

6.1.3 IMT in India: Purpose and Effects

(1) IMT: Purpose

A practical and effective means of promoting foreign investment and technology transfer is the basis of the IMT concept. The IMT should provide the following:

- (a) To expand industrial production of manufactured goods for domestic demand.

Figure 6-5 illustrates India's import structure and it can be observed that the majority of imports are accounted for in the "chemical or allied industries", "machinery and parts", "electrical and electronic equipment, and parts thereof", "base metals and articles of base metal", "pearls, precious and semi-precious stones", except for petroleum and products thereof.

"Pearls, precious and semi-precious stones/metals and associated articles", the products are exported after processing. Other imported goods are for consumption in the domestic market. Therefore, the country's domestic production must be strengthened to meet internal consumer and industrial demand.

- (b) To promote local industry by introducing advanced technology and management systems viz. foreign investors and foreign enterprises.

In order to accelerate domestic industries production of goods that meet domestic demand, domestic enterprises have to provide stable supply of quality products which are competitive with imported products, and also improve management system to find out domestic demand appropriately, and to reflect it own products. To this purpose, it is beneficial that domestic industry will acquire various technologies and management techniques of foreign enterprises. Therefore, the objective of the IMT is intent on formulating those conditions which promote effective technology transfers between foreign and domestic enterprises.

(2) Consequent Effects

(a) Support Industries Development

In order to lessen increased imports of goods, suppliers of intermediate goods and parts, should be developed that can acquire the ability to produce products that meet international levels of quality and acceptance and thus, provide for effective competition in the domestic markets.

The support industries in India in the past were under a conservative policy which obligates these companies to domestic product use (i.e., PMP, the Phased Manufacturing Programme) through policy background of compulsory purchases. However, purchaser had some advantage of cost reduction by using low cost domestic products even though there were problems related to quality. In the future, development of support industries in India will need to progress along with the country's economic liberalisation and industrial policies. Improving product quality will require transfer of technology to domestic intermediate goods and parts suppliers from foreign enterprises.

To better describe current conditions related to intermediate goods producers and parts suppliers, a sample of foreign enterprises operating in India are described.

Sample Study

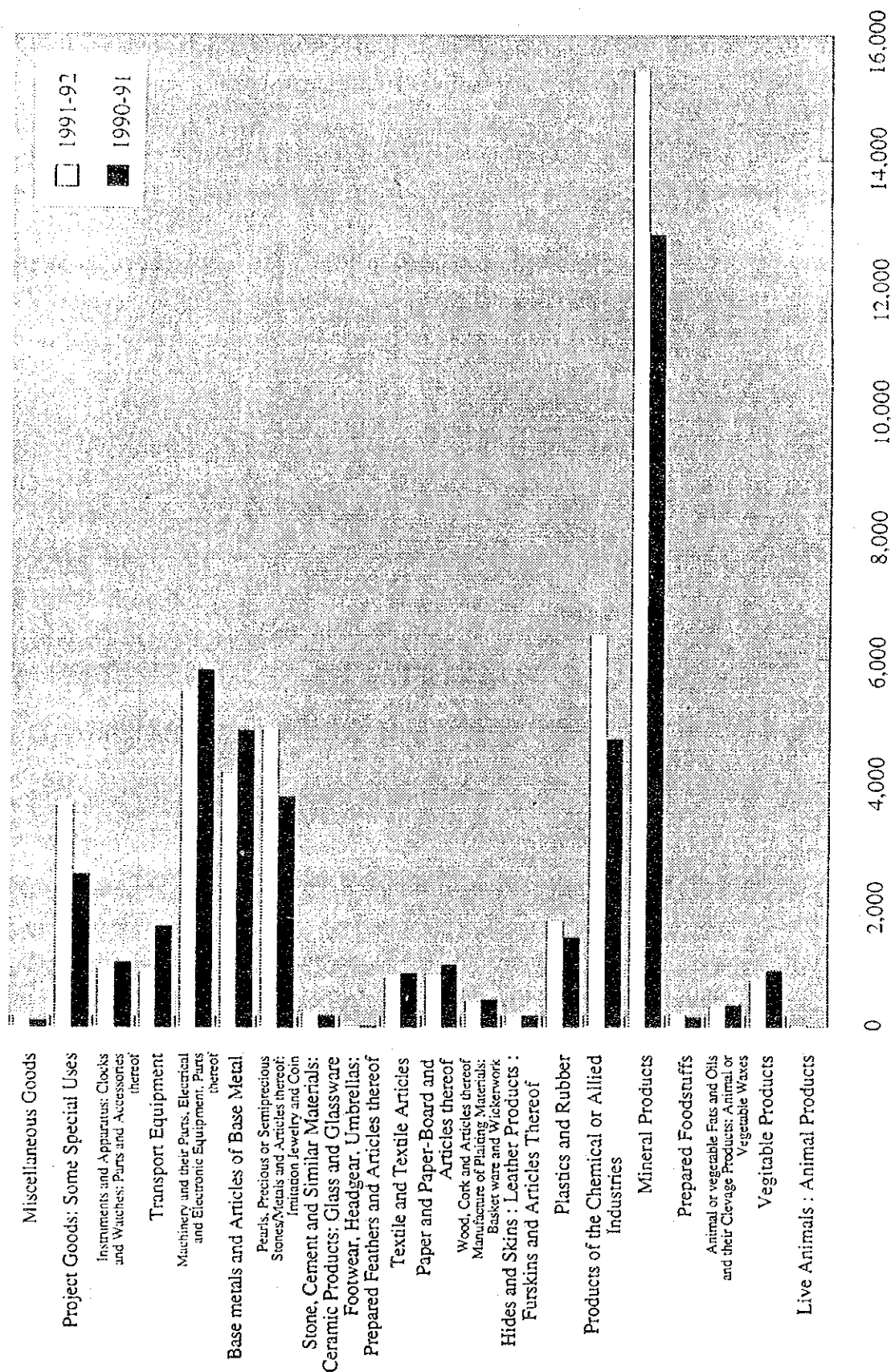
• A -- Foreign enterprise (automobile manufacturers):

In 1983, monetary exchanges with 80 local businesses amounted to Rs. 150 million. In 1992, transactions had grown to about 370 domestic enterprises (increased by 4.6 times) for a total of Rs. 8.1 million (increase of 54 times).

• B -- Foreign enterprise (write harnesses):

Depends on local procurement for about 70 per cent of production needs. In 1989, the first year of business operations, transactions involved 20 domestic companies for a total of Rs. 17 million. The number of transactions has

UNIT: Rs 10 million



Source: Monthly Statistics of the Foreign Trade of India, March 1992, DGCIIS of Ministry of Commerce

Figure 6-5 Major Import Items

since grown to include 220 businesses (11 times original number) for about Rs. 84 million in annual business (five times original amounts) in 1992.

- C -- Foreign enterprise (portable generators, general purpose engines, water pumps):

Commencement of this company in 1988 began with transacting business with approx. 20 domestic companies. Local purchasing at that time was 32 per cent. In 1992, business transactions had grown to include 110 domestic companies, and local purchasing increased to 90 per cent. This means that in five years time, business transactions with domestic companies grew more than five times, and local purchasing grew by about three times.

- D --- Foreign enterprise (Automotive safety glasses):

Operations were established in 1987 and grew from 30 local businesses providing services to about 1,500 in 1992. Local purchasing rates remains at 20 per cent. The enterprise relies on glass material imports from ASEAN members countries, but has plans to locally purchase parts and materials in the future.

(b) International Balance of Payments: Improvements

If import substitution make progress and producers manufacture quality products, export promotion will also occur. Therefore, international balance of payments would be improved.

From the viewpoint of long-term economic development planning, the import ratio will decrease if manufacturers can produce the same quality products that are now mostly imported. Domestic companies which can manufacture products with international competitiveness will then export those products, and thus improve the country's international balance of payments.

The IMT development concept and consequent effects are illustrated in Figure 6-6 for review.

