

Investment Climate in Tamil Nadu





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A report by ICRA for IBEF

Executive Summary

'Investment climate' is a broad concept, encompassing all the factors affecting business decisions, including profitability and where to locate plants and other units. A good investment climate provides opportunities and incentives for firms to invest productively and create jobs, thus playing a key role in ensuring sustained growth and poverty reduction.

Factors influencing investment climate include:

- Availability and ease of use of factor inputs such as land and labour:
- Availability of adequate physical and social infrastructure, such as power, telecom, urban
- Infrastructure, water supply, hospitals, and educational institutions:
- Governance and regulatory framework in terms of rules and regulations governing entry, operation, and exit of firms, stability in regulation, integrity of public services, law and order and investment facilitation; and
- Provision of incentives and access to credit.

Tamil Nadu is amongst the well developed states in the country in terms of industrial development. In the post-liberalisation era, it has emerged as a front-runner for attracting a large amount of domestic and foreign investment. The state's literacy rate is one of the highest in India. The robust overall economic development has been significantly aided by industrialisation. The state has always had a strong manufacturing culture, which has been instrumental in attracting investments in the manufacturing sector, in particular automobiles and textiles. The town of Tiruppur (Coimbatore district) is the largest garment exporting cluster in India. The state is home to one of the largest automotive component industries in India. A sizeable number of international auto giants have made Tamil Nadu their manufacturing base. Hyundai and Ford have set up their manufacturing facilities in the state, while BMW and Nissan are in the process of setting up similar facilities.

Electronics manufacturing has also seen significant activity in the recent past in Tamil Nadu with companies like Nokia, Flextronics, Motorola, Foxconn and Dell having chosen Chennai as their South Asian manufacturing hub. The state capital is considered an ideal location for software projects. The town of Sivakasi is a leader in the areas of printing, fireworks and safety matches, and was fondly referred as "Little Japan" by Jawaharlal Nehru while reflecting on its innovative spirit. The state has been successful in spreading economic activity across all regions, which has enabled all-round development.

The state government has implemented a number of policy initiatives to facilitate growth in the manufacturing and services sectors. Infrastructure has also been upgraded to meet the spurt in industrialisation. Tamil Nadu has become the chosen destination for FDI into India, thanks to a number of investor-friendly policy measures such as single window clearance. There is single window facilitation, and in-principle composite approval on a fast-track mode within 30 days is offered. Structured incentives and a package of support for projects with investment exceeding \$70 million in three years on a case-to-case basis is offered by the state government.

Tamil Nadu was one of the first to formulate policies for the ITES and biotech industries. It has one of the lowest power tariffs in the country and is one of the few states to sell electricity to neighbours. The Madras Special Export Processing Zone (MEPZ) is one of the seven EPZs set up by the Indian Government and has contributed to the promotion of exports from Tamil Nadu.

The state has modern ports (with container handling facilities) and airports with direct links to Europe and East Asia. It is the only state that houses three major ports - Chennai Port, Ennore Port and Tuticorin, in addition to 14 minor ports. Chennai Harbour is rated number one in terms of efficiency with turnaround time of less than a day.

The Government of Tamil Nadu constituted a Guidance Bureau in 1992 with the objective of attracting major investment proposals. During 1992-2001, the bureau attracted 48 major investment proposals with an aggregate investment of \$2.2 billion.

Capital	Chennai
Land Area (sq km)	130,058
Number of districts	30
Number of towns (as per 2001 Census)	111
Number of municipalities (as per 2001 Census)	152
Number of inhabited villages (as per 2001 Census)	15,400
People	
Main religions	Hinduism, Islam, Christianity
State Language	Tamil
Population (2001 Census)	62.4 million
Share of urban population	44.04%
State's share in India's population	6.0%
Growth in population between 1991 and 2001	11%
Population density (per sq km)	480
Sex ratio (females per 1000 males)	987
Literacy Rate	73.5 per cent
Birth rate in 2004 (per thousand persons)	17.1
Death rate in 2004 (per thousand persons)	7.5
Infant mortality rate (per thousand live births)	41
Human Development Index	All India ranked three
(Source: UNDP Human Development Repor	rt 2004)

Industry

Key industries having business potential Textiles, automobiles and heavy vehicles, auto components, railway coaches, power pumps, leather tanning industries, cement, paper and safety matches

Economic Overview of the State

Tamil Nadu is the southern-most state of India, which lies in the peninsula between the Bay of Bengal in the East, the Indian Ocean in the South, the Western Ghats and the Arabian Sea on the West. Tamil Nadu adjoins Karnataka, Andhra Pradesh and Kerala in the North and West. Chennai occupies a vantage position for trade and commerce. The following are its locational advantages:-

- A modern harbour with container handling facilities, with an additional port at Ennore to handle dirty cargo like coal and iron ore;
- · Climate that permits port operations throughout the year;
- International airport connecting Europe, USA, Middle East, and the Far East;
- A network of excellent financial institutions and banks;
- · Modern telecommunication facilities;
- Convenient connections to the rest of the country through air, rail and highway network.

With a gross domestic product of \$46.1 billion, Tamil Nadu is a well developed state in terms of industrial development. In the post-liberalisation era, the state has emerged as a front-runner in attracting a large amount of domestic and foreign investments. It is one of the major recipients of FDI, with a 13.53 per cent share.

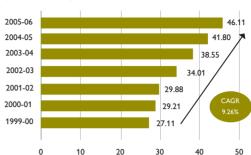
Several multi-nationals such as Ford Motors of USA, Hyundai of Korea, St Gobain of France and Nokia of Finland have established their units in Tamil Nadu. Motorola has announced plans for setting up its \$100 million manufacturing unit in the Sriperumbudur Hi-tech Special Economic Zone (SEZ), being developed jointly by Motorola and the Government of Tamil Nadu. It is a power surplus state and is among the few that sell electricity to other nearby states. It also accounts for more than half of India's wind power generation.

Industrialisation has been aided by estates that the state had built from the early 1960s. The state government is also promoting other industrial parks like Rubber Park, Apparel Parks, Floriculture Park, TICEL Park for Biotechnology, Siruseri TI Park and Agro Export Zones amongst others.

Tamil Nadu's economic performance

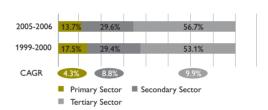
The gross state domestic product (GSDP) stood at \$46.11 billion in 2005-06, with an impressive compound annual growth rate (CAGR) of 9.26 per cent from 1999-00 onwards. This growth has been driven by all three sectors – primary (comprising agriculture and livestock, forestry and logging, fishing, mining and quarrying), secondary (comprising manufacturing, construc-

Tamil Nadu's GSDP (USD billion)



Source: Economic Survey of Tamil Nadu, 2005-06

Percentage distribution of GSDP



Source: Economic Survey of Tamil Naud, 2005-06

tion and electricity, gas and water supply) and tertiary (comprising trade, hotels and restaurants, transport, storage and communication, financial services, real estate and related services, public administration and other services) sectors. The secondary and tertiary sectors in particular have shown significant increase in contribution over the years.

The structural composition of the economy has remained more or less constant over the years, with the services sector forming the mainstay, followed by the secondary sector, namely manufacturing. The share of primary sector to GSDP was 13.7 per cent in 2005-06. Within the four sub-groups of primary sector, agriculture and allied activities was the largest component and registered a CAGR of 7.81 per cent between 1999-00 and 2005-06.

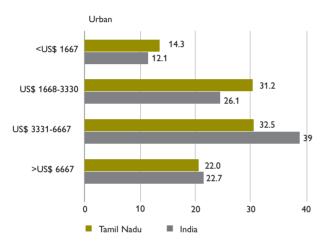
The contribution of secondary sector to overall GSDP was 29.6 per cent during 2005-06. Registered and unregistered manufacturing, the major constituent of secondary sector, grew at a CAGR of 9.3 per cent between 1999-00 and 2005-06.

The services sector had the maximum share of 56.7 per cent in the GSDP during 2005-06. The robust growth between 1999-00 and 2005-06 was driven by trade, hotels and restaurants, transport, storage and communication, financing and insurance and real estates and business services.

People - Economic prosperity

The per capita income in Tamil Nadu is amongst the highest in the country. Having grown from \$421.2 in 2000 to \$664.9 in 2005, it is substantially higher than the all-India per capita income of \$514.2.

Distribution of Household by Income (%)



Source: The Market Skyline of India 2006 by Indicus Analytics

The annual income of households in is also an important indicator of the economic prosperity of people in the state. A comparison of distribution of households by various income categories in Tamil Nadu vis-à-vis all-India shows that the share of households in higher income categories in Tamil Nadu is more or less same, especially in case of urban households.

The maximum number of urban households in the state is in the income category \$3,331-6,667, whereas the maximum number of rural households is in the \$1,668-3,330 category. In the lowest income category of less than \$1,667, only 14.3 per cent of Tamil Nadu's urban households are present, as compared to 12.1 per cent of all India urban households. In rural areas, 33 per cent of Tamil Nadu's households figure in the lowest income category, as compared to 46.2 per cent of all India rural households.

