

## 9. TRANSPORT AND COMMUNICATION

The concomitant developments arising in the twin sectors viz. transport and communication have their influences in all sectors of the economy. These two sectors connect production centres with processing and marketing centres and rural with urban roads. Hence, infrastructure in the form of an efficient transport and communication system is a pre-requisite for rapid growth of other sectors and of the economy.

### Road Infrastructure:

The road network is a basic mode of connectivity linking agriculture and industrial sectors, railways, sea ports and airports. The road index such as total road length, percentage of surfaced roads, density of road for geographical area, availability of road per lakh population etc. determine and indicate the efficiency of road system. Since the development of the economy is an imperative, provision of road infrastructure receives priority at the State and national levels.

The State is fairly well placed in terms of availability of road infrastructure. During 2005-06 the availability of all length of roads in the State is 194140 kms. In the total length of roads, Panchayat Union and Village Panchayat roads at 95328 kms. accounts for 49.10 per cent followed by 61421 kms. of roads maintained by highways department (31.64 per cent). Of the total length of roads maintained by highways department, National Highways constitute 6.93 per cent, State Highways 11.15 per cent, MDR 12.32 per cent and ODR 69.60 per cent.

**Table - 1 : Length of Roads - Tamil Nadu** (Kms.)

Type of Road	2004-05	2005-06	% Share to total
National Highways	3850	4254	2.19
State Highways	7230	6849	3.53
Major District Roads	7383	7569	3.90
Other District Roads*	42910	42749	22.02
Panchayat Union and Village Panchayat Roads	92147	95328	49.10
Others (P)	37391	37391	19.26
Total	190911	194140	100.00

Note: \* Includes Sugarcane Roads & P - Provisional.

Source: Concerned Departments.

It is observed that the proportion of surfaced road which accounted for 64.50 per cent in 1950-51 gradually increased to 66.25 per cent in 1970-71 and 78.53 per cent in 1990-91 but slipped down to 75.05 per cent in 2000-01.

**Table - 2 : Surface-wise Length of Roads in Tamil Nadu**

(Kms.)

Year	Surfaced roads		Unsurfaced roads		Total length of roads
	Length	% to total	Length	% to total	
1950-51	28291	64.50	15569	35.50	43860
1970-71	45345	66.25	23101	33.75	68446
1990-91	134135	78.53	36666	21.47	170801
2000-01	131882	75.05	43848	24.95	175730

Source: Department of Economics and Statistics, Chennai - 6.

## Lane-wise Length of Government Roads:

**Table - 3 : Lane-wise Length of Roads 2005-06 - Tamil Nadu (kms.)**

Widening, strengthening and maintenance of road infrastructure at regular intervals is necessary for speedy, timely and smooth movement of vehicles and to avoid congestions during peak hours. Construction of double line / multilane roads will help to ease out the traffic intensity arising out of the

Type of Road	Single Lane	Interm- -ediate Lane	Double Lane	Multi Lane	Total
National Highways	24	-	3909	321	4254
State Highways	1328	1238	3989	294	6849
Major District Roads	3989	1354	2103	123	7569
Other District Roads	40141	1634	917	57	42749
Total	45482 (74.05)	4226 (6.88)	10918 (17.78)	795 (1.29)	61421 (100.00)
<p><i>Note: Figures in bracket indicate percentage to total.</i>  <i>Source: Highways Department, Chennai - 5.</i></p>					

ever increasing number of motor vehicles. Lane-wise details of roads maintained by the Highways Department are furnished in Table -3.

A perusal of the figures given above indicate the following:

In the State, during 2005-06, out of 61421 kms. of length of roads maintained by Highways Department, a major portion of 45482 kms. are single lane constituting 74.05 per cent followed by double lane (17.78%), intermediate lane (6.88%) and multilane (1.29%).