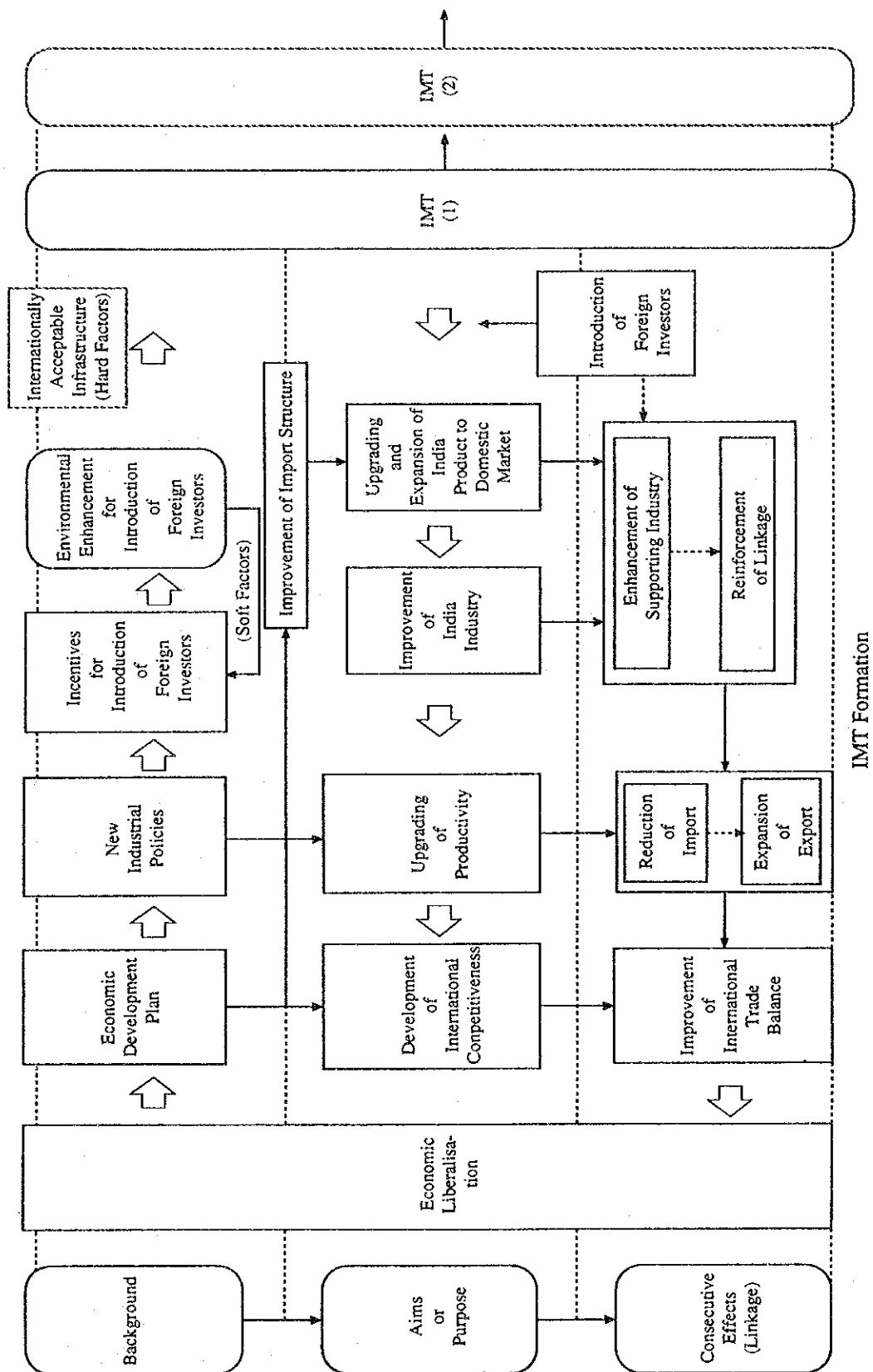


Fig. 6-6 IMT Formation

6.2 Industrial Model Town (IMT) Development Scenario

The IMT development scenario is shown in the following illustrations (Figure 6-7 and Figure 6-8) describe the *current* industrial structure and *future* industrial structure of India.

6.2.1 Industrial Structure Reinforcement

(1) Current Industrial Structure

Figure 6-7 illustrates that India's industrial base is comprised of three dominant sectors: domestic industry, export processing zones (EPZ), and export oriented units (EOU). The following descriptions apply.

The importing of raw materials, intermediate goods, and parts, generally characterizes the manufacturing needs of EPZ unit (a). Domestic inputs are minimal, and are primarily relegated to providing some raw materials, skilled and unskilled workers, and basic infrastructure (b). In principle, EPZs export 100 per cent of production (c).

Consequently, EOUs mirror the input-output scenario of EPZs except that domestic inputs (e) in the form of raw materials etc., are larger than for EPZ units. The country's domestic producers also mirror the input-output scenario of imports (h) and domestic (i) procurements. However, produced goods are primarily for the domestic market (k) with a small share of production for the export markets. The raw materials, labour force, utility supply (j) are also provided to domestic producers.

Note: Letters in () refer to items described in Figure 6-7.

(2) Future Industrial Structure

Figure 6-8 illustrates the changes occurring in the country's industrial relations if an IMT is established. The newly created factors are shown as "M", "P", "Q", and "R" (refer to the legend for concise definitions of the variables).

The changes that are illustrated portend an IMT will purchase raw materials, intermediate goods and parts abroad (M), and also purchase from existing producers (N). IMT produced goods will be supplied to domestic manufacturers located outside the IMT (P), and some finished goods will be supplied to the domestic market (R). Enterprises operating

in the IMT are also acquiring raw materials, labour, intermediate goods and infrastructure needs from domestic sources. If the linkages among the enterprises within the IMT boundary and linkages with those enterprises located outside the IMT boundary are strengthened, India's industrial base also benefits. Consequently, Indian industrial structure will expand and industrial technology will also be upgraded.

Note: Letters in () refer to items described in Figure 6-8.

6.2.2 IMT Development

For the IMT project to become a success, the following programmes should be considered.

(1) IMT Enterprises and Industries

- (a) The number of enterprises and industries locating within the IMT should be comprised of three investor groups: domestic, foreign, and joint ventures.

One of the primary objectives of the IMT is *development* of local enterprises. This means expansion of effects caused by the introduction of foreign enterprises and the accumulative effect thereof, according to India's past experiences. The accumulated effect of joining foreign investors to existing domestic enterprises provides communication and network exchanges between the IMT's foreign and domestic companies. This will provide local enterprises with valuable management and production information, which in turn would improve the level of domestic companies' production technology and management techniques.

- (b) Intermediate goods manufacturers and parts manufacturers should also establish operations within the IMT in conjunction with finished goods manufacturers.

IMT enterprises will have relative advantages for business relationships such as lower transportation time and their expenses compared to enterprises located outside the IMT. Also, business transactions and supplementary relationships will accelerate, allowing production to be upgraded to be specialised. Which in turn produce a "cost reduction effect". In addition to that, if competitive consciousness will be existed among enterprises, quality products will be developed, this leads to quality improvement effect.

