

*Section 2*

***STATE REPORT***

# I National Capital Territory of Delhi

## 1 Overview

Delhi is the capital of India, and is an important commercial center in Northern India. The metropolitan area of Delhi (population of 13.78 million and area of 1,480 km<sup>2</sup>) is the second largest metropolitan area in India behind the Greater Mumbai. Delhi's service sector has expanded exponentially due in part to the large skilled English-speaking workforce has attracted many multinational companies. Key service industries include information technology, telecommunications, hotel, banking, media and life sciences. Delhi's manufacturing industry has also grown considerably as many consumer goods industries have established manufacturing units and headquarters in and around Delhi.

Items		Ranking
Area	1,483 km <sup>2</sup>	30
Population	13,850,507	18
GDP*	Rs. 838.25 billion	12
3-year GDP average growth rate	9.6%	6
NSDP** per capita	Rs. 51,664	4
Manufacturing GDP share	10.0%	
FDI(2004)	Rs. 1,163,360 million	2
Literacy rate	81.7%	4



\*at current price (1993/94 bases) \*\*Net State Domestic Product (1993/94 bases)

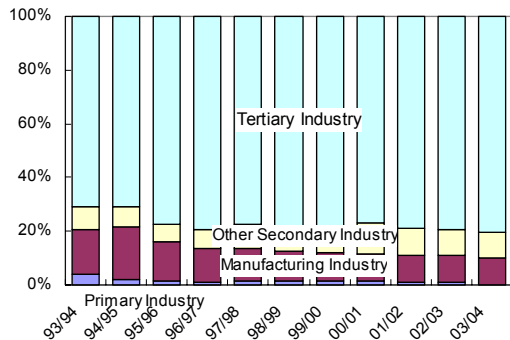
Source: States and Territories of India, Census of India 2001

## 2 Industry

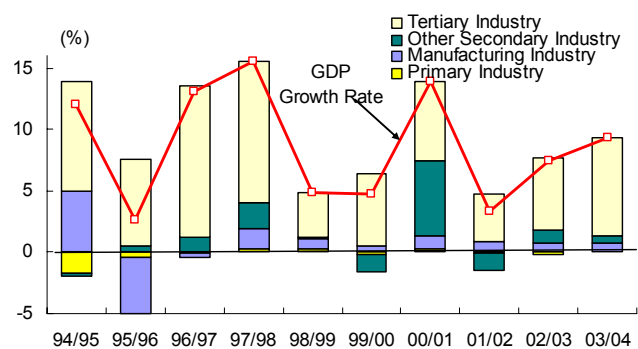
### (1) Industry Structure

The industry structure of the capital city Delhi is characterized by its high share of the service sector. The service sector is leading Delhi's economic growth except for the sharp rise of the construction industry in FY2000/01. Investment in fields, such as finance, telecom, and IT is increasing. The composition of the value-added (FY2003/04) of service industry is 28% for finance, 26% for commerce, hotel and restaurant/catering, 15% for transportation/telecom, followed by 12% for real estate.

Transition of GDP composition ratio (nominal price)



GDP growth rate and contribution by industry (1993/94base)



Source Central Statistical Organization, Ministry of Statistics and Program Implementation

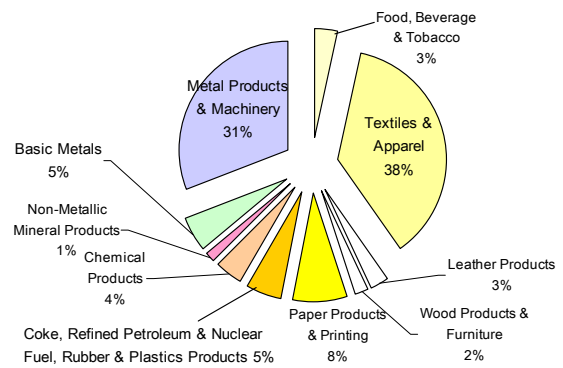
The manufacturing industry is not so prominent within Delhi since many companies investing in the Delhi area are located in industrial complexes in periphery states. The number of registered factories is 3,014 with a total of 126,700 employees.

(2) Trends in Corporate Sector

In the city of Delhi, Gurgaon of Haryana State and Noida of Uttar Pradesh State both of which are within 30km from downtown Delhi, comprise the largest industrial accumulated area in India as greater metropolitan Delhi. According to the Japanese Embassy in India, the total number of Japanese companies in the area has reached to 117, representing 36% of the total 328 companies located in all of India. Of these companies, 67 are located in Delhi, 34 in Gurgaon and 16 in Noida. In the area, manufacturers of automobiles, auto parts, motorcycle and electronic appliances have increased to formulate industrial accumulation, while such large-scale FDI assembly manufacturers as Suzuki, Honda, Samsung (manufacturer of electric ovens, washing machines, air-conditioners and refrigerators) of Korea have developed industrial linkages within the area. Because there is a huge, potential demand in the capital and its surrounding area, acceleration of infrastructure development and investment promotion by both FDI and Indian companies are expected to continue, which will lead to the development of that area as a center of Indian industries.

In the meantime, in the city of Delhi there are such 24 traditional industrial estates where many small scale industries are located such as Wazirpur and Okhla. Most of those SSI companies have many problems in such areas as management efficiency, productivity and environmental control. Improvements in productivity, quality and environment/safety control in each SSI are critical issues. At the same time, development of a common infrastructure, strengthening environmental management, and closures and

Number of employment by industry (2001)



Source Delhi Statistical Hand Book 2004, Govt. of National Capital Territory of Delhi

relocation of obsolete facilities in the whole industrial estate are also becoming important issues.

**Box. Case of company(1) Japanese automobile manufacturer**

The company was established in 1985 at Gurgaon in Haryana State as the first Japanese automobile FDI and also the first passenger car manufacturer in India. Starting from a production of 800cc passenger cars, the company still keeps the top share of the small size passenger car market in India. It competes with Tata Motors (Maharashtra) and Hyundai Auto (Tamil Nadu). While it started its operation with only 5% of local content because of inexistence of reliable materials, parts and components in the Indian domestic market, the company succeeded in increasing local content rate to 80-85% at its new model announced in May 2005 through constant efforts to select and develop core parts suppliers by establishing JV component manufacturers and making technology transfer to them.

The number of current suppliers is 216, of which 70% are located nearby the company. However, major 80 materials, parts and components companies among them occupy 85% of total purchasing value, while the smallest amount of sales by a supplier is around 5 million yen. Major parts and components that need a certain size of scale economy such as transmission as well as such major raw materials as special steel that requires a very strict chemical composition control are imported, and the company believes that this tendency will not change for a while. The company and the Japanese affiliated manufacturers have developed their first-tier suppliers in India until now, and they intend to improve management and quality of supporting industries after the second-tiers by way of strengthening quality management activities. The company also plans to expand production capacities of passenger cars and engines, utilizing its vast property including test-run facility that is next to the Manesar Industrial Estate in Gurgaon. While the company actively uses AOTS technician development courses, it plans to assist the Haryana State government by participating in capacity building project of high-level vocational training schools (ITI) as one of its social contributing activities; because the company considers training of young technical people in India have many issues need to be improved. The company is expected to assist in improving management and operation of ITIs including a revision of curricula by dispatching managers and instructors, while it intends to solely operate 2 ITIs and jointly manage 4 ITIs with the state government. Because one-year job-shop training is originally included in ITI's curricula, the company is also expected to cooperate in effective management in the area.

**Box. Case of Company(3) Japanese apparel inspection company**

The company was established in Bangalore in 2004 as the second Japanese apparel inspection company in India that makes inspection of apparel exported to Japan. It has just opened its new inspection facility in Gurgaon which employs 60 fulltime workers and 50 temporary workers ones. The parent company in Japan operates the same kind of facilities in many places in China. Product standard of Indian apparel goods are generally very low, and therefore, the company rejects almost 40% of supplied apparel goods as defects. Even with these strict conditions Japanese customers who purchase the company's products, mainly a large retail stores, often reject further 20% of delivered goods. Because delay of delivery frequently occurs, the company conducts operation and management in consideration of the occasional delay. Some workers assigned by apparel manufacturers stay at the company's facility in order to make a small-scale adjustments for defected goods. Indian garment and apparel industries have high-quality materials represented by Indian cotton and also have a long history of exports to Europe and the USA, which shows high potential of the industry. However, the current price per performance of the Indian apparel industry is not seen viewed as very high compared to the Chinese one, because labor cost is relatively high in the sector. The company still sees many possibilities for Japanese apparel inspection firms to increase their operation in India, which leads to an increase in apparel export from India to Japan.

**Box. Industry Organization(1) Automobile Component Manufacturers' Association of India (ACMA)**

ACMA was established in 1958 and its headquarters is located in Delhi. There are about 500 member companies including the Japanese automobile component manufacturers, of which 350 (70%) are SMEs. The organization actively conducts various programs mainly in the automobile cluster areas, operating branch offices in Mumbai (Maharashtra) and Chennai (Tamil Nadu). Major activities are (i) information exchange and dialogue with governments about policies, regulations, standards, and so on, (ii) assistance in marketing and globalization of member companies through organizing various fairs and business matching, and (iii) preparation of data and statistics. The organization plans to strengthen activities for increasing product development capabilities and human resource development (training) in the sector. While it has close contacts with Japan Auto Parts Industries Association (JAPIA) and JETRO, the organization works as an implementing and window agency of training activities by JETRO short-term experts on production control and quality management as well as AOTS training. ACMA also works as an active implementing agency for UNIDO cluster project.

**(3) Results of the Questionnaire Survey**

(1) Number of companies surveyed: 47

## 1-1. Sub sector (Top5)

No	Industry	%
1	Garments/apparel	20
2	Other manufacturing	15
3	Transport equipment	13
4	General machinery	9
5	Electrical machinery	9
Total of top 5 sectors		66

## 1-2. Company size

Annual sales (Rs)		%
less than 10 million		8
10 - 100 million		36
100 mill - 1 billion		33
more than 1 billion		23
Number of employees		%
less than 50		49
50-200		12
more than 200		39

## 1-3. Ownership &amp; export

Share of owner (family) company: 70%		
Share of those established before 1991 : 65%		
Export ratio	%	
Zero	44	
less than 25%	30	
more than 25%	19	
100% (EOU)	6	

(2) Important factors/obstacles in business

## 2-1. Factors/obstacles for sales expansion

Factors for expansion	
No	Important factor
1	Price competitiveness
2	Better quality
3	Personal trust
Obstacles for expansion	
No	Factor
1	Price competitiveness
2	Lower technology
3	Poorer quality

## 2-2. Factors for business expansion

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Opening up of foreign trade
3	Developing new products
Requirements of customers	
No	Requirements
1	To lower the cost
2	To improve quality
3	To observe delivery time

## 2-3. Obstacles in business environment

Major obstacles		
No	Factor	
1	Difficult administrative system	
2	Insufficient/inefficient infrastructure	
3	Tax system, including tariff structure	
Obstacles in procurement of materials/parts		
No	Factor	%
1	No obstacles	34
2	Tax system and import tariff	23
3	Laws/regulations, Gvt control	21

(3) Necessary assistance and expectations for the Government

## 3-1. Assistance services

Expected assistance services	
No	Contents
1	Testing services
2	Training courses
3	Exhibition support
4	Advice on R&D
5	Meeting with potential buyers

## 3-2. Expectations for the Government

Shares who responded that administrative services are not effective		77%
Requests in promoting private sector		
No	Contents	
1	To simplify tax system	
2	To improve infrastructure	
3	To carry out labour policy reform	

## 3-3. Study Team Comments

- Quite a few SSIs look for export, although their main market is domestic one. Expectation for improvement in legal, tax, and administrative system and procedures is strong.

(4) Top 3 reasons to invest in India (Delhi NCR)

1. Market size
2. Economic situation
3. Follow 'keiretsu' parent company / utilize local supporting industry

(5) Evaluation of Current Business Situation

Generally good but not satisfied with electric supply and real estate price.

(6) Request to state government

Many argue to abolish special treatment for plant location in specific regions.

**(4) Industrial Promotion Policy**

Solving the urban social problems is a major concern of the industrial development in Delhi; namely, congestion and labour immigration. Another issue is rehabilitation of the infrastructure of old industrial estates. Therefore, improvement of urban environment is a priority agenda in Delhi. The following are the major initiatives.

- The Delhi state prioritises non-polluting industry such as IT, IT enabling services, electronics and

high-tech industries. There are plans to establish high-tech parks under PPP.

- The Supreme Court delivered a verdict that the factories operating in the residential areas or outside industrial estates have to stop operation after a grace period. The government is assisting the corresponding factories to move to other areas including neighbouring states.
- In response to an order from the Supreme Court on establishment of common effluent treatment plants, the government plans to set up 15 plants, which support 28 industrial estates.
- 50% of investment for environmental rehabilitation spent by a company is subsidised with a ceiling of Rs. 50,000.
- Accommodation is offered to the immigrant workers at a reasonable rate.

Delhi State Industrial Development Corp. Ltd. is the main agency for implementing above measures.

Delhi has many immigrated small-scale enterprises from the rural areas. Household electric appliance is a popular sub-sector among such immigrated enterprises. As an initiative to support these small-scale enterprises, the government has ordered Quality Control Order in 1981 and made it mandatory to obtain a manufacturer certificate for producing household appliances. The government has established several testing and laboratory centres to ensure the quality of the products.



Duration testing of switches  
(testing centre in Delhi)

### 3 Investment Promotion

#### (1) Investment Trend

Delhi is the national capital of India and a centre of politics and economy. Due to limitation of availability of land and infrastructure, industries encouraged for investment are: knowledge-based industries such as IT and designing; small scale export oriented industries; non-polluting industries; and industries not requiring large amount of water, electric power or land. As it is difficult for a large scale factory to be set up inside Delhi National Capital Territory (NCT), investment environment of the region should be seen as Delhi National Capital Territory (NCR) which includes Gurgaon and Faridabad of Haryana State and Noida of Uttar Pradesh State.

Approved amount of FDI (August 1991 - August 2000): 303,038 million rupees

Share in national total: 12.2%

Source: MCI, "SIA Newsletter September 2004"

## (2) Investment Policy

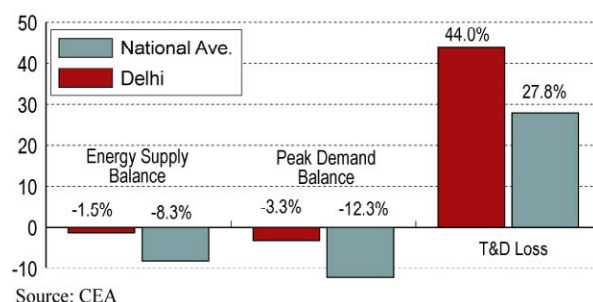
There are several investment incentives including subsidy to investment in non-polluting industries and various supports to women entrepreneurs. Delhi NCT government is planning deregulation and simplification of investment procedures. The Commissioner of Industries is responsible for the FDI policy.

## 4 Infrastructure

### (1) Electricity

The entire power sector (generation, transmission and distribution) in Delhi was previously managed by Delhi Vidut Board (DVB). In 2001, Delhi's power sector has restructured into 6 government-owned corporations (2 generation, 1 transmission and 3 distribution companies). Then, in June 2003, 3 distribution companies were successfully privatized. After the privatization, revenue collection ratio and measures to prevent energy theft have been improved, and blackout resulted from distribution side has reduced. Electricity demand and supply balance in Delhi is generally better than other states, but Delhi is still suffering from energy shortage. During the fiscal year 2005/06, there were 3.3% (122 MW) of peak deficit and 1.5% (321GWh) of energy deficit.

As of the end of Nov 2005, Delhi had 3,590 MW of generation capacity. 2,658 MW or 74.0% of generation capacity is allocated to Delhi from central power sector undertakings (CPSUs), and the remaining 932 MW or 26.0% of generation capacity is owned by the generation companies in Delhi. To cope with the increasing demand, 104 MW and 29 MW of generation capacity will be allocated from NHPC's Their hydropower station and NTPC's Unchahar thermal power station, respectively. In addition, 560 MW of generation capacity will be allocated to Delhi from CPSU's 3 power stations by March 2007.



Power Supply Situations of Delhi

### (2) Road and Urban Transportation

Delhi is well connected through a network of national highways. Delhi is the starting point of national highway (NH) No. 1, 2, 8, 10, and 25. NH-1 and NH-2 extend to north (Srinagar) and south (Agra), respectively, and forms part of the North-South Corridor of India. NH-8 and NH-2 connects to Mumbai and Kolkata, and form part of the Golden Quadrilateral.



Delhi Metro Route Map



Commercial and urban function of Delhi is concentrated in New Delhi. Since New Delhi is a well planned city constructed during the colonial period, width and alignment of roads are better than other metropolitan area, such as Kolkata, Mumbai, Chennai and Bangalore. In addition, metro railway has started its commercial operation since 2003. For these reasons, compared to other metropolitan area, traffic congestion is not a severe problem in New Delhi.

Delhi Metro has been constructing in a phased manner. The phase I project covers 3 sections with total length of 62 km. Out of 62 km, 56 km has already been in operation (Route-1 Shahdara - Rithala: 22 km, Route-2 Shahdara - Rithala: 11 km and Route-3 Barakhamba - Dwarka: 23 km). Japanese Government already provided 162.8 billion Japanese ODA loan (commitment base) for the project. The phase II project will cover extension of these three routes.

Currently, National Highways Authority of India (NHAI) is constructing an elevated toll road, which would connect New Delhi, Delhi international airport and Gurgaon, on a Built Operate and Transfer (BOT) scheme. It will be opened for traffic in March 2007. After the completion of the project, travel time from Delhi to airport and Gurgaon will be significantly reduced.



Metro Station under construction (Dwarka-10)

### (3) Railways

Railways in northern India, including Delhi, Uttar Pradesh, and Haryana, are operated by Northern Railway. Major passenger and freight routes around Delhi are broad gauge, and are mostly electrified.

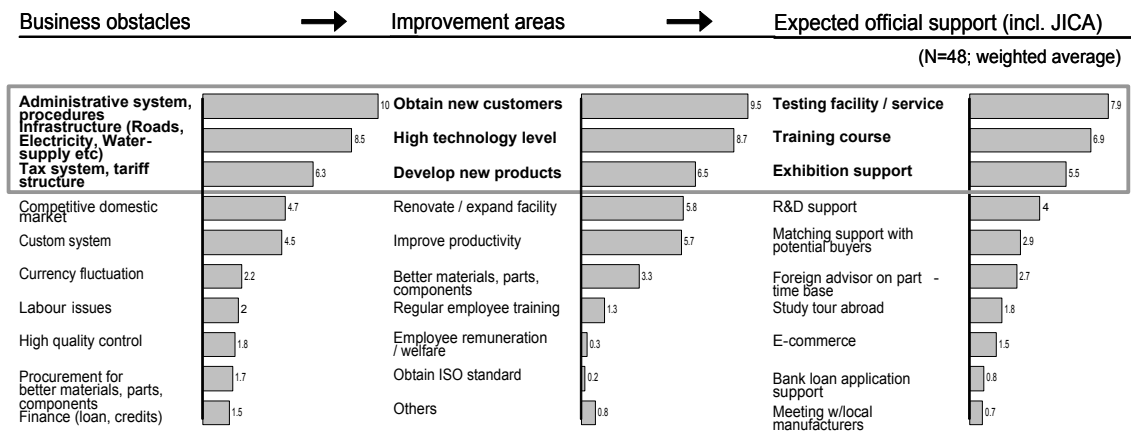
In Delhi, there are two Inland Container Depot (ICD), one container depot in Okhla (domestic container only), and the other container depot in Tughlakabad (handling both international and domestic container). A full container train operates from Tughlakabad ICD to Jawaharlal Nehru Port in Mumbai daily basis, and also to Whitefield ICD in suburban of Bangalore, Tondiarpet ICD/Container Freight Station (CFS) in Chennai, Cossipore Road CFS in Kolkata, Whitefield ICD in Bangalore, Sanathnagar ICD in Hyderabad, and Mumbai Port twice or times a week.

### (4) Airports

Privatization of Delhi international airport is under progress. Concessionaire is requested to modernize existing airports, and is responsible for operating, maintaining, and managing the airport. While the concessionaire will gain revenue from the operation, they have to be paid for the capital cost of a modernization project, operation and maintenance cost. They also requested the government to pay a certain percentage of revenue as a concession fee. On the end of January 2006, the government decided to enter in to concession agreement with GMR-Fraport consortium (offering 43% of revenue share to the government).

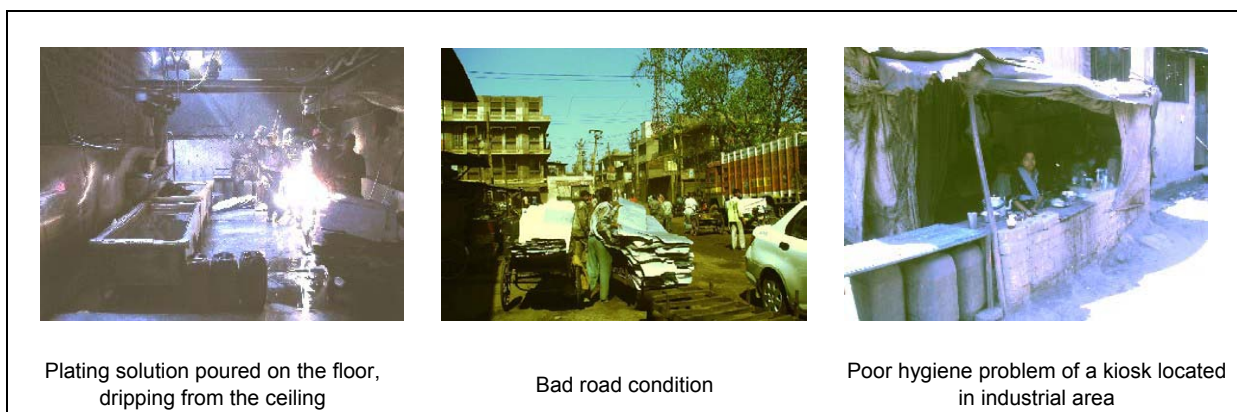
**5 Development Needs**

According to the company interview survey (sample #48 in Delhi), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;



Source: company interview survey

According to the team’s field survey, environment consideration for sustainable development is the highest priority issue for Delhi state government as well as common world’s interest. Transfer of Japanese latest technology including operation / institution building of recycle use of water, disposal, air cleaning system will be a valuable contribution. In addition, the basic infrastructure and working environment of the old industrial area of Delhi is a serious problem. Even in export industries, employers are obliged to work in poor conditions which indicate the need to institutionalize the safety standard in India. Lesson learned from a pilot case to select one existing industrial complex and improve both environment / working conditions will be an effective way for cooperation which aims to establish the operational standard.



Wajirpur Industrial Area

## II Karnataka State

### 1 Overview

Karnataka is one of the most industrialized states in India with a population of 53 million. Its capital, Bangalore has become a major worldwide hub of the IT industry and is the IT capital of India producing approximately 38% of India's software which amounted to about \$9 billion in 2005. Bangalore is dubbed as the Silicon Valley of India with more than 50% of all software companies (about 1,700) based in the city and its suburbs. Bangalore has approximately 40% of India's Biotechnology companies. Also, Bangalore is one of the fastest growing cities in the world with more than 6 million people.

Items		Rating
Area	191,791 km <sup>2</sup>	8
Population	52.8 million	9
GDP*	Rs 1324.98 billion	7
3-year GDP average growth rate	6.9%	23
NSDP** per capita	Rs 21,696	14
Manufacturing GDP share	19.1%	
FDI(2004)	Rs 449,410 million	6
Literacy rate	66.6 %	19



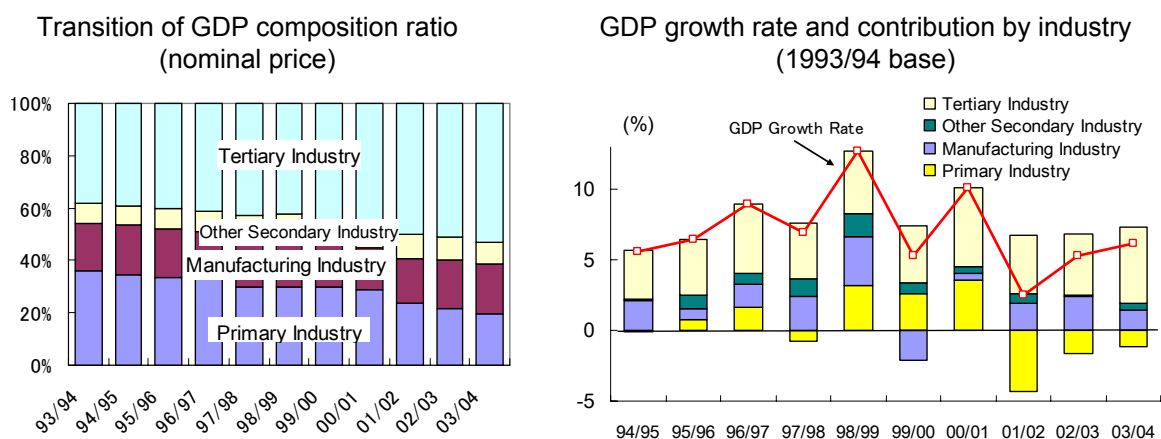
\*at current price (1993/94 bases) \*\*Net State Domestic Product (1993/94 bases)

Source: States and Territories of India, Census of India 2001

### 2 Industry

#### (1) Industry Structure

In FY2000/01, the economic growth rate of Karnataka fell from 10.1% to 2.5% over the previous fiscal year due to depression of agricultural production. However, gradual recovery is observed since the sharp drop as 5.3% in 2002/03, 6.2% in 2003/04, and 7.8% in 2004/05. Industry structure is 19.3% for primary industry, 27.8% (manufacturing industry contributes 19.1%) for secondary industry, and 52.8% for tertiary sector. (FY2003/04) After FY2001/02, the manufacturing industry has also become the leading industry.



Source Central Statistical Organisation, Ministry of Statistics and Program Implementation

From the industry composition of FY1993/94 which is the base of index of industry production (IIP), major industry in manufacturing sector are food / drink / tobacco (25.3%), textile / apparel (14.0%), chemical (10.0%), machinery excl. exports (19.2%), export machinery (6.4%) which dominates three-fourths of the total share. Exceptions are leather products and wool / silk / nylon products, IIP is showing a constant growth especially drink / tobacco and cotton products.

Karnataka Industry Area Development Bureau (KIADB) organizes 89 industrial complexes in 25 districts around the state.

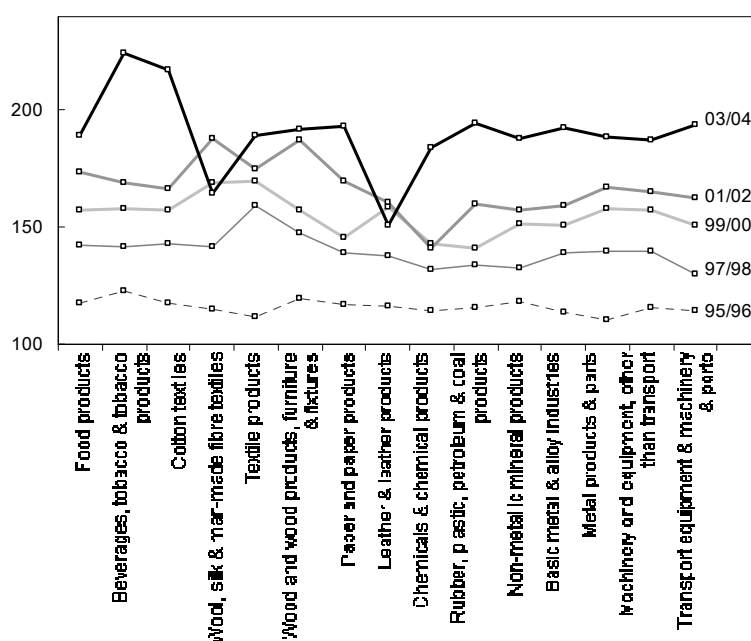
Among them, the following three (3) districts are the areas with the most growth.

