Chapter - 4

Analysis of Industrial Reforms
I. Reforms at State Level

The objective of this Research is to evaluate the industrial reform process in India that began in 1991. The emphasis will be on the steps being taken in this direction at the state level and in particular in the five states included in the study. The motivation behind industrial reforms is clear – the Indian industry needed to be set free from the well meaning but highly claustrophobic atmosphere of strict licensing and regulation of the 1950s, 1960s and 1970s. During the 1980s certain liberalizing steps were taken but they were half-hearted and lacked a coherent political and economic agenda. The severe financial crisis faced by the Indian economy in 1991 forced the central government to take drastic legislative and policy measures to set industry free from excessive regulation in tune with the pro-market reforms seen in several other developing countries.

The major components of this reform process which influence the industrial growth rate are - macro-economic stabilization, including fiscal & inflation control, industrial de-licensing & reforms of industrial regulation, trade liberalization, foreign exchange reforms & rupee convertibility, disinvestments in state-owned enterprises as well as privatization, case of foreign direct investment & portfolio investment via the stock market, and private sector participation in infrastructure (core) sectors like power, telecom and roads.
Policy measures initiated by the central government have set the pace for industrial liberalization, but the implementation of these policies takes place in the states. Therefore state governments and their policies play a major role in attracting and developing industry. The success of state governments in doing so will be the focus of this paper. With external and internal pressures on the state governments to increase growth, we are now witnessing an 'incentive war' among states striving to attract new investments. One of the issues this paper will address is the viability of a strategy to attract new industries mainly on the basis of tax incentives and subsidies.

Although the focus of this Research is the industrial policy regime in the five states, the central issues and policy recommendations would be applicable for a majority of Indian states. Thus at the outset it would not be out of place to mention that the focus of this Research is on Industrial Reforms made by the five states.

II. Industrial Reforms made by Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamilnadu

The World Economic Order is undergoing rapid transformation with its concomitant, inevitable repercussions on the development paradigms all over. The time taken by us to respond to this changing domestic and global economic scenario alone would determine whether our high potential can be transformed into opportunities of economic development. Steps taken by various governments clearly show that we are determined to move swiftly and attain a leadership position. The need to formulate a New Industrial Policy and devise appropriate development strategies to derive maximum benefits from our inherent strengths is a logical step in this direction.

A. Industrial Reforms made by Andhra Pradesh

Government has introduced a liberalized state incentive scheme for setting up new industries in the state. The time frame of the policy was year 1995 up to year 2000 and was called 'Target 2000'.
In the new Industrial Policy (1995-2000) all industrial units, whether large, medium or small, other than those listed, to be located anywhere in the state, except within the municipal areas of Hyderabad, Vijayawada and Visakhapatnam were all eligible for incentives, like investment subsidy of 20% of the fixed capital investment not exceeding Rs. 20.00 Lacs. They also enjoyed sales tax exemption for a period of 7 years effective from the date of commencement of commercial production.

Even, all new industries other than the ones setup in areas of Hyderabad, Vijawada & Visakhapatnam will be eligible for 25% rebate in power bills for a period of 3 years from the date of commencement of commercial production. The maximum total admissible rebate for the years was Rs. 50.00 Lacs in respect of large and medium industries and Rs. 30.00 Lacs in respect of small-scale industries.

Special incentives were given to entrepreneurs belonging to scheduled castes and scheduled tribe categories setting up new industries anywhere in the state.

For mega projects, with investments exceeding Rs. 100 Crores government may consider special package of incentives on a case-to-case basis, based on the gestation period of projects etc.

Existing industrial units in eligible areas setting up expansion project in product other than those listed, involving enhancement of fixed capital investment by at least 25% as well as enhancement of capacity by 25% for the products of the same product line was eligible for sales tax deferral.

B.2  **Industrial Reforms made by Gujarat**

B.2.1  **Introduction**

With the process of economic reforms unfolding in India, different States are positioning themselves in the minds of prospective investors in a bid to avail of a substantial share of the investment boom. Not surprisingly, Gujarat, known for its investor friendly atmosphere over the years, has emerged as the leading State in terms of Industrial investments.
Enthused by the massive spurt in industrial activities in the post-liberalization period, the state has laid out a comprehensive industrial policy – ‘Gujarat-2000 AD and Beyond’, setting futuristic directions for development. To accelerate the overall flow of investment in the state in general and backward areas in particular, as also to create large scale employment opportunities, emphasis is being laid on the development of infrastructure and human resources to sustain the long term growth. As a part of the overall strategy for accelerated industrial growth in the state, incentive packages offered to industries have been made more attractive compared to the scheme for the period 1990-95.