(2) Domestic Industry: Linkage

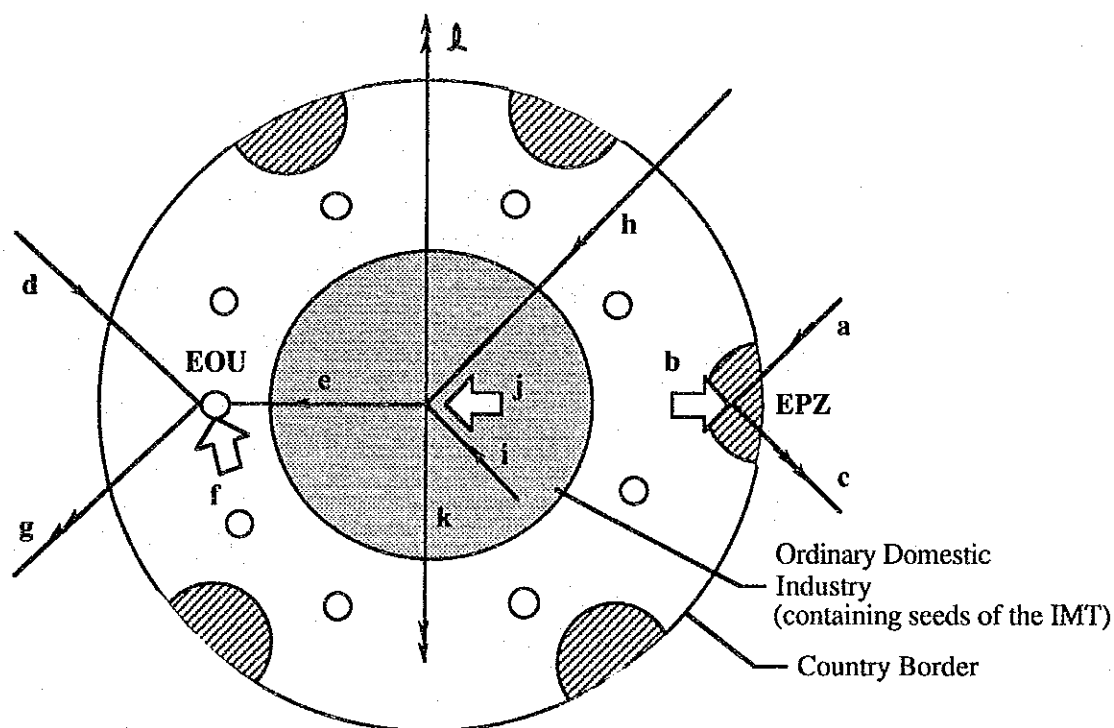
The IMT should provide reinforced linkage relationships among industry groups and sectors within the IMT, and with enterprises located outside because the IMT will revitalize domestic industry by attracting advanced technology and management techniques from foreign manufacturers.

(3) Incentives for Foreign Investors

It is assumed that reasonable incentives could be provided based on the principles of a market economy.

The offer of maximum incentives for the IMT would further attract foreign investors during the initial implementation stage. However, incentives should be reduced over a period of years to adjust for inequity of opportunities in relation to enterprises located outside the IMT. Phased incentive programme should be employed in accordance with their accomplishment. This programme should be established during the planning stages of the IMT.

Current

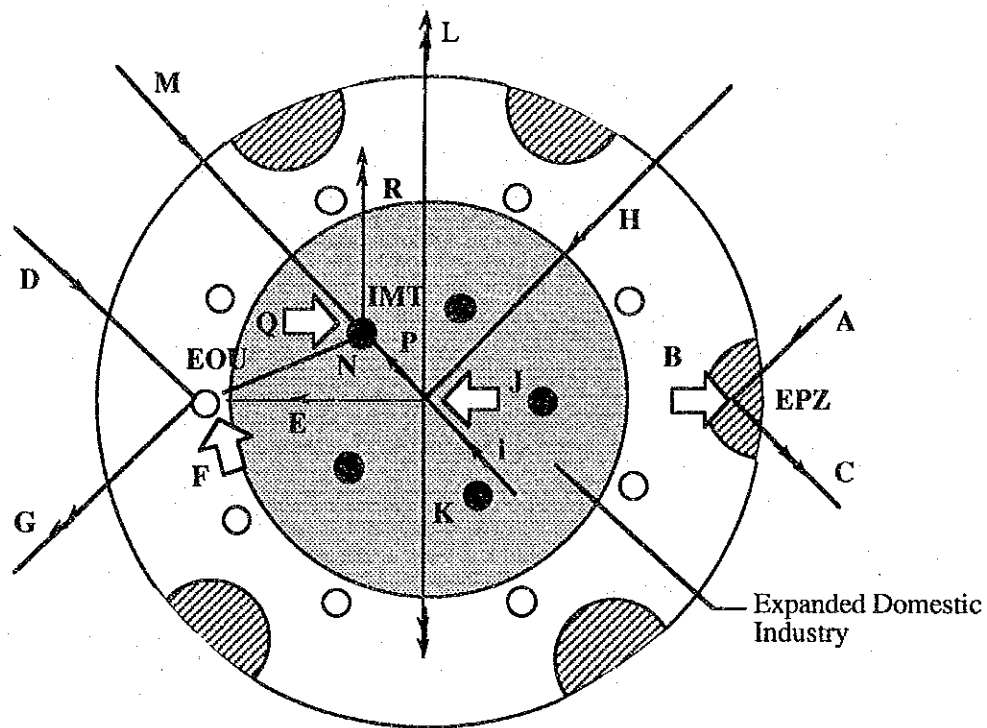


Legend

Outer circle	: India	d	: Inflow to EOU from Abroad
Inner circle	: Domestic Industry	e	: Inflow to EOU from Domestic Industry
⊗	: Export Processing Zone (EPZ)	f	: Input to EOU
○	: Export Oriented Unit (EOU)	g	: Output from EOU
⬅	: Work Force & Infrastructure	h	: Inflow to domestic Industry from Abroad
➡	: Input/Inflow	i	: Inflow to Domestic Industry from Domestic Industry
⬅➡	: Output/Outflow	j	: Input to Domestic Industry
a	: Inflow to EPZ from Abroad	k	: Outflow from Domestic Industry to Domestic Market
b	: Input to EPZ from Domestic	l	: Outflow from Domestic Industry to Overseas Market
c	: Output from EPZ		

Fig. 6-7 Industrial Structure of India (Current)

Future



TOTAL VALUE OF "K" & "R" > TOTAL VALUE OF "K"

Legend

Outer circle	: India	F	: Input to EOU
Inner circle	: Domestic Industry	G	: Output from EOU
⊗	: Export Processing Zone (EPZ)	H	: Inflow to domestic Industry from Abroad
○	: Export Oriented Unit (EOU)	I	: Inflow to Domestic Industry from Domestic Industry
↔	: Work Force & Infrastructure	J	: Input to Domestic Industry
←	: Input/Inflow	K	: Outflow from Domestic Industry to Domestic Market
↔	: Output/Outflow	L	: Outflow from Domestic Industry to Overseas Market
A	: Inflow to EPZ from Abroad	M	: Inflow to IMT from Overseas
B	: Input to EPZ from Domestic	N	: Infow to Enterprises located within IMT from Outside
C	: Output from EPZ	P	: Outflow from IMT toEnterprises located outside IMT
D	: Inflow to EOU from Abroad	Q	: Input to IMT from Domestic
E	: Inflow to EOU from Domestic Industry	R	: Outflow from IMT to Domestic Market

Fig.6-8 Industrial Structure of India (Future)

6.2.3 Infrastructure Development Conditions

The investment environment attractive to foreign investors requires that production activities receive adequate supplies of energy, telecommunications, water, etc., as well as provide for quality lifestyle conditions. Basically, the following conditions should be provided.

(a) Industrial production conditions

- access to large cities by reliable air and land transportation networks.
- labour pool of qualified technical, skilled, and unskilled workers.
- produce competitive products by purchasing parts and intermediate goods manufactured by local companies.
- control research and development investment costs in laboratory equipment by utilizing existing research and development centres.
- provide adequate support services for production activities prior to and after investment.

(b) Quality of Life

The minimum amount of public and private facilities development requirements for quality of life are as follows:

- housing, public facilities, shopping malls.
- recreational and leisure facilities.
- safe and secure residential and commercial zones.

The quality of services are given in Table 6-2.