- Mangalore – Karwar area : IT (software, hardware), electronics, automobile, biotechnology, food processing, flowers, R&D center
- Hubli – Belgaum area : Precision machinery, automobile parts, agro food processing, textile, IT related service
- Raichur – Bellary area : Iron/steel, cement, electricity, mining, agro food processing, textile

## (2) Trends in Corporate Sector

Accumulation of such industries as IT(ES), biotechnology and pharmaceutical, automobiles, apparel,

Transition of Industry production index (1993/94=100)



Source Economic Survey of Karnataka

electric and electronics and food processing have progressed, in which Bangalore which is called the “silicon valley” of India functions as a center. 57 Japanese FDI companies in automobile and components, general machinery, electric and electronics, and food processing, are located in Bangalore, including the Toyota group which operates a passenger car assembly plant in Bangalore. Bangalore is a medium-size city, different from such cities as Delhi, Mumbai and Chennai, and seems to be already overcrowded. However, Karnataka receives high evaluation in investment climate from potential investors, and the state government plans to develop a food-processing cluster. The feeling among local residents is that there exists a strong need for establishing and strengthening an information center, which would function as information exchange and business matching with Japan in IT and biotechnology-related areas.

**Box 2-9. Industry Organization(3) Karnataka Association of Apparel Manufacturers**

KAAM consists of 200 apparel companies among 3,000 located in Bangalore. The association considers that unskilled workers occupy 85-90% of total workforce be the major issue to be concerned. Even though there are demand and equipment for production, it is difficult to employ good workers who have sufficient skills. The fact that almost 50% of workers leave the company every year is also a big problem for them. KAAM thinks that the Government should make more efforts on strengthening vocational training schools, and expect to collaborate with the Government along with the efforts for strengthening apparel cluster. Each of the two member companies that the Study Team visited employs around 200 workers most of which whom are female, and have basic production facilities. However, much variances in quality were observed due to poorness in such basic skills as sewing and cutting, and to low level of production control and operation standard.

**Box 2-10. Industry Organization(4) Karnataka Chambers of SSI (KCSSI)**

KCSSI has a history of 50 years, which organizes 3,000 direct members (SSIs) and 70 District members (district association) in Karnataka State. The organization provides market/technology information, plans opportunities for technology transfer and collaboration activities, organizes study tours, and assists in human resource development activities. KCSSI expects for various donors' assistance programs for development and promotion of such clusters as automobiles and food-processing, which can strengthen industrial linkages and management/technological capabilities of SSIs and micro enterprises. It also considers promotion of micro and small scale industries in local areas as an important issue.

**(3) Results of the Questionnaire Survey**

(1) Number of companies surveyed: 50

## 1-1. Sub sector (Top5)

No	Industry	%
1	Others	30
2	Food	10
3	Other manufacturing	10
4	General machinery	6
5	Garments/apparel	6
Total of top 5 sectors		62

## 1-2. Company size

Annual sales (Rs)		%
less than 10 million		8
10 - 100 million		10
100 mill - 1 billion		24
more than 1 billion		10
Number of employees		%
less than 50		46
50 - 200		24
more than 200		14

## 1-3. Ownership &amp; export

Share of owner (family) company: 70%		
Share of those established before 1991 : 65%		
Export ratio	%	
Zero	70	
less than 25%	10	
more than 25%	6	
100% (EOU)	6	

(2) Important factors/obstacles in business

## 2-1. Factors/obstacles for sales expansion

Factors for expansion	
No	Important factor
1	Price competitiveness
2	Higher technology
3	Better quality
Obstacles for expansion	
No	Factor
1	Lower technology
2	Price competitiveness
3	Sales conditions

## 2-2. Factors for business expansion

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Developing new products
3	Developing new customers
Requirements of customers	
No	Requirements
1	To lower the cost
2	To observe delivery time
3	To improve quality

## 2-3. Obstacles in business environment

Major obstacles		
No	Factor	
1	Tax system, including tariff structure	
2	High competition in domestic market	
3	Finance (Difficulties in loans/credits)	
Obstacles in procurement of materials/parts		
No	Factor	%
1	No obstacles	52
2	Laws/regulations, Gvt control	24
3	Tax system and import tariff	12

(3) Necessary assistance and expectations for the Government

## 3-1. Assistance services

Expected assistance services	
No	Contents
1	Advice on R&D
2	Machinery lease
3	Credit guarantee
4	Training courses
5	Testing services

## 3-2. Expectations for the Government

Shares who responded that administrative services are not effective		8%
Requests in promoting private sector		
No	Contents	
1	To simplify licensing/permission	
2	Preferred tax for manufacturing	
3	Tax reform for trade promotion	

## 3-3. Study Team Comments

- There are many medium scale companies that have expectations for simplifying administration for business expansion and competitiveness improvement as well as finance, lease and credit guarantee.

(4) Top 3 reasons to invest in India (Karnataka)

1. Economic condition
2. Existence of competent skilled labour
3. Availability of business partners

(5) Evaluation of Current Business Situation

Generally satisfied but some complaints on real estate price.

(6) Request to state government

Infrastructure improvement, abolishment of special tax treatment for specific industries etc.

**(4) Industrial Promotion Policy**

Bangalore, a famous IT industrial city, now has a large concentration of the advanced enterprises in bio, pharmacy and automotive. The government of Karnataka has had ample experiences in PPP over the last 10 years and has come to learn about the technology of the international level. Yet, industrialization is mainly concentrated in Bangalore, and the gap between Bangalore and the rural areas is wide. The government is trying to protect the urban environment of Bangalore which used to be a green-rich, quiet city until 10 years

ago and to promote investment into neighbouring cities such as Mysore. Furthermore, the government has set up a Technology Upgradation Fund in an aim to bring the technological capacity of the local industry up to the international level. The following are the major initiatives.

- For promoting Science and Technology Entrepreneurs Park, 25% of infrastructural investment is subsidised with a ceiling of Rs. 2,500,000 per park.
- For promoting production and quality management, complying with the WTO standards, the government promotes establishment of the testing centres by the private sector and subsidises 10% of the capital investment with a ceiling of Rs. 1,000,000 per centre.
- In order to promote establishment of the Technology Business Incubator Centres in the local areas, the government subsidises up to Rs. 5,000,000 per centre for its infrastructural investment.

As for the entrepreneurship promotion, the Centre for Entrepreneurship Development of Karnataka in Dharward and the Rural Development and Self employment Training Institute are actively in operation. The former is state owned, and the latter is non-governmental (NGO). Karnataka also has a concentration of small-scale enterprises working on the granite carving. UNIDO is assisting artisans of small-scale industries in training the curving.



Artisans assisted by UNIDO

### 3 Investment Promotion

#### (1) Investment Trend

The capital of Karnataka State is Bangalore, Silicon Valley of India, where many hi-tech industries such as IT and biotechnology industries are located. Bangalore is the location of the head offices of Wipro and Infosys, the world famous Indian IT companies, as well as development bases of IBM and Motorola. However, in recent years other Indian cities like Pune, Hyderabad and Chennai has been also attracting investment from multi national IT companies, lowering the advantage of Bangalore in the field. In manufacturing sector, investments in automobiles, such as Toyota and Volvo, and automobile parts are growing.

Approved amount of FDI (August 1991 - August 200): 188,184 million rupees

Share in national total: 7.6%

Source: MCI, "SIA Newsletter September 2004"

#### (2) Investment Policy

A wide range of industries, from IT, biotechnology and textile to tourism and infrastructure development are encouraged for investment. Investment incentives include exemption and reduction of tax for investment in some thrust industries, support for marketing activities of small scale companies, investment



incentives for specified areas, and exemption of entry tax for export companies. The Karnataka Udyog Mitra; KUM, under the Ministry of Industries of the State, is in charge of investment promotion and has a function of consultation desk for investors.

### (3) Particular Issues for Investment Promotion

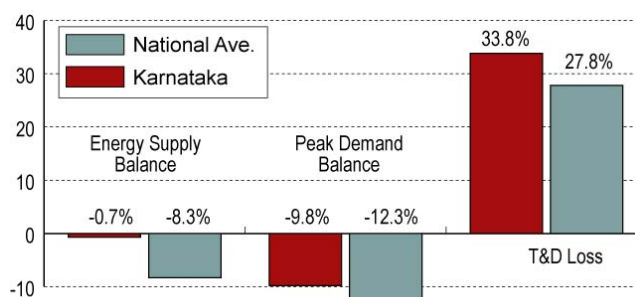
At the moment it seems that investment amount in Bangalore and its vicinity exceeds the infrastructure capacity of the area, causing heavy traffic jams and shortage of electric power. The State government encourages investment in regions other than Bangalore.

## 4 Infrastructure

### (1) Electricity

The power sector in Karnataka had been managed by Karnataka Electricity Board (KEB) and Karnataka Power Corporation Ltd (KPCL). In 1999, KEB was divided into Karnataka Power Transmission Corporation Ltd. (KPTCL) and 4 regional distribution companies. With the 4 regional distribution companies, power distribution in Bangalore city and its vicinity is assigned to Bangalore Electric Supply Company (BESCOM). State government plans to privatize these distribution companies sequentially. Since BESCOM is financially stable, it is favored for privatization.

As of the end of November 2005, total available generation capacity in the state was 7,766 MW. 44.9% of which (3,486 MW) was hydropower. During the fiscal year 2004/05, since energy production from these hydropower stations were lower during the end of dry season, peak power deficit and energy deficit were 9.8% (602 MW) and 0.7% (251 GWh), respectively.



Source: CEA

Power Supply Situation in Karnataka

By the end of 10th Five Year Development Plan, KPCL's Bellary coal-fired power station with install capacity of 500 MW will start commercial operation, and 58 MW of NPCIL's Kaiga nuclear power station unit 3 (total installed capacity 220 MW) will be allocated to the state. However, even if all of these power stations will commence operation on schedule, 21.5% (1,661 MW) of peak power deficit and 15.4% (6,906 GWh/ year) of energy deficit is estimated to rise in 2006/07.

To avoid such power supply shortage, not only augmentation of generation capacity but also reduction in T&D loss and efforts towards energy conservation will be indispensable. For example, as much as 39.8% of energy was consumed only for irrigation pump in 2004/05, which was considerably higher than the national average of 24.1%. Extraordinarily cheaper tariffs for irrigation pump encourage higher consumption, and thus resulted in a large financial deficit of distribution companies. In order to improve



the financial situation of distribution companies and to ameliorate energy supply and demand, every possible measures should be taken to reduce energy consumption for irrigation pump.

## (2) Road/ Urban Transportation

Bangalore Metropolitan area with a population of 5.7 million is the fifth largest metropolitan area in the country. Recently, population in Bangalore has rapidly increased with an annual growth ratio of 4.9%, which is the highest among metropolitan areas in the country. Since development of urban transport infrastructure cannot catch up with the sharp increase in traffic demand, Bangalore is suffering from severe traffic jams.

The railway is runs in the north-south direction of the city. Railways in the city were neither designed nor operated with regard to urban and regional traffic (infrequent stations, no pass-through lines, low service frequency). Since the railway is utilized only for inter-city transportation, urban transport in Bangalore is essentially road based. According to the report prepared by Bangalore Mass Rapid Transit Ltd., 41% of passenger kilo-meters are covered by bus 38% of private vehicles and taxis, 17% of bicycles and walk, and 4% of tricycles (auto-rickshaw). Although, a long distance bus terminal was recently re-located from the city center to city fringe, most of freight terminals are still located within the central city and thus lead to traffic congestion.

As a result, traffic congestion in Bangalore city has become more serious year by year. Traffic jams brings about adverse effects on business activities. In response to repeated requests about transport infrastructure development from several IT companies, the Karnataka government held a meeting with 25 IT companies in October 2005, and agreed on improvement of arterial roads and on constructing grade separation at 15 major junctions.

In addition, after the significant delay, state government approved a metro railway project in August 2005. Bangalore Metro Rail Corporation is planning to start construction of the 36.5 km long network in 2007. The network with 2-lines will be crossed at the Central Railway Station in Bangalore Station. The alignment will be 6.5 km underground (in the central zone), 29.2 km elevated, and remaining 0.6 km surface. Construction cost will be procured from the government of Karnataka (25%), City of Bangalore (25%), and the remaining 50% is to be borrowed from domestic and international sources (specifically Japan bank for International Cooperation).

## (3) Railways

The total length of the railway network in Karnataka is 3,090 km. Except for several meter gauge section, such as Mangalore – Sekleshpur, and Mysore - Chamaraja Nagar, remaining rail road adopted broad gauge system. There are two Inland Container Depots (ICD) in the state, White field ICD located vicinity of Bangalore and Desur ICD in north part of the state.

#### (4) Ports

Twenty ports are situated in Karnataka. New Mangalore Port is designated as one of the major ports in the country. Cargo handling volume in 2004/05 was 33,891 tons, which constitutes 9% of total handling volume of the major ports. New Mangalore port and Karwar port play important roles in exporting iron ore and magnesium, which were produced in Bellary District in the state.

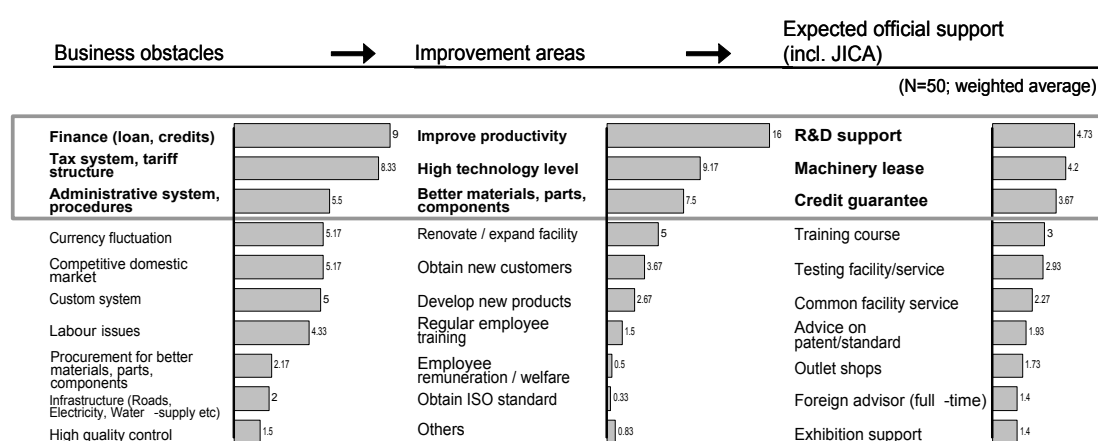
#### (5) Airports

In Karnataka, there is one international airport in Bangalore and 4 domestic airports in Mangalore, Mysore, Belgaum and Hubli. Number of passengers and cargo handling volume in Bangalore airport were 2,843 thousand and 74,493 ton, respectively, and these were 4<sup>th</sup> among the airports in India, behind Mumbai, Delhi, and Chennai. Several regular airfreights services are available at Bangalore airport (including Air India, Kuwait Air, and Lufthansa air). International cargo handling volume in the airport was 30,464 ton (ranked 3<sup>rd</sup> in the country). All the data shown above is cumulative total from April to October 2005.

In addition to these existing airports, state government plans to construct a new international airport 34 km away from Bangalore. The new airport will be completed in the middle of 2008. Capital cost was estimated US\$ 3.09 billion. Central government and state government will invest 13% each, and the remaining 74% will be disbursed by private investors including Siemens Project Venture and Unique Zurich Airport.

## 5 Development needs

According to the company interview survey (sample #50 in Karnataka), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;



Source: company interview survey

In Karnataka, while companies with the leading technology accumulated in the urban area, a number of small micro companies with obsolete production methods are scattered in rural areas. Public supporting

institution exists for each level. Karnataka is considered as one of the potential states for Japan's technical cooperation.

### III Maharashtra State

#### 1 Overview

Maharashtra is India's third largest state in terms of area and second largest in terms of population (97.0 million) after Uttar Pradesh. It is bordered by the states of Gujarat, Madhya Pradesh, Chhattisgarh, Andhra Pradesh, Karnataka, and Goa. Mumbai, India's largest city is the capital of Maharashtra.

Mumbai contributes 40% of all income tax collections, 60% of all customs duty collections, and 40% of India's foreign trade. A number of Indian and International financial institutions have headquarters in downtown Mumbai. Pune, Nagpur and Kolhapur are other large cities of Maharashtra.

Items		Ranking
Area	307,713 km <sup>2</sup>	2
Population	96.8 million	2
GDP*	Rs 3331.45 billion	1
3-year GDP average growth rate	6.5%	27
NSDP** per capita	Rs 29,204	7
Manufacturing GDP share	20.4%	
FDI(2004)	Rs 1,527,340 million	1
Literacy rate	76.9%	8



\*at current price(1993/94 bases) \*\*Net State Domestic Product(1993/94 bases)

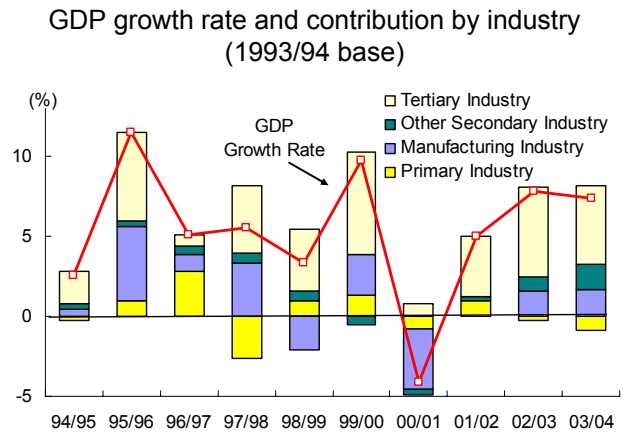
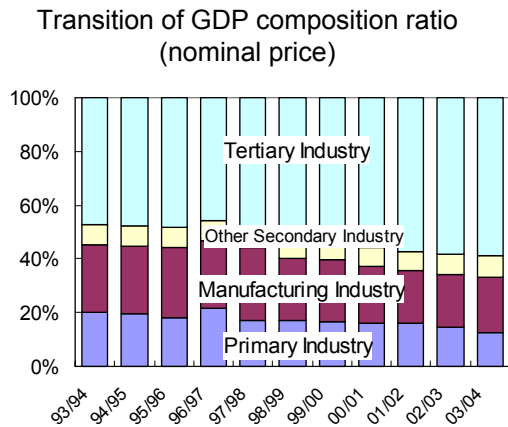
Source States and Territories of India, Census of India 2001

- Under the Ministry of Industries which plans and implements state industrial policy, Maharashtra Industrial Development Corporation (MIDC) promotes investment promotion and industrial complex development.
- Maharashtra City and Industrial Development Corporation is in charge of urban development of the greater Mumbai and Navi Mumbai Special Economic Zone.

#### 2 Industry

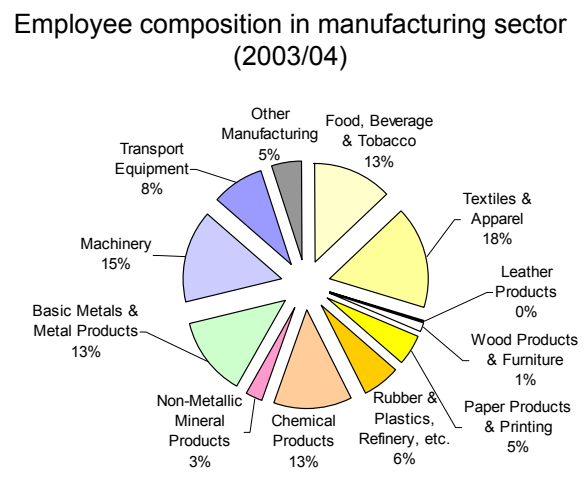
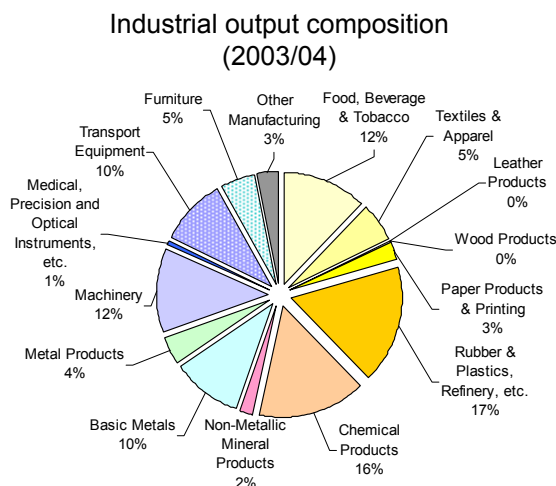
##### (1) Industry Structure

Although the Maharashtra economy recorded 4.1% of negative growth in FY2000/01 from depression of agricultural output, it has been following the sign of recovery since then. Recent rates of economic growth were 7.8% in FY2003/04, and 7.3% for 2004/05. The primary sector consists of 12.7% of the industry structure (FY2003/04), secondary industry 28.7% (incl. 20.4% of manufacturing industry) and tertiary industry 58.6%. The tertiary industry which occupied 46% in FY1997/98 has been raising its share every year.



Source Central Statistical Organisation, Ministry of Statistics and Program Implementation

There are 227,900 offices/factories (incl. repair) located in the urban area out of a total 443,800. The number of employees is 1.77 million. Major industries are chemical products, oil refining, rubber / plastic products, machinery, food, and transport machinery, etc.



Source Economic Survey of Maharashtra 2005-06 Directorate of Economics and Statistics, Govt. of Maharashtra

(2) Trends in Corporate Sector

In the State industries such as automobiles, chemical products, electric and electronics and IT have been developed, particularly in Mumbai which is also the center of finance and services in the country and in such surrounding cities as Pune which is 170 km away from Mumbai. In the automobile sector Bajaj Auto, Tata Motors and Mahindra & Mahindra, all of which are major Indian manufacturers, have major production facilities, while 45 Japanese manufacturers are located in Mumbai and 16 in Pune in such sectors as automobile components and machineries. The number of factories in Maharashtra is the second in the country at 18,000 (fiscal year 2002) after Tamil Nadu, and the number of SSIs is around 900,000 at 4th (fiscal year 2004), which makes the state one of the major industrial bases. The State makes efforts of

promoting high-tech industries, having the largest number of companies located in software technology parks. Maharashtra Industrial Development Corporation (MIDC) under the Ministry of Industry of the state government has actively developed around 250 industrial estates and industry-related infrastructures, and is also eager to conduct various capacity building projects from the viewpoint of industrial cluster development.

#### Box 0-5. Case of Company (4) Japanese industrial paint maker

The company was established in 1986 by taking over some parts of capital of local chemical product manufacturer (JV with the British) in order to supply automotive-use industrial paints, particularly to one of the Japanese car maker. The company takes almost 23% share of the Indian paint market, particularly the leading share of 65% for automotive-use. The company has 5 production facilities and 65 sales depots in the country, while it supplies products not only to the Japanese but also Tata Motors. Manufacturing of automotive-use paint is custom-based production with a small amount of batch and large varieties of different specifications, being a kind of high-tech industry, and therefore, engineers of paint makers are required to stay at the production lines of customers. In this respect, Indian engineers are evaluated as efficient, being very diligent and staying long in the job, which means that the country has rich human resources for the development of the industry.

#### Box 0-6. Case of Company(5) Japanese chemical product manufacturer

The company was established in 2004 as a manufacturing and sales company of such chemical products as insecticide and agricultural chemicals. Because it takes time for permission and licensing for establishing business units in India, the company was established by taking over an existing factory. It now operates 3 synthesizing factories in Maharashtra, Gujarat and Andhra Pradesh (Hyderabad). Labor management is conducted by a local JV partner and outsourcing of workers is effectively utilized, because labor issues are difficult to manage in India. The company thinks that India has advantages in fine chemical production, because labor cost is so cheap that semi-auto process is effectively organized with an abundant use of cheap labors, which leads to a high cost-effectiveness. However, major control and analytical equipment in plant facilities should be imported, mainly from Japan, being a limitation of Indian manufacturing sectors. Capacities of testing and laboratories by government institutions are very weak, and therefore, the company has to make such efforts as donating analytical equipment in order to get a certain level of certified measurements of products.

**(3) Results of the Questionnaire Survey****(1) Number of companies surveyed: 50****1-1. Sub sector (Top5)**

No	Industry	%
1	Other manufacturing	26
2	Medical/pharmaceutica	22
3	Others	18
4	Electrical machinery	8
5	Metal products	4
Total of top 5 sectors		78

**1-2. Company size**

Annual sales (Rs)		%
less than 10 million		6
10 - 100 million		32
100 mill - 1 billion		10
more than 1 billion		44
Number of employees		%
less than 50		35
50 – 200		18
more than 200		47

**1-3. Ownership & export**

Share of owner (family) company: 40%		
Share of those established before 1991 : 45%		
Export ratio	%	
Zero	22	
less than 25%	26	
more than 25%	18	
100% (EOU)	6	

**(2) Important factors/obstacles in business****2-1. Factors/obstacles for sales expansion**

Factors for expansion	
No	Important factor
1	Better quality
2	Higher technology
3	Price competitiveness
Obstacles for expansion	
No	Factor
1	Price competitiveness
2	Sales conditions
3	Poorer facility

**2-2. Factors for business expansion**

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Developing new products
3	Developing new customers
Requirements of customers	
No	Requirements
1	To lower the cost
2	To observe delivery time
3	To improve quality

**2-3. Obstacles in business environment**

Major obstacles		
No	Factor	
1	Tax system, including tariff structure	
2	High competition in domestic market	
3	Finance (Difficulties in loans/credits)	
Obstacles in procurement of materials/parts		
No	Factor	%
1	Laws/regulations, Gvt control	42
2	Tax system and import tariff	38
3	No obstacles	28

**(3) Necessary assistance and expectations for the Government****3-1. Assistance services**

Expected assistance services	
No	Contents
1	Advice on R&D
2	Training courses
3	Meeting with potential buyers
4	International study tour
5	Machinery lease

**3-2. Expectations for the Government**

Shares who responded that administrative services are not effective		57%
Requests in promoting private sector		
No	Contents	
1	To build up institutional capacities	
2	To improve infrastructure	
3	To simplify tax system	

**3-3. Study Team Comments**

- More positive and proactive comments about current situation and expectations for the Government are typical probably because of the character of the sample. Disatisfaction for regulation and administration is strong

**(4) Top 3 reasons to invest in Maharashtra**

1. Market Size
2. Existence of competent skilled labour
3. Political / social stability, economic condition

**(5) Evaluation of Current Business Situation**

Generally highly satisfied, especially with economic condition, existence of skilled labour, fund availability. According to FICCI's questionnaire targeting foreign-affiliated companies, Maharashtra is ranked as the most preferable state for investment.

**(6) Request to state government**

Request for construction of new industrial park in new areas. Others include deregulation of employment related areas.

**(4) Industrial Promotion Policy**

Having a long history as an industrial heartland of India, Maharashtra state government excels in the know-how of the private investment promotion. For promoting the investment from the private sector, the government focuses on overall development of the state through infrastructure development, information

delivery and tax preference granting. At the same time, the government is working on constructing SEZ and revising the labour law.