Another factor that points towards the economic well being of the people is the ownership of physical assets like vehicles and consumer electronics. Six per cent of Tamil Nadu's households own a four-wheeler as compared to the all-India figure of four per cent. Similarly 40 per cent of Tamil Nadu's households own a two-wheeler, while only 18 per cent of households own the same on an all-India basis.

Industrial performance in Tamil Nadu

Tamil Nadu is amongst the most industrialised states in India today. It ranks next only to Maharashtra in terms of the contribution of the manufacturing sector to the GSDP. It has attracted a large number of foreign and domestic investors.

The Index of Industrial Production during 2005-06 registered a growth of 8.5 per cent over and above 8.2 per cent in the preceeding year. The manufacturing group with highest weight in the index saw a robust growth of 9.3 per cent over the previous year.

The state has a well dispersed manufacturing base. It also has a fair share of both public and private sector units. Bharat Heavy Electricals Ltd (BHEL), one of India's most successful public sector unit and a leader in electrical equipment manufacturing, has manufacturing facilities at Trichy and Ranipet. The state government owned Tamil Nadu Newsprint and Papers (TNPL) has the world's biggest bagasse based paper mills in Karur. The state is home to the world's sixth largest manufacturer of watches, Titan Industries. Renowned Danish wind power company NEG Micon has established its manufacturing unit in Chennai. Tamil Nadu is a leading producer of cement in India, and is the home for leading cement brands such as Chettinad Cements (Karur), Dalmia Cements (Ariyalur) and Ramco Cements (Madras Cement Ltd). There is an ACC cement factory located in Madukkarai on the outskirts of Coimbatore.

Many heavy engineering and manufacturing-based companies are centred in and around Chennai. The state capital boasts the presence of global vehicle manufacturing giants like Ford, Caterpillar, Hyundai, BMW and Mitsubishi as well as large domestic players like MRF, TI Cycles of India, Ashok Leyland, Royal Enfield, TAFE Tractors and TVS. Recently, Mahindra & Mahindra formed a consortium with global majors Renault and Nissan to set up a \$1 billion greenfield automobile plant at Oragadam in the vicinity of Chennai, with a capacity to manufacture 400,000 units by 2009. This project would give a fillip to the manufacturing sector, especially in the area of automobiles and auto components and help consolidate Chennai's position as the 'Detroit of South Asia'. Karur is known for its bus body building industries where most of the buses used in south India are manufactured.

Electronics manufacturing is a growing industry in Tamil Nadu. Companies like Nokia, Flextronics, Motorola, Sony-Ericsson, Foxconn, Samsung, Cisco and Dell have chosen Chennai as their South Asian manufacturing hub. The products manufactured by these companies include circuit boards and cellular phone handsets. Ericsson also has a R&D facility in Chennai.

A large number of textile mills and engineering industries are present around Coimbatore city and the adjoining cities of Karur, Erode and Tiruppur. Tiruppur, in the vicinity of Coimbatore, has a thriving knitwear export cluster with annual exports of more than \$2 billion. More than 50 per cent of India's total knitwear exports come from Tiruppur. Karur generates around \$300 million a year in foreign exchange through home textile exports.

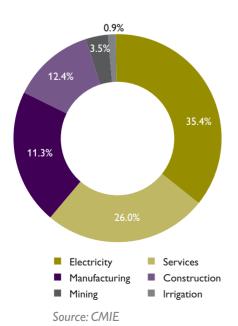
Over 11.2 per cent of the companies listed in S&P CNX 500 have their corporate offices in Tamil Nadu.

The micro and small industries segment plays a vital role in the state's economy in terms of employment generation and share in production. Micro and small industries account for 95 per cent of the industrial units, 40 per cent of the output in the manufacturing sector and 35 per cent of exports. As on March 31, 2007, about 0.5 million of micro and small enterprises were registered in the state. The total investment in these units is more than \$4 billion employing over 3.6 million persons.

Investments in Tamil Nadu

The state is at the forefront in attracting investmens. According to estimates by the Centre for Monitoring Indian Economy (CMIE), total outstanding investments as of quarter ended June 2007 amounted to \$58.3 billion distributed over 998 projects, translating into a robust 40.9 per cent growth over the same quarter in the previous year. Out of these projects, 500 were under implementation stage, while 498 were in the announcement stage.

Breakup of Investments by sector



With 120 projects, the electricity sector attracted the maximum investment of \$20.6 billion during the quarter ended June 2007. The services sector drew the second highest investment of \$15.1 billion, reflecting a 33.1 per cent growth over a year ago. With 418 projects, the sector had the highest number of outstanding projects. The construction sector posted a growth of 223.6 per cent in investment as of the quarter ended June 2007. During June 2007, 22 new construction projects were announced.

The Government of Tamil Nadu has constituted an Industrial Guidance Bureau (IGB) aimed at attracting major investment proposals. During the period 1992—November 2006, the bureau attracted 105 major investment proposals with an aggregate investment of \$4 billion. The IGB has been designated as the "Documentation and Clearance Centre" to accept common application forms for obtaining all pre-project state-level approvals and infrastructure support.

List of major investments in Tamil Nadu

Name of the Project	Products	Investment (In USD million)
Ford Motor India Ltd, USA	Cars	404.8
Hyundai Motor India Ltd, S. Korea	Cars	547.6
Visteon Automotive Systems India Pvt Ltd, USA & Visteon Power Train Control Systems India Ltd, USA	Automotive components and air-conditioners	142.9
Saint Gobain Ltd, France	Float glass	244.0
HM Mitsubishi Ltd	Cars	76.2
Nokia, Finland	Mobile phones and network equipment	214.3
Motorola, USA	Mobile phones	32.1
Samsung, South Korea	Mobile phones and consumer durables	107.1
DELL Computer, USA	Computers	64.3
FOXCONN, Taiwan	Electronic hardware	148.8
Flextronics, USA	Electronic hardware	107.1
World Bank, USA	Back office facility	4.8
Orchid Chemicals and Pharmaceuticals	Drugs	23.8
Matsushita India Ltd, Japan	Air conditioners	14.1
Mando Brake Systems (I) Ltd, S. Korea	Hydraulic brakes	7.1
L & T Cements	Cement (clinker)	29.8
PHC Manufacturing	Auto components	2.6
Pos-Hyundai Ltd, S. Korea	Coil centres	10.7
Valeo India, France	Friction materials	6.4
Reynolds, France	Ball pen components	6.2
Schwing Stetter GmBH, Germany	Construction equipment	4.3
Godrej Stow Storage Solutions Ltd	Storage equipment	10.7
Ruchi Health Foods Pvt Ltd	Edible oil	10.7
Bailey Sales Corporation, USA	Hydraulic cylinders	6.0
ASPOCOMP, Finland	PCBs	142.9
JABIL, USA	Electronic hardware	83.3
Xansa (India) Ltd., UK	Software	55.6
Hwashin	Automotive components	71.9
Asian Paints	Paints	15.7
Asahi Glass	Automotive glass	13.6
BMW, Germany	Cars	42.9
Source:- www.TamilNadunri.com		

Tamil Nadu's contribution to exports

Tamil Nadu has been posting a healthy growth in exports having performed well in key industries. Tamil Nadu's total exports added up to \$1.18 billion in 2004-05. Software exports rose from \$1.4 billion in 2002-03 to \$3.1 billion in 2005-06.

Labour Force in Tamil Nadu

As per Census 2001, of the total population of 62.4 million, the workforce comprised 27.9 million. Of this, more than 85 per cent were main workers. Trends in the sectoral shares in income and employment in Tamil Nadu show that though there has been a decline in the share of the primary sector in income, this has not been accompanied by a proportionate shift in the share of employment. Consequently, a very sizeable section of the labour

force (nearly 50 per cent) continues to depend on the primary sector.

The booming economy is expected to generate a large number of jobs in Tamil Nadu over the next decade. According to the state-level Skill Mapping Study released by the Confederation of Indian Industry (CII) - Tamil Nadu, in 2006, the automotive, IT and IT enabled services, textiles, leather, light engineering, construction and financial services sectors will account for bulk of the employment.

Organised Sector Employment			
Category	2003-04	2004-05	2005-06
Public Sector	1540.3	1512.8	1500.8
Private Sector	741.3	765.9	729.7
Total	2281.6	2278.7	2230.5

Source: Department of Employment and Training, Chennai

Infrastructure in Tamil Nadu

Industrial infrastructure

Tamil Nadu has made significant progress in developing both social and physical infrastructure. There is a significant rise in the levels of education and healthcare. With the state government's thrust on encouraging private sector participation in the process of infrastructure development, there has been a rapid expansion of highways, and capacity enhancement of ports.

Export Processing Zones

The Madras Special Export Processing Zone (MEPZ) is one of the seven EPZs set up by the Government of India. MEPZ was established in 1984 with the objective of promoting FDI, enhancing foreign exchange earnings, and creating greater employment opportunities. It also aimed to reduce transaction costs related to exports. The Union Ministry of Commerce and Industries has introduced special features that include offshore banking units and container freight stations to be set up within the zone, besides liberalised customs procedures.

