiple growth to such ceramic and refractory products.

At present there are 64 Industrial units in the Industrial Estate, around 200 cottage Industries in and around Industrial Estate manufacturing only ceramic products. The refractory industry had also witnessed steady development during the period and at present about 50 refractory industrial units are functioning around Vriddhachalam area.

The ceramic and refractory industries are producing electrical products, industrial steel products, refractory crucible, grinding media refractory bricks, filters, textile porcelain, acid resistance tiles, ball mill liners and so on. The industries situated in the Vriddhachalam area are providing employment to about 2,000 people directly. The manpower available in this area is plenty as most of them are coming from nearby villages. The other infrastructure facilities such as electrical power supply, transportation, water are also adequately available.

The ceramic cluster is an artisan type cluster engaged in the manufacturing of ceramic toys within the visibility of 10 kms of Vriddhachalam Town and centres around the Ceramic Industrial Estate. There are 200 plus artisan type ceramic units functioning in the region of Vriddhachalam providing employment opportunities to the extent of 5,000 people both directly and indirectly for their livelihood. The cluster members are manufacturing ceramic toys, idols, agal vilakku (mud lamp), etc., mostly in their thatched houses as a Cottage Industry.

Similarly, at present there are 20 small kilns (Shuttle Kiln) and 2 big kilns (Tunnel Kiln) run by the private entrepreneurs in around the ceramic industrial estate. The micro players have been forced to depend on them for firing of ceramic items in these kilns being operated by the big players. The big players used to spare little time for firing micro players' products and also charge them heavily.

In the mid of this crisis, cluster induced initiatives were started in the early 2007 with like minded artisans with a group of 90 committed members coming together to form an SPV viz., Vriddhachalam Ceramic Federation of Self Help Group Association to establish a common facility centre to construct a tunnel kiln.

The Government of Tamil Nadu, allotted two industrial sheds in the Government Industrial Estate for Ceramics, Vriddhachalam for a period of 10 years with a lease rent of Rs.500/- per annum per shed to the SPV as a State Government contribution to construct tunnel kiln. The tunnel kiln has already been erected and is presently utilised by ceramic entrepreneurs at Vriddhachalam. SIDCO is the Nodal Agency for this cluster.



CERAMIC CLUSTER



CUDDALORE DISTRICT

Vridhachalam



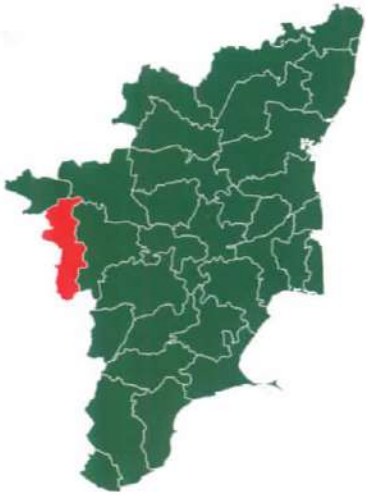
WET GRINDER CLUSTER

Coimbatore is popularly known as "Manchester of South India" under textile industry. To cater to the needs of textile mills many engineering units, foundries and fabrication units were set up. Hence, Coimbatore had emerged as an industrial city. In the later half of the century many other Industry clusters such as pumps, motors, foundries, engineering units, jewellery, etc. had developed. Of these, wet grinder cluster had developed as a natural cluster. This cluster is not available anywhere else in the world. In 1955, mechanical wet grinder was invented. Prior to that, for many centuries the Batter for Idlis and Dosas were being prepared by using manual grinding stones. This used to take a lot of time and hard labour. Hence people were preparing idlis and dosas only on special occasions and during festivals. After the invention of mechanical wet grinder, preparation of the batter has become so easy that people have started eating idlis and dosas on daily basis. Many units in Coimbatore had started manufacturing Mechanical Wet Grinders. Thus the cluster came into existence at Coimbatore. The batter is prepared by the grinding action of a large stone, holding the ingredients in a pit, in which another stone of smaller size is rotated. These movements were mechanised by using an electric motor. In the conventional type, the large stone is rotated with the help of a pulley and belt mechanism. The smaller stone is held inside the pit using the arm-set mechanism. Today various types of wet grinders are available in the market. The most popular type is known as "Conventional Type" and this type accounts for about 60% of the total wet grinder production. During 1980, "Tilting Type", wet grinder was invented with some modifications to make it user friendly. This helped to make the wet grinder popular among the people. At present this type accounts for about 10%. Soon many other units started manufacturing this type also. In 1995, "Table Top" version of the product was invented. This type occupies smaller space compared to other types and is convenient to use by the housewives. In this type, the drum was made detachable and is smaller in size. After the grinding action, the drum can be detached and kept in a fridge after fermentation. This type occupies smaller space compared to the other types and saves space in the kitchen. Also, it consumes less power compared to other types. Thus, the mechanical wet grinder invented in 1955 had taken many avatars and today Coimbatore is having thousands of skilled labourers in this cluster.