B.2.2 Objective of industrial policy 1995-2000

While employment generation and balanced regional development will continue to be among the objectives of the new industrial policy of the state of 1995, it is necessary in the present context to have wider focus while determining the objectives in view of the concerns expressed. Investment in industry has a multiplier effect on employment generation as rapid industrialization can create large-scale employment - directly and indirectly - and this can absorb the underemployed of primary sector as also provide employment to the educated unemployed.

The basic premise of the government is that parameters of sustainable development should underscore our efforts of industrialization in future. Protecting the environment and limiting pollution are most important in this regard. Priorities in investment should be guided by the goal of achieving equity in development. To achieve this, there has to be a profound bias in favour of the backward regions and backward and poor people. With these considerations, the objectives of the new industrial policy are enumerated below:

1. Accelerating the development of the backward areas of the state.
2. Creation of large-scale employment opportunities to absorb the swelling ranks of unemployed.
3. Increasing the total flow of investment in industrial sector.
4. Accelerating the development of infrastructure and human resources to sustain the long-term growth.
5. Achieving sustainable development.
6. Encouraging entrepreneurship and developing technology to promote the 'Swadeshi' spirit.

- **Highlights or Salient Features of Industrial Policy**

  ➢ As much as over two-third of the area of the state becomes eligible for benefits under various packages of incentives. Besides, eight special backward regions continue to remain eligible for similar incentives.
  ➢ Eligible areas grouped into two main categories, giving a wider choice of location.
  ➢ New chemical units or expansion of existing chemical units now eligible for incentives in the Estates/Zones designated for the purpose.
  ➢ Thrust industries, Premier and Prestigious units, eligible for incentives all over the State, except in a few banned areas.
  ➢ Electronics Industries eligible to receive capital subsidy (small & tiny) and sales tax incentives (all) throughout the state, including metropolitan cities.
  ➢ Tiny units set up and managed by SC/ST/other backward classes/women entrepreneurs/educated unemployed youths offered cash subsidy at higher rate.
  ➢ Investments in project-related infrastructure, made eligible for the purpose of incentives.
  ➢ Premier units eligible for sales tax incentives up to as much as 175% of fixed capital investment for a maximum period of 17 years.
  ➢ Investments made in social, common & public purpose infrastructure also considered as eligible fixed capital investment under the schemes for Premier & Prestigious units.
  ➢ Existing units undertaking expansion and all diversifications carried out during the operative period of the scheme considered eligible for incentives.
  ➢ List of ineligible industries reduced to a minimum.
  ➢ For pipeline cases to be eligible for incentives, effective steps to be taken on the expiry of the scheme defined in advance to remove uncertainty.
B.3  **Industrial Reforms made by Karnataka**

B.3.1  **Introduction**

Not surprisingly, Karnataka has emerged as one of the most investor-friendly states of India, with a substantial increase in industrial investment. Letters Of Intent amounting to Rs. 92,350 million and 1,148 Industrial Entrepreneurs Memoranda (IEMs) worth Rs. 3,02,850 million have been sanctioned from Aug '91 to Jan '98. The High Level Committee constituted to assist mega projects of more than Rs. 500 million has approved 91 projects with an investment of Rs. 5,46,220 million as on 31.03.1998. In fact, the State Level Single Window Agency has accorded approvals to 1,100 projects with an investment of Rs. 87,780 million for setting up industries in Karnataka, as on June '98.

B.3.2  **Dynamic Industrial Reforms**

The industrial policy declared in 1996 with a comprehensive package of incentives and concessions lays maximum stress on infrastructure building with active participation of the industries as well as various state agencies/bodies.

B.3.3  **Highlights or Salient Features of Industrial Policy**

- Infrastructure development with private sector participation based on BOO/BOOT/BOLT concepts.
- Human Resource Development.
- Encouragement to R&D, improvement in productivity and quality upgradation.
- Promotion of export of value added goods.
- Simplification/streamlining of rules and regulations.
- Single Window Agency, an empowered committee enabling a quick delivery mechanism for the clearance of new projects.
- Attractive Incentive packages:
  - Sales Tax benefits in the form of exemption/deferment for a period ranging from four to eight years.
  - State investment subsidy up to 35% to tiny/SSI units.
• Encouragement to mega projects with investments of more than Rs. 1,000 million by offering special incentive packages.
• Specific thrust to automobile industries, with special incentives.