- i. Out of 4254 kms. of National Highways, double lane accounts for 91.89 per cent and multilane for 7.55 per cent.
- ii. In the 6849 kms. of State Highways, the share of double lane is 58.24 per cent followed by 18.08 per cent of intermediate lane.
- iii. Among Major District Roads, single lane roads accounts for 52.70 per cent followed by double lane of 27.78 per cent.
- iv. Single lane road accounts for 93.90 per cent in Other District Roads and multi lane is at negligible level of 0.13 per cent only.

The objectives of Road Sector Development can be best expressed as under:

### **Box - 1 : Strategic Directions in the Road Sector - Tamil Nadu**

The Strategic Direction of the Highways Department is to develop the road network in the State for the sustainable economic development and for improving the living standards of the people by making use of appropriate technology and resources available within and outside the department.

#### **Goals and Objectives towards Strategic Directions**

The following goals and objectives are set out on the basis of Strategic Directions:

- To properly maintain and protect the road network.
- To construct safe road network for the benefit of road users and efficient movement of traffic.
- To enhance the capacity to cater to the present and future traffic.
- To provide connectivity to rural areas especially bus route roads.
- To provide services and facilities for road users to travel in comfort and with convenience.
- To protect and enhance the environment by improving landscaping and taking up avenue plantations.

*Source: Policy Note on Roads, Bridges and Shipping, 2005-06.*

## **Review of Road Infrastructure in the State:**

### **IT Expressway:**

The widening and improvement of road from Madhya Kailash in Chennai Adayar to Siruseri in Old Mahabalipuram Road for a length of 20.10 kms. along with two kms. East Coast Road is being undertaken in public-private participation. This road is designed with world class standards with six lane, two non-motorised lane and two service lane. It has been decided to mobilise the required funds for this scheme by the Tamil Nadu Road Development Company itself and to collect toll for a specified period. The Government has sanctioned Rs.43 crores for meeting initial land acquisition cost. The work is under progress.

### **National Highways:**

The total length of National Highways in the State increased to 4254 kms. in 2005-06 from 3850 kms. in 2004-05. Out of 4254 kms, 2993 kms. length of roads have been entrusted to the National Highway Authority of India (NHAI) for strengthening and improvement. The balance is improved, maintained and renewed by the State Government regularly by making use of funds allotted by the Government of India. Despite an unprecedented development of NH roads in the State, large sections of it still suffer from encroachments, lack of by-pass to avoid urban areas and there are no many expressways in the National Highways that fall in Tamil Nadu except Ennore Express way and IT Express way which is in progress.

## **Progress of Roads and Bridges under Comprehensive Road Infrastructure Development Programme:**

### **a. State Highways:**

Out of 1420 kms. length of SH roads and one bridge work taken up during 2004-05, a length of 455.53 kms of road has been improved along with the completion of one bridgework at the cost of Rs.238.28 crores during 2005-06.

### **b. Major District Roads:**

During 2005-06, a total length of 520.82 kms of roads has been improved at the cost of Rs.222.77 crores out of 1670 kms. taken up in 2004-05. It is also proposed to make all the single lane stretches as two lane or intermediate lane in a phased manner as per the need of road and traffic intensity.

### **c. Other District Roads:**

Out of 3597 kms. length of ODR and 86 bridges and culverts taken up during 2004-05, 2260 kms of roads with 30 bridges and culverts were improved at the cost of Rs.268.81 crores during 2005-06.

Under **Chennai Metropolitan Development Plan (CMDP)**, for the period of 2003-06, 184 works at the cost of Rs.602.67 crores have been taken up for traffic and transport improvement in Chennai city. Only 49 works at the cost of Rs.20.40 crores have been completed as on 2005-06.

In the **Part II scheme**, 16 bridge works have been completed during 2005-06 out of 52 bridge works.

Under **improvements to panchayat and panchayat union roads**, a length of 971 kms. of road at a cost of Rs.45 crores were improved in the State during 2005-06..