Table 6-2(1) Functions of Industrial Estate

Description	Classification	Facilities and Services	Development and Service Quality as International Standard
Production Base	1.Factory buildings	Standard factories Offices	Factory buildings are accorded general view of the estate.
	2. Roads	Roads Parking area Street light	To delineate industrial roads and general roads Road network is hierarchical structure with sufficient wide, pedestrian walkway and green belt. Paved road can support heavy truck traffic and common tunnel for utility lines. Parking area provides sufficient cargo handling space. Street lights should be installed at appropriate distance and height.
	3. Water and sewer	Water supply Industrial water supply Drainage and sewerage treatment	Water quality must meet WHO standards or better. Water supply should be in accordance with demand. Industrial water should be recycled after treatment. Discharge water level should be in accordance with WHO standards or better. Sewage treatment facilities should be provided.
	4. Energy	Electricity supply Gas supply Gasoline/petroleum supply	Constant supply of high voltage electricity to meet the demand of enterprises. Gas supply equipment should be provided to each factory. Petro-stations should be provided.

Production Base	5. Telecommunications	Telephone Facsimile Telex Computer	Automatic international dial circuit should be provided. Communications equipment should be timely installed upon establishment of enterprises. Computers should be installed in the service center.
	6. Industrial waste	Solid waste treatment Toxic waste treatment	Solid waste treatment facility should be provided within or outside the estate. Industrial toxic waste should be separately treated from sewerage. Environmental standards should be in accordance with international standards.
	7. Auxiliary facilities	Cargo handling terminal Regulation ponds Maintenance/repair station Heli-port Fire station Rest facilities	Auxiliary facilities should be provided according to needs.

Table 6-2(2) Functions of Industrial Estate

Description	Classification	Facilities and Services	Development and Service Quality as International Standard
Management and Operation Services	1. Management services	Pre-production activities Finance and accounting Marketing Support for production activities	IMT service center should provide necessary services at one centrally located place as one-stop agency. Incubation function should be provided in the center, if necessary.
	2. Technical services	Calibration Test Design Test Research & Development Technical guidance	IMT service center should provide necessary services at one place as one-stop agency. Incubation function should be provided in the center.
	3. Manpower development	Vocational training center Technical training center Seminar facility Audio visual room	IMT service center should provide services at one place as one-stop agency.
	4. Information exchange services	Exhibition hall Conference room Gallery Information center	IMT service center should provide services at one place as one-stop agency.
	5. Common Services	Dispensary Dormitory Restaurants Parking Facilities Security Control Fire Fighting	IMT service center should provide services at one place as one-stop agency.

Table 6-2-(3) Urban Facilities

Description	Classification	Facilities and Services	Development and Service Grade as International Standard
Social Infrastructure	1. Transportation and Communication	Roads (trunk roads, etc.) Airports Railways Bus transports, etc. Harbours and ports	Road network is formulated from trunk road, secondary roads and other roads with pedestrian walkways and green belt. Commercial/residential roads should be separate from industrial roads used by heavy truck transportation. Trunk road should be accessible to international airports, ports and railway stations. Public transportation systems should be established in the town. Bus transports should allow commuting from the town to the estate.
	2. Public utilities and others	Water supply Drainage and sewerage treatment Electricity and gas Telecommunications Urban solid treatment	Potable water should be in adequate supply via secured sources and equipment. Road drainage systems should be provided. Mass sewerage treatment facility should be established. Electricity and gas should be in sufficient supply to meet all facilities needs. International and domestic communication systems should be established. Garbage collection system, disposal and treatment facility should be established.
Public Facilities	1. Commercial facilities	Department stores Shopping centers Hotels Office buildings	Residents can buy various goods and commodities of international grade. One-stop-shopping should be available. Quality hotels and facilities should be available for foreign businessmen. Business offices to support and promote manufacturing firms should exist.

Public Facilities	2. Educational facilities	Universities Colleges and polytechnics Senior and junior schools Elementary/preschools	Supplementary or special classes should be available to foreign students. Qualified teachers and facilities should be available as an international standard.
	3. Social welfare facilities	General hospitals Specialised hospitals Sports facilities Community facilities	Advanced technical facilities and equipment should be available in general and specialised hospitals. Sports facilities such as golf courses, tennis courts, and swimming pools should be available.
	4. Public service facilities	Post offices Banks Administration offices Police Temples	Public service facilities should be located at convenience places Public service facilities should be clean, sanitary and well maintained through structured maintenance program.
	5. Amenity facilities	Recreation and amusement facilities Museums, theaters, etc. Parks Green belt	Families can enjoy the use of amusement facilities without fear. People can study Indian culture and view the latest movies from abroad. Amenity facilities should be clean and well-maintained.

Table 6-2-(4) Urban Facilities

Description	Functional	Classification	Development and Service Quality as International Standard
Housings	1. Class "A"	Low Density	Flats with gardens or apartment houses with security services should be in accordance with international standards.
	2. Class "B"	Medium Density	Flats with gardens or apartment houses with security services should be in accordance with international standards.
	3. Class "C"	High Density	Houses are equipped with modern facilities.
	4. Class "D"	High Density	Low cost housing is equipped with essential equipment.

CHAPTER 7 INVESTMENT DEMAND SURVEY

CHAPTER 7 INVESTMENT DEMAND SURVEY

An analytical investment demand survey was conducted to identify potential investors and industries for the Industrial Model Town (IMT) in India. Also, this survey gathered possible future business plans in the likelihood that investors would be interested in a project such as the IMT.

7.1 Investment Demand Survey: Methodology

7.1.1 Investment Demand Survey: Countries Sampled

The investment demand survey essentially sampled target populations from India, Japan, the United States, and Germany, because each country is a prominent investor in India and has myriad levels of experience in foreign investment, technology transfer agreements, and the availability of hard currency. (Refer to Chapter 4 for descriptions regarding foreign investment.) Specifically, a summary of each country surveyed will follow below.

(1) India

Investment trends and investors' opinions regarding an industrial model town are key factors in determining the IMT project's success. Reliable partners are also fundamental when foreign companies are planning to establish joint ventures, or technology transfers. Collaboration with an Indian company appears necessary, regardless of whether a foreign partner holds a controlling equity share in the company or not. In view of this, a survey that describes the needs of Indian enterprises became essential. In addition, in order to project the future trends of foreign investment, the experiences and opinions of foreign enterprises operating in India were surveyed.

(2) Japan

Japan is recognised as a primary foreign investor country, but its investment to India is comparatively small. Given that Japanese capital and technology transfers to Southeast Asian countries have made beneficial economic and social contributions and provided substantial development in that region, it appears reasonable that such investments to India might also provide similar economic benefits. It is reported that India anticipates a similar economic

impact through increased Japanese investment and technology transfers, e.g., corporate management, engineering, and process control. Based on this assumption, Japanese companies became a primary sample group for this survey.

(3) The United States and Germany

Both countries rank as the primary investors to India for the past three years as described in Chapter 4 and are expected to be so also in the future.