MEPZ is a multi-product zone housing 101 functional units. Another eight units are under various stages of implementation. Located on National Highway 45, it is six km from the international airport and 24 km from the seaport. For the six-month period ended September 30, 2007, the total export turnover of MEPZ touched \$313.6 million, up from \$234 million in the corresponding period ending September 2006. Garments, software and engineering products contributed more than 50 per cent

of exports. Recent growth in the engineering exports has been driven by automobile ancillaries.

The major upcoming SEZ projects are as follows:

- Ennore SEZ Co Ltd (ESCO) has been formed to implement
 a project near Ennore. About 2,500 acres of land adjoining
 the port has been earmarked for the \$90 million project. The
 target industries identified include auto ancillaries, finished
 leather, electronics, apparel and engineering goods. The project is expected to generate direct and indirect employment
 for about 50,000 persons in seven-eight years.
- TIDCO has received "in-principle" approval from the Government of India for establishing a multi product SEZ over an area of about 1,055 hectares in the Hosur and Denkanikotta taluks of Krishnagiri District. The cost has been estimated at \$110 million and the SEZ is expected to generate employment for about 70,000 persons over a 10 year period in the areas of IT/ITES, pharmaceuticals, apparel, electronics and food processing. A Hi-Tech Industrial Park at Nanguneri in Tirunelveli District is proposed to be implemented at a cost of \$140 million.

The Government of India has so far formally approved 53 SEZs, out of which 12 are in-principle approvals and 18 are notified SEZs in Tamil Nadu.

The following table shows the operational SEZs in Tamil Nadu:

Company	Location	Product	Area (hectares)
Flextronics Technologies (India) Private Limited	Sriperumbudur, Kancheepuram	Electronics Hardware and related services	101.21
Tata Consultancy Services Limited	Siruseri and Egattur, Chennai	IT	28.53
Syntel International Private Limited	Kancheepuram	IT/ITES	11.73
ETL Infrastructure Services Limited	Tambaram Taluk, Kancheepuram,	IT/ITES	10.57
Hexaware Technologies Limited	SIPCOT IT Park, Old Mahabalipuram Road, Siruseri, Chennai,	IT/ITES	11
Shriram Properties and Infrastructure Private Limited	Perungalathur village, Chennai	IT/ITES	10
Coimbatore Hitech Infrastructure Pvt. Ltd.	Kecranatham Village, Coimbatore(N) Taluk, Coimbatore	IT/ITES	34.66
DLF Infocity Developers (Chennai) Ltd.	Manapakkam & Mulivakkam Village,Kancheepuram Distt.	IT/ITES	13.29
State Industries Promotion Corporation of Tamil Nadu	SIPCOT Industrial area Sriperumbudur	Electronics of Telecom hardware and sup- port services including trading and logistic activities	189.77.1
Electronics Corporation of India	Kancheepuram,TN	IT/ITES	152.66.5
Electronics Corporation of India	Vilankurichi, Coimbatore	IT/ITES	11.76
M/S Hacciendaa Infotech & Realtors Pvt. Ltd	Sholinganallur Village, Old Mahabalipuram	IT/ITES	26.615
Cheyyar SEZ	Thiruvannamalai	Foowear	111.33.5
Bannari Technoparks Pvt LTd	Kalapatty Village, Coimbatore Distt.	IT/ITES	24-05.5
Arun Excello Infrastructure Pvt Ltd	Vallncheri and Potheri villages, Chengalpet Taluk, Kancheepuram Distt.	IT/ITES	11.09.0
Zillion Estates Pvt Ltd	Kancheepuram	IT/ITES	18.60.4
Span Venture Pvt Ltd	Kurichi Village, Eachanari, Coimbatore Distt.	IT/ITES	10.49
Suzlon Infrastructure Ltd	Karumatampatti & Kittampalayam Villages, Palladam Taluk, Coimbatore Distt.	Hi-tech engineering sector	104.66.40
Source : www.sezindia.nic.in			

List of Special Economic Zones for which In-principle approvals have been granted in the Board of Approvals after coming into force of SEZ Rules

Name of the developer	Location	Туре	Area (hectares)
Alliance Business Parks Pvt. Ltd	Thoraipakkam	IT/ITES	10.11
RNB Infrastructure Pvt. Ltd	Coimbatore Distt.	Textile	107.24
Sree Samayaa Pvt. Ltd	Taluka Ponneri, Distt., Thiruvallur	Multi-Product	1600
Parsvnath Developers Ltd	Kancheepuram	Multi-Product	1000
Malavalli Power Plant Pvt. Ltd	NA	Multi-Product	263
BioPure HealthCare Pvt. Ltd	Hosur, Krishnagiri Dist.	Pharmaceutical based on Biotechnology	365
Best and Corporation	Krishnagiri Distt.	Textile and Apparel Park	120
TIDCO	Perambalur	Multi-Product	1225
Tamil Nadu Industrial Development Corporation	Thiruvallur Distt.	Electronics & Electrical	120
Tamil Nadu Industrial Development Corporation	Thiruvallur Distt.	Electronics & Electrical	133
Tamil Nadu Industrial Development Corporation	Virudhunagar Distt.	Multi-Product	1049
State Industries Promotion Corporation of Tamil Nadu Ltd (SIPCOT)	Cheyyar SIPCOT Industrial Park, Cheyyar Taluk, Thiruvannamalai Distt.	Automobiles/Automobile parts/auto ancillary and support services including trading and logistics activities	120
Source : www.sezindia.nic.in			

Textile Parks

Two apparel parks have been set up, one at Tiruppur and the other at Irungattukottai near Chennai at a total project cost of \$133 million. This includes the Government of India's assistance of \$6.5 million. The Tiruppur park has commenced production.

The government has decided to establish Hi-Tech Weaving Parks at three places: the Cauvery Hi-Tech Weaving Park, Kumara-palayam, Vaigai Hi-Tech Weaving Park, Andipatti and Palladam Hi-Tech Weaving Park, Palladam.

Educational Infrastructure

About 3.72 million students joined primary schools in 2005-06. The state has a higher teacher-pupil ratio than the norm of 1:40 in higher secondary schools; similarly the student classroom ratio is higher in this category of schools. There is a vast network of institutions for imparting higher education, especially technical education. The state is encouraging private sector participation in the areas of technical and vocational education. Vocational education has been introduced in higher secondary schools dur-

ing the 10th Five Year Plan period. At present, 1,506 schools are imparting vocational education for 148,684 children.

The state government has set itself the objective of raising the gross enrolment ratio in higher education to 25 per cent by 2020 from the present level of 11.73 per cent. The national level of gross enrolment ratio in higher education stands at 9.21 per cent.

Medical and Healthcare Facilities

Chennai is the known as the healthcare capital of India with world-class hospitals and specialty clinics. It is emerging as an important medical hub in South Asia. Some reputed names include the Apollo Hospitals, Vijaya Hospitals, the Sankara Nethralaya Eye Hospital, the Christian Medical College Hospital at Vellore and the affiliated hospitals of Ramchandra Medical College. The Apollo Group, Sankara Nethralaya, Madras Medical Mission and MIOT group also attract overseas patients. Healthcare facilities provided by government hospitals in the state are also good. The government focuses on improvement in the general health, access to healthcare services and effective control and prevention of communicable diseases.

Life expectancy at birth for males was 67 years and for females it was 69.8 years, during the period 2000-06, as against the all-India average of 64.1 years and 65.4 years respectively.

Healthcare facilities installed by the Government in the state as of 2005-06

Modern Medicine	Nos.
Hospitals	315
Dispensaries	213
Other Medical Institutions	29
Primary Health Centres	1417
Health Sub Centres	8683
Indian Medicine	Nos.
Hospitals	4
Dispensaries & Mobile Medical Units	54
Wings attached to Medical College Hospitals, District Head Quarters Hospitals, Taluk & Non Taluk Hospitals	325
Wings attached to Primary Health Centres	426
Homeopathy	Nos.
Hospitals	I
Dispensaries & Mobile Medical Units	5
Wings attached to Medical College Hospitals, District Head Quarters Hospitals, Taluk and Non-Taluk Hospitals	39
Source: State government website	

Infrastructure for savings and borrowings

Infrastructure for collection of savings and disbursal of credit is strong. Banks offer assistance to agriculture and cattle farming as well as for industrial development through governmental programmes. The banking network in Tamil Nadu consists of 4,898 branches with a deposit mobilisation of \$29.9 billion and credit disbursement of \$32.6 billion as on March 31, 2006. During 2005-06, deposit mobilisation and credit disbursement recorded an increase of 22 per cent and 18 per cent respectively over the previous year. The state also has the distinction of having the highest credit—deposit ratio in the country. The credit-deposit ratio was 109.05 per cent in 2005-06 as against 99.84 per cent in the previous year.

The insurance industry also has a strong presence; state-owned, United India Insurance and the private sector Royal Sundram operate out of Chennai. The state has a strong NBFC (non-banking financial companies) segment and is home to two large NBFCs, Sundram Finance and Cholamandalam DBS. It is a strong market for chit funds and Nidhi (Mutual Benefit fund)

companies. Chennai is the financial capital of south India and is a significant player in the financial services space.