#### **Natural Calamity of Relief Works:**

In the **National Calamity of Relief** works, the road works to the value of Rs.29.55 crores were completed under Tsunami Relief Works in the State during 2005-06. Under Flood Relief Works, an amount of Rs.211.55 crores have been spent during the review year for restoring the flood affected roads in the State.

#### **Periodical Maintenance of Road Works:**

**Periodical maintenance** of existing roads of SHs, MDRs and ODRs were carried out at the cost of Rs.455.10 crores in the review year.

#### **Centrally Assisted Schemes:**

##### **a.NHDP (Phase I): Golden Quadrilateral Programme:**

The NHDP is a major initiative to provide state-of-art road network. The project envisages work on GQP, NSC and Port Connectivity. As on March, 2006, roads to a total length of 285 kms. were converted into four lane roads out of 341 kms. of roads taken up in NH 4, 5, 7 and 44 for upgradation at a cost of Rs.1159.67 crores.

##### **b. NHDP (Phase II) North South Corridor Programme, Port Connectivity Scheme and NHDP (Phase III):**

**Under NHDP (Phase II) North - South Corridor Programme** 34.40 kms. of roads have been widened out of 756.20 kms. at the cost of Rs.3654.74 crores. In the **Port connectivity Scheme**, road works of 47 kms. between Palayamkottai and Thoothukudi in NH 7A, at the cost of Rs.1373.79 crores have been widened and expected to be completed by March 2007.

**Under NHDP (Phase III)**, four laning of 1495 km length of NH is proposed to be undertaken by the National Highways Authority of India through build, operate and transfer (BOT). Most of the works are entrusted to private sector. The reallocation of these to the contractors shows that the private sectors are not much enthusiastic due to issues relating to acquisition of land, collection of tolls, long pay back period etc.

#### **Box-2**

##### **Roads Declared as National Highways : 2006-07 - Tamil Nadu**

Recently GOI has declared 270 kms of State Highways roads in the State as National Highways comprising of 126 kms. in NH 226 between Thanjavur and Manamadurai and another 144 kms. in NH 227 between Tiruchirappalli and Chidambaram.

*Source: Policy Note on Roads, Bridges and Shipping - 2006-07.*

## Rural Roads Network:

The key to rural development lies in rural road connectivity and the outcomes often have a profound impact on the economy. Hence provision of rural roads is being done by a number of specific schemes

## Pradhan Mantri Gram Sadak Yojana:

In 2000, the GOI launched a National Programme called 'Pradhan Mantri Gram Sadak Yojana' for providing all weather roads to the remaining unconnected villages with more than 1000 people by 2003 and those with more than 500 by 2007 and upgrading about 1.1 million kms. of rural roads at a cost of Rs.1.1 trillion.

In Tamil Nadu, under Phase IV of this programme, provision of 820 kms of rural roads at the cost of Rs.117 crores was taken up to give connectivity to villages. The work which is being implemented through the Tamil Nadu Road Infrastructure Development Corporation is under progress. Under Phase V of this programme, the GOI have approved the proposals for providing 849.13 kms. length of rural roads at a cost of Rs.174.32 crores.

## Bharat Nirman:

As part of Bharat Nirman project unveiled by the Government of India on 25th February 2005, it is proposed to improve 4122 kms length of roads in the State during 2006-07 at a cost of Rs.537 crores.