The Coimbatore Wet Grinder and Accessories Manufacturers Association (COWMA) has set up a Common Facility Centre with an investment of Rs.2.85 crore for the industrial cluster. The CFC would be offering common plastic and stone testing, modern welding and copper drawing besides a training centre, a research and development facility, a testing laboratory and a business information centre. All the machineries and equipments have been installed and the project has commenced production. The SIDCO is the Nodal Agency for this cluster.



WET GRINDER CLUSTER



COIMBATORE DISTRICT

Coimbatore



JEWELLERY CLUSTER

Jewellery since time immemorial has remained "Neighbour's envy and owner's pride". The ornaments have remained exotic, unequalled and invaluable articles of personal glory and with jewellery becoming symbol of status, fashion and taste, men and women today are steadily moving away from conventional styles of adornment and ornamentation and are gradually adopting modern patterns better suited to their busy lifestyles. Considering the fact that India is the largest consumer of gold and has excellent infrastructure for diamond cutting, jewellery making can prove to be a very lucrative and satisfying career. Jewellery making in India has an unbroken heritage that spans over 5,000 years. With few or no institution to research into the field, jewellery industry could not make much progress and mostly depend on traditional at work.

The term "Jewellery" signify a lot more than just a few precious metals and gem stones. The industry is poised for growth and development as the demand potential for styled variety is on the increase. There also exist young designer entrepreneurs with dynamism and creativity who can explore new avenues and experiment with designs to suit the modern needs, ethnic patterns, with intricate motifs are much sought after due to their absorbing styles. The elegant look and artistic craftsmanship in gold ornaments from traditional to modern have created a niche in the market and have multiplied the demand prospects.

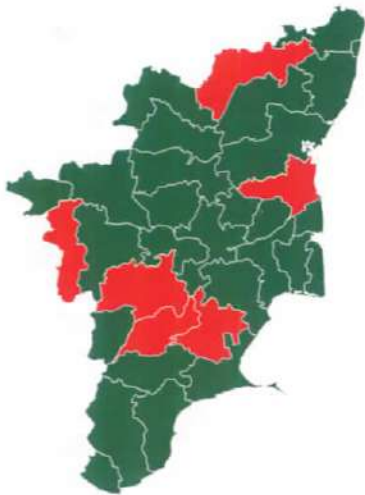
Coimbatore is one of the leading manufacturing hubs of imitation and gold jewellery and a diamond cutting centre of South India. The city has more than 3,000 units which manufacture various kinds of jewellery for the domestic as well as overseas market. It employs over 40,000 workers, mostly skilled gold workers directly or indirectly. Some of these jewellerys are exported to the US, Europe, Canada, Australia and Asian countries. The city has also emerged as a leading diamond cutting centre of south India and caters to both local as well as national market and in making diamond finished products. But it's the jewellery market which is the pride of the city. It contributes significantly to country's jewellery production as India emerged as the second largest manufacturer of imitation jewellery in the world after China.

Coimbatore also manufactures various kinds of machinery which are widely used in jewellery manufacturing. Some of these machines are supplied to domestic market and also exported to global market. The local jewellery market has however been adversely affected by the machine-made Chinese jewellery which has been flooding the Indian markets. According to one estimate, Chinese imitation jewellery has captured almost 30% of India's market.

In manufacturing of Gold Jewellery, many processes including gold melting, pressing and die casting, assaying (refining of gold from waste acid), polishing and gold checking are involved. However, individual units are facing various problems to purchase these processing machines separately due to high cost. To improve the designing and quality, increase the production, reduce the production cost and provide training, setting up of Common Facilitation Centers is necessary in jewellery clusters like Dindigul, Coimbatore, Madurai, etc., in the State. However, a project for setting up of CFC in Madurai District has been envisaged and the project at a cost of Rs.3.60 crore is under implementation. The common facilities such as dye forging, electro plating, electro polishing, gold refining, gold finishing, etc., have been proposed under this cluster. The SIDCO is the Nodal Agency for this cluster.