Dividing the areas into six classes is a measure to encourage the industrial development throughout the state. The class is rated by the degree of development; A, B, C, D, D+ and non-industrial district. The less the area is developed, the more incentives are given in terms of:

- exemption from electric power tax,
- exemption from stamp duty and registration tax,
- Subsidies grant to small-scale enterprises and
- Interest subsidies to small-scale enterprises, operating in textile, hosiery and knitwear.

Maharashtra is also trying to develop IT industries whose major concentrations are currently found in Bangalore and Hyderabad. The state government is developing IT parks and providing tax preferences to the IT related industries.

### 3 Investment Promotion

#### (1) Investment Trend

Maharashtra State, with its capital city Mumbai (Bombay) which has prospered as the centre of finance and commerce since the British colonial era, has attracted the largest amount of FDI for one state. Investments are concentrated in Mumbai and Pune, an industrial city. Main sectors for investment are: services, IT, infrastructure development, automobiles, power and fuel, and metal industry.

Approved amount of FDI (August 1991 - August 200): 366,024 million rupees

Share in national total: 14.8%

Source: MCI, "SIA Newsletter September 2004"

#### (2) Investment Policy

Investment incentives by the state include investment subsidy to small scale companies (including IT and biotechnology), exemption and reduction of sales tax, and loan interest subsidy to small scale textile companies, depending on the location of companies, which is classified into six categories. The State government is keen to promote investment and Maharashtra Industrial Development Corporation, MIDC, a state agency under the Department of Industries of the State, is responsible for facilitating investment.

#### Particular Issues for Investment Promotion

With the Jawaharlal Nehru Port Terminal (JNPT), where more than half of national total container cargos are handled, the State has an advantage in investment of large scale export oriented production base, utilising port facility. The State also has an advantage in attracting knowledge-based industries, with many R&D oriented investors in IT and biotechnology already located.



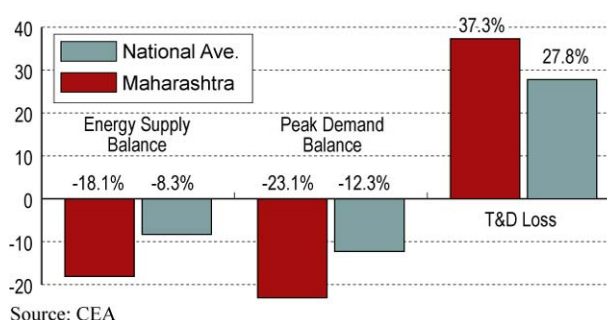
## 4 Infrastructure

### (1) Electricity

Maharashtra is currently facing massive electricity shortage. In 2005/06, the state encountered 23.1% of peak supply deficit and 18.1% of energy deficit. Energy deficit resulted in load shedding (planned rotation blackout), and which have negative repercussions for industry and civil life. One major contribution of such energy deficit is Dabor Thermal power station (total installed capacity of 2,184 MW). This IPP owned power station began its commercial operation in May 1999, then ceased operation and was left unattended since August 2000, due to contract dispute and fuel shortage.

Gas Authority of India Ltd. (GAIL) and National Thermal Power Corp. (NTPC) established Special Purpose Vehicle (SPV) in order to take over Dabor Power Station and concerned LNG terminal from Dabor Power Company. The SPV plans to start operating the power station in 2007. However, even if the power station will commence its operation on schedule, it is estimated that the state will encounter 3,175 MW of peak supply deficit in 2007/08.

The state government announced a new policy for IPPs in March 2005 to promote private investment for the generation sector. After that, the government signed MOU of several power stations with total capacities of 12,500 MW between 8 private consortiums. In addition, Nuclear Power Corp of India Ltd. (NPCIL) plans to construct a second nuclear power station in the state at Ratnagiri. NPCIL has obtained approval from the central government and has finished land acquisition for the power station.



Electricity Supply Situation in Maharashtra

Transmission and distribution loss in the state was recorded at as much as 37.3% in 2001/02. 85% of agricultural consumes are un-metered, thus the distribution company could not collect money from them. This contributed greatly to a large non-technical loss.

### (2) Road/ Urban Traffic

Greater Mumbai is the biggest metropolitan in India in terms of population (16.37 million in 2001), and is even one of the biggest metropolitan in the world. City functions of Mumbai are concentrated at southernmost of the long and thin peninsula. Because of such geographical conditions as well as increasing population and vehicles, traffic jams in Mumbai have progressively worsened year by year.

As much as 73% of passenger kilo-meters are covered by the suburban railway system. The pressure on the Mumbai rail system is worse because the population growth has been concentrated in the suburbs. Therefore the rail network has to cope with increasing numbers of commuters. About 6.1 million

commuters are using suburban railways in a day on the average. Congestion ratio reaches about 280% during peak time. In addition, population in the Greater Mumbai is estimated to increase to 224 million by 2011.

To improve the transport situation, Mumbai Metropolitan Region Development Authority is executing the Mumbai Urban Transport Project (MUTP) with the financial and technical help of World Bank. MUTP has been planned as an integrated rail and road project and includes significant investment for suburban rail and road infrastructure and soft component. A number of system improvement projects - such as modernization of traffic signals, development of pedestrian way, construction of grade separation, re-education of workers of railway and bus companies, and review of existing bus routes have been outlined and will be executed.

In addition metro railway projects are being planned in Mumbai. Metro projects will be implemented in three phases on a BOT basis. Consortium of Reliance Energy and MRT-Connex tendered for the bidding of first phase project in February 2006.

To avoid further congestion in Mumbai, part of the urban functions will be gradually transferred to New Mumbai in continental side. The plan includes a trans-Mumbai bay highway project, a bridge with 6 lanes with a total length of 3.5 km. The project will be executed on a BOT basis, and preparation of bidding is under way. In addition MMRDA plans to construct a new bridge for metro, which runs to parallel with the said bridge by 2015-18.



Victoria Terminus Station during Rush Hour

### (3) Railways

The suburban railway system in Mumbai is operated by Mumbai Railway Vikas Corp (MRVC). Central and Western Railway manages other intercity railway system in Maharashtra. Mulund and New Mulund container depot are located in Mumbai, and plays the role of a hub of the container transport network. In addition to these depots, construction of 7 inland container depots (including Nagpur, Aurangabad, and Pune) have been planned and will be executed.

### (4) Ports

There are two major ports in Maharashtra, namely Mumbai Port and Jawaharlal Nehru Port (JNP). In 2004/05, cargo handling volume in Mumbai port was 32.13 million tons (ranked 4<sup>th</sup> among major ports). While average time spent at berth was decreased from 3.21 days in 2002/03 to 2.78 days in 2004/05, number of ship days lost on account of non-availability of berth was increased from 224 ship-days to 420 ship-days during the same period because of rapid increase in the cargo traffic.

Cargo handling volume in JNP in 2004/05 was 32,809 tons (ranked 7<sup>th</sup>). Container handling volume of the port in the same year was 2,371 TEUs, which accounted for 56.0% of all Indian ports, and is ranked 29<sup>th</sup>

amongst the major container handling ports in the world. The port functions as an important physical distribution bases for export-oriented industries and industries procuring goods/materials from abroad.

However, port traffic in JNP is heavily congested, and became more serious after the concentrated heavy rain in August 2005 and subsequent secondary complication by inundation. Given these conditions, export/import-oriented industries requested the state government to take adequate measures.

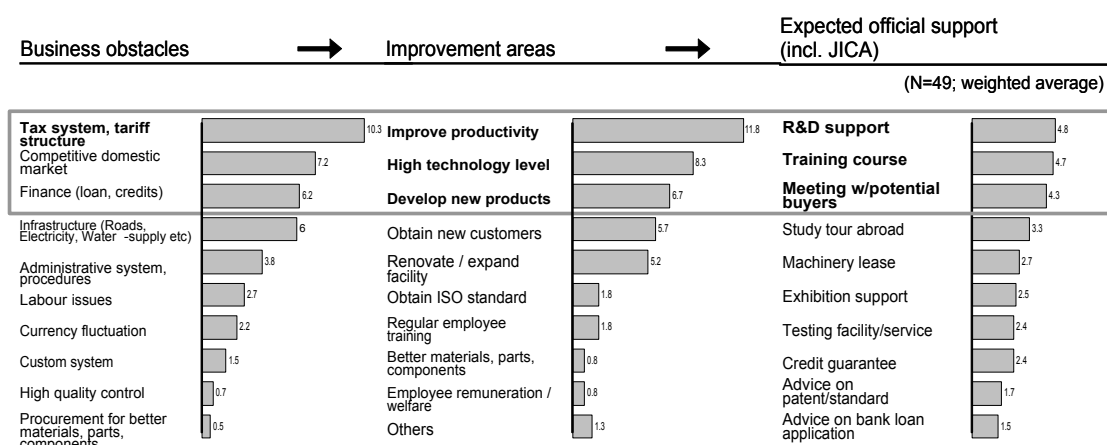
## (5) Airports

Mumbai international airport is the largest airport in India, in terms of number of passengers (9.86 million during form April to October 2005, occupying 25.6% of total passenger in the country) and cargo handling volume (248 thousand ton, occupying 30.7%). According to Airport Authority of India, out of the 126 airports in India, only 11 earn a profit. Mumbai airport is one of the profit-earning airports. As with the Delhi airport, privatization of the airport is under way. GVK South African Airports was offered 33.03% of revenue share to the government, and then obtained concession agreement at the end of January 2006.

In addition to the Mumbai airport, there are 4 domestic airports in Pune, Aurangabad, Nagpur and Nashik. Also, a new international airport is being planned near JNP and Navi Mumbai.

## 5 Development Needs

According to the company interview survey (sample #49 in Maharashtra), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;



Source: company interview survey

Maharashtra state which is the center of industry in India showed the most positive attitude towards investment promotion among the states visited by JICA study team. Since many central level technical supporting centers and inspection / examination centers have already accumulated, this will be an advantage when promoting local industry development. Moreover, the strong connection with industry and

finance / service industry in Maharashtra state is convenient to conduct industrial development projects. Focusing on rural development where Maharashtra state government is highly interested, there is a high possibility for technical cooperation in various fields.

## IV Tamil Nadu State

### 1 Overview

Tamil Nadu is a state at the southern tip of India. The bordering states are Kerala, Karnataka and Andhra Pradesh. The island nation of Sri Lanka lies off the southeast coast. Tamil Nadu's population stood at 62.1 million in 2001, which is the sixth most populous state of the India, behind Uttar Pradesh, Maharashtra, Bihar, West Bengal and Andhra Pradesh. 43.9% of the state's population lives in urban areas (2001), one of the highest percentages in India.

Chennai, which was known until 1996 as Madras, is the fourth largest city of India and the state capital. Chennai is the automobile capital of India, with around forty percent of the automobile industry having a base there and with a major portion of the nation's vehicles being produced there. Coimbatore, Madurai, Tiruchirapalli, Salem and Tirunelveli are other large cities of Tamil Nadu.

Items		Ranking
Area	130,058 km <sup>2</sup>	11
Population	62.4 million	6
GDP*	Rs 1,889.21 billion	5
3-year GDP average growth rate	6.0%	29
NSDP** per capita	Rs 25,965	11
Manufacturing GDP share	19.6%	
FDI(2004)	Rs 8151.8 million	3
Literacy rate	73.5%	10

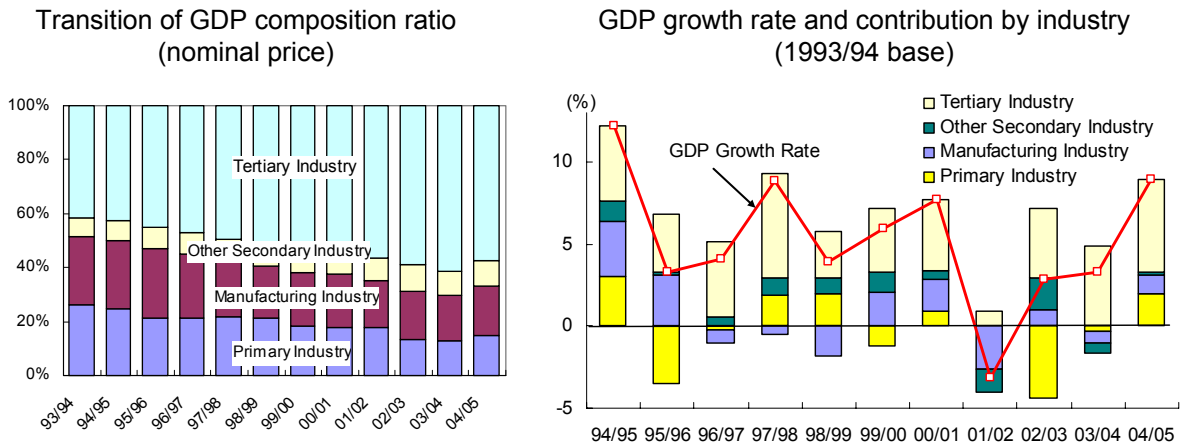


\*at current price(1993/94 bases) \*\*Net State Domestic Product(1993/94 bases)  
Source States and Territories of India, Census of India 2001

### 2 Industry

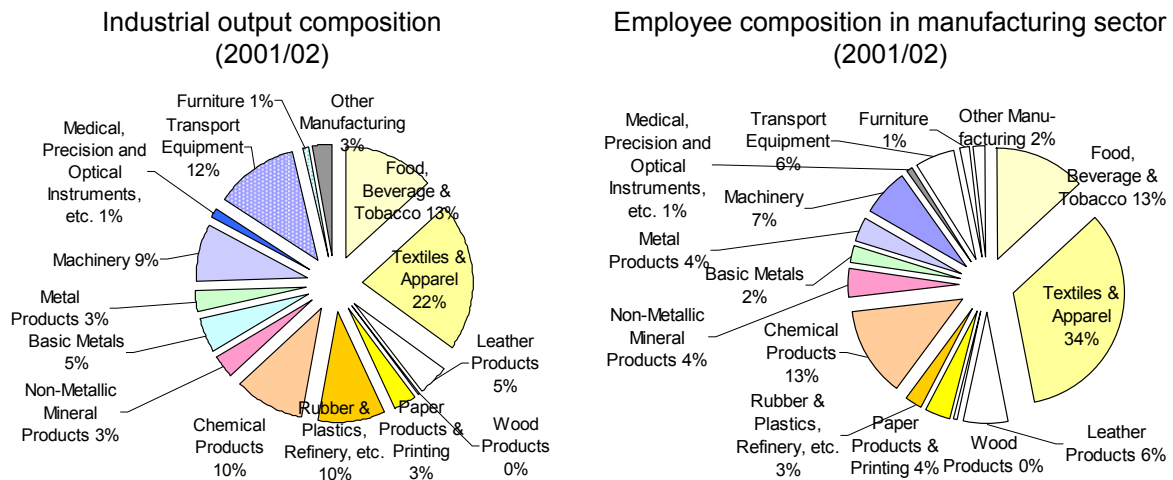
#### (1) Industry Structure

Similar to other states, the share of the service sector in Tamil Nadu is expanding each year. The manufacturing industry, however, is the core industry in Tamil Nadu as it is the second position in India only to Maharashtra.



Source Central Statistical Organisation, Ministry of Statistics and Program Implementation

Tamil Nadu is the largest industrial state in South India owing to Chennai which has prospered as the gateway of Southern India. Historically, textile industry used to be the major industry of Tamil Nadu which is also known as a major export base of cotton yarn and cotton cloth. Still about twenty percent of apparel export of India is from Tamil Nadu mainly from produced in Chennai and Tirupur. In recent years, automobile, electronics and IT industry also have been growing led by foreign companies.



Source Government of Tamil Nadu

(2) Trends in Corporate Sector

The State is located at southeastern part of India and is one of the most industrialized states. It has high-quality port infrastructures represented by Chennai and also advantage of short-distance to southeastern Asian countries. Many note that the State has advantages in social stability and labor relations compared to those of the northern part of the country. There are industrial accumulations in such sectors as automobile (parts), apparel, IT(ES) and food-processing, while Hyundai, Ford, Ashok Leyland and TVS Motor have their major facilities in the automobile sector. 36 Japanese firms are located in the

State, represented by such electric appliances manufacturers as Matsushita (manufacturer of rice cookers and mixers) and automobile component manufacturers.

**Box 0-7. Case of Company(6) Local automobile parts manufacturer: SUSIRA**

Susira, a good local auto parts manufacturer, was founded in 1976 by an entrepreneur who worked for such major auto makers as Ashok. The chairman was a former executive director of ACMA Chennai branch. The company started to make processing of engine parts as a subcontractor, but since 1985 has produced and supplied metal processed parts of diesel engines for trucks and ships under its own brand name. The chairman is proud of saying “Human resource is the source of competitiveness”, and takes family-oriented management style of conducting constant discussions and training for around 100 employees. He follows the Japanese style of production control and quality management and the company is the first ISO approved SSI in India. Management system by “5S” is effectively introduced at production site and satisfactory results of continuous improvements led by employees were observed. The chairman who received training by the Union of Japanese Scientists and Engineers actively works as the head of AOTS south India alumni network. He suggests that there are many issues to be assisted by foreign donors in such areas as trainers’ preparation for workers’ training.

**Box 0-8. Industry Organization(2) Ambattur Industrial Estate Manufacturers’ Association**

The organization is an association of manufacturers located in Ambattur SSI industrial estate, one of 77 industrial estates that Small Industry Development Corporation that is a central government body developed in the country, being located within 35km from the city of Chennai. It was established in 1963 and is now planning to conduct programs for improvements in management capabilities and technology of member companies in order to develop an automobile cluster contributing to an increase in automobile assembly manufacturing. Along with the plan, the organization is interested in developing (i) vocational training center, (ii) business development center, (iii) total management system of solid waste, and (iv) new power generating system, all of which are required to receive assistances from abroad. Germany and Netherlands have made assistances on human resource development in a limited manner. The Study Team members visited 2 SSIs in the industrial estate and observed that there were many issues to be solved in operation and process control, quality management, safety control and environmental control. The industrial estate as a whole also has problems in development of knowledge and know-how in yield improvement, reduction of solid waste and management control system, represented by a fact that various kinds of garbage and waste were scattered.

**(3) Results of the Questionnaire Survey****(1) Number of companies surveyed: 43****1-1. Sub sector (Top5)**

No	Industry	%
1	Other manufacturing	23
2	Others	19
3	Food	7
4	Printing	7
5	Pharmaceutical, etc.	5
Total of top 5 sectors		61

**1-2. Company size**

Annual sales (Rs)		%
less than 10 million		16
10 - 100 million		54
100 mill - 1 billion		13
more than 1 billion		17
Number of employees		%
less than 50		56
50 - 200		28
more than 200		16

**1-3. Ownership & export**

Share of owner (family) company: 88%		
Share of those established before 1991 : 45%		
Export ratio	%	
Zero	72	
less than 25%	19	
more than 25%	7	
100% (EOU)	2	

**(2) Important factors/obstacles in business****2-1. Factors/obstacles for sales expansion**

Factors for expansion	
No	Important factor
1	Price competitiveness
2	Higher technology
3	Better quality
Obstacles for expansion	
No	Factor
1	Past business records
2	Poorer facility
3	Poorer quality

**2-2. Factors for business expansion**

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Developing new customers
3	Opening up of foreign trade
Requirements of customers	
No	Requirements
1	To lower the cost
2	To observe delivery time
3	To produce larger volume

**2-3. Obstacles in business environment**

Major obstacles		
No	Factor	
1	Labour issues	
2	High competition in domestic market	
3	Tax system, including tariff structure	
Obstacles in procurement of materials/parts		
No	Factor	%
1	Laws/regulations, Gvt control	47
2	Lack of market information	28
3	Tax system and import tariff	21

**(3) Necessary assistance and expectations for the Government****3-1. Assistance services**

Expected assistance services	
No	Contents
1	Training courses
2	Testing services
3	Advice on R&D
4	Meeting with potential buyers
5	Advice on patent/standard

**3-2. Expectations for the Government**

Shares who responded that administrative services are not effective		n.a.
Requests in promoting private sector		
No	Contents	
1	To simplify administration	
2	To promote trade (trade summit)	
3	To improve infrastructure	

**3-3. Study Team Comments**

- There are many traditional SSIs that have strong willingness for improvement in quality, technology, and facilities. There is a strong dissatisfaction for Government services, but concrete expectation is very basic.

**(4) Top 3 reasons to invest in Tamil Nadu**

1. Market Size
2. Economic condition
3. Existence of competent skilled labour

**(5) Evaluation of Current Business Situation**

Generally high satisfaction level, especially economic infrastructure such as electricity, telecommunication.

**(6) Request to state government**

In order to respond to the market environment change, labour / employment policy is expected to become more flexible to control the size of labour.

**(4) Industrial Promotion Policy**

In an aim to reinforce the industrial infrastructure, Tamil Nadu state government set up an infrastructure fund for providing subsidies.



## Industrial Infrastructure Subsidies in Tamil Nadu

Object	Subsidy	Other incentives
Investment amount to fixed assets Rs. 500 million-Rs.1 billion Rs. 1 billion- Rs. 2 billion Rs. 2 billion -	Rs. 2.5 million * Rs. 5 million * Rs. 10 million *	electric tax exemption for 3 years electric tax exemption for 4 years electric tax exemption for 5 years
Patent registration fees	50% of the cost up to Rs. 100,000	
Construction of effluent treatment plants and waste disposal sites	25% of capital cost up to Rs. 250,000	
Construction of industrial estate with more than 50 companies and 2,500 employees in total	10% of the investment up to Rs. 10 million	

\* The amount of the subsidy is increased by 50% if the investment is by a new company in an industrial park promoted by the government.  
Source: Tamil Nadu New Industrial Policy-2003

For the small-scale industries, Tamil Nadu has an industrial support scheme named New Anna Marumalarchi Thittam. This scheme intends to promote the local industry and promote employment through inviting agro processing industries to the industrial estates run by the state government. Following incentives are given if small-scale agro processing companies make investment of more than Rs. 2 million in the state industrial estate:

- 15% subsidies for the investment on a factory and machinery;
- additional 5% subsidy if more than 50% of the workers are women;
- 15% subsidy for the investment on a generator and
- 3-year subsidy for low tension power tariff.

Small Industries Development Corporation Ltd. (SIDCO) under small-scale department is vigorously promoting industrial estate development in close cooperation with the private sector.

### 3 Investment Promotion

#### (1) Investment Trend

Tamil Nadu State, which has Chennai, the largest city in South India as the capital, has been attracting more and more investment both domestic and foreign, as the State adopts liberal industrial policy. Among its far reaching industrial base, automobiles and automobile parts, IT and software industries in particular are rapidly growing. The fact that international giants Nokia and BMW have recently decided to invest in the State draws attention to Tamil Nadu.

Approved amount of FDI (August 1991 - August 200): 225,826 million rupees

Share in national total: 9.1%

Source: MCI, "SIA Newsletter September 2004"

## (2) Investment Policy

Export Promotion and Industrial Guidance Bureau of the State government is responsible for promoting and facilitating investment and trade. Its activities include provision of information to investors, coordination between investors and relevant agencies, and assistance to investors in various procedures for investment approvals. Main investment incentives of Tamil Nadu State are as follows:

- Capital subsidy of 15-20% of fixed assets for new industries in backward area
- Capital subsidy of 20% of fixed assets for new electronic and leather industries
- Capital subsidy of 20% of fixed assets for small scale thrust industries
- Capital subsidy of 10% of fixed assets for medium scale thrust industries
- Capital subsidy of 2.5-100 million rupees for projects with an investment of more than 500 million rupees
- Subsidy of 15% of the cost for installation of new generators
- Additional subsidy of 5% (ceiling of 500 thousand rupees) for new industrial units which employ more than 30% women in their work force

## (3) Particular Issues for Investment Promotion

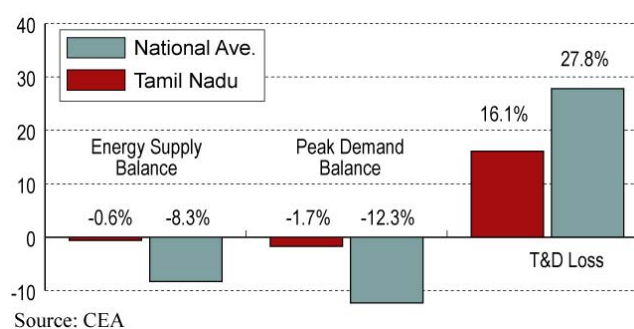
It is advantageous to attract investment by promoting the Chennai port, the gateway to South-East Asian countries with which Indian trade is expanding.

## 4 Infrastructure

### (1) Electricity

Tamil Nadu is the one of few states which still has State Electricity Board (SEB). Similar to the other states in India, restructuring of power sector is under way. However, the progress is very slow. While Tamil Nadu Electric Regulatory Committee (TNERC) was established in March 1999, unbundling and corporatization of Tamil Nadu Electricity Board (TENB) has not advanced.

Aggregate generation capacity allocated for the state was 11,835 MW as of the end of November 2005, which was far above peak demand of 9,114 MW in fiscal year 2005/06. Unlike other states in India, electricity supply in Tamil Nadu is almost balanced. Actually the state has more generation capacity than the figure shown above, substantial generation



Electricity Supply Situation in Tamil Nadu

capacity in the state has already allocated to surrounding states. Since TNEB is aggressive in controlling electricity theft and installing electric meters, transmission and distribution loss of the state (16.1% in 2001/02) was lower than the national average of 27.8 (2001/02).

NTPC Tamil Nadu Energy Company, which was established by TNEB and National Thermal Power Corp. with 50:50 share, is planning to construct a coal-fired power station with a capacity of 1,000 MW near Ennore port by 2012. Tamil Nadu, Andhra Pradesh, and Karnataka states are planning to establish a joint venture company, in order to construct a 3,000 MW gas-fired power station.

## (2) Roads/ Urban Traffic

Population in Chennai metropolitan area has rapidly increased recently, and reached 7.5 million in 2003. Such population growth has put urban infrastructure and services under severe strain, particularly during peak time.

To solve the problem, Chennai Metropolitan Development Authority (CMDA) and concerned agencies in the state are planning and implementing grade separation projects, outer ring road project, Mass Rapid Transit System (MRTS) project, modification of bus route, and re-location of inter-city bus terminal to city fringe.

MRTS project is implementing on a BOT bases in four phases. An elevated MRTS 8.6 km long was constructed under phase I, and has been in operation since 1997. It was designed for a maximum load of 600,000 passengers per day, but carried only about 9,000 in 2002/03. Phase II is currently under construction. Metropolitan Transport Corporation lunched a bid for phase III. If and when all the phases are completed, the line would make a ring around the city, with interchanges with south-west and west bound commuter rail lines.

In Chennai City, there is no comprehensive urban traffic master plan, after the Chennai Comprehensive Transport and Traffic Study in 1995. Thus, each project is examined and implemented individually without close coordination.

## (3) Railways

Total length and number of train station in Tamil Nadu is 6,693 km and 690, respectively. Major railway nodes in the state is Chennai, Madurai, Tiruchirapalli, Salem and Coimbatore.

In Chennai, the Central Railway Station is 5-km from the city centre and trains from almost all cities of India halt here. Broad gauge train services link the city with New Delhi, Mumbai, Kolkata, Cochin, Hyderabad, Bangalore, and other important cities. The meter gauge train services cater to the south of Chennai, including Madurai, Rameshwaram, Tirunelveli and Tuticorin. The railhead for meter gauge services is situated at the Egmore station.

#### (4) Ports

Out of the 13 major ports in the country, 3 major ports (Chennai, Ennore, and Tuticorin) are situated in Tamil Nadu. Chennai port is the biggest port in the state, and has 3 piers, 21 berths, and a container terminal. Cargo handling volume in Chennai port is rapidly increasing due to considerable rise in the iron ore demand from China. The port handled a cargo of 43.8 million ton (ranked 2nd among major ports in the country) during 2004/05 as against Port Trust of India's target of 39.2 million ton. As a result, many iron ore carrying vessels waiting at offshore because of non-availability of berths.