Physical Infrastructure

Transport

Roads

Tamil Nadu is served by an extensive road network, providing links between urban centres, agricultural markets and rural habitations. The state is also a terminus for the Golden Quadrilateral project that is scheduled to be completed in 2008. Tamil Nadu has a total road length of 167,000 km, of which 60,628 km are maintained by the State Highways Department. The Transport Department has under its control seven state Transport Undertakings which manage public transport. The state has a road density of 1.59 km per sq km as against the national average of 0.68 km per sq km. To upgrade road infrastructure, the state government is implementing a World Bank funded project at a cost of \$500 million.

Civil Aviation

Chennai international airport, the third largest in India, has a separate domestic terminal. There is an international airport at Tiruchirappalli, and domestic airports at Coimbatore, Tuticorin and Madurai.

Railways

Tamil Nadu has 4,180 km of rail network with a density of 32.2 km per 1,000 sq km. The main rail junctions include Chennai, Coimbatore, Madurai and Tiruchirappalli. Chennai has a well-established Suburban Railway network and is in the process of developing a metro.

Ports

The state has modern ports (with container handling facilities) with direct links to Europe and East Asia. Tamil Nadu has three major ports: Chennai Port, Ennore Port and Tuticorin and 14 minor ports. The volume of cargo grew by 13 per cent in 2005-06 over the previous year. The Sethusamudram Shipping Canal Project is expected to transform the Tuticorin port into a transhipment hub similar to those in Singapore and Colombo. Cuddalore, Colachel, Karaikal, Pamban and Valinokkan are currently capable of handling over 73 million metric tonnes of cargo annually (this translates to 24 per cent share of cargo handled

on an all-India basis). All the minor ports are managed by the Tamil Nadu Maritime Board.

Power

Tamil Nadu's installed generation capacity of 13,276 MW is the second largest in India. It has a comfortable power situation and does not have power outages.

Installed Power Capacity and Generation

- 4 thermal stations generating 2970 MW
- · 4 gas turbine stations generating 424 MW
- 19 MW from wind mills
- 37 hydro stations generating 2184 MW
- I 154 MW from private sector projects
- 2859 MW as Tamil Nadu's share from Central Generating Stations
- 335 MW as external assistance
- 175 MW from captive power plants
- 3535 MW of generating capacity from privately owned wind farms
- 376.6 MW of installed capacity of cogeneration in sugar mills
- 78.35 MW of biomass power project
- 0.165 MW of solar power

The total generating capacity of Tamil Nadu Electricity Board (TNEB) as on February 28, 2007 was 10,098 MW. This comprises 5,565 MW of TNEB's own generating stations, 1,154 MW of private sector power plants, 2,841 MW from central sector generating stations, external assistance of 360 MW and others (including captive power plants) of 178 MW. A total capacity of 3,225 MW is available from wind mills in the private sector and 19 MW of power from the wind mills of TNEB. A total capacity of 314.6 MW is also available from co-generation plants and 77.85 MW from biomass plants. The maximum peak demand reached so far in the state is 8,804 MW.

The union government has allocated \$62 million for setting up four nuclear reactors in the state with an aggregate capacity of 4,000 MW.

Telecommunication

Telecommunications have shown remarkable progress in Tamil Nadu, which offers state-of-the-art infrastructure for high-speed large volume data transfer and video conferencing. The state has a tele density of eight against the national average of 5.1. It also has 100 per cent digital exchange network. Tamil Nadu has the highest rural telephone connectivity in the country with nearly

86 per cent of all its villages covered. Seven service providers in the state make phones available on demand.

Chennai has the largest bandwidth of 13,520 Gbps.VSNL has laid another submarine cable linking Chennai with Singapore with a bandwidth of 5.12 Gbps. Six agencies have already been permitted on a non-exclusive basis to create high bandwidth optic fibre cable networks that will cover all the districts.

The following are the additional features of Tamil Nadu's telecommunication technology:

- Bharti Sing Tel Submarine cable link between Chennai-Singapore with bandwidth of 8.4 terabits per second;
- A second submarine cable with 5.12 terabits per second commissioned by VSNL;
- Value-added services to meet needs of software / BPO companies;
- International Private Leased Circuit (IPLC) Service;
- Internet Leased Line with port speeds from 64K to 155 Mbps (STM-I);
- Managed Data Network Service Frame Relay technology to meet mission critical applications with disaster recovery solution:
- Internet Protocol Virtual Private Network Service (IP-VPN);
- TV uplinking & Videoconferencing systems;
- Long Distance Leased Line (NLD LL) offering point-to-point service with dedicated bandwidth.

Information Technology

The growth of the software industry in Tamil Nadu has been spectacular. More than 1,400 companies employ over 145,000 professionals. The setting up of a government promoted IT Park, the TIDEL Park, along with development of a four-laned highway in the south eastern part of Chennai has catalysed the development of the Information Technology Corridor of Chennai. Tamil Nadu is amongst the first states to have a comprehensive policy for non-exclusive use of the public right of way by organisations in the private/public sector for laying high bandwidth optic fibre cables throughout the state. Software companies (including services and training) are assured of uninterrupted power supply, and exempted from Pollution Control regulations, Factories Act and certain provisions of the Tamil Nadu Shops & Establishment Act.

Companies such as HCL, Wipro, TCS, Satyam, Infosys, Cognizant Technology Solutions, Convergys, Ford Information Technology, Xansa, Verizon, iSoft, iNautix, Electronic Data Systems and Bally

have offices in Chennai. Infosys Technologies has set up India's largest software development centre to house 25,000 professionals at an estimated investment of \$270 million in Chennai. It is also emerging as a preferred destination for Knowledge Process Outsourcing (KPO). The city is a hub for e-publishing, with nearly 50 e-publishing units.

Chennai is the second largest software exporter in India, after Bangalore. India's largest IT Park is housed at Chennai, developed jointly by Ascendas India Ltd, a Singapore-based company engaged in providing business space solutions, and Tamil Nadu Industrial Development Corporation Ltd (TIDCO), an arm of the state government.

Chennai is now emerging as the most preferred destination for high-end BPOs in financial services, healthcare and other back-office services for multinational companies. Companies like Congruent Solutions (back-end services for California-based retirement funds), Secova eServices (HR service provider for US clients), Lason India (data processing for healthcare and financial services clients in the US) and Office Tiger (outsourcing of creative works) have set up centres here. Stanchart, eServe (Citibank), ABN AMRO and World Bank have also chosen the city for their back-office functions.

Software Technology Parks of India, Chennai, has been given financial assistance in the form of interest free loans and grants to set up international data links at Madurai, Tiruchirappalli, Tirunelveli and at NSIC/Guindy/Chennai. This is in addition to the STPI and VSNL facilities already available in Coimbatore. The facilities at NSIC/Chennai, Madurai, Tiruchirappalli and Tirunelveli have become operational.

A pilot project called "Sustainable Access in Rural India (SARI)" is being implemented in Madurai District for providing both telephone and Internet access in every village through the Wireless in Local Loop (WLL) technology developed by the Telecom and Network Group at IIT Madras. This project is sponsored by the MIT Media Lab, Centre for International Development, Harvard University and IIT Madras and is supported by the Government of Tamil Nadu. A similar project has been launched by IIT Madras in association with EID Parry group of companies in 271 villages in Nellikuppam in Cuddalore District.

A 1,000 acre IT Park has been developed by the State Industries Promotion Corporation of Tamil Nadu in Siruseri village, 20 km south of Chennai, for IT companies that plan to build their own campuses. The 1,700-acre Mahindra Industrial Park, a joint venture of TIDCO, IL&FS and the Mahindras, 25 km south of the

Chennai Airport on the national highway, is also being developed to meet the needs of both IT and logistics industries.

The "Tamil Nadu Infotech Fund", a state-specific venture capital fund (jointly promoted by the Tamil Nadu Industrial Development Corporation, IL&FS Venture Corporation and SIDBI), has funded several innovative projects.

Two companies, Dishnet DSL and Bharti Aquanet Ltd (a Bharti Telesonic – SingTel joint venture), have initiated steps to lay submarine optic fibre cables from Singapore to Chennai with a total capacity in excess of 11 terabits per second to ensure the availability of international bandwidth on demand. The Bharti i2i submarine cable is expected to begin its commercial operation shortly.

Urban Infrastructure and Urban Reforms in Tamil Nadu

According to the 2001 Census, Tamil Nadu had the highest level of urbanisation (44.04 per cent) in India. It accounts for six per cent of India's total population and 9.6 per cent of the country's urban population. Tamil Nadu's urban population grew by nearly 31 per cent between 1991 and 2001 to cross 285 million (accounting for nearly 28 per cent of the population), as against the overall state population growth of 11 per cent during the same period. Tamil Nadu has a dispersed urban population and urbanisation is prevalent across the state. Only 56 per cent of the urban population is in larger cities and towns (with more than 100,000) population, as against all-India average of 68 per cent.

Tamil Nadu is considered to be among the leading states in the area of urban reforms. The state has constituted three successive State Finance Commissions (SFC) for improving resources of urban local bodies. It has also conducted two successive elections to urban local bodies on due dates. Apart from this, other key reform initiatives undertaken by Tamil Nadu in the urban sector are:

- Reduction in stamp duty on transfer of property from 15 to nine per cent;
- Implementation of accrual accounting system in all 107 urban local bodies;
- Introduction of modified area based property tax system;
- · Computerisation of land records;
- Repeal of the Land Ceiling Act, while a reformed Rent Control Act is being considered;
- Commitment to levy user charges and improvement in collections for water and sanitation services;
- Creation of TNUDF to provide local bodies access to capital markets in a non-guarantee mode.