**Table - 4 : NABARD Assisted Schemes - Tamil Nadu**

Scheme	Objective	Progress
1. Improvement to MDR and ODR	Improving and strengthening of MDR and ODR Roads	As on 2005-06, 1241.31 kms. of road works and 17 bridge works are in progress.
2. Rural Road Scheme	Panchayat Union Roads connecting villages having population between 500-1000	As on March 2006, 3914 kms. of road works and 46 bridge works were completed which benefits 1689 villages at the cost of Rs.418.67 crores.
3. Scheduled Caste Sub-Plan	Providing road connectivity to hamlets where 50 per cent of population belong to Adi-dravidar community.	As on March 2006, 1347 kms. of road length with 25 bridges were completed which provides connectivity to 621 villages at the cost of Rs.139.70 crores.
4. Bus Route Improvement Scheme	Conversion of Panchayat Union BT roads as per ODR standard where buses are plying for more than three years.	As on March 2006, 2705 kms. of roads were improved with construction of 45 bridges at a total cost of Rs.241.74 crores.
5. Sugarcane Roads	Improvement in Sugarcane Roads	By the end of March, 2 bridges and 103 road works have been improved out of 7 bridges and 139 road works taken for improvement during 2005-06.

*Source: Policy Note on Roads, Bridges and Shipping 2006-07.*

## HUDCO Assisted Schemes:

- Out of 59 bridge works taken up with the assistance of HUDCO at a cost of Rs.60 crores, 42 bridges have been completed as on March 2006 and works relating to 17 bridges are in progress.

- Under Madurai Radial Roads (Phase I) financial assistance to the tune of Rs.112 crores was sanctioned for improving radial roads connecting Madurai City. Under this scheme, 12 road works covering a road length of 121.80 kms. and one High Level Bridge were completed upto March 2006.

**Table - 5 : Externally Aided Schemes**

Scheme	Objective	Progress
1. Tsunami Relief Works with loan assistance from World Bank	Construction of bridge connecting Keelmanakudi with Melmanakudi in Kanyakumari district at a cost of Rs.9 crores from World Bank assistance.	Preparation of project report is in progress.
2. Tsunami Emergency Assistance Project by Asian Development Bank	Five major bridge works in the Tsunami affected coastal districts of Tiruvallur, Cuddalore and Nagapattinam with loan assistance of Rs.42.70 crores from ADB.	Preparation of project report is in progress.
3. Tamil Nadu Road Sector Project	Strengthening and Maintenance of 742 kms of core net work of roads and periodical maintenance of 2000 kms. of SHs, MDRs, ODRs and road safety works at a total cost of Rs.2160 crores comprising Rs.1670 crores of World Bank loan assistance and Rs.490 crores of State Government contribution.	The scheme is being implemented in the State from 2003-04 onwards.

*Source: Policy Note on Roads, Bridges and Shipping 2006-07.*

### Investment in Transport Sector:

As on April 2006, the investment in the transport sector shows that in all 239 projects had attracted Rs.22973 crores, of which, road transport had the highest share of Rs.11400 crores with 200 projects followed by railways with 18 projects at a cost of Rs.7555 crores and shipping with 16 projects to the value of Rs.3872 crores. Sector-wise details of projects announced, proposed and under implementation are furnished below.

**Table – 6 : Distribution of Investment in Transport Sector - Tamil Nadu  
(As on April 2006)**

	Announcement		Proposed		Under Implementation		Total	
	No.	Rs. Crores	No.	Rs. Crores	No.	Rs. Crores	No.	Rs. Crores
Road Transport	118	4538	31	2238	51	4624	200	11400 (49.6)
Railway Transport	3	5159	4	321	11	2075	18	7555 (32.9)
Air Transport	2	35	1	35	2	76	5	146 (0.6)
Shipping	13	1444	2	1	1	2427	16	3872 (16.9)
<b>Total</b>	<b>136</b>	<b>11176</b>	<b>38</b>	<b>2595</b>	<b>65</b>	<b>9202</b>	<b>239</b>	<b>22973 (100.0)</b>

*Note: Figures in bracket indicate percentage to total.*

*Source: Monthly Review of Tamil Nadu Economy, May 2006.*

### Pivotal Role of Road Transport:

Among the modes of transport such as land, water and air, the road transport system which is very cheap and accessible to all enables the movement of passengers and goods more rapidly and connects rural with urban and hence plays a vital role in the economic and social development of a region.