JEWELLERY CLUSTER



COIMBATORE DISTRICT

Coimbatore

CUDDALORE DISTRICT

Chidambaram

DINDIGUL DISTRICT

Nilakottai

MADURAI DISTRICT

Madurai

SIVAGANGA DISTRICT

Karakudi

VELLORE DISTRICT

Vellore



FOUNDRY CLUSTER

The Indian Metal Casting (Foundry Industry) is well established. According to the recent World Census of Castings by Modern Castings, USA, India ranks as 2nd largest casting producer in the World producing estimated 7.44 million MT of various grades of castings as per international standards. The various types of castings which are produced are ferrous, non-ferrous, aluminium alloy, graded cast iron, ductile iron, steel, etc. for application in automobiles, railways, pumps, compressors & valves, diesel engines, cement, electrical, textile machinery, aero, sanitary pipes & fittings, etc. & castings for special applications. However, grey iron castings are the major share of about 70% of total castings produced. There are approximately 4,500 units out of which 80% can be classified as small scale units and 10% each as medium & large scale units. About 500 units are having international quality accreditation. The large foundries are modern and globally competitive and are working at nearly full capacity. Most foundries use cupolas using LAM Coke. There is growing awareness about environment and many foundries are switching over to induction furnaces and some units are changing over to cokeless cupolas. The Indian foundry industry is trying to focus on higher value added castings to beat the competition. The industry directly employs about 5,00,000 people & indirectly about 1,50,000 people and is labour intensive. The small units are mainly dependant on manual labour. However, the medium and large units are semi/ largely mechanised & some of the large units are world class.

Coimbatore, located in the State of Tamil Nadu, is an important foundry cluster in Southern India. The foundry industry at Coimbatore came up mainly to cater to the needs of the local textile and pumpset industries. There are about 600 foundry units in Coimbatore. The geographical spread of the cluster includes Peelamedu, Ganapathy, SIDCO, Singanallur, Mettupalayam Road and Arasur Village. Most of the foundry units cater to the needs of the domestic market. Small percentages (about 10%) of the foundry units are also exporting castings. Nearly half the number of foundry units is manufacturing castings for the pumpset industry.

Distribution of foundry units at Coimbatore by end-use segments are pumps/valves (46%), food processing industry (7%), textile machinery (6%), electric motors (6%), automotive (4%), others (31%). Cupola is the predominant melting furnace employed by the foundry units. Majority (about 70%) of the cupolas in the cluster are of conventional designs. Electric induction furnaces are used just 10% of the foundry units, mainly to manufacture graded castings and for duplexing operation.

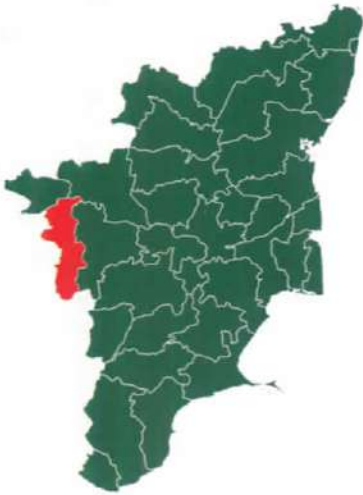
The Coimbatore Industrial Infrastructure Association (COINDIA) consisting of 400 members directly but representing 1,200 units indirectly has developed Common Facility Centres for Pump, Motor and Foundry industrial cluster for updated quality of products and enhance the quantity of production under Government of India's Industrial Infrastructure Upgradation Scheme (IIUS). The common facilities envisaged are:

- Product dye and Mould Centre / Common Modern Tool Room
- Rapid Prototyping Machine
- Relocation of foundries outside the city limits
- Engineering software training enabling SMEs of this region to get their wards trained at a common place

This is one of the best clusters implemented in the country.