Ennore port is situated 24 km away from Chennai port, and is the first corporatized major port of India. Handling of the dirty cargo such as iron ore and coal will be entirely shifting from Chennai port to Ennore port. This arrangement is expected to contribute to reducing urban traffic in Chennai.

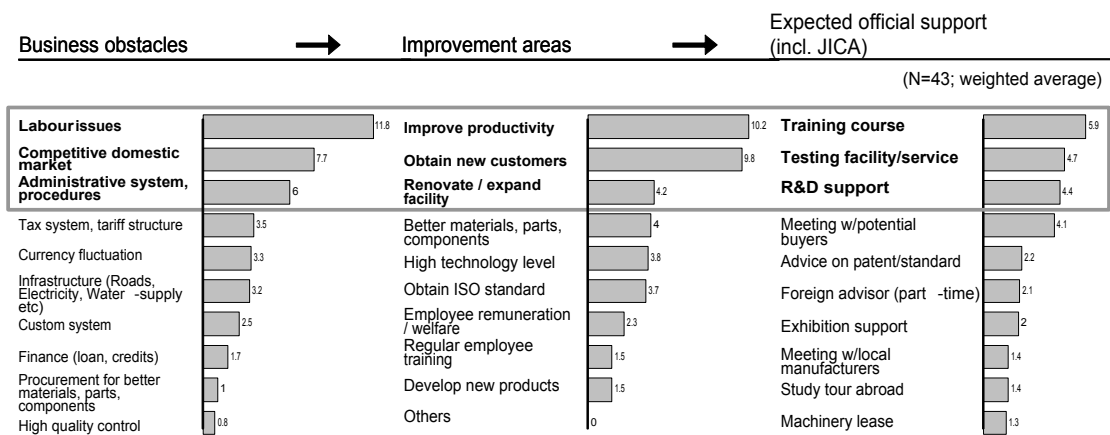
#### (5) Airports

One international airport (Chennai) and four domestic airports (Salem, Trichy, Coimbatore, and Madurai) are situated in Tamil Nadu. Chennai international airport is the third biggest airport in India, in terms of number of passenger and cargo handling volume. More than 60 international flights directly connect Chennai and 15 countries in a week.

Chennai airport is a profit-earning airport (only 11 airports in the country earn profit). According to Airport Authority of India, these profit-earning airports will eventually privatize. Along with the intensifying economic activities in Tamil Nadu, cargo handling volume in Chennai airport has rapidly increased with an annual growth rate of 18%, and subsequently existing handling capacity of the airport has already saturated. Given these conditions, private consortia is expected to modernize and expand existing airport and then to operate. Concessionaire is also expected to pay certain percentage of revenue for the state government; this scheme is called revenue sharing arrangement. The bidders offering the highest revenue sharing to state government will be the predominant candidates.

## 5 Development Needs

According to the company interview survey (sample #43 in Tamil Nadu), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;



Source: company interview survey

Tamil Nadu state department of small-scale industry showed its strong interest to JICA assistance when the team visited. Also, the state commerce and industry department stated that technical assistance is especially needed to conduct environment rehabilitation of industrial complex specialized for small-scale industries as a pilot project.

## V Andhra Pradesh

### 1 Overview

Andhra Pradesh is the fifth largest state in India and it forms the major link between the north and the south of India. The state is crossed by two major rivers, the Godavari and Krishna, and has a flourishing agriculture. In the last decade, the state has emerged at the forefront of India's progress in fields like information technology, biotechnology, and pharmaceuticals. Particularly, Hyderabad, the capital of the state has become a center for outsourcing of information technology, like Bangalore.

Items		Ranking
Area	275,068km <sup>2</sup>	4
Population	76.2 million	5
GDP*	Rs 2025.75 billion	3
3-year GDP average growth rate	7.7%	18
NSDP** per capita	Rs. 23,153	13
Manufacturing GDP share	12.5%	
FDI(2004)	Rs. 5266.6 million	4
Literacy rate	60.5%	26



\*at current price (1993/94 bases) \*\*Net State Domestic Product (1993/94 bases)

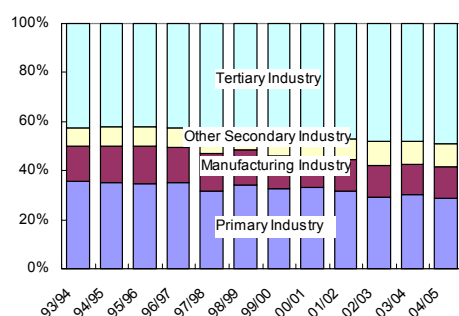
Source: States and Territories of India, Census of India 2001

### 2 Industry

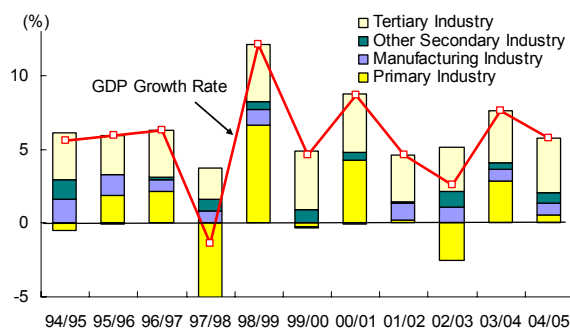
#### (1) Industry Structure

Primary industry dominates 28.9% (FY2004/5) of Andhra Pradesh's GDP, while secondary industry comprise 21.9%. Thus, although service sector leads the steady economic growth, the state economy is still greatly influenced by the trend of the agricultural sector. Machinery and engineering industry used to concentrate in the capital Hyderabad. Recently, investment in electronics, IT and medical/biotech industry has also been increasing.

Transition of GDP composition ratio  
(nominal price)



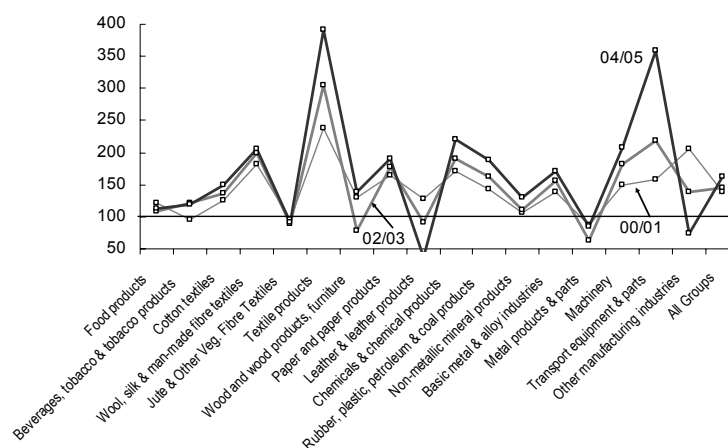
GDP growth rate and contribution by industry  
(1993/94 base)



Source Central Statistical Organisation, Ministry of Statistics and Program Implementation

From the industry composition of FY1993/94 which is the base year of index of industry production (IIP), major industries in the manufacturing sector are food / drink / tobacco (25.7%), chemical products (17.6%), basic metal / metal products (11.4%), machinery / transport machinery (10.5%), textile / apparel (7.6%) which shows the high share of heavy and chemical industry. Except for leather products and wool / silk / nylon products, IIP is showing a steady growth especially chemical products, basic metal, Trends in Corporate Sector

Transition of Industry production index (1993/94=100)



Source Economic Survey 2005-2006, Govt. of Andhra Pradesh

The state not only has such traditional industries as cotton spinning and textiles that process high-quality cotton produced in the state, automobile and auto components, but also such growing high-tech industries as IT, chemical and pharmaceutical, mainly in the state capital area of Hyderabad. In IT industry there are around 1,200 companies (2001), including such major enterprises as Satayam Computers and Infotec. The number of companies located in Software Technology Parks amounted to 1,345 (2001), which was almost the same level as of the first-ranked Maharashtra (1,494) and of the third-ranked Karnataka (1,033). There are also around 970,000 SSIs (2004), which represent the second share (8%) among the states after Uttar Pradesh.

## (2) Trends in Corporate Sector

The state has not only such traditional industries as cotton spinning and textiles that process high-quality cotton produced in the state, automobile and auto components, but also such growing high-tech industries as IT, chemical and pharmaceutical, mainly in the state capital area of Hyderabad. In IT industry there are around 1,200 companies (2001), including such major enterprises as Satayam Computers and Infotec. The number of companies located in Software Technology Parks amounted to 1,345 (2001), which was almost the same level as of the first-ranked Maharashtra (1,494) and of the third-ranked Karnataka (1,033). There are also around 970 thousand SSIs (2004), which represent the second share (8%) among the states after Uttar Pradesh.

**(3) Results of the Questionnaire Survey**

(1) Number of companies surveyed: 50

## 1-1. Sub sector (Top5)

No	Industry	%
1	Others	28
2	Electrical machinery	16
3	Medical/pharmaceutica	14
4	IT services	4
5	Rubber	4
Total of top 5 sectors		66

## 1-2. Company size

Annual sales (Rs)		%
less than 10 million		2
10 - 100 million		24
100 mill - 1 billion		16
more than 1 billion		4
Number of employees		%
less than 50		30
50—200		38
more than 200		28

## 1-3. Ownership &amp; export

Share of owner (family) company: 90%		
Share of those established before 1991 : 52%		
Export ratio	%	
Zero	50	
less than 25%	24	
more than 25%	14	
100% (EOU)	8	

(2) Important factors/obstacles in business

## 2-1. Factors/obstacles for sales expansion

Factors for expansion	
No	Important factor
1	Price competitiveness
2	Higher technology
3	Better quality
Obstacles for expansion	
No	Factor
1	Poorer facility
2	Poorer quality
3	Lower technology

## 2-2. Factors for business expansion

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Developing new products
3	Developing new customers
Requirements of customers	
No	Requirements
1	To lower the cost
2	To observe delivery time
3	To improve quality

## 2-3. Obstacles in business environment

Major obstacles		
No	Factor	
1	Difficult administrative system	
2	Insufficient/inefficient infrastructure	
3	Tax system, including tariff structure	
Obstacles in procurement of materials/parts		
No	Factor	%
1	Laws/regulations, Gvt control	48
2	No obstacles	34
3	Lack of market information	10

(3) Necessary assistance and expectations for the Government

## 3-1. Assistance services

Expected assistance services	
No	Contents
1	Advice on R&D
2	Meeting with potential buyers
3	Testing services
4	Common facility services
5	Credit guarantee

## 3-2. Expectations for the Government

Shares who responded that administrative services are not effective		77%
Requests in promoting private sector		
No	Contents	
1	To carry out labour policy reform	
2	To promote IT offshore services	
3	To simplify administration	

## 3-3. Study Team Comments

- There are many individual companies that have strong consciousness about facilities, technology and quality and also dissatisfaction about labour policies and business environment.

(4) Top 3 reasons to invest in Andhra Pradesh

1. Low cost of labour / Availability of raw materials
2. Market size
3. Economic condition

(5) Evaluation of Current Business Situation

Generally satisfied especially highly satisfied with telecommunication infrastructure.

(6) Request to state government

Introduction of preferential tax system, infrastructure improvement, regulation on real estate price.

**(4) Industrial Promotion Policy**

Andhra Pradesh State puts an effort into infrastructure development in an aim of calling in investment. The following measures are taken:

- 25% subsidies for the investment for constructing industrial infrastructure outside the industrial area with an upper ceiling of Rs. 10 million, sourced from an infrastructure development fund;



- Installment of captive power generators and dedicated feeders and lines in the industrial areas;
- 50% exemption from stamp duty, registration tax and transfer duty for acquisition of industrial land and
- 20% subsidies for fixed investment by the small-scale enterprises with an upper ceiling of Rs. 2 million (50% shall be in the cash form, and the other 50% shall be in machinery or trainings.).

In Hyderabad, there are the Central Institute of Tool Design and the National Institute of Small Industry Extension Training, which are under the Ministry of Small Scale Industries. There are also the Advanced Training Institute and the Advanced Training Institute for Electronics and Process Instrumentation under the Ministry of Labour and Employment. All these institutions can offer training courses for the trainers.

### 3 Investment Promotion

#### (1) Investment Trend

Investors, both Indian and foreign, are paying more and more attention to Andhra Pradesh State as the State is very positive in driving its industries, especially IT, and infrastructure development. Investments in knowledge based industries such as IT, biotechnology and pharmaceutical, are increasing, with investments from multinational companies like Microsoft, IBM and GE Capital.

Approved amount of FDI (August 1991 - August 200): 116,091 million rupees

Share in national total: 4.7%

Source: MCI, "SIA Newsletter September 2004"

#### (2) Investment Policy

Thrust industries for investment are IT, pharmaceutical, biotechnology, tourism, mining, food processing, leather and textile. Infrastructure development projects are also encouraged. AD Invest, the agency of the State government, is in charge of investment promotion, though it does not seem to be fully functioning at the moment.

#### (3) Particular Issues for Investment Promotion

Andhra Pradesh State has very few investments from Japan, if compared with other states. It is expected that the State will perform more intensive promotional activities to attract Japanese investors by appealing its advantages including infrastructure.

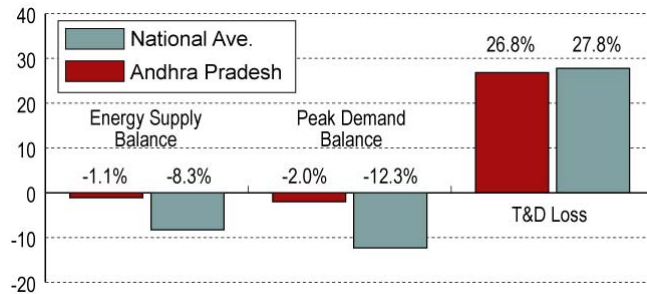
### 4 Infrastructure

#### (1) Electricity

Generation capacity of Andhra Pradesh was 11,250.4 MW as of Nov. 2005, which was the third largest in

the country behind Maharashtra and Tamil Nadu. Since the state is rich in water resources, 31.8% of generation capacity relies on hydropower stations. During the period from Sep. 2002 to Nov. 2005, 6 power stations with total generation capacity of 1,819 MW were constructed using Japanese ODA loan.

Unlike other states in India, generation capacity in the state is sufficient. During the fiscal year 2005/06, peak demand in the state was 8,716 MW as against 8,542 MW. There was slight energy deficit, but compared with other states, it was considered to be fair. The state is planning to construct 8 power stations (total capacity of 2,359 MW) by 2012.



Source: CEA

Power Supply Situations in Andhra Pradesh

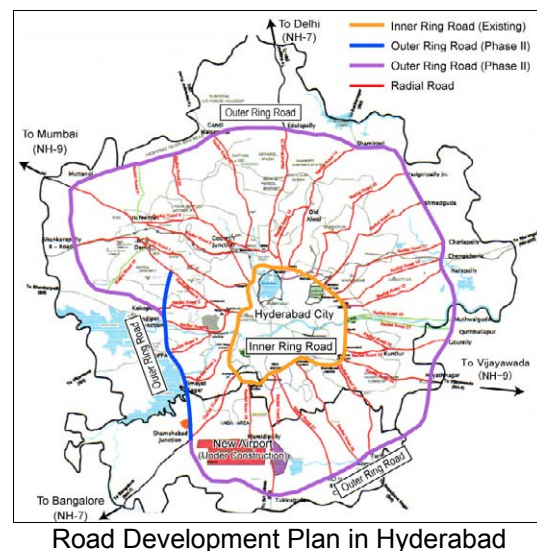
On the other hand, transmission and distribution loss of 30.1% in 2002/03 was higher than the national average of 25.9%, and thus leaves much to be improved.

## (2) Roads and Urban Transportation

The road network in the state has increased from 26,762 km in 1956 to 191,175 km in 2000. Major national highways in the state are NH-7 (running from north to south of the metropolitan area of Hyderabad, and connecting to such as Delhi and Bangalore), NH-5 (running along the coast, and connecting to Chennai and Kolkata), and NH-9 (traversing east and west of the metropolitan area, and interconnecting NH-5 and NH-7). Of which, NH-5 and NH-7 constitute part of the Golden Quadrilateral and the North-South Corridor, respectively.

According to the 2001 census, the population of Hyderabad Metropolitan Area was about 6.5 million with decadal growth of 34.3% and ranking 6th in population among the major metropolitan cities in India. Recently, Hyderabad has been brought to international attention as a promising industrial location. Numbers of foreign companies has been moving in into the suburbs of the Hyderabad.

To cope with such rapid population increase and to regulate location of new industries, Hyderabad Urban Development Authority (HUDA) prepared a Master Plan of the Metropolitan area. The plan includes i) 166 km Outer Ring Road, which links the major activity areas like Hi-Tec City, Proposed International Airport, Hardware Park, Apparel Park, etc., ii) improvement and widening of the existing inner ring road, iii) construction or improvement/widening of radial shaped 29 major link roads would improve the accessibility between the inner ring road and proposed



Road Development Plan in Hyderabad

outer ring road. HUDA proposed to develop Sites and Services Scheme to an extent of 1000 Acres. Survey work with two different private agencies was taken up and completed. A proposed approach road was also surveyed and demarcated on ground.

### (3) Railways

Andhra Pradesh is covered by a 5055 km railway route. Railways handled 35 million ton per annum. Inland Container Freight Depots with customs clearance are available at Sanathnagar and Hyderabad, and an inland container station is set up at Guntur.

The railway network plays an important role in transporting coal, iron ore, lime stone, kalium chloride, and rock phosphate to/from Visakhapatnam port. The Railway system within the port presently consists of 240km of railway track and is the largest rail network in the ports of the country, which consists of Ore handling complex for handling iron ore traffic and general railway system for handling other commodities.

### (4) Ports

Andhra Pradesh has one Major port at Visakhapatnam and two intermediate ports at Kakinada and Machilipatnam. The State also has 9 minor ports. At the state port level, Andhra Pradesh ranked third behind Gujarat and Maharashtra and handles 12.5% of the total port traffic (64.6 million ton in 2004/05).

Visakhapatnam Port is the largest port in India, and has 22 berths, one container terminal, off-shore terminal, and newly constructed LNG terminal (Nov. 2004). Visakhapatnam Port handled 50.1 million ton in 2004/05, which occupied 13.1% of total traffic of 13 Major ports and the highest throughput among Indian Ports in the year. The port is maintaining its prime position in the fiscal year 2004-05 for the fifth year in succession.

India is the 4th largest iron ore producer (3<sup>rd</sup> in exports), and Visakhapatnam Port is one of the key shipping ports for exporting high-quality iron ore produced at the Bailadila Mine in Madhya Pradesh. The port is an important iron ore shipping port in the country. Iron ore is transported from the Bailadila Mine, one of the major iron ore mines in India, by train. 30% of iron ore produced at the Bailadila Mine is exported to Japan through Visakhapatnam Port, because the development of the outer harbor of Visakhapatnam Port and Bailadila Mine was financed by a Japanese ODA loan in the 1970s. Japanese Government recently committed the new yen loan project for Visakhapatnam port. The project aims to upgrade transport capacity and improve the transport effectiveness of Visakhapatnam Port by consolidating the ground used as an iron ore stockpiling site, dredging waterways and berths, and strengthening mooring facilities, thereby facilitating increased iron ore exports from and economic growth of the country.

### (5) Airports

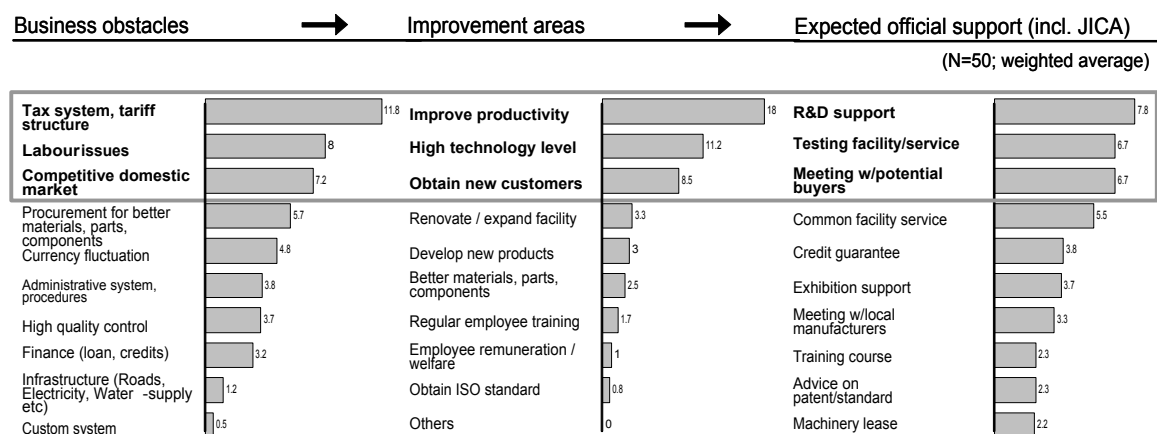
Regular air services are available at Hyderabad, Visakhapatnam, Vijayawada and Tirupati airport. With Hyderabad being the only International Airport in Andhra Pradesh. It has been an air cargo complex having

customs clearance facilities. About 900 flights are operating in Hyderabad airport in a week. During the period from April to October 2005, 2.03 million of passengers (ranked 6th among the ports in India) and 20,497 ton of cargo (ranked 6th) were handled in the airport. Number of passengers and cargo handling volume was increased by 33.2% and 5.1%, respectively, in comparison to last year. Along with such increase, handling capacity of the airport has already saturated.

To accommodate the increasing demand, Hyderabad International Airport Limited (HIAL) has been cleared for setting up an international airport in the south-west of Hyderabad city. Work has already commenced in the acquisition of land for the new airport. Construction work of the cargo terminal building, ground handling workshops, runway, taxiway and aprons to accommodate wide-body planes, including new generation aircraft, such as the A380, are on-going. The airport is expected to be open to traffic by 2008, and is planned to connect with the city area by elevated toll road. The State government also intends on setting up an international airport at Visakhapatnam in the future.

## 5 Development Needs

According to the company interview survey (sample #50 in AP), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;



Source: company interview survey

As symbolized by the President Bush's visit in March 2006, Hyderabad is one of the most attractive city from foreign investors as major IT and electronics companies are competing to promote large-scale investments in this area. Recently the shift from Bangalore to Hyderabad due to limited room for further development has been noted from several sources. In fact, addition to traditional engineering industry, the high-tech industry has been gaining power in Hyderabad, the capital of Andhra Pradesh. However, statewide level of industrialization remains low with many small-scale companies, thus development needs of both high-tech industry and local SMEs support exists.

## VI Gujarat

### 1 Overview

Gujarat is the westernmost state of India. It is bounded by the Arabian Sea to the west and southwest, and Pakistan to the north. The state of Rajasthan is to the northeast, Madhya Pradesh to the east, and Maharashtra and the union territory of Dadra and Nagar Haveli to the south and southeast of Gujarat. The major cities in Gujarat are Ahmedabad, Vadodara, Surat, Rajkot, Gandhinagar (state capital), and Jamnagar. Ahmedabad, the commercial capital of the state, is the sixth largest city of India.

Items		Ranking
Area	196,024 km <sup>2</sup>	7
Population	50.6 million	10
GDP*	Rs 1673.56 billion	6
3-year GDP average growth rate	9.0%	10
NSDP** per capita	Rs 26,979	10
Manufacturing GDP share	29.8%	
FDI(2004)	Rs 1480.4 million	9
Literacy rate	69.1%	15



\*at current price (1993/94 bases) \*\*Net State Domestic Product (1993/94 bases)

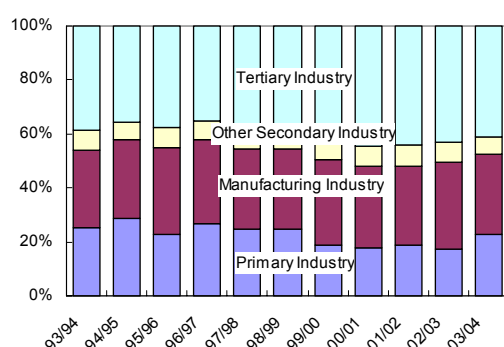
Source: States and Territories of India, Census of India 2001

### 2 Industry

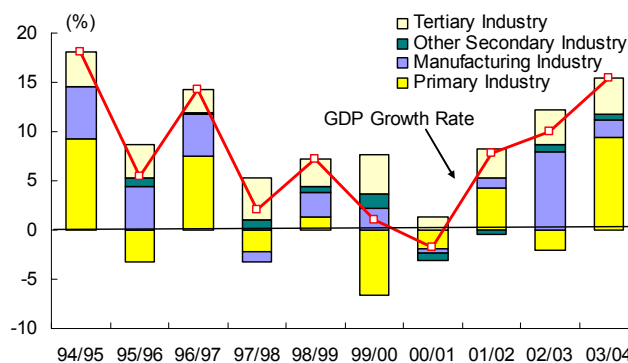
#### (1) Industry Structure

Gujarat state is characterized by its high share of secondary industry which comprises 36.4% (2003/4). Thus the economy is greatly influenced by the trend of manufacturing industry and agriculture reflecting its industry structure. GDP is maintaining high growth rate, after recording negative 1.8% growth in 2000/1.

Transition of GDP composition ratio  
(nominal price)

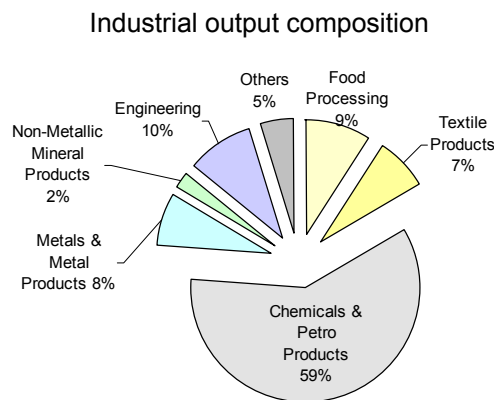


GDP growth rate and contribution by industry  
(1993/94 base)

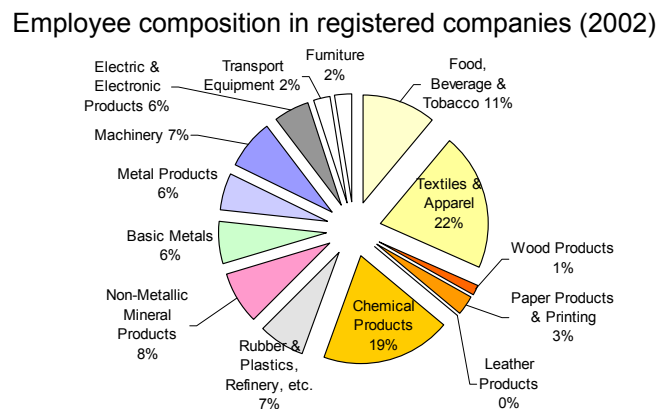


Source Central Statistical Organisation, Ministry of Statistics and Program Implementation

Gujarat already has a solid foundation for machine industry in addition to heavy industry such as oil refining and shipbuilding. According to 'Annual Survey of Industries'(FY2000/01), the industrial value-added of Gujarat accounts for 11.7% of total India which is the second largest to Maharashtra state. By industry, chemical and chemical products dominate almost half of total output (48.7%) followed by electric apparatus (7.9%), machinery (5.1%), basic metal (5.1%), other metal goods (4.4%), and food and drinks (4.3%).