B.4 Industrial Reforms made by Maharashtra

B.4.1 Introduction

Since its formation in 1960, Maharashtra has aimed for all-round balanced development in all sectors of the economy to improve the quality of life of its people. Its basic strength has always been the exceptional quality of its human resources, be it in its far-sighted leadership or its spirit of indomitable entrepreneurship or its millions of peasants and industrial workers ever ready to adopt new ideas and practices.

It was one of the foremost states in adopting democratic decentralization as a way of polity. It was the first to decentralize the state's planning process down to the district level. It was again the first in providing a meaningful and effective safety net to the most disadvantaged, viz., the rural poor, recognizing their right to work through its Employment Guarantee Scheme.

On the industrial front, Maharashtra was the first to create specialized institutions like the Maharashtra Industrial Development Corporation (MIDC) and the State Industrial and Investment Corporation of Maharashtra Limited (SICOM) for focusing on industrial infrastructure and promotion of industries especially in its backward areas. It was the first in devising policy instrument of the package scheme of incentives to attract industries in its developing regions to achieve industrial dispersal. It has thus been able to harmonize the aspirations of its diverse citizenry and has always offered the most conducive milieu for nurturing productive entrepreneurship. No wonder it has achieved the distinction of being the Premier Industrial State in the country.
B.4.2. **Goals and objectives of new industrial policy since 1993**

The underlying goals of Maharashtra’s developmental policy are the development of Human Resource and improvement in the quality of life for its citizens. The State Government has, therefore, embodied this goal by integrating its industrial development strategy with agriculture on one hand and social development and ecology on the other.

The basic objectives of the new policy are as follows:

- Maintaining the State’s premier status in the industrial field.
- Balanced regional development and rapid growth with dispersal.
- Employment generation.
- Broadening the entrepreneurial base.
- Simplifying rules and procedures.
- Ensuring sustainable growth compatible with ecology.

Their new strategy would have to be progressive, aggressive and free from any bottlenecks in the industrialization process so as to sharpen the State’s competitive edge. What follows is the direction in which they would like to charter their industrial growth path to meet the aspirations of the developing regions.

B.5. **Industrial Reforms made by Tamilnadu**

B.5.1. **Introduction**

The winds of change in the Government of India’s Industrial policy have had a dynamic impact on the industrial climate of the state and today Tamilnadu is poised to regain its vanguard position in business and industry.

Already Tamilnadu has moved to second place in its bid to attract foreign investment. The approved FDI between August 1991 and June 1998 was a staggering US $3.25 billion in 1,260 projects. And given its favourable industrial
Three major factors have contributed to the emergence of Tamilnadu’s economic development. These are:

- Availability of sound all round infrastructure,
- A well-established industrial culture, and,
- Most significantly, remarkable political stability as compared to most other states.

This is reflected by the fact that apart from foreign direct investments, there has been an impressive inflow of investments from domestic industrial establishments in the state and also investments from other states in India.

8.5.2 Industrial Policy Reforms

Traditionally, Tamilnadu is one of the most industrialized states. At present, Tamilnadu is the third largest economy in India. Given the high current economic growth rate, Tamilnadu is poised to emerge as the second largest economy. The State Domestic Product is about US $23 billion and current exports are around Rs. 225 billion. There has been visible change in the overall economic and industrial climate in the state. Coinciding with the new economic and industrial policy of the Government of India, the state government too has come up with its own policy that outlines its main objectives and the strategies to achieve faster growth.

The industrial policy of Tamilnadu’s government is essentially need-based. In a larger perspective, it assigns a promotional role to the government while attaching great importance towards motivating entrepreneurs by proving adequate and timely incentives. The government is deeply committed to bringing about a harmonious development of both large and small industry sectors, one contributing to the growth of the other.
A number of steps have been taken to boost the development of industry in the state. In the last two years, a number of new incentives have been announced and all procedures have been simplified. Single Window Committees have been set up to assist small industries to secure and obtain statutory clearances for starting industries. In addition a statutory Single Window Authority at the district level has been constituted to oversee and direct all clearances expeditiously.

The main objectives of the state government in its bid to be the leading industrial state are as follows:

- To set up industrial estates and to encourage the setting up of private and co-operative industrial estates.
- To accelerate industrial growth and to maximize production and productivity.
- To provide adequate measures for infrastructure facilities and raw materials.
- To promote industrialization in the backward area, thus paving the way for balanced regional growth.