It was estimated that during 1990-91 the share of road transport and railways in carrying goods at the national level, was 38 per cent and 62 per cent respectively. As a result of the ever increasing reliance on road transport and the development in road network the share of goods transported through road has increased to 61 per cent.

The industrialisation and urbanisation in post reform period has thrown up new problems and challenges in the infrastructural development of the country especially those relating to road transport.

### State Transport Undertakings:

The state has built up a network of STUs to provide an efficient transport system at low cost. To avoid administrative overhead charges and wasteful competition in the operations of services between the Corporations, the State Government amalgamated 21 Transport Corporations into 7. At present, the Transport operations in the State caters to the needy passengers effectively. As on March 2006, the State Transport Undertaking's total fleet strength has increased to 17129 numbers from 16861 in March 2005 registering a growth of 1.59 per cent only. Out of total fleet strength, Chennai Metro City services alone have the highest number of fleet strength at 2554 accounting for 14.91 per cent of the total fleets as detailed below.

**Table – 7: Fleet Strength of State Transport Corporations - Tamil Nadu  
(As of March 2006)**

Category	Number	% Share
Chennai Metro	2554	14.91
Town Services (all districts)	5633	32.89
Mofussil Services	6065	35.41
Express Services		
Inside State	522	3.05
Outside State	273	1.59
Ghat Services	524	3.06
Spare Buses	1558	9.10
Total Fleet Strength	17129	100.00

Source: Policy Note on Transport Department 2006-07, GOT.

### Long Term Trend in Human Population - Road Infrastructure - Vehicle Population:

The vehicle population growth is important to assess the requirement of road infrastructure. From 1990-91 onwards, in tune with the 'Liberalisation Policy', the country is experiencing a change in all the sectors of economy including road infrastructure and automobile industries. This leads to the question of adopting a policy that will determine the optimal mix between public and private transport.

**Table – 8 : Vehicle Population and Road Infrastructure - Tamil Nadu**

Year	No. of Registered Motor Vehicles per lakh population	Road Density per 1000 Sq.km (in kms.)	Number of Motor Vehicles per sq.km
1950-51	618	339	0.14
1960-61	1315	338	0.34
1970-71	3329	526	1
1980-81	6833	935	2
1990-91	27695	1312	12
2000-01	99488	1353	48
2004-05	115054	1823	57

Source: Computed by DEAR

## Railways Route Length:

The route length of railways refers to the distance between two points on a railway treating all lines on the section as a single line. In the review year, the availability of railway lines in the State at 3991 kms. is lower than the previous year due to the ongoing process of gauge conversion. Of the total availability of 3991 kms. of route length, broad gauge accounts for 54.6 per cent and metre gauge for 45.4 per cent. Electrified route length constitutes 27.0 per cent only and non-electrified route length accounts for about three-fourths of the total length (73.0%). During 2004-05, the State with a route length of 4171 kms. shared 6.6 per cent of total route length of 63465 kms. at the national level. The density of route (per 1000 sq.kms. of geographical area) at 30.64 kms. and route length per lakh population at 6.5 for the State are higher than the All India averages.

**Table – 9 : Railway Route Length - Tamil Nadu and All India**

Year	Total Route Length (kms.)		% share of Tamil Nadu	Route Length (km) per '000' sq.km of area		Route length per lakh population (kms.)	
	Tamil Nadu	All India		Tamil Nadu	All India	Tamil Nadu	All India
2003-04	4015.86	63122	6.36	30.91	19.20	6.30	5.88
2004-05	4171.00	63465	6.57	30.72	19.31	6.48	5.82
2005-06	3991.00	63465	6.29	30.64	19.31	6.13	5.73

Source: 1. Southern Railway, Chennai - 3. 2. CMIE Infrastructure, May 2006.