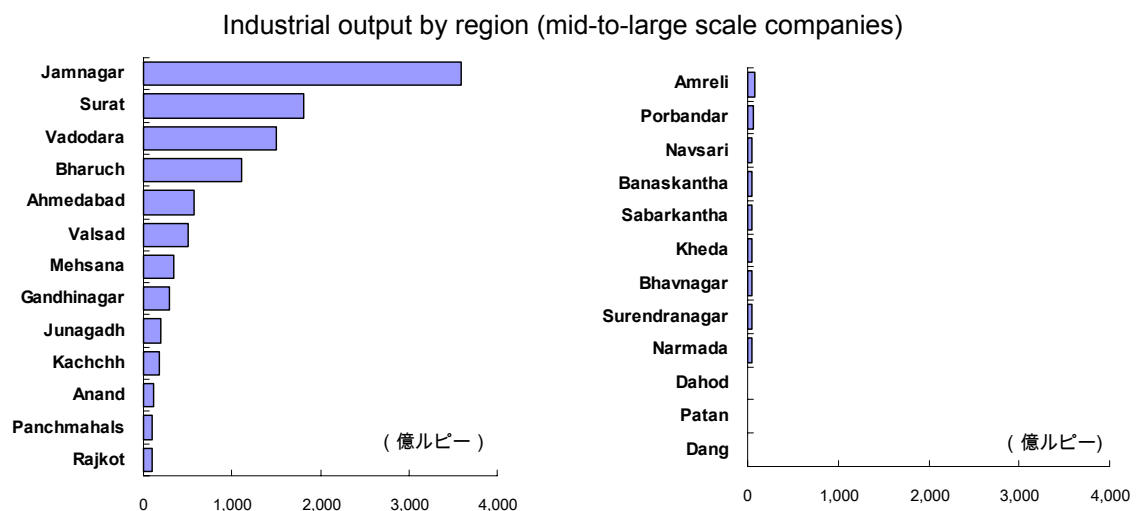


Source: Government of Gujarat Investment Promotion



Source : Socio-Economic Review 2002-03, Gujarat State

By region, Jamnagar is the largest production site where Reliance Industries operates a large-scale oil refinery plant.



Source : Socio-Economic Review 2002-03, Gujarat State

## (2) Trends in Corporate Sector

The state is a center of such chemical industries as petrochemical and fine chemical, taking advantages of port infrastructure located at northwest seashore of India. There are around 500 large and medium scale companies as well as 16,000 SMEs (companies and factories) in the chemical sector, occupies almost 50% of total capital investments in the state. Reliance, one of the major industrial conglomerate groups, operates the largest oil refinery in India, and is planning to expand the facility by investing US\$ 5.9.

While demand of intermediate and chemical materials is expected to increase in India along with an increase in consumer goods production, both upstream of chemical industry and downstream fine chemical including pharmaceutical will continue to be leading industries in the state. Gujarat Industrial Development Corporation (GIDC) has promoted to establish and upgrade industrial estates for development of a chemical cluster. In the meantime, the state has the largest number of industrial estates at 140 (year of 2001) in the country. There are many companies that have sufficient technological and export capabilities, as shown in the questionnaire survey result, and these have strong interests in further improving quality and management technique in order to match the global standard. Not only the chemical industry but also aluminum refinery, cement, iron and steel are major industries in the state, and large scale investment plans often become hot news.

### (3) Results of the Questionnaire Survey

(1) Number of companies surveyed: 51

#### 1-1. Sub sector (Top5)

No	Industry	%
1	Chemical	42
2	Medical/pharmaceutica	12
3	General machinery	10
4	Food	10
5	Electrical machinery, et	4
Total of top 5 sectors		78

#### 1-2. Company size

Annual sales (Rs)	%
less than 10 million	8
10 - 100 million	30
100 mill - 1 billion	32
more than 1 billion	30
Number of employees	%
less than 50	32
50—200	45
more than 200	23

#### 1-3. Ownership & export

Share of owner (family) company: 27%	
Share of those established before 1991 : 78%	
Export ratio	%
Zero	26
less than 25%	28
more than 25%	34
100%(EOU)	12

(2) Important factors/obstacles in business

#### 2-1. Factors/obstacles for sales expansion

Factors for expansion	
No	Important factor
1	Better quality
2	Price competitiveness
3	Higher technology
Obstacles for expansion	
No	Factor
1	Price competitiveness
2	Sales conditions
3	Lower technology

#### 2-2. Factors for business expansion

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Developing new products
3	Developing new customers
Requirements of customers	
No	Requirements
1	To lower the cost
2	To improve quality
3	To observe delivery time

#### 2-3. Obstacles in business environment

Major obstacles		
No	Factor	
1	Tax system, including tariff structure	
2	High competition in domestic market	
3	Insufficient/inefficient infrastructure	
Obstacles in procurement of materials/parts		
No	Factor	%
1	No obstacles	54
2	Tax system and import tariff	24
3	Laws/regulations, Gvt control	22

(3) Necessary assistance and expectations for the Government

#### 3-1. Assistance services

Expected assistance services	
No	Contents
1	Meeting with potential buyers
2	Advice on R&D
3	Credit guarantee
4	Assistance on loan application
5	Testing services

#### 3-2. Expectations for the Government

Shares who responded that administrative services are not effective		62%
Requests in promoting private sector		
No	Contents	
1	To improve infrastructure	
2	To improve (tax) administration	
3	To carry out labour policy reform	

#### 3-3. Study Team Comments

- Many are enterprises that have histories before economic reform in chemical and pharmaceutical sector. Export scale is rather large and they have strong consciousness about quality and skill improvement of workers.

(4) Top 3 reasons to invest in Gujarat

1. Economic condition / Market size
2. Existence of supporting industry
3. Political / Social stability / Existence of competent skilled labour

(5) Evaluation of Current Business Situation

High appraisal of business environment, especially the level of overall infrastructure.

(6) Request to state government

Low commodity tax law, deregulation of environment issues.

(4) Industrial Promotion Policy

In an aim of gaining international competitiveness, Gujarat state promotes the following strategies:

- establishing a brand image of products manufactured in Gujarat;
- introducing labour reforms;
- reinforcing infrastructure;
- reforming the electric power sector;
- industrial promotion driven by harbour development;
- establishing SEZ;
- industrial development based on innovation, technology and value-added production;
- promoting the service sector which leads the development of the manufacturing sector and
- strengthening export.

In the area of marketing, the following measures are taken.

- Common Branding and Marketing Fund is established, and business expense up to Rs. 10,000 is to be subsidised per company that sells under the same brand name. To maintain the quality, testing activities are also supported.
- 50% of the exhibition space fees for international fair at Gujarat pavilion are to be subsidised with a ceiling of Rs. 500,000.
- Expenses for sending a sample to abroad up to Rs. 500,000 are to be subsidised to the small-scale enterprises for their first trial.
- 50% of participation fees in foreign seminars by the small-scale enterprises are to be subsidised with a ceiling of Rs. 50,000.
- 50% of the land acquisition cost is to be subsidised for constructing exhibition or meeting halls in major cities with a ceiling of Rs. 10 million.
- 25% of the facility cost is to be subsidised with a ceiling of Rs. 1 million when a trade centre above 1,000 m<sup>2</sup> is constructed in major industrial areas. It is assumed that these trade centres consist of meeting rooms, media rooms, exhibitions rooms, business centres, banks and telecommunication facilities.



### 3 Investment Promotion

#### (1) Investment Trend

Gujarat State is geographically located between Delhi and Mumbai, which is an advantage for industrial location. Gujarat, one of the most industrialized states in India, is the centre of chemical and textile industries. Mining and biotech-pharmaceutical are other prospective sectors for investment.

Approved amount of FDI (August 1991 - August 2000): 111,765 million rupees

Share in national total: 4.5%

Source: MCI, "SIA Newsletter September 2004"

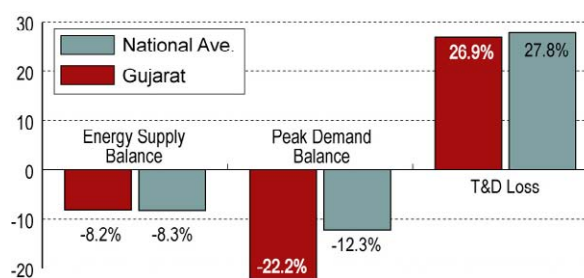
#### (2) Investment Policy

The State government offers various subsidies for investment projects in services and agro-industry, besides IT. Small scale industries and projects in the backward area are also given some incentives.

### 4 Infrastructure

#### (1) Electricity

Currently, Gujarat is encountering serious energy shortages. With a peak demand of 9,783 MW during 2005/06, only 7,610 MW was met, that is to say 22.2% of peak deficit. There was also 8.2% energy deficit during the period. To compensate such shortfall, frequent load shedding (planned blackout) was executed under a rotation manner by area. Energy shortage in the state has affected a broad spectrum of the economy in the state.



Source: CEA

Power Supply Situations in Gujarat

#### (2) Roads

The total length of road network in Gujarat is 73,600 km. Over 95% of this road length is surfaced. Under the National Highway Development Project Phase II, NHAI is constructing 3,640 km of four lane national highway (East - West Corridor of the country). The western end of the corridor starts from Porbandar in Gujarat, passing through Rajkot and Samakhiali in the state, and then reaches to Silchar in Assam state.

#### (3) Airports

The State of Gujarat has 11 airports one of which, Ahmedabad, is the only international airport in the state. Ahmedabad has direct international connections to the middle-east towns of Sharjah, Kuwait and Muscat. Ahmedabad is also directly connected to Singapore and Kuala Lumpur, and will soon be having direct

connections to Colombo. Cargo handling volume of the airport during April to October 2005 was 10,379 tons (8th largest volume among the airports in India). Of the total cargo handling volume, 2,314 tons or 22.3% was international cargo.

Out of the 11 airports in the states, only seven airports at Ahmedabad, Vadodara, Jamnagar, Rajkot, Bhavnagar, Porbandar and Bhuj are served by scheduled flights. Kandla, Keshod and Surat airports have no scheduled regular flights and the airport at Dessa is currently closed.

#### (4) Ports

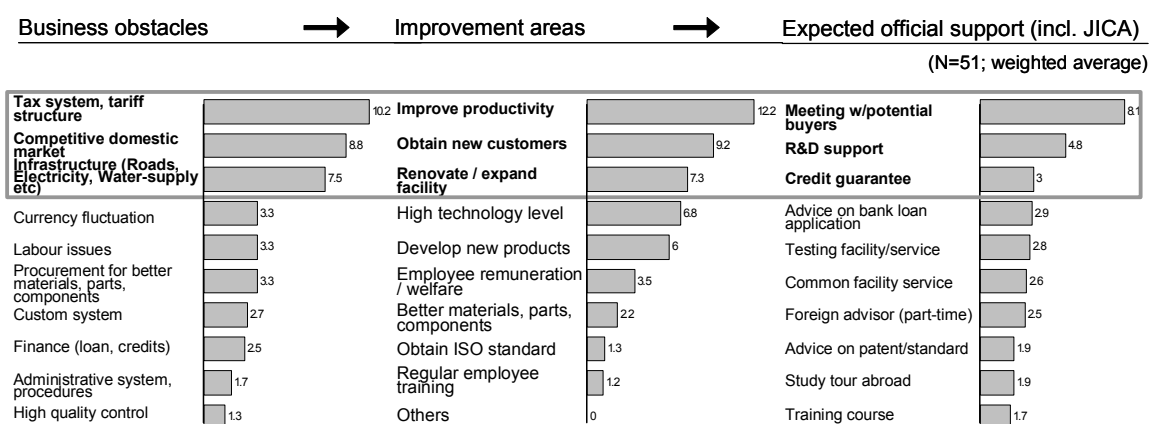
Gujarat has the longest coastline (1,600 km) in the country, and has 41 ports. During the year 2004/05, ports in Gujarat handled 137.3 million tons or 26.5% of the cargo throughout the country, which is the largest in India (Maharashtra occupied 15.4%, and is 2nd largest). Kandla port is one of the 13 major ports in India. In 2004/05, Kandla port handled 415 thousand tons (ranked 3rd among the ports in India).

According to the Department of Shipping, the cargo handling volume of the country is estimated to be 1,027 million tons by 2015. At the same time, the Gujarat ports will handle 400 million tons taking the share of the state to 39% of the country.

Under the Port Policy of Gujarat in 1995, 10 new ports are proposed to be developed. Of them, Pipavav, Mundra, and Positra ports are already in operation. Pipavav is developed with pure private sector investment, while Mundra, Dahej and Positra port have been developed in joint sector. Ports at Dholera, Hazira, and Maroli are currently under various stages of development. The ports at locations like Mithivirdi, Simar and Vansi Borsi are open for private sector investment.

## 5 Development Needs

According to the company interview survey (sample #48 in Gujarat), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;



Source: company interview survey

The industry structure of Gujarat heavily relies on heavy chemical industry. To enhance production capability and inter-industry relations among the sector by promoting large-scale investment into the state will be the key for success. The state is promoting branding strategy for local products which is expected to contribute to industrial development in other sectors.

## VII Haryana State

### 1 Overview

Items		Ranking
Area	44,212 km <sup>2</sup>	20
Population	21.1 million	16
GDP*	Rs 830.03 billion	13
3-year GDP average growth rate	8.6%	12
NSDP** per capita	Rs. 32,717	5
Manufacturing GDP share	22.8%	
FDI(2004)	Rs. 2,482.9 million	8
Literacy rate	67.9%	18



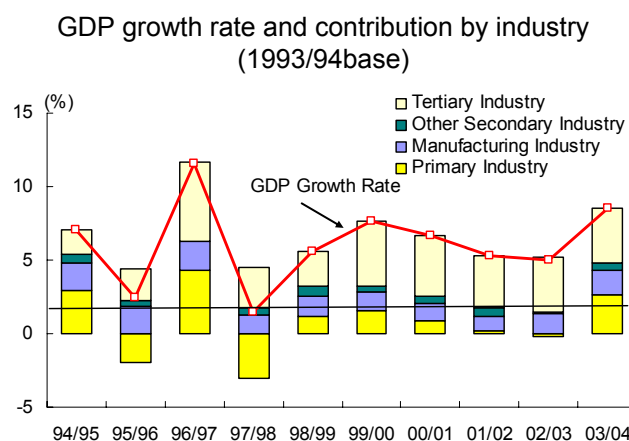
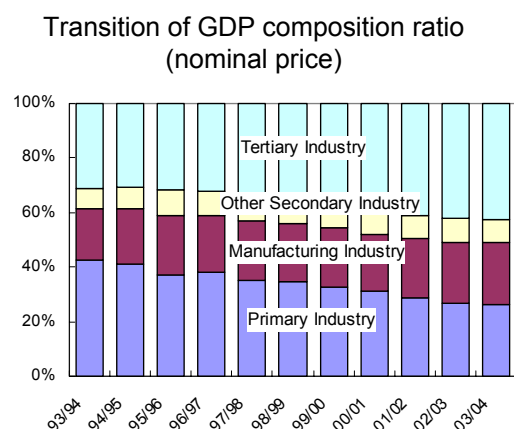
\*at current price (1993/94 bases) \*\*Net State Domestic Product (1993/94 bases)

Source: States and Territories of India, Census of India 2001

### 2 Industry

#### (1) Industry Structure

Haryana is recognized as the breadbasket of India together with Punjab. Since it is located in the suburbs of Delhi, the GDP share of manufacturing sector is gradually increasing by growth in investment.



Source Central Statistical Organization, Ministry of Statistics and Program Implementation

At the end of 2005, there were 1,250 mid-to-large scale and 80,000 tiny/small companies in Haryana. Automobile and motorcycle are key industries of Haryana and have been increasing volume in recent years.

#### (2) Trends in Corporate Sector

The state is located north of Delhi, and neighboring district to Delhi represented by Gurgaon formulates an important industrial complex in the Delhi Metropolitan area. There are many large and medium sized

companies as well as SMEs in such sectors as autos and auto components, electrical machinery, and general machineries, particularly in the neighborhood of Delhi. Because agro-related industries utilizing grain, sugarcane, cotton and flowers have traditionally been prosperous, there are still many SMEs working for agro-product and agro-related industries.

### (3) Results of the Questionnaire Survey

#### (1) Number of companies surveyed: 46

##### 1-1. Sub sector (Top5)

No	Industry	%
1	Transport equipment	24
2	Food	15
3	Electrical machinery	13
4	General machinery	11
5	Other manufacturing	9
Total of top 5 sectors		72

##### 1-2. Company size

Annual sales (Rs)		%
less than 10 million		17
10 - 100 million		46
100 mill - 1 billion		15
more than 1 billion		11
Number of employees		%
less than 50		37
50—200		26
more than 200		30

##### 1-3. Ownership & export

Share of owner (family) company: 78%		
Share of those established before 1991 : 50%		
Export ratio	%	
Zero	61	
less than 25%	22	
more than 25%	11	
100%(EOU)	7	

#### (2) Important factors/obstacles in business

##### 2-1. Factors/obstacles for sales expansion

Factors for expansion	
No	Important factor
1	Price competitiveness
2	Better quality
3	Higher technology
Obstacles for expansion	
No	Factor
1	Price competitiveness
2	Lower technology
3	Sales conditions

##### 2-2. Factors for business expansion

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Developing new products
3	Developing new customers
Requirements of customers	
No	Requirements
1	To lower the cost
2	To observe delivery time
3	To improve quality

##### 2-3. Obstacles in business environment

Major obstacles		
No	Factor	
1	Insufficient/inefficient infrastructure	
2	High competition in domestic market	
3	Tax system, including tariff structure	
Obstacles in procurement of materials/parts		
No	Factor	%
1	No obstacles	54
2	Tax system and import tariff	17
3	Laws/regulations, Gvt control	17

#### (3) Necessary assistance and expectations for the Government

##### 3-1. Assistance services

Expected assistance services	
No	Contents
1	Meeting with potential buyers
2	Training courses
3	Testing services
4	Advice on R&D
5	Exhibition support

##### 3-2. Expectations for the Government

Shares who responded that administrative services are not effective		13%
Requests in promoting private sector		
No	Contents	
1	To simplify tax system	
2	To improve infrastructure	
3	To simplify administration	

##### 3-3. Study Team Comments

- There are many traditional SSIs in food processing and machinery sectors including automotive component that have expectations for domestic market expansion and business environment improvement.

#### (4) Top 3 reasons to invest in Haryana

1. Market size
2. Economic condition / Existence of supporting industry / Existence of competent skilled labour
3. Political/social stability / Availability of raw material / Low cost of labour

#### (5) Evaluation of Current Business Situation

Generally high satisfaction, especially human resource and infrastructure.

#### (6) Request to state government

Low electricity tariff, low commodity tax level etc.

#### (4) Industrial Promotion Policy

Having a geographical advantage near Delhi, Haryana state government is zealous in calling in foreign investment. It is the most popular destination of foreign investors in North India. Haryana state government lists the purpose of industrial development as follows:

- revitalising industry as the mainspring of economic development;
- improving the living standards of the resident;
- providing opportunities for employment and starting businesses across the sectors;
- expanding economic activities to less developed areas and
- realising sustainable development through investing in the major economic sector.

In concrete, the following measures are taken.

- Infrastructural development shall be promoted with a leadership of Haryana State Industrial Development Corporation. The industrial estates shall be integrated with commercial and residential facilities, workers' housing and social infrastructure as well as water and solid waste treatment facilities.
- Establishment of and investment to SEZ shall be promoted.
- Having an industrial town in Manesar as model, similar industrial towns shall be constructed in other areas. The model town should be the scale of about 200 acres and have ample spaces reserved for large enterprises, residential areas and workers' housing as well as commercial, entertainment, educational and medical facilities.
- Dedicated industrial parks to be constructed for the thrust sub sectors; namely food processing, jewelry, apparel, shoes and leather garments.
- Free enterprise zone, which can change the purpose of the land use without applications, shall be constructed in the backward areas.
- New investment project, having either over Rs. 1 billion investment value or over 500 employees in backward areas, shall be endowed with interest-free loans in the amount equaling 50% of the value-added tax for 7 years with repayment grace period for 5 years. In addition, local development tax shall be exempted for 5 years.
- Small-scale enterprises which invest in backward areas shall be endowed with interest-free loans in the amount equaling 50% of the value-added tax for 5 years with repayment grace period of 5 years.
- 1% of the export values shall be subsidised to exporting enterprises with a ceiling of Rs. 1 million per year.
- 75% of the value added tax shall be granted as an interest-free loan to the food processing

enterprises for 5 years with repayment grace period for 5 years. In addition, 50% of taxes relating to changes of the land use shall be exempted for the food processing enterprises which make new investment in the backward areas.

- Manufacturing of wine, liqueur or brandy from 100% fruit shall be exempted from the excise duty in the backward areas.

### 3 Investment Promotion

#### (1) Investment Trend

With its liberal industrial policy and geographical advantage of proximity to Delhi NCT, Haryana State has enjoyed rapid industrialisation. In particular, development of the Gurgaon area, adjacent to Delhi, is remarkable as many multinational companies including Suzuki, Honda, Nestle, Coca Cola, Pepsi, IBM and Motorola have production bases in the area..

Approved amount of FDI (August 1991 - August 2000): 38,752 million rupees

Share in national total: 1.6%

Source: MCI, "SIA Newsletter September 2004"

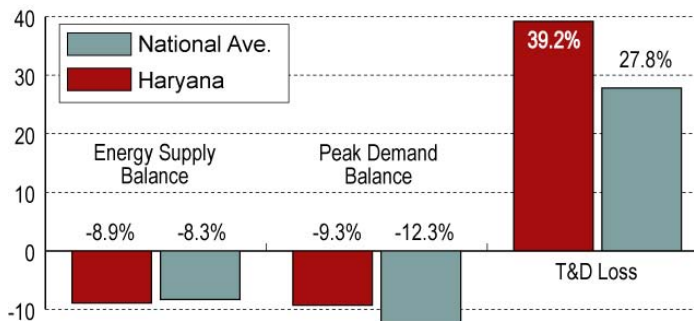
#### (2) Investment Policy

The State government, in its new industrial policy announced in 2005, estimates FDI of 45 billion US dollars in the next ten years. Prospective industries are automobiles and automobile parts, electronics, IT, textiles, food processing, etc. Projects in IT are given such incentives as discounts to electric power tariff and land allotment with priority.

### 4 Infrastructure

#### (1) Electricity

Energy demand in Haryana has increased by 10.4% per annum on average during the past three years (2001/02 to 2004/05). Total generation capacity in the state was 3,921 MW as of the end of November 2005. Of which, 1,086 MW was purchased from central public sector undertakings (CPSUs). As in most of the states in India, supply capability in the state is far below energy



Source: CEA

Power Supply Situations in Haryana

demand. Energy deficit and peak load deficit of Haryana during the fiscal year 2005/06 were 8.9% and 9.3%, respectively. These deficits were almost same as the national average of 8.3% and 12.3%.

Transmission and distribution loss in 2002/03 of 37.7% was considerably higher than the national average (25.9%), and thus needs improvement.

## (2) Roads

Haryana state is well connected to other major cities, including Delhi, by its road network. Haryana State has total length of 23,684 km of road network. There are four national highways passing through the Haryana State. NH-1 passes through Haryana from Delhi to Ambala, linking Punjab, H.P. and Jammu and Kashmir. NH-2 passes through Faridabad and links vast areas to Uttar Pradesh, Madhya Pradesh etc. right up to Bombay. NH-8 passes through prestigious industrial estate Gurgaon, Industrial Model Township Manesar, and Growth Centre Bawal and links vast areas right up to Ahmedabad and Bombay. Currently, elevated toll road is being constructed on a BOT basis. The road connects Delhi, international airport, and Gurgaon and), which is located immediately above NH-8,



Delhi- Gurgaon Road Under Construction

NH-1 and NH-2 form part of the North-South Corridor and part of the Golden Quadrilateral, respectively, and are widening to 4 lanes and are in the pipeline by NHAI.

## (3) Railways

Most of the main railway routes in the northern area of India pass through Haryana. In addition, under the national capital region there is already a proposal to provide rail corridor connecting towns around Delhi linking the major satellite towns like Faridabad, Gurgaon, Bahadurgarh, Kundli etc.

Inland container depots are located in Okhla, Babarpur, Rewari, and Ballabhgarh. A new inland container depot is currently under construction in Gurgaon.

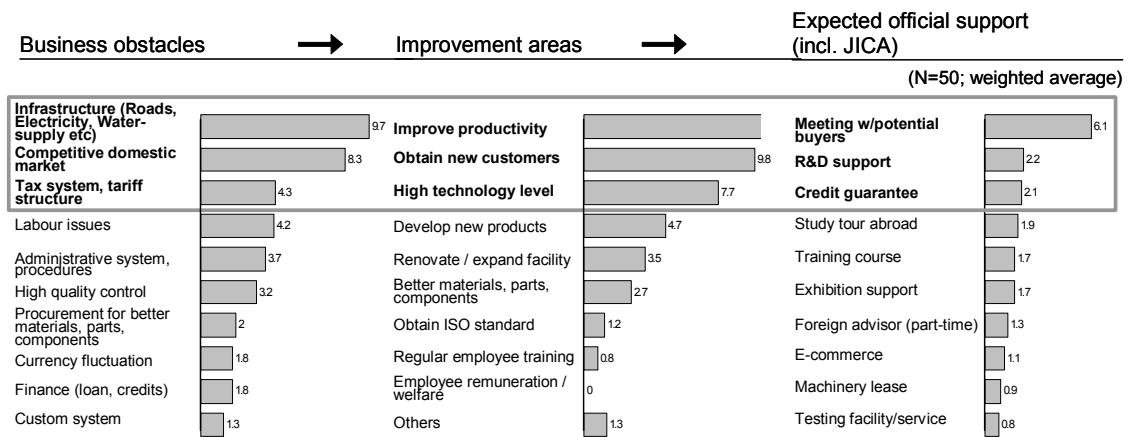
## (4) Ports and Airports

There are no ports or airports in Haryana.

## 5 Development Needs

According to the company interview survey (sample #50 in Haryana), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;





Source: company interview survey

The condition for PPP is quite sufficient in the urban areas, thus needs for technical cooperation may be low. However, in rural backward regions, technical assistance in the field of social development combined with industrial promotion is significant.

## VIII Madhya Pradesh

### 1 Overview

Items		Ranking
Area	308,144 km <sup>2</sup>	2
Population	60.3 million	7
GDP*	Rs 1,079.26 billion	9
3-year GDP average growth rate	7.9%	16
NSDP** per capita	Rs. 14,626	21
Manufacturing GDP share	14.6%	
FDI(2004)	Rs. 4.4 million	16
Literacy rate	63.7%	22



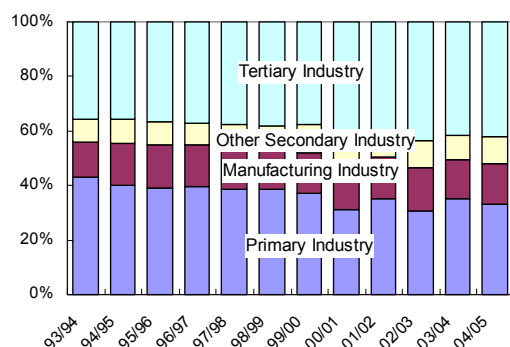
\*at current price (1993/94 bases) \*\*Net State Domestic Product (1993/94 bases)  
Source: States and Territories of India, Census of India 2001

### 2 Industry

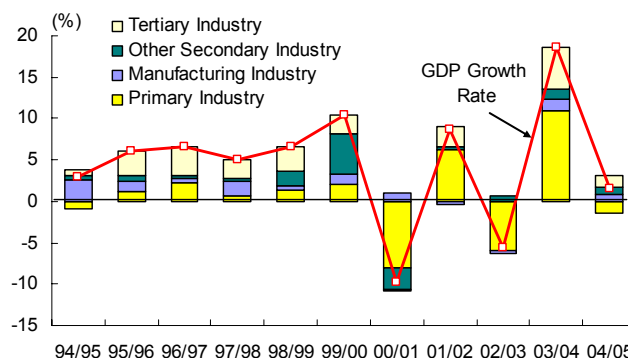
#### (1) Industry Structure

Madhya Pradesh is an agricultural state in which the primary industry occupies 33.2% of total GDP (2004/05), and a leading production site of soybean, other legumes, and oilseed. Although the secondary industry consists 24.5% of the GDP, the share of manufacturing industry is limited to 14.6%. The economy of Madhya Pradesh is greatly influenced by the trend of agricultural output. As seen in the economic trend in recent years, negative growth of the primary industry results in a big fall in the rate of economic growth.