The reforms at the state level comprise policy level changes, setting up of organizational intervention mechanisms and most importantly, bringing about an attitudinal change. These include amongst other things, like simplifying the whole process and to answer the investors’ queries and guide them through various procedures. To name a few:

- Procedural simplification and facilitation through a single window. Tamilnadu has introduced an effective single window system to speed up pre-project clearances through a single form.
- Incentives and concession package for investors.
- Industrial promotion campaigns and seminars.
- Creation of nodal agencies for attracting investments.

With increasing competitiveness among states to attract investments, Tamilnadu was one of the first states to carry out industrial campaigns in a few Gulf countries as well as to organize seminars in different parts of India. These
initiatives have led to tremendous enthusiasm amongst investors about doing business in Tamilnadu. The overall strategy includes the key thrust areas listed below:

- Focus on core and infrastructure sector.
- Targeting strategic industries.
- Developing knowledge/technology-driven advantage in industries.
- Encouraging private sector initiative and participation in infrastructure projects.

These predicted efforts have had their impact on the market and have boosted investor confidence. It is no wonder that Tamilnadu is fast emerging as the 'Blue Chip' state for various investments.

III. **Infrastructure Development in Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamilnadu**

The Center for Monitoring Indian Economy (CMIE), Mumbai in its report dated March 1997 has analyzed & published relative Infrastructure Development Index for India States. This Index facilitates inter-state comparison. Its finds are summarized hereunder:

<table>
<thead>
<tr>
<th>State</th>
<th>Infrastructure Development Index</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>96.1</td>
<td>11</td>
</tr>
<tr>
<td>Gujarat</td>
<td>122.4</td>
<td>5</td>
</tr>
<tr>
<td>Karnataka</td>
<td>96.9</td>
<td>10</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>107.0</td>
<td>6</td>
</tr>
<tr>
<td>Tamilnadu</td>
<td>144.0</td>
<td>3</td>
</tr>
</tbody>
</table>
The above CMIE index is a weighted composite index taking into account different components of infrastructure.

The individual five states present an interesting picture of infrastructure development, as seen from the data presented below. Infrastructure development in essential sectors such as Power, Transport Network, Telecommunications, Water Resources, Industrial Parks & Environmental issues are presented here:

A. **Andhra Pradesh**

**POWER**

- 7,200 MW of installed capacity.
- Installed capacity being doubled by the year 2002 A.D.
- Restructuring of State Power Board on the anvil.
TRANSPORT

- Excellent road, rail and air connections to various parts of the country.
- 1,45,000 kms network of roads. 1,400 kms of Major highways being upgraded as Expressways with World Bank aid (US $350 million.)
- Over 5,000 kms of rail lines.
- One third of country's rail cargo passes through Vijayawada rail terminal.
- Over 11 ports along the 960 kms of coastline.
- Deep-water ports at Visakhapatnam and Kakinada with Visakhapatnam port handling the largest volume of cargo in the country. Minor ports at Gangavaram, Krishnapatnam and Vodarevu being developed with private sector participation.
- Inland Container Freight Depot (ICD) and Air-Cargo complex available at Hyderabad.

TELECOMMUNICATIONS

- Largest number of telephone exchanges in the country.
- Modern communication facilities like cellular and pager services available.

WATER

- The three major rivers Godavari, Krishna & Pennar with their extensive canal system, provide adequate water for industrial use in any part of the state.
- Ample ground water resources.

INDUSTRIAL PARKS

- Over 25,000 acres of land developed across the state for industrial use.
- Ultra modern Hi-Tec City, exclusively for info-tech industry fast coming up near Hyderabad.

ENVIRONMENT

- Andhra Pradesh provides a cosmopolitan and welcoming environment.
- The state offers good quality of life at very reasonable costs.
It is well known that no amount of subsidies or incentives can compensate for the lack of infrastructure development in a particular area. The experience world over has amply proved that infrastructure development holds the key to promoting industrial development of an area. The state government has renewed focus with specific emphasis on infrastructure development, particularly in backward areas. The state has already set up Gujarat Infrastructure Development Board under the chairmanship of Hon. Chief Minister to allow single point expeditious clearance of infrastructure development projects with private sector participation. The Board helps lay down guidelines and norms for identification of such projects and their clearances. Investment in specified infrastructure is provided due weightage in determining the quantum of incentive under the New Incentive Policy.