7.1.2 Methodology

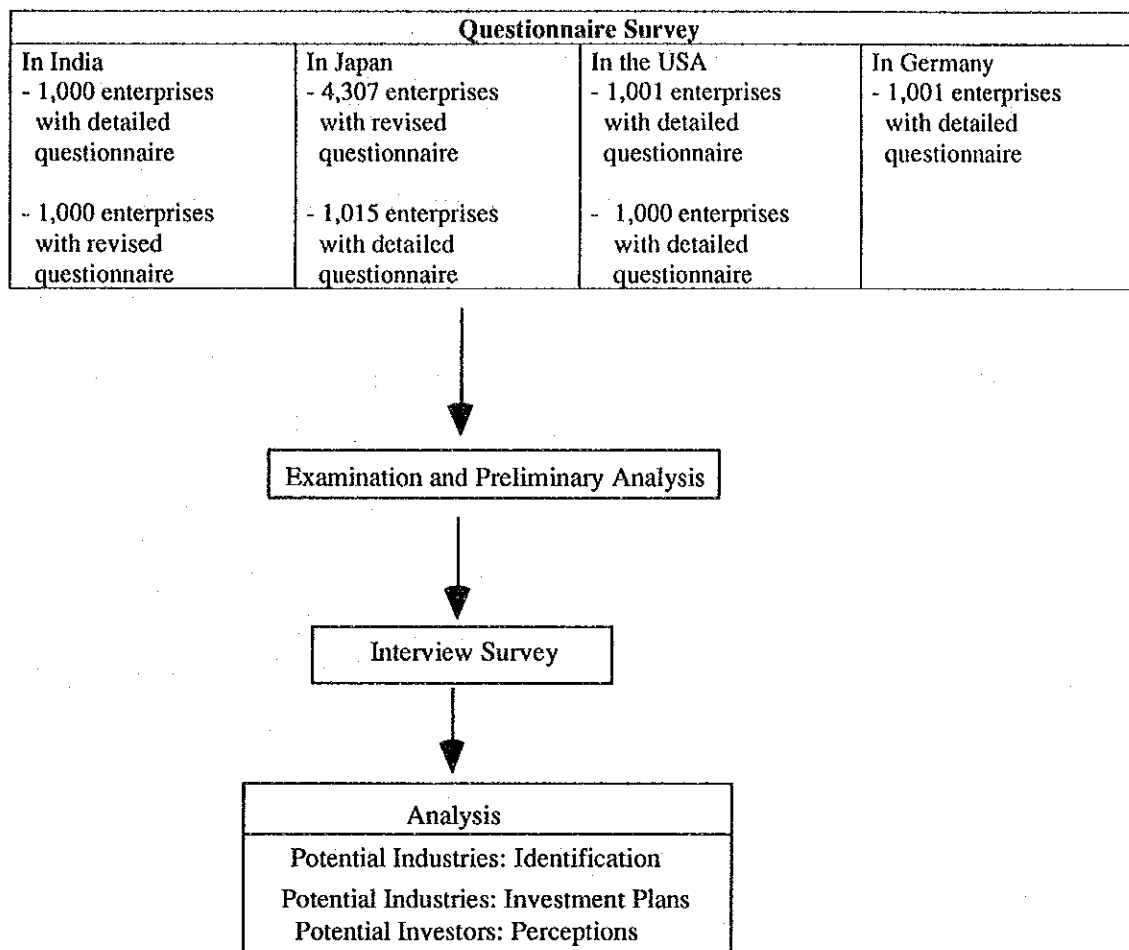
(1) Methodology

The investment demand survey consisted of preparing, distributing, and collecting questionnaires, as well as conducting personal interviews. The results pertaining to India, Japan, the United States, and Germany will be critically analyzed independently and comparatively based on cross-sectional statistical procedures.

The questionnaires consisted of questions regarding foreign investments, India, and the IMT project. The questionnaire employed in Japan is attached in the Appendix. In addition to the questionnaires, interviews were held to solicit first-hand responses.

Figure 7-1 shows the methodology and procedure of the investment demand survey.

Figure 7-1 Survey Methodology and Procedure



(2) Classification of industries surveyed

The questionnaire survey was mailed to companies in the manufacturing sector. Table 7-1 lists the manufacturing sectors and production characteristics.

Table 7-1 Details of Manufacturing Industry

1. Food Processing - Meat, Dairy and Fishery Products - Canned and Preserved Fruits and Vegetables - Condiment - Flour and Other Grain Mill Products - Livestock Feed and Organic Fertilizer - Sugar - Bakery and Confectionery Products - Beverages - Fats and Oils - Noodles, Ice, Frozen Food and Other Food	9. Non-ferrous Metals - Metals (Copper, Lead, Zinc, Aluminum, etc.) - Metal Products (Wire, Cables, etc.)
2. Textile - Cotton, Wool and Other Yarn, Synthetic Fiber - Woven Fabrics - Apparel - Other Miscellaneous Textile Goods	10. Metal Products - Cutlery, Cans, Containers, Press Working, etc.
3. Pulp and Paper - Pulp and Paper, Converted Paper - Converted Paper and Paperboard Products	11. Machinery - Machinery Tools and Hand Tools - Farm and Garden Machinery and Equipment - Construction Machinery and Mining Machinery - Textile Machinery - Food Processing Machinery - Plastic Processing Machinery - Elevator, Escalator and Conveying Equipment - Hydraulic Machinery and Equipment - Sewing and Knitting Machines - Refrigerating Machine and Air Conditioner - Bearing - Boiler, Engine, Metal Mold and Others
4. Chemicals - Fertilizers, Soda, Pigments - Soap, Detergents and Other Fat/Oil Products - Paints and Printing Ink - Medicinal and Pharmaceutical Products - Photosensitive Materials - Plastic Materials and Plastic Products - Others (Fermented Products, Synthetic Rubber and Agricultural Chemicals)	12. Electric and Electronic Equipment - Apparatus (Generator, Motor, Transformer, Lighting Fixture, Communication Equipment, etc.) - Parts (Semiconductor Device, IC, Electronic Tube, Wiring Accessories, etc.)
5. Oil/Coal Products - Petroleum Refining, Other Oil/Coal Products	13. Transport Equipment - Motor Vehicles and Motor Vehicle Parts - Railroad Equipment - Bicycle and Parts - Ship and Boat Building and Repairing
6. Rubber and Leather Products - Tire, Tube and Other Rubber Products - Leather and Leather Products	14. Precision Machinery - Measuring and Controlling Instruments - Medical Equipment - Optical Instruments and Lenses - Watches, Clocks, Clockwork Operated Devices, etc.
7. Glass and Ceramics - Flat Glass and Other Glass Products - Cement, Cement Products and Concrete - Refractory Products, Abradant and Other Ceramics	15. Others - Jewelry, Silverware and Plated Ware - Musical Instruments - Toys and Amusement, Sporting and Athletic Goods - Office and Artists Materials - Lumber/Wood Products, Furniture and Fixtures - Printing and Publishing - Tobacco, Lacquered Ware and Others
8. Iron and Steel - Hot Metal, Pig Iron, Steel and Steel Products - Iron and Steel Casting, Forged Steel, etc.	

7.2 India

7.2.1 Survey Framework

The investment demand survey in India consisted of questionnaire and interview surveys. Two kinds of forms were prepared for the questionnaire survey: an original, detailed version; and a revised version designed to motivate respondents.

(1) Questionnaire Survey

(a) Companies Surveyed

Primarily, large scale companies were selected for the survey based on assumptions that foreign companies will prefer to collaborate with local companies that demonstrate stable operational management, administration, and production capabilities, and are familiar with international business practices. Large scale companies comprise a dominate sector in India's economy, regardless if the activities of those enterprises are regulated by the Monopolies and Restrictive Trade Practice Act (MRTP).

In addition, domestic firms that participated in the Indian Engineering Trade Fair (IETF) held in Delhi (February 1993) hosted by the CII, demonstrated a strong willingness to expand business operations. The following detailed and revised survey questionnaires were made with the assistance of CII staff members:

Detailed: 1,000 large scale manufacturing companies that fall within the 'Monopolies and Restrictive Trade Practices Act', including their related companies.

Revised; The participating 1,000 companies in the Engineering 'Trade Fair' held in Delhi during 1-21 February 1993 (second phase field survey).

(b) Survey Method

Detailed: Mail distribution with return postage, and interviews

Revised: Distributed during the IETF with CII's assistance.

(c) Survey Periods

Detailed: December 1992 to March 1993

Revised: February 1993

(d) Questionnaire Contents

Detailed: The basic survey questionnaire framework was reviewed with the Study Team's Indian counterparts and is outlined as follows.

- i) Brief profile of the IMT project
- ii) What interest a company may have for participating in an IMT (type of industry interested, size, sales channels, site, etc.) and reason(s)
- iii) Most desirable collaboration: technology tie-up or joint venture operation
- iv) Previous business experiences with a foreign capital venture
- v) Business perceptions regarding foreign capital ventures

Revised: Selected from detailed version

(e) Response

Detailed: 72 (7.2% response) companies

Revised: 42 (4.2% response) companies

Total: 114 companies

(2) Interview Survey

(a) Companies Surveyed

Sixty-four companies located in the regions of Delhi, Calcutta, Madras, Bombay and Pune, were selected per recommendation by the CII and from companies previously contacted and given an opportunity to complete the detailed version of the questionnaire.