Transition of GDP composition ratio  
(nominal price)



GDP growth rate and contribution by industry  
(1993/94base)



Source Central Statistical Organization, Ministry of Statistics and Program Implementation

The State of Madhya Pradesh is abundant in mineral resources, such as diamond, coal, bauxite, copper, manganese ore, limestone, and ironstone etc. Therefore, it has an advantage in resource processing type industries, such as steel, cement, and aluminum etc.

## (2) Trends in Corporate Sector

The state has a broad range of industries, having major facilities of such Indian large enterprises as Hindustan Lever, Hindustan Motor, Kinetic Motor, Tata Iron and Steel (TISCO), and Raymond. Many manufacturing companies in the state seem to focus their businesses on the Indian domestic market, given its geographical position inland of the country. The number of SSIs is around 900,000 and occupies around 8% of the country's share and being 5th in the state ranking.

## (3) Results of the Questionnaire Survey

### (1) Number of companies surveyed: 55

#### 1-1. Sub sector (Top5)

No	Industry	%
1	Electrical machinery	20
2	General machinery	16
3	Medical/pharmaceutica	9
4	Plastic	9
5	Other manufacturing	7
Total of top 5 sectors		61

#### 1-2. Company size

Annual sales (Rs)		%
less than 10 million		17
10 - 100 million		20
100 mill - 1 billion		46
more than 1 billion		15
Number of employees		%
less than 50		32
50—200		43
more than 200		25

#### 1-3. Ownership & export

Share of owner (family) company: 64%		
Share of those established before 1991 : 69%		
Export ratio	%	
Zero	69	
less than 25%	18	
more than 25%	12	
100%(EOU)	0	

### (2) Important factors/obstacles in business

#### 2-1. Factors/obstacles for sales expansion

Factors for expansion	
No	Important factor
1	Better quality
2	Price competitiveness
3	Higher technology
Obstacles for expansion	
No	Factor
1	Others (Finance, etc.)
2	Price competitiveness
3	Lower technology

#### 2-2. Factors for business expansion

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Developing new products
3	Developing new customers
Requirements of customers	
No	Requirements
1	To lower the cost
2	To produce larger volume
3	To observe delivery time

#### 2-3. Obstacles in business environment

Major obstacles		
No	Factor	
1	Insufficient/inefficient infrastructure	
2	High competition in domestic market	
3	Tax system, including tariff structure	
Obstacles in procurement of materials/parts		
No	Factor	%
1	No obstacles	56
2	Laws/regulations, Gvt control	18
3	Tax system and import tariff	13

### (3) Necessary assistance and expectations for the Government

#### 3-1. Assistance services

Expected assistance services	
No	Contents
1	Meeting with potential buyers
2	Machinery lease
3	Training courses
4	Credit guarantee
5	Advice on R&D

#### 3-2. Expectations for the Government

Shares who responded that administrative services are not effective		3%
Requests in promoting private sector		
No	Contents	
1	To simplify tax system	
2	To improve infrastructure	
3	To carry out labour policy reform	

#### 3-3. Study Team Comments

- There are many traditional SSIs mainly in machinery sectors. They have willingness of increasing capacities for domestic demands, but financial weakness, which leads their expectations for credit guarantee and leasing

### (4) Top 3 reasons to invest in Madhya Pradesh

1. Market size
2. Low cost of labour
3. Existence of competent skilled labour

### (5) Evaluation of Current Business Situation

There is a high satisfaction level of business environment, especially electricity, telecommunication, and transport infrastructure. On the other hand, the satisfaction level is low not satisfied with the low level of

industrial water supply.

(6) Request to state government

Many request on a unified tax system with other neighbouring states. Also, there are many critics on the inconsistency of policy direction due to change in political administration, or state governor.

(4) Industrial promotion policy

The industrial promotion policies of Madhya Pradesh comprise various measures as if they sum up those of more advanced industrial states.

- Madhya Pradesh Trade and Investment Facilitation Corporation was established. The Corporation shall be a contact window for the investors by providing investment information and proceeding with investment applications.
- Infrastructure Development Fund is founded and shall operate as a revolving fund.
- SEZ is established in Indole.
- 10% of the investment fees on the infrastructural facility shall be subsidised with a ceiling of Rs. 10 million when the private sector constructs an industrial estate or an IT park.
- Foreign investors or 100% exporting companies can acquire land at a concessional rate in accordance with the amount of capital investment over Rs. 250 million.
- Enterprises with fixed assets of more than Rs. 10 million are exempted from 50% or 75% of business tax and consumption tax for 3 to 10 years depending on the amount of investment and backwardness of the area.
- For promoting the agro processing industry, 7 food processing parks shall be established with cold storages facilities, testing facilities and waste water treatment.
- Backward areas are divided into four stages (A, B, C and non-industrial district) according to the degree of development. Enterprises are granted 3 to 5% interest subsidies depending on the area. In addition, a small-scale enterprise can receive 15% subsidy for its investment to fixed assets.
- Enterprises investing in the backward areas (B, C and non-industrial district) are exempted from part or all of stamp and registration duties levied on their loan.
- Patent acquisition fees are subsidised with a ceiling of Rs. 200,000.
- The Deendayal Rozgar Yojana scheme is established, and reemployment support subsidy is to be granted to the unemployed youth with a ceiling of Rs. 150,000 per year.
- SC, ST, or women entrepreneurs can receive 5% interest subsidies for 5 years. If they are the owners of the small-scale enterprises, up to 15% of the fixed investment cost shall be subsidised depending on the backwardness of the area.

### 3 Investment Promotion

#### (1) Investment Trend

Madhya Pradesh State is in the centre of India and endowed with rich natural resources. However, its industrialisation lags behind other states and FDI flow into the State is still small. Shimadzu and Bridgestone, from Japan, have factories here.

Approved amount of FDI (August 1991 - August 2000): 92,714 million rupees

Share in national total: 3.7%

Source: MCI, "SIA Newsletter September 2004"

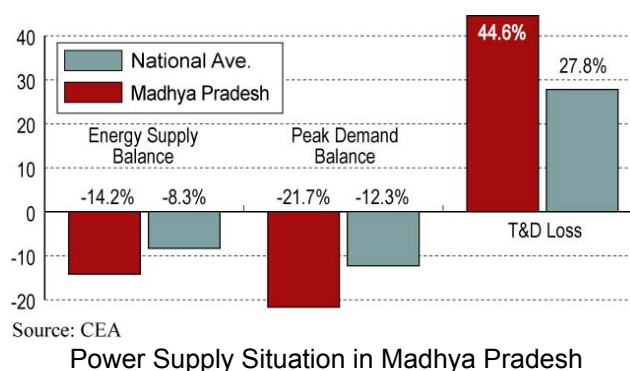
#### (2) Investment Policy

The State government introduced industrial promotion policy in 2004 where priority industries for development are specified, i.e., textiles, IT, biotechnology, automobiles, pharmaceutical, food processing, agriculture and urban waste treatment and subsidies are given to investment in these sectors. Other incentives are given to large scale projects and investment in industries to use "new technologies".

### 4 Infrastructure

#### (1) Electricity

Total installed capacity of Madhya Pradesh was 6,293.5 MW as of the end of March 2006. Installed capacity of coal fired power stations occupied 51.1% (3,215.5 MW) of total capacity in the state, followed by hydropower 41.1% (2,586.6 MW), and others 7.8% (491.4 MW). Electricity demand and supply balance of Madhya Pradesh is more serious than in other states. In 2005/06, there was an energy deficit of 14.2% and peak supply deficit of 21.7%. To fill these gaps, the state and central power sector undertakings are planning to construct 11 power stations with a total capacity of 1,942.5 MW.



According to news paper reports, iron and steel industries are suffering catastrophic damage due to rapid increase in the electricity tariff for industrial consumers.

#### (2) Roads

The total length of road network in Madhya Pradesh is 67,743 km (National highway: 5,176 km, state highway 31,660 km). Road density per 100 km<sup>2</sup> is 22.1 km, which is considerably shorter than the national average of 37.0 km. National highway numbers 7 and 26 (NH-7, NH- 26) run from north to south of state

center, and lead to such areas as Delhi, Hyderabad and Bangalore. These national highways form part of the North- South Corridor, and are currently widened to 4 lanes by the National Highway Authority of India under NHDP Phase II. The East- West Corridor is also passing through northern part of the state (NH-25).

### (3) Railways

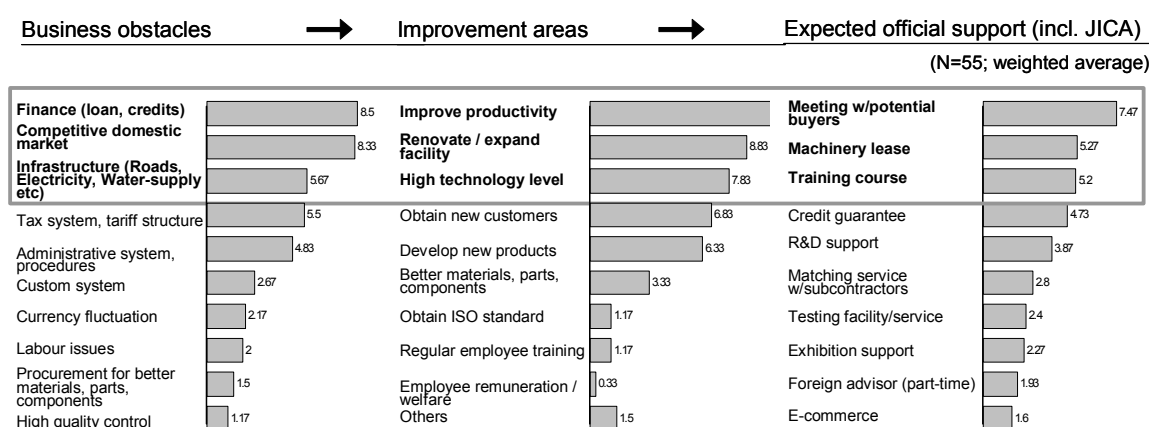
Total length of the railway network in Madhya Pradesh is 5,992 km. Most of the railways connecting North India and South India pass through the state. Major nodes of the network are Bhopal, Indore, Bina, Gwalior, Itarsi, Jabalpur, Katni, Ratlam and Ujjain. Inland container depots with custom facilities are situated in Malanpur, Ratlam and Pitnampur. Currently, a new container depot is being planned at Mandideep near Bhopal.

### (4) Airports

There are 4 domestic airports in the state (Bhopal, Indore, Gwalior, and Jabalpur). Even in Bhopal airport and Indore airport, the bigger airports in the state, cargo handling volume is very small, 1254 ton (ranked 21st among airports in India) and 288 ton (ranked 39th), respectively.

## 5 Development Needs

According to the company interview survey (sample #55 in Madhya Pradesh), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;



Source: company interview survey

The center of industry is Indore, 186 km far from Bhopal. Although located at the center of India, Indore is less attractive to investors due to inconvenient access. Promotion of the agricultural processing industry which is prioritized by the local government combined with the development of the agriculture sector will be appropriate, instead of introducing the cutting edge technology, as the area for technical cooperation in Madhya Pradesh.

## IX Uttar Pradesh

### 1 Overview

Items		Ranking
Area	238,566 km <sup>2</sup>	5
Population	166.1 million	1
GDP*	Rs 2,356.78 billion	2
3-year GDP average growth rate	6.4%	28
NSDP** per capita	Rs 11,477	25
Manufacturing GDP share	13.4%	
FDI(2004)	Rs 1,023.2 million	10
Literacy rate	56.3%	28



\*at current price (1993/94 bases) \*\*Net State Domestic Product (1993/94 bases)

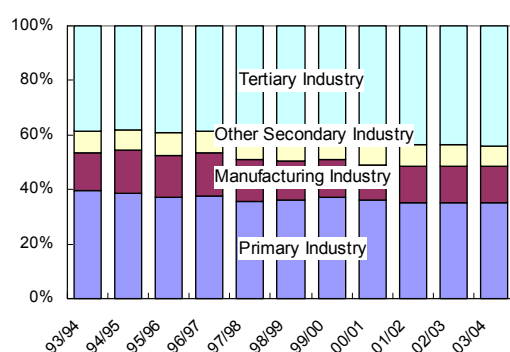
Source: States and Territories of India, Census of India 2001

### 2 Industry

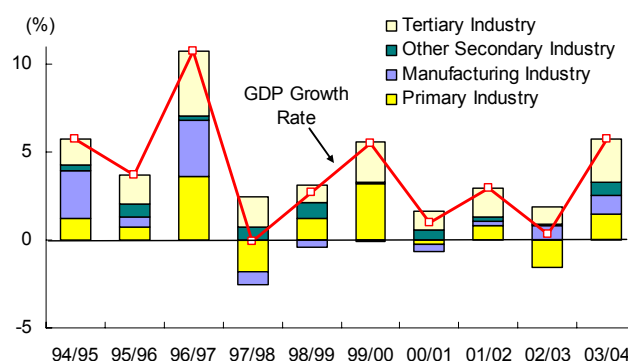
#### (1) Industry Structure

Although the State of Uttar Pradesh is a state with the largest population in India, it is also one of the states with the most poverty. The primary industry occupies the state's economy with its share of GDP remaining around 35% in the past 10 years. On the other hand, the manufacturing industry showed slow increase after FY1997/98 but started to contribute greatly to the overall economic growth since FY2002/03.

Transition of GDP composition ratio  
(nominal price)



GDP growth rate and contribution by industry  
(1993/94base)



Source Central Statistical Organization, Ministry of Statistics and Program Implementation

Uttar Pradesh is the largest state for wheat, sugarcane, and maize, and also important production region for food, sugar processing and beverage. In addition, textile, chemical, machinery and automobile including related parts are major industries. Recent rapid growth is caused by increase in foreign investment to electronics and automobile-related industries, etc into Noida city near Delhi.

## (2) Trends in Corporate Sector

The state is located east of the country's capital city, Delhi, and Noida, a neighbouring area of Delhi, is one of the most integrated industrial zones in the country. Traditional key industrial sectors of the state are agro-processing and its related industries utilizing rich agricultural resources, textiles, leather products, and so forth. The state occupies the largest share (16%) of the number of SSIs in the country, having around 1.92 million SSIs (2004).

## (3) Results of the Questionnaire Survey

### (1) Number of companies surveyed: 38

#### 1-1. Sub sector (Top5)

No	Industry	%
1	Electrical machinery	21
2	Electronics/Telecom	11
3	Food	8
4	Garments/apparel	8
5	Chemical	8
Total of top 5 sectors		56

#### 1-2. Company size

Annual sales (Rs)		%
less than 10 million		3
10 - 100 million		5
100 mill - 1 billion		39
more than 1 billion		26
Number of employees		%
less than 50		21
50—200		24
more than 200		39

#### 1-3. Ownership & export

Share of owner (family) company: 24%		
Share of those established before 1991 : 32%		
Export ratio	%	
Zero	42	
less than 25%	18	
more than 25%	11	
100% (EOU)	29	

### (2) Important factors/obstacles in business

#### 2-1. Factors/obstacles for sales expansion

Factors for expansion	
No	Important factor
1	Better quality
2	Price competitiveness
3	Past business records
Obstacles for expansion	
No	Factor
1	Price competitiveness
2	Sales conditions
3	Location

#### 2-2. Factors for business expansion

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Developing new products
3	Opening up of foreign trade
Requirements of customers	
No	Requirements
1	To lower the cost
2	To observe delivery time
3	To improve quality

#### 2-3. Obstacles in business environment

Major obstacles		
No	Factor	
1	High competition in domestic market	
2	Tax system, including tariff structure	
3	Difficult administration in custom	
Obstacles in procurement of materials/parts		
No	Factor	%
1	No obstacles	60
2	Tax system and import tariff	18
3	Laws/regulations, Gvt control	11

### (3) Necessary assistance and expectations for the Government

#### 3-1. Assistance services

Expected assistance services	
No	Contents
1	Receiving foreign advisors
2	Advice on R&D
3	e-commerce support
4	Training courses
5	Exhibition support

#### 3-2. Expectations for the Government

Shares who responded that administrative services are not effective		18%
Requests in promoting private sector		
No	Contents	
1	To improve infrastructure	
2	To develop tax preference	
3	To simplify administration	

#### 3-3. Study Team Comments

- There are many new, non-individual companies in electric and electronics sectors, including 100% export companies. They have proactive attitudes for welcoming foreign experts and R&D.

### (4) Top 3 reasons to invest in Uttar Pradesh state

1. Market size
2. Low cost of labour
3. Existence of supporting industry, alliance partner, or follow parent company

### (5) Evaluation of Current Business Situation

Assessment on business environment, especially satisfaction level of electricity supply, tax system, and administration of the central and state government is significantly low.



## (6) Request to state government

There is a strong request for introducing Value-added tax (VAT). Others include infrastructure improvement, preferential investment measures, and regulation on real estate price etc.

## (4) Industrial promotion policy

Uttar Pradesh state aims industrial promotion through the cooperation with the private sector and PPP. In concrete, the following measures are taken.

- Balanced industries growth is sought across the sizes and sub-sectors.
- Industrial initiative fund is to be established for promoting construction of major infrastructure through PPP. Advisory services of foreign experts and financial assistance from donors are invited for the fund operation.
- Industrial corridors are to be constructed in phases. In the first phase, 7 corridors as indicated in the map below are to be constructed.
- Integrated Industrial Township, as seen in the models in NOIDA and Grater Noida, shall be constructed with facilities of road, electric power, water, sewage, residences and educational and medical facilities.
- For operating industrial estates, forming industrial unions are encouraged. Maximum of Rs. 1 million per union is subsidised.
- Food parks shall be constructed in the vicinity of large markets in the state.
- The power transmission lines of 132 KVA are to be connected to the industrial areas and shall be distributed to the member enterprises through industrial unions or associations. In addition, dedicated power transmission shall be connected to the exporting companies, agro food processing companies over Rs. 100 million investment values and other type of enterprises over Rs. 500 million investment values outside the industrial area.



Moreover, to promote IT as the mainspring of economic development, the following preferential treatment policies are executed to the IT related businesses:

- priority over locating in NOIDA or in Greater NOIDA;
- exemption from the stamp duty;
- permitting to install a private power generator of 5VA and
- further preferential schemes on tax reduction and concessional sales of lands for enterprises over Rs. 500 million investment values.

### 3 Investment Promotion

#### (1) Investment Trend

Western region of the State, including Noida which is part of Delhi NCR, has been developing at a rapid pace. The Greater Noida area, a new industrial estate with industrial accumulation of electronics and automobile parts, attracts Japanese companies such as Honda, Panasonic, Yamaha as well as other multinational companies. However, the amount of FDI inflow is still small compared to economic scale of the state.

Approved amount of FDI (August 1991 - August 200): 48,267 million rupees

Share in national total: 2.0%

Source: MCI, "SIA Newsletter September 2004"

#### (2) Investment Policy

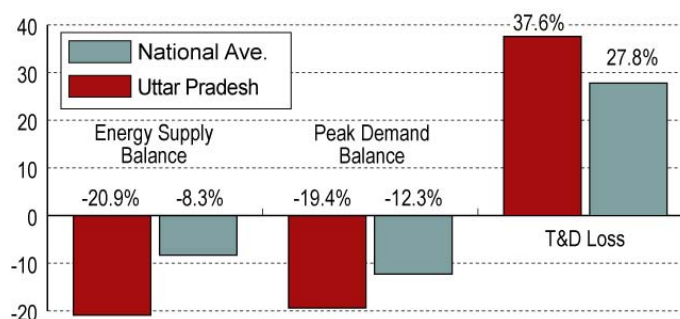
Because the principal industry of the State is agriculture, the State government mainly promotes investment in agricultural products and food processing industry. Processing of agricultural products, automobiles, automobile parts, electronics, software, engineering, agricultural machinery and export oriented industries are specified as thrust industries in which sectors low interest loans are offered for investment by small scale companies.

### 4 Infrastructure

#### (1) Electricity

Recently, Uttar Pradesh has been facing a serious electricity shortage. During the period from April to November 2005, while peak demand in the state was 8,175 MW, actual peak supply was only 6,588 MW thus resulting in a 19.4% peak deficit. Energy supply during the period was 21.4% lower than demand. Because of such electricity deficit, load shedding (planned blackout) was executed under a rotation manner by area, mainly during peak hours.

In order to solve the problem, construction of 14 power stations with total installed capacity of 2,419 MW are being planned by 2012. Of these power stations, Uttar Pradesh Power Corporation Ltd. (UPPCL) will construct Anpara C hydropower station (500 MW) and Parichhan thermal power station (expansion of 210 MW unit). The remaining 12 power stations (1,709 MW in total) are constructed by CPSUs and IPPs, and the state will purchase electricity from these power stations.



Source: CEA

Power Supply Indicators in Uttar Pradesh

Transmission and distribution loss in the state was as much as 41.6% in 2004/05, which is considerably higher than the national average of 27.8% (2001/02). More than half of the loss is regarded as non-technical loss that resulted from theft of electricity, tampered electric meter, and un-metered customers.

## (2) Roads/ Railways

Total road length in Uttar Pradesh is 184,000 km, of which 2,613 km is national highway. Uttar Pradesh is situated in the north-central part of India, and trunk national highways pass through the state. Of national highways in the state, NH-2, NH-25 and NH-28 (running east to west of the state), NH-3 (traverse longitudinally) play important roles in commodity distribution. NH-2 was widened under the National Highway Development Program (NHDP) Phase I, and comprises part of the Golden Quadrilateral, which connects Delhi, Mumbai, Chennai, and Kolkata. NH-25/28 and NH-3 are currently widened to 4 or 6 lanes under NHDP Phase II, and form part of the East-West Corridor and the North-South Corridor of the country.

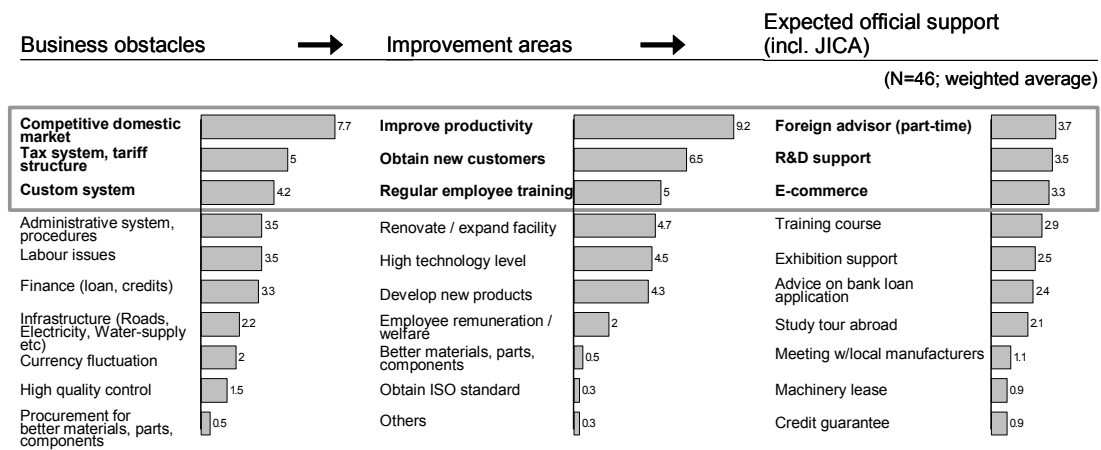
Total length of railway network in the state is 8,901 km. Kanpur, Agra, and Lucknow are the important nodes of broad gauge network. Inland container depots are located in Agra and Kanpur.

## (3) Airports

There are 5 domestic airports in Uttar Pradesh (Agra, Calcutta, Kanpur, Lucknow, and Varanasi). Unscheduled international flights operate at Lucknow airport and Varanasi airport, which provide customs service. Total international cargo handling volume at both airports was only 517 tons (April - October 2005), which occupied only 0.1% of total international cargo volume in India (528,662 ton) during the same period.

## 5 Development Needs

According to the company interview survey (sample #46 in UP), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;



Source: company interview survey

Uttar Pradesh is requesting external donor agencies for financial support towards its ‘Infrastructure Initiative Fund’. They also require technical support for the operation of the fund. By utilizing the fund, the state is considering building an industrial corridor thus technical cooperation in the aspect of regional development.

## X West Bengal

### 1 Overview

Items		Ranking
Area	88,752 km <sup>2</sup>	13
Population	80.1 million	4
GDP*	Rs 1,897.28 million	4
3-year GDP average growth rate	8.4%	13
NSDP** per capita	Rs 20,897	15
Manufacturing GDP share	11.9%	
FDI(2004)	Rs 3,034.5 million	7
Literacy rate	68.6%	17

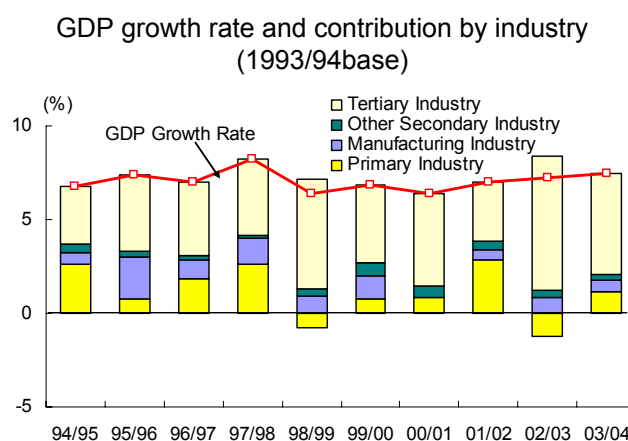
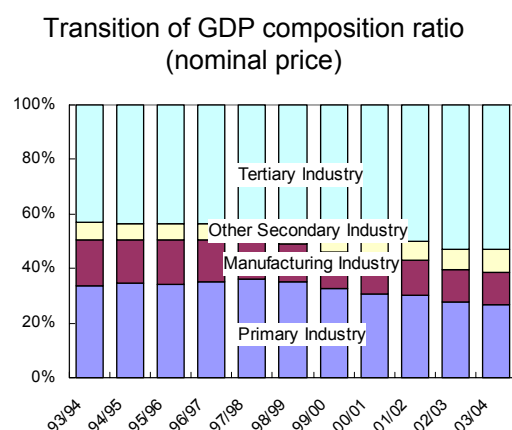


\*at current price (1993/94 bases) \*\*Net State Domestic Product (1993/94 bases)  
Source: States and Territories of India, Census of India 2001

### 2 Industry

#### (1) Industry Structure

The economic growth rate of West Bengal which is an important state of Eastern India remains steady as approximately 7% annually. Although secondary industry consists 20.1% (FY2003/04) in GDP, the ratio of the manufacturing industry is falling from 16.6% (1995/96) down to 11.9% (2004/05).