PHYSICAL INFRASTRUCTURE

- **Road Network & Development**

  The total length of roads (except municipal area) in the State was 72,591 Kms at the end of 1998-99. Out of the total road length of 72,950 Kms, the length of surfaced roads was 68,159 Kms (93.93 per cent). The length of National Highways, State Highways, Major District Roads, Other District Roads and Village Roads was 1,877 Kms, 19,518 Kms, 20,939 Kms, and 10,541 Kms, respectively. The road length per 100 Sqr Kms area and per one lakh of population (as per 1991 census) works out to around 37 Kms and 176 Kms respectively.

- **Telecommunications**

  As on March 1999, there were 9,010 post offices / branches and 1,774 telegraph offices comprising of 5 Central Telegraph Offices, 35 Departmental Telegraph Offices and 1,734 combined offices in the state. There were nearly 15.48 lakh telephone connections in the state at the end of the year 1998-99. During the year 1998-99, another 2,55,388 new telephone connections were given in the state.
During the year 1998-99, 84 new telephone exchanges were commissioned. There were 1,546 telephone exchanges in the state as on 31st March, 1999. By the end of the year 1998-99, a total of 12,415 Gram Panchayats had been provided telephone facility in the state.

- **Power**

Gujarat has been fortunate enough to be in a reasonably comfortable position as far as availability of power is concerned. Demand for power has been growing at a rate of 8% to 10% per annum. Apart from requirement of power in the industrial sector, consumption of energy has been growing at a rapid rate in domestic, commercial and agricultural sectors. The State Government has taken initiatives to promote new generation capacities with projects totaling 3000 MW in various stages of implementation. However, looking to the rapid rate of industrialization and urbanization in the state, it will be necessary to increase the power generating capacity from the present 6165 MW to over 15000 MW by 2000 AD. This will require massive investment for which the state government has welcomed private sector participation.

Major investments by the private sector in generation and distribution of power requires comprehensive review of the existing statutory provisions, policies and procedures relating to the power sector. The role of Gujarat Electricity Board vis-à-vis the private sector entrants into power sector also needs to be set out in clear terms. These issues form an important part of the Power Policy, which is on the anvil.

The State Government will encourage modernization in industrial units to adopt energy conservation and use of non-conventional sources of energy as well.

**SOCIAL INFRASTRUCTURE**

The state is committed to the social sector and intends to provide better education, training and health care to the population. In order to look after these aspects, the State
Government has established Gujarat Social Infrastructure Development Board, under the Chairmanship of Hon. Chief Minister.

During the year 1999-2000, the plan allocation for the social sector was of the order of 33.58% of the total plan outlay of Rs. 6,550 Crores.

**Proposed Investments Programme: FY 2000 to FY 2010**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Industry</th>
<th>Proposed No. of Projects</th>
<th>Investment Envisaged (Rs. Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power</strong></td>
<td>Power</td>
<td>22</td>
<td>55,167.00</td>
</tr>
<tr>
<td><strong>Ports</strong></td>
<td>Ports</td>
<td>10</td>
<td>12,288.00</td>
</tr>
<tr>
<td><strong>Industrial Parks</strong></td>
<td>Industrial Parks</td>
<td>24</td>
<td>5,045.00</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td>Roads</td>
<td>105</td>
<td>19,951.00</td>
</tr>
<tr>
<td></td>
<td>Railways</td>
<td>38</td>
<td>6,533.50</td>
</tr>
<tr>
<td><strong>Urban Infrastructure</strong></td>
<td>Water Supply &amp; Sanitation</td>
<td>49</td>
<td>2,578.50</td>
</tr>
<tr>
<td></td>
<td>Townships</td>
<td>11</td>
<td>321.60</td>
</tr>
<tr>
<td></td>
<td>Urban Transport</td>
<td>51</td>
<td>3,408.5</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>28</td>
<td>134.10</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>Water</td>
<td>41</td>
<td>7,087.00</td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td>Airports</td>
<td>2</td>
<td>400.00</td>
</tr>
<tr>
<td></td>
<td>Gas Grid</td>
<td>1</td>
<td>3,678.80</td>
</tr>
<tr>
<td></td>
<td>Information</td>
<td>1</td>
<td>400.00</td>
</tr>
<tr>
<td></td>
<td>Infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>383</td>
<td>1,16,993.00</td>
</tr>
</tbody>
</table>

C.3 Karnataka

**Industrial Infrastructure**

- 70 well developed Industrial Areas by KIADB over 25,000 acres.
- 25,000 acres provided for 112 Single Unit Complexes.
- 125 Industrial Estates developed for SSI sector by KSSIDC.
- Three major Growth Centers at Raichur, Hassan and Dharwad with more than 2,000 acres each.
- 9 Mini Growth Centers are being developed for Small & Medium enterprises all over the state.
• A 300 acres Export Promotion Industrial Park at Whitefield Bangalore.
• A US $600 Million State of the Art International Technology Park by TATA-
  Singapore Consortium.
• A specialized Electronics City at Bangalore & Mysore.
• Software Technology Parks at Bangalore & Mysore.
• Auto complex at Belgaum.