## Budget Allocation for Railway Projects in Tamil Nadu:

Investments on railway projects in the State is very meagre which besides delaying the execution of projects leads to cost overrun. Formation of new line between Salem - Karur has been delayed due to inadequate budget provision. Likewise, gauge conversion and doubling of lines has also been slow due to funding constraints and a gap between requirements and release.

In 2003, the Railway Ministry formed Railway Vikas Nigam Ltd. (RVNL) as a special purpose vehicle for speedy execution of some prestigious projects coming under the Golden Quadrilateral (GQ). Though the Ministry formed RVNL to undertake the projects of GQ and port connectivity to complete the project in time, some of the project works were again transferred to Southern Railway since RVNL does not have the required infrastructural facilities. Strengthening of rail network is a priority for the balanced regional development.

## Mass Rapid Transit System - Chennai:

In order to meet the challenge of providing an efficient and low cost transport system to the burgeoning urban commuters, the MRTS has been in partial operation from Beach to Thiruvanmiyur. Its extension to Velacherry is in progress.

## Major Ports:

Among the 13 major ports in India, the three major ports in the State viz. Chennai, Tutucorin and Ennore account for a major share of the foreign trade in Tamil Nadu.

## Traffic Handled at Major Ports:

The total traffic handled at major ports of Tamil Nadu, increased by 44.59 lakh tonnes during 2005-06 to reach 735.55 lakh tonnes from 690.96 lakh tonnes in 2004-05 thereby registering a growth of 6.5 per cent. Among the three major ports, Chennai and

Tuticorin ports showed an increasing trend in the volume of traffic handled during 2005-06, recording a growth of 7.9 per cent and 8.4 per cent respectively over the previous years level. However, the first corporatised Ennore Port has recorded a marginal decline of 3.3 per cent in the volume of traffic handled.

Among the major ports at the national level, the share of the major ports in the State in the total traffic handled has marginally declined to 17.37 per cent in 2005-06 from 18.01 per cent in 2004-05. The details are presented below.

**Table – 10 : Traffic at Major Ports - Tamil Nadu**

*(Lakh tonnes)*

Ports	2004-05	% change	2005-06	% change
Chennai	438.06	19.3	472.48	7.9
Tuticorin	158.11	15.6	171.39	8.4
Ennore	94.79	2.2	91.68	(-3.3)
Total	690.96 (100.00)	15.8	735.55 (100.00)	6.5
Percentage share in major ports of India	18.01		17.37	

*Note: Figures in brackets indicate the percentage share to total.*

*Source: Monthly Review of Tamil Nadu Economy, May 2006.*

### Commodity-wise Traffic – Major Ports of Tamil Nadu:

Each major port in the State has its separate identity in commodity-wise handling of traffic. Commodity-wise review of handling performance at major ports of Tamil Nadu during 2005-06 revealed that iron and steel registered a growth of 77.9 per cent followed by fertilizers finished (38.3%), fertilizer raw material (31.5%), containerized goods (16.2%) and POL (16.0%). Food grains and other liquid cargo recorded sizable fall during the reference year over the previous year. Chennai port has the highest traffic in POL, Tuticorin and Ennore Ports in coal traffic. Among the major ports in India, the major ports in the State shared 30.09 per cent in handling of coal and 2.64 per cent in food grains traffic.

**Table – 11: Tamil Nadu - Commodity-wise Traffic - Major Ports -2005-06**

Commodity	Chennai	Tuticorin	Ennore	Tamil Nadu		% change over previous year	% share to major ports in all India
	`000' tonnes	`000' tones	`000' tonnes	`000' tonnes	% Change		
POL	13210	774	244	14228	19.34	16.0	10.01
Food grain	-	61	-	61	0.08	(-)61.9	2.64
Other liquid cargo	155	388	-	543	0.74	(-)33.4	5.12
Iron and Steel	443	-	-	443	0.60	77.9	5.15
Fertiliser (Finished)	709	484	-	1103	1.62	38.3	17.99
Iron Ore	9458	-	537	9995	13.59	(-)1.8	12.62
Fertiliser (raw material)	361	958	-	1319	1.79	31.5	23.72
Edible oil	415	119	-	534	0.73	(-)6.8	13.83
Coal	3172	6146	8387	17705	24.07	1.1	30.09
Container	11756	3428	-	15184	20.64	16.2	24.56
Others	7569	4781	-	12350	16.79	(-)0.4	28.16
Total	47248	17139	9168	73555	100.00	6.5	17.37