Source Central Statistical Organization, Ministry of Statistics and Program Implementation

Historically, West Bengal was popular for light industries such as jute and leather industry etc. However, recent shift to heavy industries such as steel-related, chemical, metal goods, and medical goods is remarkable. Due to the state's abundant resources, it is said that the steel-related industry has predominance in this region. In fact, recent investment in this sector is expanding.

The longtime rule of the communist party as the governing party of West Bengal used to be considered as

the preventing factor of the state's economic growth such as frequent labour disputes. However, recently there are showing a positive attitude towards promotion of investment.

## (2) Trend in Corporate Sector

The state is on the northeast coastline, whose with its capital located in Kolkata, former capital city of the country, being the center of leather (product), jute and textile industries. Bata Corporation, the largest shoe manufacturer in India, has its headquarters in the state. Around 70% of Indian leather product exports originate from the state. West Bengal Leather Industrial Development Corporation has made efforts on formulating and developing an industrial cluster of leather and leather products in the neighborhood of Kolkata. Other major sectors are the tea industry represented by Darjeeling tea, metal processing, engineering, and paper industries. Japan's Mitsubishi Chemical has operated a plant to produce "purified terephthalic acid (PTA)", major raw material for polyester products, in Haldia, West Bengal. Mitsubishi plans to expand its production capacity by investing around 370 million US dollars in the near future.

## (3) Results of the Questionnaire Survey

### (1) Number of companies surveyed: 47

#### 1-1. Sub sector (Top5)

No	Industry	%
1	Others	32
2	Other manufacturing	15
3	Food	11
4	Iron & Steel	9
5	IT services	9
Total of top 5 sectors		76

#### 1-2. Company size

Annual sales (Rs)		%
less than 10 million		2
10 - 100 million		13
100 mill - 1 billion		34
more than 1 billion		30
Number of employees		%
less than 50		32
50 - 200		21
more than 200		47

#### 1-3. Ownership & export

Share of owner (family) company: 53%	
Share of those established before 1991 : 51%	
Export ratio	%
Zero	36
less than 25%	47
more than 25%	8
100% (EOU)	9

### (2) Important factors/obstacles in business

#### 2-1. Factors/obstacles for sales expansion

Factors for expansion	
No	Important factor
1	Price competitiveness
2	Higher technology
3	Better quality
Obstacles for expansion	
No	Factor
1	Price competitiveness
2	Sales conditions
3	Poorer facility

#### 2-2. Factors for business expansion

Factors for expansion	
No	Important factor
1	Expansion of domestic market
2	Developing new products
3	Developing new customers
Requirements of customers	
No	Requirements
1	To lower the cost
2	To observe delivery time
3	To improve quality

#### 2-3. Obstacles in business environment

Major obstacles		
No	Factor	
1	High competition in domestic market	
2	Tax system, including tariff structure	
3	Difficult administrative system	
Obstacles in procurement of materials/parts		
No	Factor	%
1	Laws/regulations, Gvt control	34
2	Tax system and import tariff	28
3	Lack of market information	19

### (3) Necessary assistance and expectations for the Government

#### 3-1. Assistance services

Expected assistance services	
No	Contents
1	Meeting with potential buyers
2	Advice on R&D
3	Training courses
4	Credit guarantee
5	Testing services

#### 3-2. Expectations for the Government

Shares who responded that administrative services are not effective		n.a.
Requests in promoting private sector		
No	Contents	
1	To simplify tax system/reduce tariff	
2	To improve infrastructure	
3	To carry out labour policy reform	

#### 3-3. Study Team Comments

- There are many new, non-individual companies in "other" sector. They have wide range of business issues and expectations such as simplifying tax and administrative procedures.

## (4) Top 3 reasons to invest in West Bengal state

1. Market size
2. Economic condition
3. Political / social stability, Existence of competent skilled labour

## (5) Evaluation of Current Business Situation

There is general satisfaction, especially with the high reputation on of the economic infrastructure except for the transportation system.

## (6) Request to state government

Policy coherence with the central government, introduction of preferential investment measure.

## (4) Industrial promotion policy

West Bengal stresses industrial promotion accompanied with employment generation and productivity upgrade in the light of global competition. As for the infrastructural development, power supply is the priority issue, and the government invites investment from the private sector. As for human resource development, it aims at the strengthening of technical education at ITIs and polytechnics. Furthermore, there are preferential schemes as indicated in Table 10-1 for the newly investing enterprises.

Table 10-1 Outline of industrial preferential schemes in West Bengal

Items	Group A Thrust sub-sectors* in Kolkata	Group B Burdwan, Hoogly, Howrah, 24 -Parganas, Midnapore	Group C Bankura, Birbhum, Cooch Behar, Maldah, Darjeeling, Dinajpur, Jalpaiguri, Purulia
Special capital investment subsidies		15% with a ceiling of Rs. 15 million	25% with a ceiling of Rs. 25 million
Interest subsidies	10% per annum if the company has over 200 employees	50% of interest for 5 years with a ceiling of Rs. 10 million per annum	50% of interest for 7 years with a ceiling of Rs. 10 million per annum
Waiver of electricity duty	From 10 to 40% exemption of electricity charges for 6 years if the company has a contract over 33 KV	Electricity duty is waived for 5 years.	
Employment generation subsidies		50% of fees spent on Employees State Insurance and Employees Provident Fund are reimbursed for 5 years (for small scale enterprises, 75%)	50% of fees spent on Employees State Insurance and Employees Provident Fund are reimbursed for 7 years (for small scale enterprises, 75%)
Exemption from stamp duty and registration fees for registering the purchase of land and buildings for setting up an approved project	100% exemption of stamp duty if employing 200 people. 50 % exemption of stamp duty if the purpose is constructing industrial centre.	50% exemption from stamp duty and registration fees	
Subsidies for investment on the piped gas		75% of the investment cost is subsidised with a ceiling of Rs. 1 million, and 20% of gas charges are subsidies for 5 years.	
Assistance to small-scale enterprises for quality improvement		50% of fees spent on environmental rehabilitation or acquisition of ISO9000 shall be subsidised with a ceiling of Rs. 500,000.	

Note: The thrust sub-sectors in Group A include agricultural implements, agro & food processing industry, biotechnology, downstream projects of Haldia Petrochemicals Ltd., electronics, hosiery units, IT (software, hardware and ITES), jute diversification and tourism.

Source: West Bengal Incentive Schemes <[http://www.wbdc.com/about\\_wb/incentive.html](http://www.wbdc.com/about_wb/incentive.html)> (accessed on 18th April 2006)

### 3 Investment Promotion

#### (1) Investment Trend

Investors have been hesitant in investing in West Bengal State as the State is ruled by the Communist party. However, in recent years foreign investors have become increasingly interested in the Petro-Chemical Complex where Mitsubishi Chemical has a factory, and Salt Lake City where a number of IT and software industries are located, because of liberal investment promotion policy by the State government. Leading sectors of FDI in the past few years have been, steel, petro-chemicals, IT and others.

Approved amount of FDI (August 1991 - August 200): 77,898 million rupees

Share in national total: 3.2%

Source: MCI, "SIA Newsletter September 2004"

#### (2) Investment Policy

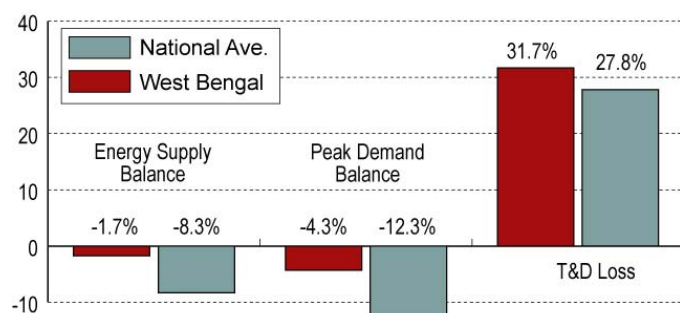
The State government has identified thrust industries: petro-chemicals; electronics and IT; iron and steel; textiles; leather; food processing; medical plants, rubber, palm oil and tea; gems and jewelry; and tourism. Besides, investment projects in industrial estates and large scale projects are eligible for special incentives.

### 4 Infrastructure

#### (1) Electricity

There was a 2.5% peak power shortage and 1.8% energy shortage in West Bengal state (April – November 2005), which is better than the national average of 9.1% and 7.4%. Since more than 95% of generation capacity in the state is occupied by a thermal power station, generation cost is higher than other states, and is vulnerable to soaring international fuel prices.

Since transmission and distribution loss in the state is higher (31.7%) because of insufficiency of revenue collection and meter reading, and electricity theft, measures should be taken to reduce this loss.



Source: CEA

Power Supply Indicators in West Bengal

#### (2) Roads

The road system in the state has seen significant improvements in the last couple of years. NHAI is widening the entire stretch of national highway, NH-2 falling within the state to 4 lanes. This highway, which connects Kolkata to New Delhi, is part of the national Golden Quadrangle. The newly constructed 65 km Durgapur Expressway and 8 km Kona Expressway provides easier access to Kolkata from NH-2. All



these projects combine to bring the industrialised Durgapur region closer to metro Kolkata, bridging distance and more importantly, time.

### (3) Ports

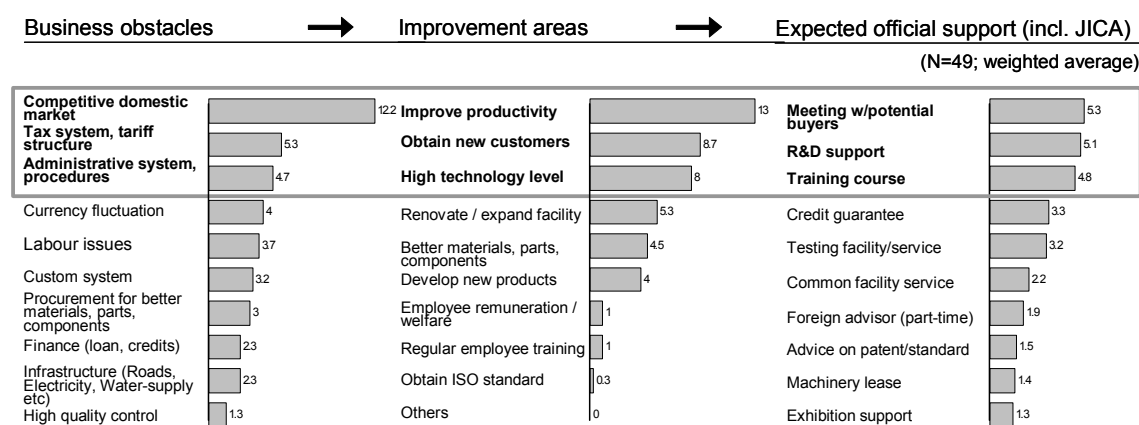
Out of the 13 Major ports in India, two Major ports (Kolkata and Haldia) are located along Hooghly River in West Bengal state. During the year 2004/05, cargo handling volume in Kolkata and Haldia was 9.95 million ton (ranked 11th among ports in India) and 36.21 million ton (ranked 4th), respectively. Both ports have container handling facilities.

### (4) Airports

There are two airports in West Bengal state, namely Netaji Subhas international airport in Kolkata (ranked 5th in number of passengers and freight handling volume) and Bagdogra airport in Derjiling (28th in passenger and 35th in handling volume).

## 5 Development needs

According to the company interview survey (sample #49 in West Bengal), 1) bottleneck for business expansion, 2) improvement effort on company side and 3) expected support/service from government and/or JICA, are as follows;



Source: company interview survey

West Bengal is considered to be a little behind in relation to investment promotion. However its abundant population and the location of capital city, Kolkata, facing the sea, are advantages. Institutional improvement and physical infrastructure are required for further development.

*Appendix 1*  
*Study Team Members*

## JICA Study Team for Private Sector Development in India

Team Leader /Macro Policy /Industrial Analysis	Kazuo MISHIMA	KRI International Corp.
Trade and Investment Policy 1	Izumi SAKAYA	Global Group 21 Japan, Inc.
Trade and Investment Policy 2	Tatsuo BANDO	The Japan Research Institute, Ltd.
Local Industry Promotion Policy	Ayako ISHIWATA	KRI International Corp.
Corporate Sector Analysis	Nobuhisa IWASE	IMG Inc.
Infrastructure	Takeshi YAMASHITA	KRI International Corp.
Tax System/Finance	Makoto SUNAGAWA	KRI International Corp.
External Assistance Analysis	Aoi IWANA	KRI International Corp.

*Appendix 2*  
*Study Schedule*

# Study Schedule

1st	February		March							2nd	Total						
	23 24 Th Fr	25 26 Sa Su	1 2 We Th	3 4 Fr Sa	5 6 Su Mo	7 8 Tu We	9 10 Th Fr	11 12 Sa Su									
1	Kazuo Mishima	Macro policy Industrial analysis	9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31											0.73	0.37	1.10	
2	Izumi Sakaya	Trade Investment Policy													0.60	0.30	0.90
3	Ayako Ishiwata	Local Industry Development													0.83	0.43	1.26
4	Nobuhisa Iwase	Company Analysis													0.83	0.37	1.20
5	Takeshi Yamashita	Infrastructure													0.83	0.37	1.20
6	Makoto Sunagawa	Tax system Finance													0.50	0.20	0.70
7	Aoi Iwana	External Assistance Policy													0.67	0.33	1.00

The number in parentheses indicates duration of stay in each city excluding Saturdays and Sundays.

*Appendix 3*

*List of Visited Organizations / Companies*

## List of Visited Organisations

State	Organisations	Name	Title/Position	Study Team
<b>Central Government</b>				
Delhi	Ministry of External Affairs	Mr. P.Harish	Director/East Asia	Mishima, Sakaya, Ymashita, Iwana
	Ministry of Finance	Ms.Sreyashi Chaudhuri	Under Secretary/Dept. of Economic Affairs	Mishima, Sakaya, Ymashita, Iwana
	Ministry of Commerce and Industry, Department of Industrial Policy & Promotion	Mr. Umesh Kumar Mr. Sanjay Chavre	Joint Secretary Senior Development Officer	Mishima, Skaya, Iwase, Ishiwata, Yamashita
	Ministry of Small Scale Industries	Mr. Rajat Bansal Mr. Sanjeev Kaushal	Director Joint Development Commissioner	Ishiwata
	National Highway Authority of India (NHAI)	Mr. Sajjan K. Agrawala Mr. S. K. Puri Mr. V. K. Sharma Mr. Pradeep K. Agarawal	General Manager Finance Chief General Manager (SP) General Manager (Environment) Duputy General Manager Finance	Yamashita
	Central Electricity Authority (CEA)/ Ministry of Power	Mr. Rakesh Nath Mr. Verma	Chairperson/ Secretary Member (Planning)	Yamashita
	Ministry of Power, Bureau of Energy Efficiency	K. K. Chakravarti	Energy Economist	Yamashita
	India Trade Promotion Organisation (ITPO)	Mr. R.K. Jain Mr. N.K.Sehgal	General Manager Deputy General Manager	Mishima, Sakaya, Iwase, Ishiwata
	The National Small Industries Corporation Ltd.	Cdr. I.P.S. Aurora	Chief General Manager	Ishiwata
	Small Industries Service Institute-New Delhi	Mr. Ravi Kapoor	Director	Ishiwata
	Regional Testing Center	Mr. A.K. Gogia	Additional Industrial Advisor	Ishiwata
	Air Port Authority of India (AAI)	Mr. P. B. Daswani Mr. I. N. Murty	General Manager (Aero Planning) Dy. General Manager (Planning)	Yamashita
	Ministry of Urban Development	Mr. Venue Ghopal	Dy Secretary (Uraban Renewal Mission) Director (Urban Transport)	Yamashita
	National Manufacturing Competitiveness Council (NMCC)	Dr. V. Krishnamurthy	Industry Ministry	Mishima
	National Manufacturing Competitiveness Council (NMCC)	Mr. V. Govindarajan Mr. Rajeev Ranjan	Member Secretary Director	Mishima, Iwase
	All India Council for Technical Education	Mr. Prasad Krishna	Advisor-1, Quality Assurance	Iwase
	Ministry of Labor and Employment	Mr. Sharma	Director, Dept. of Employment &	Iwase
	National Thermal Power Crop (NTPC)	Mr. Richard S. V. Muthuman	Dy. General Manager (Finance)	Yamashita
Mumbai	Small Industries Service Institute-Mumbai		Director	Mishima, Iwase, Ishiwata
Bangalore	Small Industries Service Institute-Bangalore	Mr. Dhillon	Director	Iwase, Ishiwata
	The National Small Industries Corporation Ltd.-Bangalore	Mr. D. Mohanraj	Sr. Branch Manager	Iwase, Ishiwata
Chennai	Small Industries Service Institute-Chennai	Mr. S. Sivagananam	Director	Ishiwata
	Central Training Institute for Instructors	Mr. R. Senthil Kumar	Principal/Jt. Director	Ishiwata
	India Trade Promotion Organisation (ITPO)	Ms. Kanchana Manavalan	Manager, Chennai Regional Office	Sakaya
Hyderabad	Advanced Training Institute for Electronics and Process Instrumentation	Mr. H. Somsundaram	Director	Ishiwata
	Indian Institute of Packaging	Mr. B.K. Karna	Deputy Director	Ishiwata
	National Institute of Small Industry Extension Training	Dr. Chukka Kondaiah	Principal Director	Ishiwata
	Small Industries Service Institute	Mr. K. Jayachandiran	Deputy Director	Ishiwata
	Central Institute of Tool Design	Mr.V.Krishna Swami	Director	Ishiwata
Bhopal	Central Institute of Vocational Education	Dr. Asfa M. Yasin		Ishiwata
	National Institute of Technical Teachers' Training & Research	Prof. K. K. Shrivastava	Director	Ishiwata
<b>State Government</b>				
Delhi	Delhi State Industrial Development Corp. Ltd. (DSIDC)	Mr. Jalaj Shrivastava Mr. R. K. Gupta	Managing Director Chief Engineer	Sakaya, Yamashita Iwase, Ishiwata
	Delhi Development Authority (DDA)	Mr. A. K. Jain Mr. D. K. Saluja Mr. S. P. Bansal	Commissioner (Planning) Director (Planning) Additional Commissioner (Planning)	Mishima, Yamashita
Mumbai	City & Industrial Development Corp. (CIDCO)	Mr. Ashok Sinha Mr. C. S. Sangavhi	Managing Director General Manager, SEZ	Mishima, Sakaya
	Maharashtra State Electricity Distribution Co. Ltd. (MAHA DISCOM)	Mr. Vijay L. Sonavane	Executive Director	Yamashita
	Maharashtra State Power Generation Co. Ltd. (MAHA GENCO)	Mr. A. K. Kulkarni Mr. B. Viswanathan Mr. G. M. Makone Mr. Jayant Totade	Executive Director (Generation O&M) Executive Engineer (Generation) General Manager (Generation O&M) General Manager (HR)	Yamashita
	Maharashtra State Transmission Co. Ltd.	Mr. A. D. Palamwar	Director Operation (Transmission)	Yamashita
	Maharashtra Industrial Development Corp. (MIDC)	Mr. Sanjay Khandare Mr. S. D. Dhote Mr. N. D. Gadge Mr. Samir Gandhi	Joint Chief Executive Officer Chief Engineer Super Intending Engineer	Mishima, Sakaya, Iwase, Ishiwata Yamashita
	Mumbai Metropolitan Region Dev. Authority (MMRDA)	Mr. R. Ramana	Senior Transportation Planner	Yamashita
	Govt. of Maharashtra, Industries Department	Mr. V. K. Jairath Mr. Chandrahas C. Charekar	Secretary (Industry) Officer on Special Duty	Mishima, Iwase, Ishiwata, Yamashita
	SICOM Capital Management PVT Ltd.	Mr. Umesh Kudalkar	CEO	Mishima, Iwase, Ishiwata, Yamashita
Bangalore	Govt. of India- Ministry of Commerce and Industry.	Mr. Mohommad Sanaullah	Commissioner for Industrial Development and Director of Industries	Mishima, Iwase, Ishiwata
	Bangalore Electricity Supply Company Ltd. (BESCOM)	Mr. G. Kumar Naik Mr. B. N. Sathyaprema Kuma	Managing Director Reforms Co-ordinating Officer	Yamashita
	Karnataka Power Corp. Ltd. (KPCL)	Mr. L. V. Nagarajan	Managing Director	Yamashita
	Karnataka Power Transmission Corp. Ltd.	Mr. Bharat Lal Mr. D. Chethan	Managing Director Tech Asstt. Managing Director	Yamashita

State	Organisations	Name	Title/Position	Study Team
	Karnataka Industrial Areas Development Board (KIADEB)	Mr. G.S.Narayanswami	Chief Executive Officer and Executive Manager	Mishima, Iwase, Ishiwata
	Karnataka Udyog Mitra	Mr. H.L. Shivananda	Managing Director	Mishima, Sakaya, Iwase, Ishiwata
	Karnataka State Industrial Investment and Development Corporation Limited	Mr. V.S. Somanath	Assistant General Manager	Mishima, Iwase, Ishiwata
	Visvesvaraya Industrial Trade Centre (VITC)	Mr.D.R.Umakant	Managing Director	Mishima, Sakaya
	Government Tool Room and Training Centre	Mr. Manoj Kumar Tripathi	Managing Director	Ishiwata
Chennai	Tamil Nadu State Electricity Board (TNEB)	Ms. B. Shantha Mr. V. Naganathan Mr. J. Gunasekaran	Chief Engineer Planning Member (Generation) Financial Controller General	Yamashita
	Government of Tamil Nadu, Industries Department	Mr. D. Rajendran	Secretary to Government	Mishima
	Ennore Port Limited	Mr. T. K. Arun	Company Secretary	Yamashita
	Tamil Nadu Road Development Company Ltd. (TNRDC)	Mr. K. Malmarugan Mr. N. Ramesh Mr. Rohit Modi Mr. C. G. Xavier	Vice President Assitant Vice President Chief Executive Officer Assitant Manger (CEO's Office)	Yamashita
	Govt. of Tamil Nadu, Small Scale Industries Department	Mr. Rameshram Mishra	Secretary	Mishima, Iwase, Ishiwata, Yamashita
Hyderabad	Chennai Metropolitan Development Authority (CMDA)	Mr. Malik Feroze Khan Mr. D. Manivel Mr. N. V. Rakhunath Mr. K. Kumar Mr. C. Palanivelu	Member Secretary Superintending Engineer Chief Urban Planner Senior Planner Chief Planner	Yamashita
	Small Industries Development Corp. Ltd. (SIDCO)	Mr. M. R. Mohan	Managing Director	Mishima, Iwase, Ishiwata, Yamashita
	State Industries Promotion Corporation of Tamil Nadu Ltd. (SIPCOT)	Mr. C. T. Jagadeesan	Deputy General Manager	Sakaya
	Tamilnadu Industrial Guidance Bureau.	Mr. M. Velmurugan	Director	Mishima, Sakaya, Iwase, Ishiwata
	Tamilnadu Industrial DevelopmentCorpn. Ltd.	Mr. V. Soundhararajan	General Manager	Mishima, Sakaya, Iwase, Ishiwata
	TIDEL Park Limited	Mr. N. Bagavathy	Managing Director	Sakaya
	Hyderabad Urban Development Authority	Mr. N. Surya Prakash Mr. V. Madhwa Raja Mr. Jayesh Ranjan Mr. S. P. Shorey	Executive Engineer Division V Superintending Engineer (Planning) Vice Chairman City Planning	Yamashita
	Municipality Corporation of Hyderabad	Mr. N. V. S. Reddy	Additional Commissioner (Planning)	Yamashita
	AP Genco	Mr. Divaker Rao Mr. Heeralal Samariya Mr. G. Adishesu Mr. Ajay Jain Mr. G. Adinarayana	Superintending Engineer (Hydro) Chairman and Managing Director Director (Hydro) Managing Director Company Secretary	Yamashita
	Central Power Distribution Company	Mr. C. Srinivasa Rao	Director Finance	Yamashita
	A.P. Industries & Commerce Dept.	Mrs.D.Lakshmi Parasarthi	Principal Secretary & Commissioner	Mishima, Sakaya
	A.P. Textile Development Corp.	Mr. Bishambar Lal Kedia	Chairman	Mishima, Sakaya
	Commissioner Industries & Export Promotion	Mr. Sutirtha Bhattachary	Commissioner	Mishima, Sakaya
	A.P. Industrial Infrastructure Corporation Ltd.	Mr. B.P. Acharya	Managing Director	Mishima
	A.P. Stata Trading Corp. Ltd.	Mr. G.N. Mishra	GM Export & Import Division	Mishima, Sakaya
Govt. Institute of Electronic, Hyderabad	Ms. R.L. Singh		Ishiwata	
Bhopal	A.P. Invest	Dr. C.S. Rao	CEO	Sakaya
	Department of Commerce, Industry & Employment	Mr. Gopal Reddy, IAS	Industrial Commissioner	Ishiwata
	MP State Industrial Development Corporation Ltd.	Mr. Pratap Verma	Advisor Industrial Promotion	Ishiwata
	MP Trade and Investment Facilitation Corporation Ltd.	Mr. J.N. Vyas	General Manager	Ishiwata
	Centre For Entrepreneurship Development	Mr. Jitendra Tiwari	Chief Executive Officer	Ishiwata
<b>Japanese Companies</b>				
Delhi	Mitsui & Co. Ltd.	Mr. Takao Miyachi	Chairman/MD	Mishima, Sakaya, Ishiwata, Iwase, Yamashita, Sunagawa, Iwana
	Sojitz India Pvt. Ltd.	Mr. Tadahiro Hiruma Mr. Masahiro Matsushita Mr. Sei Kuba	Representative, New Delhi Office GM/Machinery GM/Accounts-Finance & Admn.	Sunagawa, Iwana
	Marubeni Corporation, India	Mr. Yousuke Yakushiji	General Manager	Sunagawa, Yamashita
	Daikin Airconditioning India Pvt. Ltd.	Mr. Toshiki Hayashi	Managing Director	Iwase, Ishiwata
	Furushima ITC Inspecdtion Center Pvt. Ltd.	Mr. Takao Yamada	Senior Advisor	Iwase, Ishiwata
	Stanley Electric Engineering India	Mr. Katsumi Fujimoto		
	Denso			Iwase, Ishiwata
	HCFL (Telecom Co.)	Mr. Rakesh Taneja	Vice President	Iwase
	Nippoin Koei, New Delhi Office	Mr. Yasuhiro Mori	GM	Mishima, Sakaya, Yamashita, Iwana
Haryana	Maruti Suzuki (Maruti Udyog Ltd.)	Mr. I. V. Rao Mr. S. K. Kakkar Mr. Tapan Sahoo Mr. Rajeev Budhiraja	Chief General Manager Asstt. General Manager, Supply Chain Div. Asstt. General Manager, Engineering-2 Sr. Manager, Supply Chain Div.	Iwase, Yamashita
	Stanley Electric Engineering India	Mr. Katsumi Fujimoto	Managing Director	Iwase
	Denso Haryana Pvt. Ltd.	Mr. Hiroshi Kaizaki Mr. Keisuke Kashiwada	Director Director	Iwase
Uttar Pradesh	Anest Iwata Motherson Ltd.	Mr. Manjul Kulshrestha	President	Iwase
Mumbai	Sojitz India Pvt. Ltd.	Mr. Akira Murakami Mr. Sei Kuba	MD GM/Accounts-Finance & Admn.	Sunagawa, Yamashita, Iwana
	Mizuho Corporate Bank	Mr. Takeshi Itou	Represtatative	
	Itochu Corporation, Mumbai Office	Mr. Masaharu Yamashita	Representative	Mishima, Sakaya, Iwase, Ishiwata
Bangalore	Transystem Logistics International Pvt. Ltd.	Mr. Kentarou Kataoka	Managing Director	Iwase, Ishiwata, Yamashita
	Denso Kirloskar Industries Pvt. Ltd.	Mr. Katsumoto Nagasaki	General Manager-Finance	Mishima, Iwase, Ishiwata
Chennai	Mitsui Sumitomo Insurance Co. Ltd.	Mr. Junichi Kitamura	General Manager	Mishima, Iwase, Ishiwata, Yamashita
	Panasonic Home Appliances India Co. Ltd.	Mr. H. Aso	Managing Director	Iwase
	Bank of Tokyo-Mitsubugi UFJ	Mr. Yoshiaki Ozawa Mr. Michiharu Hamura	General Manager, Chennai Branch Deputy General Manager, Chennai	Sakaya