Urban Sector - Institutional Framework - State Level

Financial Intermediaries in the Urban sector

TNUIFSL/TNUDF: The state government established the Tamil Nadu Urban Development Fund (TNUDF) on a 'Public-Private Partnership' mode, with the participation of ICICI, Housing Development Finance Corporation (HDFC) and Infrastructure Leasing & Financial Services (IL&FS). The Fund is managed by Tamil Nadu Urban Infrastructure Financial Services Ltd (TNUIFSL). TNUDF provides various services including project advisory, financial advisory and consultancy services to various urban local bodies through its fund manager TNUIFSL.

TUFIDCO: TUFIDCO, a state owned organisation, was incorporated to extend financial assistance to urban infrastructure schemes in Tamil Nadu. The state government has also appointed TUFIDCO as a state level nodal agency for centrally sponsored schemes including Jawaharlal Nehru Urban Renewal Mission (JNNURM) and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)

Innovations and Public Private Partnerships in Tamil Nadu

The government has put emphasis on streamlining the complex regulations related to private investment and on building a strong partnership with the private sector for sustainable infrastructure financing and development. Tamil Nadu is at the forefront of such partnerships with a number of pilots that are the first in India.

Some of the successful projects executed with private sector participation include:

The Alandur sewerage project is the first using a PPP framework (BOT format) to provide underground sewerage to a town of 125,000 people near Chennai. Some 15,000 households out of 17,000 have contributed Rs.5,000 per household representing one third of the project cost. A notable feature is the tariff structure, developed on full user charge recovery with cross subsidies for the poor.

The Tiruppur Water Supply Scheme is the first water sector related project developed under the PPP framework in India. The project will supply water to the fast-growing garment export industry in Tiruppur, domestic consumers in Tiruppur Municipality and surrounding villages, as well as a sewerage system for the Tiruppur Municipality and onsite sanitation facilities for slums. User charges are based on cost recovery with cross subsidies

between industrial and domestic consumers.

The East-Coast Highway Project on road upgrading, operation and maintenance is being financed by the Tamil Nadu Road Development Company (TNRDC), which was set up in 1998 to catalyse private sector investment in the road sector. This project involves a cost of \$10 million. A rehabilitate-improvemaintain-operate-transfer (RIMOT) framework was applied and commercial operations on the road commenced in March 2002. The RIMOT framework requires user charges to recover improvement and maintenance costs only, leading to lower tolls; project returns are capped at 20 per cent and surplus if any, is reinvested in the road sector in Tamil Nadu.

Tamil Nadu Urban Development Fund (TNUDF) for credit enhancement capital market financing of urban infrastructure projects. It has been financed through a World Bank loan, a state government Line of Credit, and equity from banks in 1996. Notable projects covered include Karur Toll Bridge, Madurai Ring Road, and Pooled Financing for smaller towns for water and sanitation, solid waste contracts and storm water drains. TNUDF has structured investments in basic civic amenities on the basis of debt servicing capabilities of Urban Local Bodies (ULBs) and assisted in technical and financial capacity enhancement of ULBs. The few privately contracted projects have so far had a good track record of implementation. TNUDF lends to those ULBs which are receptive to undertaking institutional and financial reforms.

Key Nodal Agencies

The Government of Tamil Nadu has established a single window system to avoid procedural delays and accord all pre-project clearances at the state government level. However there is no supporting legislation for the system.

The following two-tier single window system has been constituted:

Project Approvals Authority (PAA) under the Chairmanship of the Chief Secretary to Government to monitor and hasten projects with investment less than \$20 million.

State level Investment Promotion Board (SIPB) under the Chairmanship of the Chief Minister to monitor and expedite all mega projects exceeding investment of \$20 million.

Both the SIPB and PAA have been set up to accord composite and in-principle clearance to expedite the implementation of projects. The investor is merely required to file an application to a 'guidance' unit that subsequently secures state approvals from various agencies.

The government has constituted the Tamil Nadu Industrial Guidance & Export Promotion Bureau (Guidance Bureau) as the nodal agency for investment promotion with an objective of attracting major investment proposals. The functions of the Bureau include providing comprehensive information to investors, and extending guidance and support to them. The Bureau functions as Single Window Documentation and Clearance Centre for major investment proposals and assists investors in getting all pre-project clearances.

During 2006-07, it handled 19 major investment proposals with a total investment of \$2.2 billion. It provides single window clearances as a fee-based service.

The government has introduced a common application form (CAF) to be filled and filed by investors with the Documentation and Clearance Centre (DCC) in Guidance Bureau. The Bureau receives the CAF and liaises with different agencies to get speedy clearances. It places such applications received from the investors before the SIPB and the PAA.

Other nodal bodies in the state include:

Tamil Nadu Industrial Development Corporation Ltd. (TIDCO)

TIDCO was established as a government of Tamil Nadu Enterprise in 1965 to promote large and medium scale industries. With liberalisation of industrial licensing and controls, TIDCO's focus has now shifted towards promoting infrastructure projects. The TIDEL Park in Chennai and the East Coast Road from Chennai to Pondicherry are examples of this approach. TIDCO has also supported ventures through venture capital funds set up in association with other financial institutions. It is also promoting industrial parks and SEZs. The Mahindra Industrial Park Project (now known as Mahindra World City) was launched in 1997-98 near Chengalpattu. Similarly, the Ennore SEZ Co Ltd (ESCO) has been formed to implement a project near Ennore.

State Industries Promotion Corporation of Tamil Nadu Ltd. (SIPCOT)

SIPCOT was established in 1971, originally as a term loan lending organisation for large and medium industries. However, with changing times, term loan activities of SIPCOT have been transferred to TIIC. SIPCOT is now primarily concentrating on developing, marketing and maintaining industrial complexes/parks

and growth centres and implementing Infrastructure Development Schemes.

Tamil Nadu Industrial Investment Corporation Ltd. (TIIC)

TIIC is one of the oldest financial institutions promoted by the state government. It was incorporated in 1949.TIIC provides financial assistance by way of term loans for purchase of land, plant and machinery and construction of building for setting up of new industrial units as well as for expansion/modernisation/diversification of existing units. It also extends term loans to the service sector.

Policy Framework

Prior to the initiation of economic reforms in 1990, the regulatory maze of licensing and controls inhibited the growth potential of states. The Industrial Policy announced by the government in 1992 provided the broad policy framework for change, ensuring that Tamil Nadu emerged as one of the most important investment destinations by attracting a large number of projects.

Industrial Policy 2003

The state policy aims to facilitate the creation of foreign and local ventures through investor friendly and transparent decision-making processes, harmonious industry relations and attractive incentive packages. The Industrial Policy is aimed at consolidation of the existing industrial base and facilitating new manufacturing capacity. Under policy, the state government aims:

- To target a growth rate of the order of 8 per cent;
- To reorient strategy to facilitate new manufacturing capacitybuilding based on improved competitiveness, and promote FDI;
- Assist the existing industrial base to consolidate its gains and promote its efficient growth in the highly competitive domestic and export markets;
- Engender private public partnerships and create an environment which enables the flow of substantial domestic and foreign capital for infrastructure building.

The New Industrial Policy for 2007 aims to develop quality infrastructure including social infrastructure like skill development centres, housing, business centres, restaurants, financial services, schools and hospitals. According to the new policy, in order to have equitable regional development, proposals for SEZs in industrially backward areas will be given priority.

Textiles Policy 2006-07

The textile policy aims at facilitating and promoting growth of the industry, achieving global standards in product quality, contributing more to exports and encouraging textile clusters.

Its thrust areas include:

- To produce textiles to cater satisfactorily to the quantity, quality and price requirements of both domestic and international markets, keeping in view the industry's potential for employment
- To identify markets, products for each market, inputs required, technology, human and financial resources required to meet the growth in the industry.

IT Policy

Tamil Nadu has shown remarkable progress in the IT sector. In 2005-06, there were 1,437 units registered with the Software Technology Parks of India (STPI). A year later, 162 new companies were registered. All the top 10 IT companies have significant operations in Tamil Nadu. Large IT campuses are being built.

The key focus areas are:

- To establish an e-Governance Training Academy to train officers and staff of all Government Departments;
- To establish IT parks in Coimbatore, Madurai, Trichy, Salem and Tirunelveli;
- To establish a National Centre of Excellence called "Indian Institute of Information Technology, Design and Manufacturing".

The government through ELCOT participates in a number of national and international IT related events in order to promote the state as an investment destination.

ITES policy

The key focus areas of the ITES Policy are:

- · To maximise global ITES investments in Tamil Nadu;
- To develop Human Resources specific to ITES sector;
- To create world class infrastructure for IT and ITES and an enabling framework for protection of intellectual property and data;
- To generate employment and other ITES opportunities in major cities;
- To provide a conducive environment for the sector by reducing regulations and increasing opportunities

Tourism Policy

During 2006-07, Tamil Nadu experienced sustained buoyancy in the hospitality sector. A three pronged strategy of attracting more tourists, making them stay for a longer period and providing them with world class infrastructure is being pursued vigorously by the Tourism Department of Tamil Nadu.