**Proposed Industrial Infrastructure Projects**

• EPIP at Mangalore – 125 acres
• Textile City at Dharwad
• EPIP at Bangalore under expansion with 500 acres
• Expansion of Electronic City Bangalore
• Electronics City at Dharwad
• Software Technology Parks (STPs) at Mangalore, Manipal & Dharwad
• Auto Complex at Shimoga
• Growth Centers at Malur and Bagalkot for Food Processing Units

**INFRASTRUCTURE POWER**

<table>
<thead>
<tr>
<th>Description</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Capacity available</td>
<td>4253 MW</td>
</tr>
<tr>
<td>Electricity available</td>
<td>20,424 MU</td>
</tr>
<tr>
<td>Expected Max. Demand by 2001 AD</td>
<td>7247 MW</td>
</tr>
<tr>
<td>Power projects (approved)</td>
<td>8535 MW</td>
</tr>
</tbody>
</table>

**C.4 Maharashtra**

Availability of proper and adequate infrastructure in an integrated manner is of vital importance not only for accelerating industrial growth but also for achieving balanced development. So the policy makers proposed to take an integrated approach in developing infrastructure for industry by addressing the issue of development of physical, financial and social infrastructure.

MIDC continues to play a crucial role in providing physical infrastructure in an integrated manner. While planning its industrial areas and growth centers, MIDC has made
provision for necessary supportive amenities like educational institutions, commercial complexes, recreational facilities, truck terminals, informal shopping dispensaries and hospitals, effluent disposal systems, police stations, fire stations, etc. MIDC is also in close touch with the Maharashtra Pollution Control Board (MPCB) for full safeguards on pollution control in these areas.

PHYSICAL INFRASTRUCTURE

• Land

Physical infrastructure includes land, water, Power and communication required for industry. Since inception, MIDC has acquired over 30,000 hectares of land and developed 108 industrial areas. It has so far executed capital works of Rs. 550 Crores and created a network of roads of 1,500 kms as well as installed water capacity of over 1,700 million litres per day.

Maharashtra government has decided to undertake an ambitious programme of setting up 65 growth centers and 140 mini industrial areas in different parts of the State. MIDC has already established industrial estates in 11 growth centers and 13 mini industrial areas under this programme. Land acquisition for five growth centers under the Central Government's growth center scheme has also been started. Since the number of new industrial locations being developed by MIDC is very large, their actual prioritization is necessary as is the need to fix a definite time bound plan for implementation.

• Three-Year Time-bound Action Plan

In a three-year time-bound Action Plan, MIDC intends to execute capital works of an additional Rs. 400 Crores and endeavors to make 40 out of 65 growth centers and 84 out of 140 mini industrial areas functional. MIDC also intends to complete land acquisition in respect of another 21 growth centers and 28 mini industrial areas during this period. MIDC has proposed to set up Specialized Industrial Complexes for leather, knitwear, hosiery and garments, soft wear, electronics hardware, diamonds, gems and jewellery at suitable locations in consultation with the concerned industry associations. It has also been decided to set up at least one chemical industrial zone in Vidarbha and Marathwada.
regions. These zones will have sophisticated common effluent treatment plants, disposal systems and arrangement for solid waste disposal as an integral part of the infrastructure.

MIDC also proposes to establish International Industrial Parks to attract Non Resident Indians (NRI) and Foreign Direct Investment. These would offer infrastructure of internationally comparable quality. It is heartening to see that to complement the efforts of the state government, the Government of India has also come up with a centrally sponsored scheme for this purpose under the new Exim Policy. MIDC is also planning to set up a large port-based industrial area in Ratnagiri district.