State	Organisations	Name	Title/Position	Study Team	
<b>Local Enterprises</b>					
Delhi	SAMSUNG Corporation	Mr. Sardar Ali Mr. Pawan Garg	Business Manager Sr. Manager Marketing Project Division	Iwase, Iwana	
	Okhla Industrial Area Association	Mr. A.K. Sood	President	Yamashita	
	Okhla Garment and Textile Cluster	Mr. M.K.Mehra	Joint Director	Ishiwata	
	Junbo International	Mr. Rahul Bhargava	President	Iwase	
	Federation of Industry and Chamber of Commerce of India			Iwase	
	Automobile Component Manufacturers' Association of India		Executive Director	Iwase	
Electronic Industries Association of India	Mr. Geel	Executive Director	Iwase		
Haryana	Mark Auto	Mr. Sunandan Kapur	Managing Director	Iwase, Yamashita	
Uttar Pradesh	Minda Huf Limited	Mr. Deepak Singhal	COO (Group Corporate Strategy)	Iwase	
	OMFA Rubbers Private Limited	Mr. Sandeep Bansal	President	Iwase	
Mumbai	Federation of Indian Chambers of Commerce & Industry (FICCI)	Mr. Rajan Kohli Mr. Anjan Roy	Deputy Secretary General Advisor	Iwase, Sakaya	
	Agricultural and Processed Food Products Export Development Authority (APEDA)	Mr. K. S.Money Mr. R. K.Boyal Mr. Pravin Gupta	Chairman General Manager General Manager	Mishima, Sakaya	
	Apparel Export Promotion Council	K. K. Jalan	Secretary General	Mishima, Sakaya	
	Federation of Karnataka Chambers of Commerce & Industry	Mr. J.R. Bangera	Chairman	Ishiwata	
	Karnataka Small Scale Industries Association	Mr. Hareesh P. Hedge	President	Iwase, Ishiwata	
	Bharat Traders	Mr. Bankim D. Mistry	Director; Vice President of Bombay Small Scale Industries Association	Mishima, Iwase, Ishiwata	
	Excel Engineering Works	Mr. Harshad A. Patel		Mishima, Iwase, Ishiwata	
	Jalaram Industries	Mr. Hemant Patel		Mishima, Iwase, Ishiwata	
	Sajnani Pneumatic Pvt. Ltd.	Mr. Sachin Sanjani		Mishima, Iwase, Ishiwata	
	Shreeji Engineering Products	Mr. Sumeet Samani		Mishima, Iwase, Ishiwata	
Maharashtra	Mahnot GringAge Industries	Mr. Satish Mahnot		Ishiwata	
	Asian Brush Co.	Mr. N.N. Pandey		Ishiwata	
	Indian Merchants' Chamber WIPRO	Dr. Mohan T. Mathew Mr. Milind Karnik Ms. Supriya Nalavade	Manager Operation Support Executive	Sakaya Mishima, Iwase, Ishiwata, Yamashita	
Pune	Badve Autocomps Pvt. Ltd./ Badve Engg. Pvt. Ltd.	Mr. Sadanand Patil Mr. R. G. Chimote Mr. S. B. Kulkarni	Head Export Vice President General Manager (Commercial)	Mishima, Iwase, Ishiwata, Yamashita	
	Karnataka Garment Manufacturers Association	Mr. Dungarmal Jain	President	Mishima, Iwase, Ishiwata	
Bangalore	All India Granites & Sone Association	Lt. Col K.L.B. Aithal	Chief Administrative Executive	Ishiwata	
	Dyna Fashion	Mr. K.V. Shettigar		Mishima, Iwase, Ishiwata	
	Bafna Clothing Company	Mr. Praveen Mutha		Mishima, Iwase, Ishiwata	
	A.M. Fashions Pvt. Ltd.	Mr. Veluri Devaraj	Director	Mishima, Iwase, Ishiwata	
	Biocon Limited	Mr. Srikanth Vemparala	Manager, Marketing & Technical Services	Mishima, Iwase	
	Integral Systems and Components Pvt. Ltd.	Mr. N. Mahalingam	Director	Iwase	
	Indo Bloom Limited	Mr. Mammen Mapphillai	Managing Director	Iwase	
	Infosys	Mr. R. Srinivasan	Associate Vice President, Division Manager	Mishima	
	Chennai	ACMA	Mr. S. Raj	Deputy Director	Mishima, Iwase, Ishiwata
		National Confederation of Small Industry	DE. Ramakrishnan	President	Mishima, Iwase, Ishiwata
Tamil Nadu Small and Tiny Industries Association		Mr. G. Balakrishnan	President	Mishima, Iwase, Ishiwata, Yamashita	
The Industrial Estate Manufacturers Association		Mr. K. Gopalakrishnan	President	Mishima, Iwase, Ishiwata, Yamashita	
Ambattur Industrial Estate Manufacturer's Association		Mr. K. P. Shashidar Rao	President	Mishima, Iwase, Ishiwata, Yamashita	
Chennai Auto Ancillary Industrial Infrastructure Upgrading Company		Mr. A. S. Hariprasad Mr. S. Thyagarajan	Chairman Vice Chairman	Mishima, Iwase, Ishiwata, Yamashita	
Aban Loyd Chiles Offshore Ltd. (Aban Power)		Mr. V. Kannappan	President, Power Division	Yamashita	
K-Lite Industries		Mr. Dilip Kumbhat		Mishima, Iwase, Ishiwata	
Amirtha				Mishima, Iwase, Ishiwata	
Siva's Soft Drink Private Ltd.		Mr. M. Gnanasabai		Ishiwata	
Susira Industries		Mr. S. Seetharamaiah	Managing Partner	Mishima, Iwase	
Indo Maskat Bakery				Ishiwata	
Hyderabad		Electronic Industries Association of AP	Mr. D. Venkata Rao	Administrative Officer	Ishiwata
	Shekhawat Industries	Mr. U.S. Shekhawat	Director	Ishiwata	
	Yash International	Mr. Ritesh Naredi	Managing Partner	Ishiwata	
	Confederation of Indian Industry (CII), Hyderabad	Mr. Subodh Kumar Mr. Madhav Kamat	Counsellor, Technology Engineer	Mishima, Sakaya	
	ELICO Limited	Mr. J. P. Reddy	Senior Manager	Mishima, Sakaya	
Bhopal	MGM Industries	Mr. Shiji Chacko		Ishiwata	
	Sigma Heavy Engineering Industries			Ishiwata	
<b>Local Financial Institutions (Public)</b>					
Delhi	Small Industries Development Bank of India (SIDBI)	Dr. N.K.Madan Mr. Navin Rahul	GM/Int'l Cooperation Dept.-New Delhi Manager/Int'l Cooperation Dept.-New Delhi	Sunagawa, Iwana	
Mumbai	Export-Import Bank of India	Mr. S.Prahalthan	Deputy GM	Sunagawa, Iwana	
	NABARD	Mr. M.Vasudeva Patro Mr. S.Hazarika Mr. N.Raman Mr. S.V.G.Nandagopal Mr. U.R.Tata Mr. K.G.Alai	GM/Executive Assistant to Chairperson Chief GM Chief GM-Mumbai Chief GM-Mumbai GM GM	Sunagawa, Iwana	
	Small Industries Development Bank of India (SIDBI)	Mr. Ravi Tyagi Dr. A. V. Arun Kumar	Dy General Manager Dy General Manager		
	National Bank for Agriculture & Rural Development	Mr. K.G. Karmakar Mr. P. V. Narayanan	Executive Director Dy General Manager	Sunagawa, Iwana	

State	Organisations	Name	Title/Position	Study Team	
		Mr. N. Shankara Rao	General Manager		
<b>Local Financial Institutions (Private)</b>					
Mumbai	State Bank of India (SBI)	Dr. Brinda Jagirdar	Deputy GM/Economic Research Dept.	Sunagawa, Iwana	
	IDFC	Mr. Rajiv B.Lall Mr. S.J.Balesh	MD/CEO Principal/Treasury	Sunagawa, Iwana	
	ICICI Bank	Mr. Nachiket Mor Mr. Balaji Iyer	Executive Director Manager	Sunagawa, Iwana	
	ICICI Securities	Mr. S.Mukherji Mr. Ketan Shaah Mr. J.Niranjan	MD/CEO Vice President Joint Head/Investment Banking, M&A Advisory	Sunagawa, Iwana	
	IDBI Bank	Mr.Jitender Balakrishnan	Executive Director	Sunagawa	
	Securities & Exchange Board of India	Mr.R.K.Nair	Executive Director	Sunagawa	
	Reserve Bank of India	Mr.P.Vijaya Bhaskar	Chief General Manager	Sunagawa	
	Lehman Brothers	Mr.Sanjeev Kaushik	Senior Vice President Director-Equity Research	Sunagawa	
Pune	SICOM Venture Capital	Mr. Umesh Kudalkar Mr. Ajay Limaye	Chief Executive Officer Vice President	Mishima, Iwase, Ishiwata, Yamashita	
<b>International Donors</b>					
Delhi	JICA, India Office	Mr. Toshifumi Sakai Mr. Nobuaki Koguchi	Representative Assistant Representative	Sunagawa, Iwana Mishima, Sakaya, Ishiwata, Iwase, Yamashita Iwana	
	JBIC, New Delhi Office	Mr. Kikuo Nakagawa Mr. Akio Saitou Mr. Hiroshi Kurihara Mr. Fusatou Higashi	Representative Senior Representative Seniro Representative	Sunagawa, Iwana Sunagawa, Iwana Mishima, Sakaya, Ishiwata, Iwase, Yamashita Sunagawa Iwana Sunagawa, Iwana	
	AOTS, New Delhi office	Mr. Mikio Ujiie	Representative	Mishima, Sakaya, Iwase	
	The Word Bank, India	Ms. Priya Basu Mr. Inderbir Singh Dhingra	Lead Economist/Finance & Private Sector PSD Specialist/South Asia Finance & Private Sector: SASFP	Sunagawa, Yamashita, Iwana	
Delhi	ADB India Resident Mission	Mr. Tadashi Kondo Mr. Cheolsu Kim Mr. Mythili Ravi Ms. Shamit Chakravarti	Country Director Senior Financial Economist Financial Specialist Programs Officer	Sunagawa, Yamashita, Iwana	
		Mr. Shunso Tsukada	Principal Transport Specialist	Sunagawa, Iwana	
		UNIDO	Mr. Sanjaya M.Shrestha Mr. D. K. Jain	Industrial Development Officer National Programme Director	Iwase, Ishiwata
		DFID India	Mr. Mahesh Mishra	Programs Officer	Iwana
	JETRO	Mr. Hirotsu Itou	Director	Mishima, Sakaya, Iwase, Ishiwata, Yamashita	
	Swiss Corporation Office of India	Mr. Francois Binder	Country Director	Iwana	
		Dr. Aniket Alam Mr. Adrian Marti	Programs Officer Deputy Country Director		
	European Union	Mr. Stefano Gatto	Head of Section Trade & Economic Aff.	Sakaya, Iwana	
	GTZ	Dr.Rolf Suelzer Ms.Varupi Jain	Country Director Programme Advisor	Iwana	
	KfW	Mr.Christian Haas Ms.Rukmini Parthasarathy	Director Programme Officer	Iwana	
	USAID	Mr. A. S. Dasgupta Mr. Rebacca Black Mr. Ashok JHA	Program Manager Director Financial Institutions Reform	Iwana	
	Mumbai	JETRO	Mr. Akihiro Nagamori	Director General	Mishima, Sakaya, Iwase, Ishiwata
Bangalore	JETRO	Mr. Kazumasa Kuboki	Senior Investment Advisor	Mishima, Sakaya, Iwase, Ishiwata	
<b>Others</b>					
Delhi	Public Information Center	Ms.Hema Balasubramanian	Public Relations	Iwana	
	UN Information Centre	Mr. Feodor Starcevis	Director	Iwana	
Mumbai	TATA Service Ltd.	Ms. Kamolika Roy Chowdhury	Economist	Iwana	
	n/a	Mr. V.V.Desai	Economist/Former ADB Chief Economist	Sungawa, Iwana	
Bangalore	International Institute for Energy Conservation	Mr. Mahesh Patankar	Senior Project Manager	Yamashita	
	Karnataka Biotechnology & Information Technology Services	Mr. V.D. Nishchith	Former Executive Officer	Mishima, Iwase, Ishiwata	
	Institute of Bioinformatics and Applied Biotechnology	Prof. H. Sharat Chandra	Director	Mishima, Iwase, Ishiwata	
Chennai	International Institute of Biotechnology and Toxicology	Dr. Balakrishna Murthy	Director	Iwase	
Hayderabad	Centre for Research and Industrial Staff Performance	Mr. M. S. Waikar	Senior Manager	Ishiwata	

*Appendix 4*  
*Questionnaire Sheet*

**QUESTIONNAIRE SHEET (COMPANY INTERVIEW SURVEY)**

1. Company Name \_\_\_\_\_
2. Address \_\_\_\_\_
3. Telephone \_\_\_\_\_
4. Respondents \_\_\_\_\_  
E-mail address: \_\_\_\_\_
5. Business category (Category in Manufacturing)
 

1.Food	2.Textile	3.Garments/Apparel	4.Timber	5.Furniture
6.Paper/Pulp	7.Printing	8.Chemical	9.Medical/Pharmaceutical	
10.Rubber	11.Plastic	12.Other non-metals	13.Iron/Steel	14.Non-Ferrous metals
15.Metal products	16.General machinery	17.Electric Equipment/machinery	18.Electronics/Telecommunication equipment	
19.Transport Equipment	20.Other manufacturing	21.IT service		
22.Others ( _____ )				
6. Annual Sales      Year 2004 ( \_\_\_\_\_ )      Year 2005 ( \_\_\_\_\_ )
7. Number of Employees      ( \_\_\_\_\_ )
8. Share holders
 

a. Individuals	( _____ )	%, particularly of owner	( _____ )	%
b. Local companies	( _____ )	%, particularly of	( _____ )	%
c. Foreign company	( _____ )	%, particularly of	( _____ )	%
9. Year of Establishment \_\_\_\_\_ Year of Operation \_\_\_\_\_
10. Owner's Background
 

a. Age	_____
(in case of "Owner-Company")	
b. Educational Backgrounds	_____
c. Previous Occupation	_____
11. Major Products
 

a. _____	( _____ )	%
b. _____	( _____ )	%
c. _____	( _____ )	%
12. Top 3 Customers
 

a. _____	( _____ )	%
b. _____	( _____ )	%
c. _____	( _____ )	%
13. Export ratio      ( \_\_\_\_\_ %)

14. Export Destination a. \_\_\_\_\_ (           %)  
 (3 major regions) b. \_\_\_\_\_ (           %)  
 c. \_\_\_\_\_ (           %)

15. What do you think that have made Customers attract to starting business with your company?  
 Please rank top 3. And What are major difficulties/obstacles in order to increase sales? (Top3)

Advantages	Difficulties/obstacles
a. (    ) Price competitiveness	(Lower) a. (    )
b. (    ) Higher technological skills	(Lower) b. (    )
c. (    ) Consciousness towards quality improvement	c. (    )
d. (    ) Facility	d. (    )
e. (    ) Skills of employees	e. (    )
f. (    ) Sales conditions (payment and/or delivery conditions)	f. (    )
g. (    ) Previous business records	g. (    )
h. (    ) Personal trust	h. (    )
i. (    ) Location	i. (    )
j. (    ) Other	j. (    )

16. What events were most influential in expanding your business since its establishment?  
 Please rank top 3

	Approx. Year
a. (    ) Expansion of the domestic market	(           )
b. (    ) Opening up of the foreign trade	(           )
c. (    ) Establishment of JVs with foreign companies	(           )
d. (    ) Starting business with specific customers	(           )
e. (    ) Developing new products	(           )
f. (    ) Receiving consultations	(           )
g. (    ) Other	(           )

17. Please rank the three most frequently heard requests from Customers (buyers).  
 Have customers extended assistance and/or advice to improve these requests?

	Any Advice and/or Assistance?		If yes, what?
	Yes	No	
a. (    ) To lower the cost	(    )	(    )	_____
b. (    ) To observe delivery time	(    )	(    )	_____
c. (    ) To lower the defection rate	(    )	(    )	_____
d. (    ) To improve quality	(    )	(    )	_____
e. (    ) To produce larger volume	(    )	(    )	_____
f. (    ) Other	(    )	(    )	_____



22. Assuming that you have to pay fees for the services below (from a to s), what assistance does your company wish to receive? Please rank up to top 5.

a. ( ) training courses What? \_\_\_\_\_

Technology

- b. ( ) testing services
- c. ( ) advice on patent and/or standard
- d. ( ) advice on R&D
- e. ( ) receiving foreign advisors at the factory (part-time)
- f. ( ) receiving foreign advisors at the factory (full-time)

Facility

- g. ( ) common facility service
- h. ( ) machinery lease

Marketing

- i. ( ) exhibition support
- j. ( ) e-Commerce support (sales over Internet)
- k. ( ) outlet shops
- l. ( ) meeting with potential buyers

Finance

- m. ( ) credit guarantee
- n. ( ) assistance on bank loan applications

Other

- o. ( ) meeting with the local manufacturers
- p. ( ) partner/subcontractor search services
- q. ( ) domestic study tours
- r. ( ) international study tours
- s. ( ) other

23. What public services does your company often use? How effective are they?

	Name of the services	Effective	Fair	Not Effective
a.	_____	( )	( )	( )
b.	_____	( )	( )	( )
c.	_____	( )	( )	( )
d.	_____	( )	( )	( )
e.	_____	( )	( )	( )

24. What were the most important factors when you decided to invest in India? Choose up to 3 items from the following. (Questions to Companies with Foreign Capital)

- 1 Political and social stability
- 2 Economic conditions
- 3 Market size of India
- 4 Fiscal incentives including tax holiday
- 5 Existence of parent company
- 6 Existence of supporting industry
- 7 Availability of partner for JV, technical tie-up
- 8 Availability of raw materials
- 9 Availability of quality human resources
- 10 Availability of low cost labour
- 11 Availability of infrastructure
- 12 Other (Specify: \_\_\_\_\_ )

25. How do you evaluate current business environment in India? Rate each of the following issues by giving score 5 (very good), 4 (good), 3 (average), 2(bad) or 1 (very bad).

1. Political and social conditions	5	4	3	2	1
2. Economic conditions	5	4	3	2	1
3. Policy framework in general	5	4	3	2	1
4. Labour laws	5	4	3	2	1
5. Tax regime	5	4	3	2	1
6. Administrative procedures (applications and approvals) at the Central level	5	4	3	2	1
7. Administrative procedures (applications and approvals) at the State level	5	4	3	2	1
8. Import/export procedures	5	4	3	2	1
9. Cost of labour	5	4	3	2	1
10. Availability of skilled human resources	5	4	3	2	1
11. Availability of funds	5	4	3	2	1
12. Real estate prices	5	4	3	2	1
13. Electric power supply	5	4	3	2	1
14. Telecommunication system	5	4	3	2	1
15. Water supply for industry	5	4	3	2	1
16. Transport system/network	5	4	3	2	1



26. Do you have any comments/requests to the governments of India (Central and State) in relation to acceleration of private sector development, including foreign direct investment, in India?

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27. Do you have any comments/requests to the government and JICA in relation to acceleration of private sector development, including foreign direct investment, in India?

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28. What do you expect from the central Government at the policy level, to promote your business?  
Please describe your answers for each of the following fields.

1. Industrial policy

2. Trade (export/import) policy

3. Foreign investment promotion policy

4. Other policies (e.g. labour policy, land policy, etc.)

29. What do you expect from the State Government at the policy level, to promote your business?  
Please describe your answers for each of the following fields.

1. Industrial policy

2. Trade (export/import) policy

3. Foreign investment promotion policy

4. Other Policies (e.g. labour policy, land policy, etc.)

30. How do you estimate the impacts of India's bilateral free trade agreements, such as FTA with Thailand and FTA with Sri Lanka, on your business? Please choose one

1. Very positive

2. Positive

3. Neutral

4. Negative

5. Very negative

30a. Narrate the reason(s) of your answer above:

S1 Interview Date

S2 Interviewers

*Appendix 5*

*Summary Result of Company Interview Survey*

## Summary of Company Survey Results

### (1) Distribution of Turnover

#### Sales figure in Indian Rupees in Million

Criteria	Annual Sales (Year 2004)		Annual Sales (Year 2005)	
	No of companies	percentage	No of companies	percentage
Companies did not disclose their sales figure	116	24%	92	19%
Upto Rs 50 Million	152	31%	151	31%
More than 50 but upto Rs.250 Million	83	17%	85	17%
More than 250 but upto Rs.500 Million	37	8%	39	8%
More than 500 but upto Rs.1000 Million	30	6%	29	6%
More than 1000 but upto Rs.1500 Million	13	3%	21	4%
More than Rs.1500 Million	60	12%	74	15%
	<b>491</b>	<b>100%</b>	<b>491</b>	<b>100%</b>

### (2) Classification by Sector

Industry	No of responses	Percentage
Chemical	26	5%
Electric equipment / Machinery	41	8%
Electronics / Telecommunication equipments	25	5%
Food	30	6%
Furniture & Timber	5	1%
Garments / Apparel	21	4%
General Machinery	28	6%
Iron / steel	12	2%
IT & IT services	18	4%
Medical / Pharmaceutical	37	8%
Metal Products	11	2%
Non-ferrous Metals	8	2%
Other manufacturing	57	12%
Other non-metals	3	1%
Others	99	20%
Paper / Pulp	6	1%
Plastic	12	2%
Printing	10	2%
Rubber	6	1%
Textile	14	3%
Transport equipment	22	4%
<b>Total</b>	<b>491</b>	<b>100%</b>

(3) Classification by Location

States	No of responses	Percentage
Andhra Pradesh	50	10%
Delhi	48	10%
Gujarat	51	10%
Haryana	50	10%
Karnataka	50	10%
Madhya Pradesh	55	11%
Maharashtra	49	10%
Tamil Nadu	43	9%
Uttar Pradesh	46	9%
West Bengal	49	10%
<b>Total</b>	<b>491</b>	<b>100%</b>

(4) Ownership and Export

Foreign Share in Indian Companies	No of companies	Percentage
No of companies with foreign equity	426	87%
No of companies without foreign equity	65	13%
<b>Total</b>	<b>491</b>	<b>100%</b>

Export	No of companies	Percentage
Companies doing Export	250	51%
Companies not doing Export	241	49%
<b>Total</b>	<b>491</b>	<b>100%</b>

Export Destination	No of companies	Percentage
Companies exporting to Japan	14	3%
Companies exporting to other countries	477	97%
<b>Total</b>	<b>491</b>	<b>100%</b>

(5) Raw Material Procurement

Raw Material procurement	No of companies	Percentage
Companies procuring Raw Materials from Japan	33	7%
Companies procuring Raw Materials from Other foreign countries	24	5%
Companies procuring Raw Materials domestically	434	88%
<b>Total</b>	<b>491</b>	<b>100%</b>

**Value of RM Procurement from Japan (Rs Million) - Years 2004 & 2005**

Total value	6,169.20
Average	186.95

(6) Elements for attracting customers

Key customer attraction elements	Rank 1	Rank 2	Rank 3
Price competitiveness	42%	12%	12%
Higher technological skills	14%	20%	6%
Consciousness towards quality improvement	22%	26%	14%
Facility	4%	6%	8%
Skills of employees	1%	7%	8%
Sales conditions (payment and/or delivery conditions)	3%	7%	9%
Previous business records	4%	6%	12%
Personal trust	4%	9%	12%
Location	2%	2%	5%
Other	2%	0%	2%

(7) Influential factors for business expansion

Most Influential Events	Rank 1	Rank 2	Rank 3
Expansion of the domestic market	48.3%	15.3%	7.1%
Opening up of the foreign trade	11.0%	15.5%	6.9%
Establishment of JVs with foreign companies	3.3%	7.5%	3.1%
Starting business with specific customers	17.1%	25.1%	9.0%
Developing new products	12.4%	18.3%	28.9%
Receiving consultations	0.4%	0.8%	3.1%
Others	2.9%	1.2%	3.3%

(8) Most frequently heard requests from the customers

Frequently heard customer requests	Rank 1	Rank 2	Rank 3
To reduce the cost	<b>55.6%</b>	11.0%	5.1%
To observe delivery time	13.6%	<b>27.3%</b>	8.1%
To reduce the defection rate	2.6%	5.7%	6.9%
To further improve quality	7.5%	21.2%	<b>14.3%</b>
To produce larger volume	7.7%	12.4%	12.0%
Others	2.6%	1.6%	1.4%

(9) Key obstacles in running business

Key obstacles in running business	Rank 1	Rank 2	Rank 3
Currency fluctuation	8.8%	4.1%	3.5%
Finance (Difficulties in obtaining loans/credits)	12.8%	3.9%	3.3%
Tax system, including tariff structure	18.1%	13.4%	7.7%
Difficult administrative system in customs	5.5%	7.3%	3.7%
Difficult administrative system/procedures in business activities	9.8%	14.1%	6.1%
Labor issues	10.2%	9.0%	8.4%
Difficulties in obtaining better material/parts/components	2.9%	7.5%	4.1%
High competition in the domestic market	<b>15.7%</b>	<b>16.7%</b>	<b>17.3%</b>
Difficulties in keeping high quality control standards	2.6%	2.2%	8.6%
Insufficient and inefficient infrastructures (Roads, Electricity, Water-supply, etc.)	8.8%	11.6%	11.0%
Others	2.4%	1.4%	1.8%

(10) Evaluation on business environment

Business environment in states / in the country	Very Good	Good	Average	Bad	Very Bad
Political and social conditions	6.3%	34.6%	43.8%	9.4%	3.5%
Economic conditions	14.9%	55.2%	22.8%	4.5%	0.6%
Policy framework in general	3.3%	24.6%	50.3%	17.9%	1.6%
Labour laws	1.2%	11.2%	46.8%	26.5%	10.2%
Tax regime	2.2%	15.5%	49.9%	24.8%	5.1%
Administrative procedures (applications and approvals) at the Central level	1.4%	10.8%	50.3%	18.9%	6.9%
Administrative procedures (applications and approvals) at the State level	1.2%	13.2%	46.8%	24.2%	7.3%
Import/export procedures	2.2%	28.1%	44.0%	10.8%	1.2%
Cost of labour	8.6%	47.5%	34.8%	4.9%	1.8%
Availability of skilled human resources	14.1%	46.6%	22.4%	12.0%	2.2%
Availability of funds	11.8%	46.8%	29.3%	7.1%	1.8%
Real estate prices	5.9%	26.7%	35.6%	19.8%	3.7%
Electric power supply	9.0%	35.8%	27.1%	17.7%	8.1%
Telecommunication system	24.8%	50.9%	17.5%	3.9%	0.8%
Water supply for industry	8.1%	37.3%	31.6%	13.4%	5.1%
Transport system / network	4.7%	39.1%	32.6%	15.1%	5.9%