The key focus areas are:

- To participate in International Travel Marts to attract tourists;
- To beautify select tourism destinations;
- To develop Eco-Tourism circuit;
- To promote rural tourism;
- To introduce "Hop on Hop off" tours in Chennai;
- To establish sculptors park for sculptors and artisans in Mamallapuram.

Biotech Policy

Tamil Nadu's forest, agricultural and plant resource base is large and diverse and represents great market opportunity for biotech products. There are over 5,000 species of flowering plants and the forest cover in the state spreads over 22,500 sq km. The state also has one of the largest coastlines, which again presents opportunities for Marine Biotechnology. Tamil Nadu is also well-placed in terms of human resources to exploit opportunities in biotech.

The key focus areas under this policy are:

- To focus on medical / human and animal healthcare, agriculture, environment and industrial products;
- To create Biotechnology Enterprise Zones (Bio-Valleys);
- To regulate facilitation for establishing a Biotech entity for commencing research activity;
- To strengthen the human resources pool;
- To establish emerging technologies fund for biotechnology;
- To establish Tamil Nadu Biotechnology Board.

SEZ Policy 2003

The highlights of the SEZ policy of Tamil Nadu are as follows:

- To provide legislative support to SEZs;
- To provide adequate water supply within SEZs;
- To ensure continuous power supply of required quality to
- To provide single window clearance to all SEZ units.

Incentives offered in Tamil Nadu

The incentives offered by the government for industrial development are comparable to the best in the country. A recent study by the National Council of Applied Economic Research (NCAER) made a comparison of the incentive packages of all Indian states. This study reveals that Tamil Nadu offers the most attractive package among industrialised states. The following are the incentives offered:

- Structured assistance package for investments exceeding \$70 million to be made in a maximum of three years;
- 50 per cent stamp duty concession for projects located in government promoted industrial parks;
- · Effluent treatment plant subsidy;
- 50 per cent stamp duty concession for projects located in government promoted industrial parks;
- Electricity tax exemption up to a maximum of five years.

Certain specific incentives are offered to SEZ developers as well as units.

- 100 per cent income tax exemption for five years and 50
 per cent of income tax exemption for the next five years
 and reinvestment allowance to the extent of 50 per cent of
 ploughed back profits for the next five years;
- Stamp duty exemption on purchase/lease of land;
- Electricity tax exemption on power supplied by Tamil Nadu Electricity Board;
- Dividend distribution tax exemption for developers.

Some of the non fiscal incentives offered by the state include:

- Prompt allotment of land in the industrial parks with supporting infrastructure;
- Single window facilitation to complete pre-project documentation:
- · Assistance in land procurement;
- Power and water supply, access roads and other supporting infrastructure;
- Common Application Form and Single Window facilitation for all regulatory approvals;

Key industries and players in Tamil Nadu

Tamil Nadu has a mix of industries – textiles, leather, agro-based, chemicals and fertilisers, engineering, cement, mineral-based, automobile ancillaries, information technology and tourism.

Textiles Industry

Chennai is known for woven garments and has about 2,400 registered exporters. Tiruppur, known as the knitting city, has about 3,000 exporters and exports about \$1.7 billion worth of T-shirts every year, and has about 25 per cent market share in the European Union in the T-shirts segment.

Tamil Nadu has a large cotton textile industry cluster, which accounts for 39 per cent of India's production capacity. Textiles and garments exports are about \$3 billion a year. Over 59 per cent of the total spinning mills of the country are located in Tamil Nadu. There are 1,734 large, medium and small spinning mills, including 18 cooperative spinning mills, eight National Textile Corporation mills and 26 composite mills. Tamil Nadu is the largest producer of cotton yarn and accounts for 41 per cent of India's production.

Madura Coats Ltd (MCL)

MCL was started in 1974 following the merger of Madura Mills, J & P Coats and A & F Harvey. MCL is a subsidiary of Coats Viyella Plc, UK, and a leader in sewing and embroidery thread with 50 per cent market share in the organised sector. MCL has the unique distinction of being the only professionally managed multinational company in the textile industry. MCL operates through its two divisions - Coats India and Global Thread Supply India.

Leather Industry

Tamil Nadu has 70 per cent of India's leather tanning capacity. It has a dominant presence in the leather and leather-based industries and enjoys a leading position with 40 per cent share in India's exports. It currently employs about 2.5 million persons. The government has set up industrial estates and common effluent treatment plants to provide infrastructure support.

Agro-Based Industries

Tamil Nadu is one of the top three producers of a variety of fruits and vegetables in India that offer substantial potential for value addition. It possesses ideal climatic conditions for a strong agro based food industry, especially for the cultivation of a variety of fruits and vegetables in the Madurai-Dindigul belt. Tamil Nadu is also a leader in agricultural production with a high yield per hectare of sugarcane, rice and groundnut.

Its long coastline offers opportunities for marine products based industry. Exports of marine products add up to about \$50 million. With the area around Coimbatore (identified as an intensive floriculture zone), Dharmapuri and the Nilgiris being earmarked

as ideal locations for the cultivation of flowers such as rose and chrysanthemum, the floriculture industry is likely to get a boost.

Chemicals and fertilisers

The chemical industry is situated mainly in Manali (on the outskirts of Chennai), Cuddalore, Panangudi (Nagapattinam) and Tuticorin. It showed a robust growth of 20 per cent in 2005-06, over the previous year. To increase the availability of bio fertilisers, production of bio fertiliser inoculum pockets is being taken up at production units at Cuddalore, Trichy, Ramanathapuram, Kudumianmalai and Sakkottai, having a combined annual production capacity of 1,400 MT.

Prominent players in the chemicals sector are Orchid Chemicals and Pharmaceuticals and Shasun Chemicals and Drugs.

Orchid Chemicals and Pharmaceuticals Ltd

Orchid was established in 1992 as a 100 per cent Export Oriented Unit (EOU). It employs over 3,000 persons, of which over 600 are scientists, technologists and other professionals. Orchid has two manufacturing sites for APIs [Active Pharmaceutical Ingredients] at Alathur near Chennai and Aurangabad, and three manufacturing sites for dosage forms at Irungattukottai and Alathur, besides two R&D centres at Sholinganallur and Irungattukottai in Tamil Nadu. Orchid has two subsidiaries to undertake drug discovery in the USA, Orchid Research Laboratories Ltd in Chennai and Bexel Pharmaceuticals Inc.

Shasun Chemicals and Drugs (SCDL)

SCDL was incorporated in 1976 and is headquartered in Chennai, with a multi product production facility at Cuddalore. Shasun manufactures APIs, their intermediates and enteric coating excipients with a significant presence in some key generics.

Cement industry

Tamil Nadu, with 12 major plants, is one of the leading cement manufacturers in the country. During 2005-06, cement production added up to 14.3 million tonnes per annum (mtpa). The state reported a cement consumption of 11.1 mtpa with cement and clinker exports of 0.3 mtpa. Prominent players in the cement sector are ACC, Madras Cements, India Cements, Chettinad Cements and Tamil Nadu Cements Corporation.

ACC

ACC is India's largest cement producer with a consolidated capacity of 19.3 mtpa and plants in 15 locations across 12 states. ACC has a plant in Madukkarai in Tamil Nadu with an installed capacity of 0.96 mtpa.

Madras Cements

Madras Cements, the flagship of the Ramco Group, is a major player in South India with an installed capacity of 5.99 mtpa in 2007 and market share of I I per cent. Two of its four facilities are located in Tamil Nadu (R.R. Nagar and Alathiyur).

India Cements (ICL)

ICL, a leading player in South India, has seven plants, out of which three are in Tamil Nadu. The company has an installed capacity of 1.30 mtpa at the Tiruchirappalli plant, and is in the process of converting the wet process grinding unit at Sankaridurg into a dry process one. The third plant is located at Dalavoi Village, Perambalur District, having a capacity of 0.9 million tonnes, based on the dry process technology.

Chettinad Cements Corporation Ltd.

Chettinad Cements, established in 1962, has plants at Puliyur, Karur district and at Karikalli, Dindigul district. The Karur plant has an installed capacity of 0.6 mtpa and the Karikalli plant has an installed capacity of 1.20 mtpa.

Tamil Nadu Cements Corporation Ltd (TANCEM)

TANCEM, a wholly owned Government of Tamil Nadu undertaking, started operations in 1976 after taking over a cement plant at Alangulam and setting up another at Ariyalur in 1979.

Mineral-based industries

The state has a rich mineral base. Mineral products saw growth in net sales of 28 per cent in 2006. Important minerals are lignite, limestone, magnesite, mica, quartz, salt, felspar, iron ore, bauxite and gypsum. The existence of lignite in the Neyveli area led to the establishment of Neyveli Lignite Corporation, which plays an important role in the power sector.

Neyveli Lignite Corporation (NLC)

NLC is the largest lignite mining and lignite-based power generating company in India located at Neyveli, 197 km south

of Chennai. Owned by the Government of India, the company operates thermal power plants, three large mines, a fertiliser factory manufacturing urea, and a briquetting and carbonising plant. NLC also supplies a large quantity of potable water, given the presence of the artesian wells in the lignite mines.