- **Power**

On the power front, Maharashtra has always accorded a very high priority to this sector. Nearly one fourth of its plan outlay is earmarked for this purpose. Today, their installed capacity is 9,300 mega watts. In the next 5 years, it is proposed to add 5,500 mega watts to this capacity. Maharashtra was the first State in which private sector participation has been permitted in power projects. They have now been able to seek participation of an international power company, which is planning to set up a large power plant based on liquefied natural gas in Ratnagiri at a total investment of Rs. 8,000 Crores. Captive generation of power by any unit is welcomed since it helps augment the overall power availability in the state. To encourage such captive power generation, it is proposed not to charge electricity duty to the extent of such captive power generation and its utilization.

Right through the past years great emphasis is laid on efficiency and quality, which can be seen from the fact that the average plant load factor of state's thermal plants is 61.34% which is higher by 8 points than the national average. Industry accounts for 44% of the total energy consumption in the state. Today, Maharashtra sells surplus power generation to neighbour states such as Gujarat, Karnataka, Madhya Pradesh, Andhra Pradesh and Goa.
It will thus be evident that Maharashtra is committed to provide quality power to its industries and will continue to be comfortable on the power front. It has committed large funds for power sector, sought and obtained private participation for augmenting capacities. It has also been strengthening the distribution network. To enable it to continue to generate adequate resources for this purpose on a continuing basis, it will have to price the electricity accordingly.

Communication

Providing speedy and quality communication system is a sine-qua-non for integrating Indian industry with global markets. Many of the rapidly growing, high value added, knowledge intensive and information-oriented sectors like software development require a far higher quality of telecommunication infrastructure. Rapid advances in information technology have made artificial national boundaries meaningless. Maharashtra, through its vast pool of talent is well poised to take full advantage of the tremendous opportunities that this development opens up.

Udyog Mitra and Maharashtra Electronics Corporation Limited (MELTRON) have been in constant touch with the Telecom Department, which has already effected several system improvements in a large number of industrial townships in accordance with a time-bound joint plan of action. The Maharashtra Telecom has been very responsive to the needs and aspirations of the states people as far as telecom infrastructure goes. It has added new capacities at 12 places spread throughout the state, commissioned new electronic exchanges at Patalganga and Satara, introduced new STD facilities in 11 industrial concentrations and accelerated this process, MIDC has taken a policy decision to make advance booking of necessary number of telephone and telex lines in its industrial areas so that the entrepreneurs do not have to wait for these facilities.

SICOM has signed a Memorandum of Understanding (MoU) with reputed Indian and International telecom companies for conducting a study regarding setting up of a joint venture project for establishing a fully integrated voice, data image and text communication network interconnecting industries located at the various
MIDC areas, their Mumbai offices and the Public Switched Telephone Network. The Foreign Investments Promotion Board (FIPB) has, in principle approved these arrangements and the operational modalities are being worked out.

Communication from the nearby city center to the industrial area is also an important element in higher production. Wherever possible, the state transport has attempted to link the city center to the industrial area. Simultaneously, the government proposes to freely permit private transport operators to ply on these specialized routes so that the workers can easily go to the industrial areas from their residence.

MIDC's package of infrastructure also includes other modes of communication such as access by air – developing airstrips at selected growth centers. While the government does support and encourage private air taxis for these growth centers, it is necessary to have some immediate arrangement so that the entrepreneurs can easily reach their industrial locations. For this purpose, SICOM is working out suitable arrangements so that it would be possible to provide air charter services in remote industrial locations at short notice.

SOCIAL INFRASTRUCTURE

Housing is a very important element in the industrialization process. Wherever possible, MIDC would earmark residential zones within its industrial areas. There is active participation from agencies like HDFC in providing for housing needs in such zones. Wherever feasible, the Maharashtra Housing and Area Development Authority (MHADA) and the City and Industrial Development Corporation of Maharashtra (CIDCO) have also pitched in aggressively in complimenting this process. All the other Government departments like Public Health, Public Works, Transport, Housing, Home, Irrigation, Energy and Education have given due weightage to the needs of the industrial growth centers while planning fresh investment or expanding existing facilities.

C.5 Tamilnadu

Traditionally, Government of Tamilnadu has been according high priority to both industrial and off-site infrastructure development. Government has been earmarking
substantial amount of funds in its annual budgets to continuously upgrade the quality of infrastructure. As a result, today, Tamilnadu is one of few states in India endowed with fairly sound infrastructure.

Tamilnadu is ranked third in terms of infrastructure development among India states.