*Source : Monthly Rewiew of Tamil Nadu Economy, Masy 2006.*

## Minor Ports:

In addition to the three major ports in the State, there are 15 minor ports spread over the 1000 kms. of eastern coast of Tamil Nadu under the control of State Government. The Tamil Nadu Maritime Board is administering, controlling, regulating and managing the minor ports. In the long run these minor ports would be the main gateway on the eastern coast to the entire hinterland beyond. Minor ports in the State are also the nearest maritime outlet from India to Sri Lanka, Andaman, Nicobar Islands and East Asian Countries. Minor ports are exporting crude oil and cement and importing edible oil, liquid ammonia, naphthol, crude oil, machineries, copra cake etc. Unlike road sector, ports generate substantial surplus incomes from port charges. Encouraging minor ports has the potential to bring additional revenue and generate additional employment.

## Air Traffic Performance:

Tamil Nadu is the gate way for South Asian Countries. In the post reform period, the State is witnessing increased flow of FDI, establishment of many number of IT companies and automobile industries, availability of uninterrupted health care facilities competitively at low prices and tie up of local institutions with foreign universities and hospitals which together had increased the number of air passengers. The introduction of additional private flights comparatively at low fare and the ever increasing domestic and international passengers should be complemented by number of domestic airports in the State. Hence, steps to promote the use of domestic airports at Salem and Vellore etc. are under way.

The total number of domestic and international passengers who used the airports in the State, rose from 63.52 lakhs in 2004-05 to 77.21 lakhs in 2005-06 registering a growth of 21.57 per cent. While the number of domestic passengers in the State had increased by about 30 per cent both during 2004-05 and 2005-06 over the previous years, the increase in international passengers was only 8.7 per cent during 2005-06 as against 18.0 per cent during 2004-05. As a result, the composition of domestic and international passengers using the airports in the State has changed from 60:40 in 2004-05 to 64:36 during 2005-06. During the reference year, the airports in the State accounted for 9.7 per cent of domestic passengers, 12.4 per cent of international passengers and 10.5 per cent of the total air passengers of all the airports in the country.

**Table – 12: Tamil nadu - Air Port Performance**

Airports	2004-05		2005-06	
	Passenger ('000')	Cargo (tonnes)	Passenger ('000')	Cargo (tonnes)
Domestic	3993.96 (30.64)	43640 (15.79)	4940.86 (30.23)	41845 (-).4.11
International	2557.55 (18.00)	147853 (22.31)	2780.45 (8.72)	170494 (15.91)
Total	6351.52 (8.72)	191493 (20.19)	7721.31 (21.57)	212339 (10.99)

*Note: Figures in brackets indicate percentage change over the previous year.*

*Source: Monthly Review of Tamil Nadu Economy, June 2006.*

The domestic air ports such as Chennai, Coimbatore, Madurai, Tiruchirappalli and international airports in Chennai, Coimbatore and Tiruchirappalli witnessed an increase in passenger traffic during 2005-06. However, in respect of handling of cargo there has been an increase only in international airports.