Engineering

Tamil Nadu has a strong engineering base the products that are manufactured range from automobiles, bicycles, castings and forgings, to textile machinery, electrical and non-electrical machinery, pumps and transportation equipment. The units are concentrated in Chennai, Coimbatore and Salem. Tamil Nadu, which exports \$320 million worth of engineering products, has nearly 3,000 units, employing a skilled workforce of more than 250,000.

Prominent players in the engineering sector are Amalgamations Group, BHEL, Caterpillar, CPCL, LMW, Murugappa Group, Saint Gobain, Sanmar and the TVS group.

Amalgamations Group

The Amalgamations Group is one of the largest light engineering conglomerates comprising 37 companies, 27 manufacturing plants and a workforce of over 14,000. The group has a major presence in diesel engines, agricultural tractors, auto components, batteries, cutting tools and paints. Its subsidiaries that have a presence in Tamil Nadu include TAFE, Higginbothams Pvt Ltd, India Pistons Ltd and Amco Batteries Ltd.

Bharat Heavy Electricals Ltd (BHEL)

Established in the late 1950s, BHEL is the largest engineering and manufacturing enterprise in India in the energy-related infrastructure sector. BHEL's principal activities are to manufacture and distribute electrical, electronic, mechanical and nuclear power equipment. BHEL has a wide network of 14 manufacturing divisions, four power sector regional centres, over 100 project sites, eight service centres and 18 regional offices. BHEL's operations are organised around key business sectors like power (including transmission), telecommunications and renewable energy, in addition to its overseas business. One of the manufacturing facilities of BHEL is at Tiruchirappalli, comprising a boiler complex, seamless steel tube plant and boiler auxiliaries plant.

Caterpillar India Pvt. Ltd (CIPL)

Caterpillar Inc. USA is a global manufacturer of construction and mining equipment, diesel and natural gas engines and industrial

gas turbines, with 105 plants spread across 21 countries. CPIL, a wholly owned subsidiary of the US company, manufactures a range of earthmoving equipment comprising dumpers, frontend loaders, backhoe loaders, crawler tractors and hydraulic excavators. The company has its plant at Melnallathur, Thiruvallur district.

Chennai Petroleum Corporation Ltd (CPCL)

CPCL is engaged in the production and marketing of fuel products, lubricants and additives. Its products include propylene, superior kerosene, butylenes, naphtha, paraffin wax and sulphur. CPCL operates refineries at Manali and Cauvery Basin and employs about 1,670 people. CPCL is one of the largest and most integrated refineries in south India.

Lakshmi Machine Works (LMW)

LMW, established in 1962, is a leading textile machinery manufacturer and amongst the top three in the world to produce the entire range of spinning machinery. Today it caters to around 60 per cent of the domestic market and has emerged as a leader in the export of textile machinery. LMW, based in Coimbatore, has diversified into CNC machine tools and is a brand leader in manufacturing customised products.

Murugappa Group

The Murugappa Group, headquartered in Chennai, is a \$2 billion conglomerate with interests in engineering, abrasives, sanitary-ware, fertilisers, finance, bio-products and plantations. It has 29 companies under its umbrella and over 28,000 employees. With 40 units spread across I2 states, the Murugappa Group is one of India's oldest business houses. It has a presence in the UK, the US, Australia, Canada, South Africa, the UAE, Thailand, and China. Some of the group companies having a major presence in Tamil Nadu include Carborundum Universal Ltd, Cholamandalam Investment & Finance Co Ltd, Coromandel Fertilisers Ltd, EID Parry (India) Ltd, Godavari Fertilisers & Chemicals Ltd, Parry Agro Industries Ltd and Tube Investment of India Ltd.

Saint-Gobain Glass India

Saint-Gobain Glass India is a subsidiary of Compagnie de Saint-Gobain, France, and is the second largest producer of laminated and toughened glass. The company started operations in Sriperumbudur, near Chennai, with an initial investment of \$108.4 million in 2000. The plant manufactures float glass for mirrors, architectural, automotive segments and other applications (solar panels, photo framing etc). Glass accounted for the majority (49

per cent) of sales, followed by abrasives (24 per cent), ceramics and plastics (15 per cent) and reinforcements accounting for the rest.

Sanmar Group

The Sanmar Group, with its corporate headquarters at Chennai, is a leading player in chloro-chemicals, speciality chemicals, engineering and life insurance. The group also has a presence in shipping and software. It entered into its first international joint venture back in the 1960s when it started Chemicals and Plastics India Ltd to manufacture PVC resins in a joint venture with B F Goodrich of the USA. The group has a presence in some 25 businesses, with 25 manufacturing units spread over 10 locations in India.

TV Sundram Iyengar (TVS) Group

The TVS Group, established in 1911 is India's leading supplier of automotive components and one of the country's leading business conglomerates. Originating as a transport company in 1911, the group now comprises over 29 companies that operate in diverse fields like automotive component manufacturing, automotive dealerships and electronics. It has a turnover of over \$1 billion and is the largest manufacturer of automotive components in the country with a workforce of over 5,000.TVS Motors, Brakes India, Lucas TVS Ltd, Sundram Fasteners and Wheels India are some of the major subsidiaries of the group that have a presence in Tamil Nadu. It produces auto-electricals, diesel fuel injection systems, braking systems, automotive wheels, axle fasteners, powder metal components, radiator caps, two wheelers and computer peripherals. The subsidiaries, TVS Motors, Sundram-Clayton Ltd (Brakes Division) and Sundram Brake Linings Ltd have bagged the prestigious Deming Award for manufacturing excellence.

Banking and Financial Services

Chennai is the financial hub of South India and has a strong presence of major Indian financial institutions and foreign banks. Several banks have their back offices in Chennai. Prominent players in the banking and financial services sector are ABN Amro, Scope International and World Bank.

ABN AMRO

ABN AMRO bank set up its BPO division, the Global Support Centre (GSC), in Chennai in 2002. It provides operations and IT processing services to business units of ABN AMRO globally. The

Dutch-based bank's BPO operations have been able to achieve growth in cash lockbox (700 clients) and international netting (10 clients). The centre provides both banking and non-banking functions.

Scope International

Scope International, Chennai, is a wholly owned subsidiary of Standard Chartered Bank, UK operating its shared services centre. Scope has adopted the Six Sigma quality methodology to create a highly effective metrics driven performance culture and has grown to over 3,000 employees servicing 30 countries in the Standard Chartered Group in a short span of one year.

World Bank

The World Bank commenced its BPO operations in Chennai in 2001 with an initial workforce of 80. The size of the commercial bonds portfolio is estimated at \$100 billion.

Automobile and automobile ancillaries

Chennai is fast emerging as a major export hub for automobiles in South Asia. Major automobile manufacturers like Ford, Hyundai, HM-Mitsubishi, Ashok Leyland, TAFE and TVS Motors have their manufacturing base in Tamil Nadu. The success of the auto industry can be attributed to skilled manpower coupled with the state's strong engineering industry. Adding to this, the ports at Chennai and Tuticorin help facilitate the export and import of materials for the industry.

Tamil Nadu has a 30 per cent share each in the Indian automotive and auto components industries, 17 per cent in the trucks segment and 20 per cent each in passenger cars and two wheelers

Its current annual output in the automotive sector is estimated to be \$3-3.5 billion and the contribution of the sector to the GSDP is 7-8 per cent. It is one of the leading manufacturers of high quality electrical, braking / suspension parts and engine parts. These products also enjoy a reputation of quality and reliability amongst global OEMs. The state targets to achieve an output of \$18 billion in the sector.

Prominent players in the automobile and auto ancillaries sectors are Ford, Hyundai, Mitsubishi, Visteon, Sundram Fasteners, Rane TRW, Ashok Leyland, and PRICOL.

Ford Motor Company India

Established in 1995 with an investment of \$351.1 million under the single window policy, Ford Motor India is a wholly owned subsidiary of Ford Motor Company, a global automotive industry leader. The company is currently manufacturing three models in India and is one of the key players in the automotive industry. Ford's plant is located in Maraimalai Nagar near Chennai and has the capacity to produce 100,000 vehicles per annum.

Hyundai Motor India Ltd (HMIL)

HMIL, a subsidiary of Hyundai Motor Company, South Korea, was established in 1997 at Irrungattukottai near Chennai at an initial investment of \$614 million. The plant in Chennai stands on a plot of over 500 acres and has been built with an initial investment of more than \$500 million. Hyundai markets over 18 variants of passenger cars across four models. The company emerged as the second largest exporter of passenger cars from the country. Hyundai is ISO 14001 certified and recorded sales of over 500,000 units in a period of five years. HMIL is setting up its second plant, which will produce an additional 300,000 units per annum, raising its total production capacity to 600,000 units per annum.

Mitsubishi Motors

Mitsubishi Motors joined hands with Hindustan Motors to set up a state-of-the-art manufacturing unit at Tiruvallur near Chennai at a cost of \$71 million. The main functional areas of the facility are the body (weld) shop, paint shop, assembly shop and quality line.