INFRASTRUCTURE DEVELOPMENT OF TAMILNADU

In terms of accomplishments on this front, Tamilnadu appears to have made outstanding achievements as can be seen from following rankings:

- Social Infrastructure: Second
- Physical Infrastructure: Third
- Proximity to port: Second
- Airport Facilities (Network): Second
- Labour Availability: Second
- Cost of Labour: Second
- Labour Relations: Second
- Proximity to Market: Third
- Availability of Raw Material: Third
- Power availability & cost: Third
- Road Transport Infrastructure: Second

(Source BT-Gallup-MBA Survey, January, 1998)

Fairly well developed infrastructure and comfortable power situation offer a significant competitive advantage to Tamilnadu in attracting investments.

- Power

Tamilnadu is one of the few states without power cuts and with a near zero deficit power situation. The gap between energy demand & supply is one of the lowest in the country i.e. 10.8%. It has made impressive strides in power generation and is comfortably placed in this sector. Against an installed capacity of 6,904 MW, the additional capacity envisaged is to the tune of 12,685 MW and
to cater to this need, investment of an estimated Rs. 450 billion through 39 projects are in the pipeline. Though the power supply situation in Tamilnadu is comfortable, Government of Tamilnadu is not complacent. The Government has recently proposed to set up 20 short-gestation power projects with capacity ranging between 40-150 MW each. The total capacity proposed to be added is 2750 MW, which will be sufficient to meet future demand of industry.

More notably, the state has also made pioneering attempts to harness non-conventional sources of energy especially wind power. With numerous incentives being offered, greater exploration of wind corridors are anticipated. Similarly, efforts are on to create capacity of 12,685 MW through conventional sources of power generation.

- Water

The totally dynamic ground water resource in Tamilnadu is estimated to be around 27,346 mcm/year. The government has recommended that 15% of this should be reserved for domestic user and a similar quantum for industrial use – thus leaving enough ground water reserves to meet any additional new demands. The Telugu-Ganga project is currently supplying 10 tmc of water to Chennai.

Various schemes are being planned to recycle water on a large scale and secondary treated sewage water will be made available in urban conglomerations for industrial use.

Additionally, desalination plants along the coast are being established.

- Roads and Rail Network

Tamilnadu ranks second in terms of transport network. Roads and rail account for the maximum percentage of carrying goods. The state has a high percentage of surfaced roads spanning more than 1,38,500 kms. (as high as 64%). National Highways of length of about 2,000 kms run through Tamilnadu – ensuring easy, uninterrupted movement of goods and passengers. Major plans
have been drawn up to reinforce this sector including an extensive Mass Rapid Transportation (MRT) network in Chennai (Madras), 27 km bypass in Coimbatore, elevated road facilities for freight transportation and outer ring road at Chennai and widening of the existing National Highways-NH4 and NH-5 into 4 lanes. Government of Tamilnadu invites private sector investments in roads sector. The road length per thousand sq. km. area in Tamilnadu is 1,572 as against the all India average of 663 kms.

The efficient railway network accounts for a large share in movement of bulk cargo such as coal, iron ore, etc. as well as finished goods. At present, the railway route length in the state spans more than 41,000 kms. In Tamilnadu, the rail length per 1000 sq. km. area is 30.91 as against all India average of 19.01 km.

- **Air Links**

The presence of an international airport at Chennai (Madras) with direct links to Europe, USA and Far-East as well as domestic airports at Salem, Tiruchy, Coimbatore and Madurai make several parts of the state easily accessible. Increased industrial activity has given rise to an increase in passenger traffic as well as freighted movement, which has been growing at over 18% per year. Chennai airport is connected with 15 countries with more than 65 direct flights every week. To respond to the increasing cargo traffic and the emerging industrial needs, large-scale plans are underway for setting up an aircraft maintenance center and for upgrading existing infrastructure. Further, with the emergence of private sector airlines, the frequency of flights and their coverage will be boosted considerably.

- **Telecommunications**

Tamilnadu is part of the global telecom network. It has 1,603 telephone exchanges with over 1.4 million lines with integrated communication facilities linking it to all parts of the world. The entry of international giants like US West and Skycell into the market should give the much-needed boost to this sector and provide basic and value added services in the state.
Cellular and radio-paging services have been operational since 1994/95 in major cities like Chennai, Coimbatore etc. in the state. Given below are some important telecom services provided in the state, especially in Chennai (Madras) city:

**International Telephones**
- Operator dialed services
- Toll free services for US
- International telephone conference service

**Other Services**
- International data transmission service
- International digital leased line service
- Inmarsat service
- International radio-photo & Video Conferencing
- International programme transmission service
- International newscast service
- Meteorological transmission