(b) Survey Method

Personal interviews

(c) Survey Period

Second Field Trip to India (January 31, 1993 to March 28, 1993).

(d) Questions

Following an examination and analysis of the mailed and distributed questionnaires, interviews were held during the second field survey by the investment demand survey members. Interviews consisted of the following:

- i) Verification of questionnaire responses
- ii) Business classifications (type of industry and scale of production, etc.).
- iii) Rationale for establishing a business tie-up and interests in establishing a venture with a foreign company.
- iv) What, if any, interest in establishing ventures with companies other than the target countries (i.e., U.K., Republic of Korea, Taiwan, etc.).

- v) Business purchase plans for procuring raw materials (i.e., import or domestic, name of supplier(s) for those cases in which domestic supplies are available, etc.).
- vi) Sales plan (domestic sales channels, competition, export ratio, etc.).
- vii) What are the rationales for developing technology transfers or joint ventures.
- viii) Primary beneficial gains expected from foreign investors (funds, technology, management skills, etc.).
- ix) Recommendations for the Indian Government/corporations by way of promoting foreign capital investment.
- x) Investment and operational related difficulties.

7.2.2 Survey Results

The questionnaire and interview survey results are as follows:

(1) Company Profiles

Company locations, profiles, number and percent responding, number of employees, and response totals for plans regarding international trade to the two questionnaires are listed below.

Location						
	Detailed		Revised		Total	
Delhi Area (north)	16	22.2%	11	26.2%	27	23.7%
Calcutta Area (east)	6	8.3%	11	26.2%	17	14.9%
Madras, Bangalore (south)	25	34.7%	13	31.0%	38	33.3%
Bombay, Pune (west)	25	34.7%	7	16.7%	32	28.1%
TOTAL	72	100.0%	42	100.0%	114	100.0%

Industrial Sector Responses

	Detailed		Revised		Total	
Food Processing	3	4.1%	1	2.4%	4	4.6%
Textile & Apparel	-	0.0%	3	7.1%	3	3.4%
Pulp & Paper	2	2.7%	-	0.0%	2	2.3%
Glass, Ceramic & Clay	6	8.1%	3	7.1%	9	10.3%
Rubber & Leather	4	5.4%	-	0.0%	4	4.6%
Ceramic & Clay	1	1.4%	-	0.0%	1	1.1%
Iron & Steel	5	6.8%	-	0.0%	5	5.7%
Non-Ferrous Metals	5	6.8%	3	7.1%	8	9.1%
Metal Products	-	0.0%	1	2.4%	1	1.1%
General Machinery	13	17.6%	9	21.4%	22	25.1%
Electrical	11	14.9%	4	9.5%	15	17.1%
Transportation Equip.	19	25.7%	6	14.3%	25	28.5%
Precision Instruments	2	2.7%	3	7.1%	5	5.7%
Miscellaneous Mfg.	-	0.0%	4	9.5%	4	4.6%
Others	1	1.4%	5	11.9%	6	6.8%
Total	72	100.0%	42	100.0%	114	100.0%

Number of Employees

	Detailed		Revised		Total	
300 or less	11	15.3%	26	61.9%	37	32.5%
301 - 1000	18	25.0%	6	14.3%	24	21.1%
1001 - or more	43	59.7%	10	23.85	53	46.5%
Total	72	100.0%	42	100.0%	114	100.0%

Experience in International Trade

	Detailed	
Yes	66	91.7%
No	6	8.3%
Total	72	100.0%

(2) Investment Planning

Among the 114 companies receiving questionnaires, 104, or 91.2 per cent responded positively to expanding existing factory floor-space, or have plans to construct new production facilities. About 70 per cent (n=73) of them to implement these plans within three years.

Table 7-2 lists important factors affecting the choice of location for the establishment of new production facilities. The data appear to reinforce earlier assumptions regarding the importance of infrastructure in an investor's locational decisions. About 63.9 per cent reported infrastructure as "very important", followed by political stability, social security, availability of labour, and supporting industries. Fewer companies ranked expectations regarding government incentives and concessions as deciding factors.

Table 7-2 Important Factors for Selecting A New Factory's Location
(n=72, Unit : %)

	Very Important	Important	Not Important (%)	Score (0-2)
MARKET				
Market Size	25.0	38.9	23.6	1.02
Access to Local MKT	19.4	50.0	20.8	0.98
Access to O'Seas MKT	36.1	41.7	13.9	1.24
FACTORS OF PRODUCTION				
Availability of Raw Materials	29.2	40.3	18.1	1.13
Availability of Labour	40.3	44.4	5.6	1.38
Infrastructure	63.9	26.4	1.4	1.68
Supporting Industries	40.3	37.5	12.5	1.31
OTHERS				
Government Incentives and Concessions	25.0	37.5	29.2	0.95
Social Security	52.8	34.7	1.4	1.58
Improving Corporate Image	13.9	38.9	29.2	0.81
Distance to Big City	20.8	44.4	29.2	0.97

Note: Average points calculated = 2 pts. for VERY IMPORTANT; 1 pt. for IMPORTANT; and 0 pts. for NOT IMPORTANT.

(3) Foreign Collaborations

As shown in Table 7-3, 85 companies from a total of 114, or 74.6 per cent, have had experience with foreign collaborations and foreign technical exchanges, and 69 companies (60.5 per cent) have or had, a joint venture company in India with foreign participation. A majority of the large sized companies (1,000 or more employees), have had business experience in the form of technology tie-ups or joint ventures. Regarding future joint enterprises, a majority of the

respondents (77.2 per cent) demonstrated a positive interest as shown in Table 7-3.

The interview results also revealed that many companies are willing to have foreign collaborations with equity participation, especially with Japanese companies. This appears to imply that domestic companies and entrepreneurs are willing to establish business relationships with foreign investors interested in locating to India.

Table 7-3 Foreign Collaborations: Objectives

n=114	
Both J/V and Technical Collaboration	77.2%
Only J/V	1.8%
Only Technical Collaboration	5.3%
Nether J/V or Technical Collaboration	7.0%
Others	0.9%
No Response	7.8%

Table 7-4 indicates that Indian companies are not especially concerned about a foreign partner's equity share holding. About 22 per cent of the companies surveyed insisted they would be unwilling to give up control of their business. More than 50 per cent indicated that the scale of the operation or company is not as important as a company's reliability. Many Indian companies placed more emphasis on the level of foreign technology than in a company's product image or the costs of OEM licensing fees to be paid. However, most of consumer goods manufacturers noted selections based on company's product image through all depended on types of product level of technology and other factors.

Table 7-4 Conditions for Foreign Collaborations

n=63	
- PARTNER'S EQUITY SHARE	
Major (More Than 50%)	22.2%
Minor or Equal (50% or Less)	17.5%
Not Particular	28.6%
- PARTNER'S BUSINESS SCALE	
Big Company Only	17.5%
Not Particular, if Reliable	54.0%
- IMPORTANT FACTOR	
License Fee	1.6%
Technology	57.1%
Brand Name	7.9%

Note: Non responses were excluded from this analysis.

(4) Interest in the IMT

Of the companies surveyed, 23.6 per cent of the respondents indicated significant interest in the IMT project, and 54.2 per cent reported the project as worthy of closer scrutiny; 16.7 per cent reported no interest in the project (see Table 7-5). About 80 per cent or more of the companies that manufacture pulp and paper, chemicals, iron and steel, non-ferrous metals, and transport equipment appear to have more interest in the IMT project. In addition, larger scale companies with 1,000 employees or more demonstrated more interest in the IMT project (close to 90 per cent) than other companies.