Visteon

Visteon is a global enterprise with nearly a century of automotive engineering and design expertise and more than 80 years of experience in accomplished integrated systems. Visteon started its operations with two projects on a 50-acre facility at Maraimalai Nagar, near Chennai in 1999 under the single window policy. Visteon's customer base includes most of the global vehicle manufacturers. The company has over 170 technical, manufacturing, sales and service facilities in 26 countries. Visteon's sales revenue was \$11.4 billion in 2006.

Sundram Fasteners

Sundram Fasteners Ltd is part of the TVS Group, headquartered in Chennai. With a diversified product line and facilities in five countries, the company has become a supplier for leading

customers in the automotive and industrial segments worldwide. Sundram Fasteners is the first Indian company to get ISO 9000 certification. Today all divisions of the company are ISO/TS 16949 and ISO 14001 certified. It is also the first Indian component manufacturing company to have won the prestigious TPM Excellence and Consistency Award from the Japan Institute of Plant Maintenance.

Rane TRW Steering Systems

Rane TRW is part of the Rane Group with manufacturing facility at Alwarpet. The company was set up in 1987 to manufacture steering systems and started manufacture of seat belts in 1995. Both divisions have joint venture partnership with TRW automotive JV LLC, USA. The company won the Deming Prize in 2005.

Ashok Leyland

Ashok Leyland, a part of the Hinduja group, was established in 1948 for manufacturing commercial vehicles. With an annual turnover exceeding \$1 billion, it is India's largest exporter of medium and heavy duty trucks. The company became the first in India's automobile history to win the ISO 9002 certification in 1993. Ashok Leyland recently announced the takeover of the Avia Truck Business Unit in the Czech Republic. Its plant in Tamil Nadu is located at Gummidipoondi.

Premier Instruments & Controls Ltd (PRICOL)

PRICOL was established in 1974 at Coimbatore and commenced manufacturing operations in 1975 in the precision engineering field of automotive instruments. It is a leader with 53 per cent share in the automotive instruments market. It exports to the US, Canada, Mexico, South America, Europe, the Middle East, Asia, Australia and New Zealand.

Information Technology

Tamil Nadu has emerged as a centre for investments in IT services and ITES as it possesses key resources of skilled and educated manpower, high standard of educational institutions, good infrastructure and an effective cost of operation. The ITES sector holds immense scope as it provides employment to technical and non-technical graduates.

Software exports from Tamil Nadu grew to \$3.1 billion in 2006. Exports include application software and system software, which has the highest share with around 70 per cent, ITES and BPO, communication software, VLSI Design and web solutions, IT consultancy and product development. So far, 1,437 software companies have established their facilities in the state.

The ITES market globally is expected to grow to \$142 billion. As per the Nasscom-McKinsey report, the Indian ITES industry can attain export revenues of \$21-24 billion by 2008. Tamil Nadu will strive to achieve 20 per cent share of this market by promotion of Chennai as well as other Tier-II cities and Tier-III cities as preferred ITES destinations.

Prominent players in the IT sector are Cognizant Technology Solutions, Computer Associates, Xansa and Polaris.

Cognizant Technology Solutions India Pvt Ltd (CTS)

CTS, founded in 1994 in Chennai, is a leading provider of information technology, consulting and business process outsourcing services. CTS employs over 40,000 people and has global delivery centres in Asia, Europe and North America. CTS offers services such as IT Consulting and Technology Services and Outsourcing services. The company holds SEI CMM Level 5, ISO 9001, P-CMM Level 5 certification for its performance and quality.

Computer Associates (CA)

CA is one of the leading providers of IT management solutions and services. In India, CA is involved in providing software products and services with six offices in all the major cities since its inception in 1997. CA set up its Global Technical Support Centre at Chennai in 2000, which is involved in providing technical support to its global clientele. The centre has over 200 professionals.

Xansa

Xansa is a UK based outsourcing and technology company with over 8,000 people in the UK and India. Xansa's services include business and technology consulting, IT implementation, IT outsourcing and BPO. The Chennai campus spread over 27 acres, has the potential to house up to 6,000 employees. The company made an initial investment of over \$47 million under the single window policy.

Polaris

Polaris is one of India's leading solutions and service provider with a focus on Banking, Financial Services and Insurance sectors and headquartered in Chennai. It is amongst the fastest growing Indian IT companies. It is also world's first CMMi (Capability Maturity Model Integrated) Level 5 Certified Company.

Tourism industry

The tourism sector has great potential to create employment. Tamil Nadu is known for various attractions and attracts a large number of tourists. Health tourism has opened up new vistas as there are numerous high-end medical care facilities available in the state, which are cost-competitive. Tamil Nadu is being promoted as an "enchanting" destination for holidaying in southern India through massive publicity and marketing and provision of infrastructural facilities and basic amenities at potential tourist spots. Private sector participation is being encouraged in the development of tourism.

Some of the major initiatives taken by the government to boost Tourism in Tamil Nadu include:

- Tourism has been declared as an industry;
- To encourage private investment, the Department of Tourism co-ordinates with different departments for early clearance of projects and prepares plans to improve infrastructure facilities in tourist centres obtaining central assistance, and securing the active participation of the local public by providing better economic avenues;
- The Tamil Nadu Tourism Development Corporation is providing travel circuit plan to tourists.

Upcoming Investments in Tamil Nadu

- J P Morgan Property Fund, which has mobilised over \$300 million to focus on Indian real estate, is planning to set up a residential project in Chennai, at an estimated cost of \$100 million.
- Ras Al Khaimah (RAK), the fourth largest of the seven emirates forming the United Arab Emirates (UAE), has identified Tamil Nadu for its mega investments and is expected to invest \$ 4.8 billion in developing infrastructure and feeder townships. The Ras Al Khaimah Investment Authority (RAKIA), a semi-governmental agency set up by the government of RAK, has identified two projects, one each at Coimbatore and Kadalur in Kancheepuram district, where it will invest about \$5 billion in residential township projects.

Flextronics, a \$16-billion global Electronics Manufacturing
Services (EMS) provider, has built a manufacturing facility in
the outskirts of Chennai. In the first five years, the company
is planning to invest about \$70 to 100 million in the plant in
Sriperumbudur. This facility will be classified as a SEZ and will
offer services such as plastic injection moulding, circuit-board
assembly, distribution, logistics and repair.

Doing Business in Tamil Nadu

At present, investors setting up industrial projects have to obtain the following pre-project clearances:

Local Body Clearance

- · Site and Building Plan approval
- Health clearance
- · Fire service clearance
- Environmental clearance from Tamil Nadu Pollution Control

 Board
- Registration with Inspector of Factories under Factories Act
- Registration under Boilers Act (if boilers used)
- · Safety Certificate from Chief Electrical Inspector

What the State Government offers

Application for Water supply

Application for Power supply

- Structured Incentives package of support for projects with investment exceeding \$70 million in three years on a caseto-case basis
- Special package of support for units in Special Economic Zones under SEZ Act and Policy
- Single Window Facilitation and In-principle composite approval on a fast track mode within 30 days

Infrastructure Support

• Application for Land allotment in Industrial parks

Concerned Agencies and Time estimates for starting Business in Tamil Nadu

List of Approvals and Clearances required	Departments to be consulted	Estimated time taken(days)
Incorporation of the company	Registrar of companies	SINGLE WINDOW CLEARANCE
Allotment of Land	State Department of Industries/State Industrial Development Corporation	GUIDANCE (state's single window clearance facility) clears investment proposals in 30 days on an average. The single
Permission for land Use	State DI, Department of Town and Country Planning	window obtains all approvals necessary for the investment proposal within the aforementioned time
Site environmental approvals	State Pollution Control Board and Ministry of Environment and Forests	proposal walling the distributioned time
No Objection Certificate and consent under water and pollution control Acts	State Pollution Control Board	
Approval of construction activity and building plan	Town and Country planning authority	
Sanction of Power	State Electricity Board	
Registration under states sales tax act and central and state excise act	Sales tax department, Central and state excise departments	

Cost of doing business in Tamil Nadu

Cost of land *	US\$ 8 per square metre	
Hotel costs**	US\$ 50 to US\$ 150 per room night	
Cost of Office space***	US\$ 0.6-1.2 per square foot per month	
Cost of Residential space***	US\$ 225 to US\$ 550 per month for a 2,000 square feet house (Rates depend on the type of structure and location)	
Power cost****	Commercial & Industrial use: 10 cents per kWh	
Cost of Water****	Commercial & Industrial: 30 cents per 1000 litres	

^{*}Source: Average cost of land at various Industrial Parks in Tamil Nadu

Costs taken as on October 1, 2007

^{**}Source: Leading hotels in the State

^{***}Source: Discussions with property dealers

^{****}Source:Tamil Nadu State Electricity Board

^{*****}Source:Tamil Nadu Water Authority

Contact for information

Information pertaining to investment opportunities or setting up a new business unit in Tamil Nadu can be obtained from:

State Government Website www.tn.gov.in

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Appendix

Exchanges rates used

Year	One USD is equivalent to Rs.
2000	46.6
2001	48.3
2002	48.04
2003	45.6
2004	43.7
2005	45.2
2006	45
2007	42

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