FOUNDRY CLUSTER



COIMBATORE DISTRICT

Coimbatore



RICE MILL CLUSTER

In Tamil Nadu agriculture is predominant in Central and Western region providing major employment opportunities in the State. Many districts like Tiruchirapalli, Thanjavur, Coimbatore, Nagapattinam, Thiruvarur, Pudukottai are basically agriculture oriented. Rice and banana are the main crops which are abundantly cultivated in such districts. Being traditionally paddy growing areas, they are looking to the raw material availability and the ready market. Rice being the staple food for the state's population, rice milling became a natural choice for traders keen on investing. Thus the milling activity started in the State almost 50 years ago. In fact, due to the ongoing purchase support from Tamil Nadu Civil Supplies Corporation, the number of milling units increased in Districts like Trichy, Thanjavur, Sivagangai, Cuddalore, Villupuram & Thiruvannamalai during the period 2001-2010. As such, the cluster is a naturally evolved in the regions having proximity of raw material, i.e. paddy which in turn enjoys regular water supply from the Cauvery river flowing in the cluster's proximity.

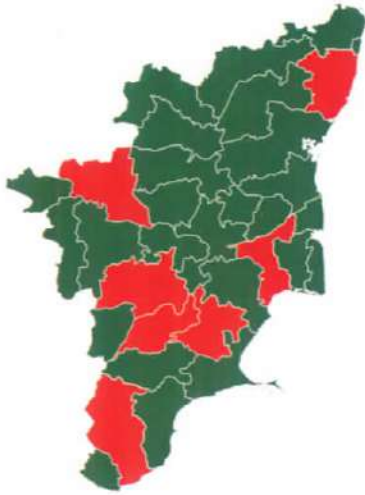
However, the cluster firms have outdated machineries and facilities. The boiling of paddy is generally done in the traditional methods by putting paddy in big vessels and heating the same using firewood. They dry the paddy in open yards with sunlight. In this method, the quality of boiling may not be even in the entire vessel. The drying in open yard is also not possible except in the hot summer. Therefore, the products get spoiled in rainy season. The milling capacity of the local mills is also not commensurate with the demand. Further they do not have the colour sorter, de stoner, paddy cleaner, polisher, super whitener, silky polisher, length grader etc., and hence quality rice can be manufactured only with these modern equipments. The present machineries required for the clusters will be offering mechanised pre-cleaning, boiling and drying facility for the paddy and grading, colour sorting and polishing facility for the rice. The rice manufactured by the cluster members with this kind of quality processes will be out of infection due to insects for a long time. The yield will go up and the quality of the rice will match the standards. The reduction in production loss, increase in productivity, bulk volume of production, quality, etc. will give competitive edge in the market. Some of the important requirements of the cluster for setting up of common facilities are as follows:

- Presently most of the micro enterprises are having hulling type and hence they are not in a position to expand their operation due to financial constraints
- They do not have higher capacity for mechanical drying and in turn the hulling
- To create backward integration and also forward integration
- Encouraging mechanisation of operation also paves the way for establishing value added rice based enterprises in the Central Region of the State
- There is a sizable opportunity for value addition in the second phase like manufacturing of rice bran oil extraction, bio-fertilizer and poultry feed in that region

In the State of Tamil Nadu, Common Facility Centre with solvent extraction oil plant and cooling tower has been envisaged at Keelapavoor in Tirunelveli District in which the machineries are under installation. Similarly, the machineries are under erection towards setting up of colour sorter / silo storage at Alangulam in the same district. In addition to this, the Government of India have approved setting up of CFC with parboiling / colour sorter in Thanjavur District. The SIDCO is the Nodal Agency for all these clusters.



RICE MILL CLUSTER



DINDIGUL DISTRICT

Dindigul

ERODE DISTRICT

Kangayam

KANCHEEPURAM DISTRICT

Kancheepuram

Walajabath

Maduranthagam

MADURAI DISTRICT

Madurai

SIVAGANGAI DISTRICT

Puduvayal

Pallathur

THANJAVUR DISTRICT

Thanjavur

TIRUNELVELI DISTRICT

Alangulam





My Vision is to set Tamil Nadu on a high growth trajectory and to secure for all its people the benefits of rapid economic growth. It is in this context that we have embarked, for the first time in Tamil Nadu, on the preparation of a Vision Document for the State as a strategic plan for achieving overall development. The goals and themes of the vision are determined as clearly perceivable outcomes that will impact the lives of the common citizens in the most direct manner. We are setting for ourselves certain ambitious growth targets to be achieved within the next 10 years.

- Hon'ble Chief Minister of Tamil Nadu



TANSI