**Table-13 : Tamil Nadu - Airport-wise Performance - 2005-06**

Airports	Passengers (000)	% change	Cargo (Tonnes)	% change
<b>Domestic</b>				
Chennai	4173.3	29.1	38118	(-)3.3
Coimbatore	559.1	29.1	3345	(-)10.1
Madurai	29.6	12.9	361	(-)15.9
Tiruchirapalli	29.6	21.9	21	(-)32.3
<b>International</b>				
Chennai	2606.6	8.6	147853	14.6
Coimbatore	14.8	12.3	1949	102.0
Tiruchirapalli	159.1	10.7	692	129.9
Total	7721.3	21.6	212339	11.0

Source: Monthly Review of Tamil Nadu Economy, June 2006.

### Communication:

#### Posts:

The services of the Indian postal network are classified into communication services (letters, post cards etc.), transportation services (parcel, logistic post), financial services (savings bank, money order, international money transfer service, PLI) and premium value-added services (speed post, business post, retail post etc.).

In the State during 2004-05, there are 8692 post offices doing postal business alone and 3504 post offices doing post and telegraph services.

#### Tele-communication:

As on March 2005, totally there are 98.87 lakh subscribers in telecommunication system in the State. In the public sector there are 54.05 lakh cellular subscribers with 39.25 lakh numbers in fixed line. The remaining 5.57 lakh subscribers are in the private sector. Out of 39.25 lakh numbers of fixed line, rural areas constitute about 24.15 per cent. The State is sharing 10.05 per cent of subscribers in total tele-system in India. It shares about 10.35 per cent of public sector subscribers with 9.55 per cent of fixed lines, 8.50 per cent of private sector subscribers and 6.59 per cent of fixed lines in rural.

The number of Public Call Offices (PCOs) in Tamil Nadu Circle at 171036 accounts for 7.95 per cent of those at the national level. All the Village Panchayats numbering 17899 in Tamil Nadu Circle are having the Village Public Telephones (VPT) as against the coverage of only 87.37 per cent of village panchayats at the national level.

**Table-14 : Basic and Cellular Services in Tamil Nadu Circle**  
(As on 31st March, 2005)

Category	(Numbers)	
	Tamil Nadu	All India
<b>Total</b> (Fixed lines and Cellular)	9887432	98427558
<b>Public Sector</b>		
Cellular Subscribers	5405119	52220000
Total fixed lines	3925069	41110865
Fixed lines in Rural	947959	13569084
<b>Private Cellular</b>	557244	5096693
Public Call Offices	171036	2151044
Village Public Telephones	17899	518113

Source: CMIE's Infrastructure, May 2006.

**Tele Density:**

Tele density refers to the number of phones available per 100 persons. The tele-density levels have tended to increase. The overall tele-density in India rose from a mere 2.32 per cent in 1999 to 11.32 per cent as on December, 2005. India has a 125 million strong telephone network, including mobile phones. However, the telephone penetration rate at the above level of 11.32 per cent is considered as low when compared to advanced countries.

As on March 2005, the tele-density in the State is 15.36 per cent. The GOI has set a target of 250 million subscribers and 22 per cent tele-density by 2007. The Telecom Regulatory Authority of India (TRAI) has planned to increase the teledensity in rural areas from the current 1.9 per cent to 15 per cent by 2007. During 2006, the rural tele-density in the country is only 2 per cent compared to 31 per cent in urban areas.

**Transport - Tenth Plan Mid-term Appraisal:**

- The Tenth Five Year Plan Outlay for the roads and bridges sector was Rs.6000 crores. The anticipated expenditure during the first four years of the Tenth Plan period at Rs.4639.56 crores indicates an achievement of 77.33 per cent. This is in contrast to the expenditure of Rs.2310.96 crores incurred during the Ninth Plan against the plan outlay of only Rs.1700 crores.
- During the Tenth Plan period strengthening, maintaining and widening of roads got priority over formation of new roads. Hence, the average annual increase in road length during the first four years, Tenth Plan Period is merely 1.3 per cent as against 4.5 per cent during the Ninth Plan period.
- The average growth of registered motor vehicle population in the State during the first four years of Tenth Plan Period was 9.8 per cent as against 12.5 per cent during the Ninth Plan Period.