Regarding the IMT site location, many indicated a site preference near existing plants, as shown in Table 7-6. The results portend that the Delhi area candidate sites (Noida and Gurgaon) have advantages due to proximity to the nation's capital, and a higher level of infrastructure than Karnataka. The Bangalore area candidate sites (Bidadi and Sathnur) have advantages due to "better labour relations", a milder climate, etc. Nevertheless, many of the companies reported during the interview survey that site location is negotiable based on the joint partner's preference.

Table 7-5 Interests in IMT

Classification	Much Interest (23.6%)	Deserving Scrutiny (54.2%)	Beyond Consideration (16.7%)	No Answer (5.6%)	Total (100)
Food Processing	01	01	01	00	03
Textile	00	00	00	00	00
Pulp & Paper	01	01	00	00	02
Chemicals	00	05	01	00	06
Oil/Coal Products	00	00	00	00	00
Rubber & Leather	00	03	01	00	0
Glass & Ceramics	00	00	01	00	01
Iron & Steel	02	02	01	00	05
Non-ferrous Metal	02	03	00	00	05
Metal Products	00	00	00	00	00
Machinery	02	08	01	02	13
Electric & Electronics	02	06	03	00	11
Transport Equipment	06	10	01	02	19
Precision machinery	01	00	01	00	02
Others	00	00	01	00	01
Total	07	39	12	04	72

Table 7-6 Desirable Location for IMT

(%)

Present Location	Delhi Area	Bangalore Area	Others*	No Answer
North (n=27)	70.4	11.1	3.7	14.8
East (n=17)	17.6	5.9	35.3	41.2
South (n=38)	0.0	36.8	26.3	36.8
West (n=32)	3.1	43.8	21.9	28.1
Total (n=114)	21.1	28.1	21.1	29.8

Note: OTHERS refers to location of existing factories.

Although Table 7-7 indicates more companies prefer to purchase land and construct their own buildings than lease, many companies reported during interviews that purchasing, and or leasing, are dependent variables effected by other conditions.

Table 7-7 Desirable Land and Building Acquisition

n=72

	Purchase/Own Construction	Lease	Yet to Decide	No Answer
Land	30.6%	5.6%	36.1%	27.8%
Building	36.1%	2.8%	33.3%	27.8%

(5) Desirable Facilities for an IMT

Many Indian companies responded that infrastructure is a significant business determinant, especially electric power supply and telecommunications when considering investments in the IMT (Table 7-8). It appears priority should be given to infrastructure conditions as many companies' questionnaire responses indicated that infrastructure was generally unsatisfactory. Additionally, companies stated general dissatisfaction with the present industrial infrastructure in India during interviews. These findings portend that a higher level and more reliable infrastructure would be a key factor for motivating investors to participate in the IMT project than taxation and other incentives.

Table 7-8 Desirable Services and Facilities for IMT

n=60

- INFRASTRUCTURE	
Electricity	88.3%
Water Resource	68.3%
Telecommunication	86.7%
Road and Railway	70.0%
Airport and Harbour	28.3%
- SERVICE FACILITIES	
Business Information Centre	41.7%
Vocational Training Centre	21.7%
- WORKFORCE	
Recruitment of Quality Labour	58.3%
Labour Issues	45.0%
Availability of Subcontractor	25.0%
- OTHERS	
Social Security	50.0%
Living Environment	51.7%
Function of Surrounding Cities	30.0%

(6) Requests of Foreign Capital Enterprises

The requests of foreign capital enterprises located in India are summarized in Chapter 4 and in the Appendix.

7.3 Japan

7.3.1 Survey Framework

Successful implementation of the IMT project requires participation by Japanese firms. Based on this assumption, surveys of Japanese firms were accomplished in three phases. The first phase utilized the mailing of response cards, the second phase incorporated a more detailed mailed questionnaire, and finally, personal interviews were conducted with company representatives.

Objectives of the first phase survey

- To collect replies from as many firms as possible.
- To increase the scale of the sample population to ensure the reliability of the survey results.
- To ensure a better response rate during the second phase survey.

After examining the results and responses of the first phase sample, firms that appeared to have positive views regarding India were chosen as a purposeful sample

for the second phase survey. The second phase focused on discovering a company's possible investor interest in India. Unlike the findings of the first phase survey that reflected a Japanese firm's opinions about India, the second survey obtained detailed opinions of entrepreneurs.

Moreover, the interview stage was designed to confirm the questionnaire responses, identify an investor's intention to invest in India-based projects, and what conditions would be acceptable for joining in the IMT project.

(1) Companies surveyed

The main purpose of the IMT project is to promote the industries in India by introducing foreign capital thus creating new jobs and obtaining foreign management practices and technology.

An appropriate firm establishing operations within the IMT should be of the manufacturing industrial category that contributes to the industrial development in India. Primarily, it appears that manufacturing companies would provide more contributions to the Indian domestic and foreign trade economies. As a result, a majority of the companies surveyed are from the manufacturing sector, such as food processing, textile, paper and pulp, chemical, oil and coal, rubber and leather, glass and ceramics, iron and steel, non-ferrous metals, metal products, machinery, electric and electronic appliances, transportation machinery, precision machinery and other manufacturing.

The detailed questionnaire survey also included trading companies that could provide investment project management functions to manufacturers locating to India, and the insights of reputable construction companies.

(2) Survey Method

(a) First Phase Survey

Return postage-paid postcards were mailed to 4,307 companies (primarily manufacturers) to solicit interested companies that would facilitate the second phase survey sample. A sample size of N=29,790 companies were selected from a total of 120,000 companies listed in the data book of a private Japanese research institution. Manufacturers were then classified

into 70 industry categories to calculate respective shares, and adjusted for the number of companies presently participating in the Asian market. Based on this adjustment, a final sample size of 4,307 companies were selected to receive the mailed questionnaires.

(b) Second Phase Survey

In the second phase survey, 1,115 companies were chosen for distribution of the detailed questionnaires. The sample distribution consisted of 429 firms previously contacted during the first phase and that reported foreign investment plans for the future, and 686 companies randomly chosen from 1,161 manufacturers listed on the Tokyo Stock Exchange.

(c) Companies Interviewed

The companies interviewed by the survey team, were ten that demonstrated a positive interest in the IMT project as a result of the detailed questionnaire survey, and five companies that demonstrated an interest in India (but not in the IMT project) were also interviewed. In addition, five companies reported foreign investment interests, but not any interest for projects located in India were also interviewed. Also, 10 Japanese companies with operations in India were interviewed by the survey team during the second field investigation in India.

(3) Study Period

First phase preliminary questionnaire survey:

From November 1992 to January 1993

Second phase detailed questionnaire survey:

From January 1993 to March 1993

Third phase interview survey:

From March 1993 to May 1993

(4) Survey Contents

(a) First Phase Preliminary Questionnaire

In order to identify prospective industrial participants to the IMT project in the next 3-4 years, questionnaires were organized with a brief introduction about the IMT project along with the industrial liberalization policies in India and its large consumer market, were mailed to various companies.

(b) Second Phase Detailed Questionnaire Survey

Based on the results obtained from the first field survey and the first phase preliminary questionnaire survey, a comprehensive detailed questionnaire was employed and mailed to a sample size of 1,115 companies mainly in the prospective industry segments. The key aspects of the questionnaire are indicated below.

- i) An explanation of India's present industrial policies.
- ii) The IMT project summary, including descriptions of the four candidate site locations.
- iii) An outline of prevailing incentives by state and central government.

For the companies expressing probable investment interest:

- Type of business and size
- Preferred location
- Type of investment (joint venture, technology tie-up, etc.)
- Equity capital ratio desired
- Foreign investment experiences
- Preferred partner/venture company in India

Companies not interested in investment in India:

- If not planning foreign investment
 - Rationale
- If planning foreign investment but not in India
- Preferred region(s) and rationale
 - Rationale for not investing in India

(c) Third Phase Interview Survey

After an analysis of the second stage questionnaire survey responses, interviews were held at approximately 30 targeted companies. Comprehensive discussion based on the results of the preceding survey were held. The survey team identified potential industrial sectors and summarized Japanese investors' opinions regarding desirable conditions and policies that would help promote investment to India.

(5) Response Results

(a) First phase survey response rates

A total of 4,307 companies were sampled during the first phase survey. Of that total, 812 companies (19 per cent response rate) responded. By industry category, rubber products and the leather industry were the two modal categories. The petroleum and coal industry representatives were the two lowest response groups.

(b) Second phase survey response rates

A sample of 1,115 companies were selected for the second phase survey. Of that total, 250 companies responded (22 per cent response rate). By industry category, the glass industry represented the modal group, and the pulp/paper and petroleum/coal industries had the two lowest response rates.

Results of the responses for the first and second surveys are given for industry category in Table 7-9.

Table 7-9 Questionnaire Responses

(Unit: Number)

	1st Stage			2nd Stage		
	Mailed	Replied	Rate of Reply (%)	Mailed	Replied	Rate of Reply (%)
Food Processing	292	63	21.6	76	12	15.8
Textile	320	66	20.6	62	9	14.5
Pulp and Paper	60	8	13.3	8	1	12.5
Chemicals	413	78	18.9	133	29	21.8
Oil & Coal Products	20	1	5.0	6	1	16.7
Rubber & Leather	20	6	30.0	14	4	28.6
Glass and Ceramics	241	40	16.6	43	16	37.2
Iron and Steel	121	17	14.0	20	6	30.0
Non-ferrous Metal	121	24	19.8	30	4	13.3
Metal Products	565	100	17.7	92	19	20.7
Machinery	667	141	21.1	199	44	22.1
Electric & Electronic	583	97	16.6	165	37	22.4
Transport Equipment	283	74	26.1	103	27	26.2
Precision Machinery	300	55	18.3	63	16	25.4
Others	301	42	14.0	101	25	24.8
Total	4,307	812	18.9	1,115	250	22.4

7.3.2 Survey Results

Presented below are the results of the first phase, second phase, and interview surveys.

(1) Results of the First Phase Survey by Simple Questionnaire

The main objectives of the first phase survey were to collect responses from as many companies as possible, and to select companies that would increase the response rate of the second phase survey. In addition, the first phase survey can be assumed to make objective selections of the sample size for the second survey, and the results appear to be statistically significant.

(a) Past Foreign Investment

Of the total of 812 firms responded to the questionnaire survey. About 42.7 per cent, or 347 companies have developed foreign activities regardless of plans and interests in this project. The rubber and leather products, and chemical industries had the largest foreign business activities. Responses indicated that of those companies sampled, the petroleum and coal, iron and steel, and metal products industries are less active in the foreign markets.

(b) New Foreign Investment Plans

About 15.5 per cent or 126 of the companies responding, reported plans to expand foreign investment irrespective of past foreign business experience. The industrial sectors, rubber and leather, electric and electronics, machinery, transportation equipment, and food processing industries were more likely to report foreign investment plans. The petroleum and coal, iron and steel, and metal products industries were less likely to indicate business plans that include active foreign investment.

(c) Foreign Investment Strategy

The questionnaire was designed to solicit a company's foreign investment strategy, and primarily asked which of the following topics were applicable:

- i) Exports foreign manufactured products to Japan.
- ii) Exports the products to other countries.
- iii) Establishes a production base for marketing to the local market.

From the nature of the IMT, the chemicals, electric and electronics, and transport equipment manufacturing industries were more likely to invest in foreign production to establish entry into the local market.

(d) India's Domestic Market

Among the 812 companies that responded to the survey questionnaire, 159 (19.6 percent) reported that India is an attractive market. More than 25 per cent of the companies that represented the chemicals, rubber, glass, iron and steel, machinery, electric and electronics and precision machinery industries, reported an interest in accessing India's domestic market.

(e) Probability of Investment to India

Of the sample surveyed, 45 (5.5 percent) have been or will be interested in some kind of investment to India. From the responses, it appears that likely investors would originate from the chemical, glass, machinery, electric and electronics industries.

(f) Possibility of Establishing Joint Ventures and/or Technology Collaborations

Of the survey respondents, 128 (15.8 per cent) companies indicated positive perceptions regarding establishment of joint ventures and/or technology collaboration agreements if the company were approached by an Indian company. Industrial sectors most likely to respond favorably to such activity were the chemicals, glass and ceramics, machinery, electric and electronics industries.

(g) Probability of Investment in an IMT

The majority of survey respondents demonstrating an investment interest for an industrial manufacturing zone as envisioned by the IMT project, were the chemicals, glass, machinery, electric and electronics industries. Specifically, 31 companies, or 3.8 per cent, of the companies that responded, indicated an interest in studying IMT investment opportunities.

(h) First Phase Survey Results

Table 7-10 is a summary of those companies responding positively to the first phase survey questionnaire.

Table 7-10 Positive Responses to the First Phase Survey (No. 1)

(Unit: %)

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Replied (Total)
Food Processing	42.9	14.3	27.0	6.3	1.6	6.3	3.2	63
Textile	36.4	12.1	18.2	6.1	0.0	10.6	4.5	66
Pulp & Paper	37.5	12.5	25.0	0.0	0.0	0.0	0.0	8
Chemicals	60.3	30.8	52.6	26.9	7.7	23.1	6.4	78
Oil & Coal Products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Rubber & Leather	50.0	0.0	33.3	50.0	0.0	0.0	16.7	6
Glass & Ceramics	35.0	27.5	32.5	25.0	12.5	37.5	10.0	40
Iron & Steel	23.5	5.9	17.6	29.4	5.9	23.5	5.9	17
Non-ferrous Metal	41.7	16.7	33.3	12.5	4.2	12.5	8.3	24
Metal Products	29.0	6.0	18.0	7.0	3.0	9.0	1.0	100
Machinery	45.4	13.5	36.9	36.2	9.2	23.4	1.4	141
Electric & Electronic	49.5	21.6	44.3	20.6	9.3	16.5	5.2	97
Transport Equipment	43.2	14.9	43.2	14.9	2.7	13.5	2.7	74
Precision Machinery	30.9	12.7	23.6	29.1	1.8	9.1	3.6	55
Others	59.5	9.5	26.2	9.5	7.1	9.5	2.4	42
Total	42.7	15.5	32.9	19.6	5.5	15.8	3.8	812

Note: Survey questions are listed below Q1 to Q7).

- Q1: Does this company have past foreign investment experiences such as the establishment of a factory and/or a technology transfer in the past?
- Q2: Does this company have any new plans for foreign investment?
- Q3: What is the company's foreign investment objectives? (Manufacturing base to local market)
- Q4: Do you perceive the Indian market as attractive?
- Q5: Have you ever considered investments to India?
- Q6: Would this company seriously consider a proposal by an Indian company for a joint venture and/or technology transfer arrangement?
- Q7: Would this company be interested in an investment into an IMT located in India?

Table 7-10 Positive Reply of 1st Phase Survey (No. 2)

(Unit: Number)

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Replied
Food Processing	27	09	17	04	01	04	02	63
Textile	24	08	12	04	00	70	03	66
Pulp and Paper	03	01	02	00	00	00	00	08
Chemicals	47	24	41	21	06	18	05	78
Oil & Coal Products	00	00	00	00	00	00	00	01
Rubber & Leather	03	00	02	03	00	00	01	06
Glass and Ceramics	14	11	13	10	05	15	04	40
Iron and Steel	04	01	03	05	01	04	01	17
Non-ferrous Metal	10	04	08	03	01	03	02	24
Metal Products	29	06	18	07	03	09	01	100
Machinery	64	19	52	51	13	33	02	141
Electric & Electronic	48	21	43	20	09	16	05	97
Transport Equipment	32	11	32	11	02	10	02	74
Precision Machinery	17	07	13	16	01	05	02	55
Others	25	04	11	04	03	04	01	42
Total	347	126	267	156	45	128	31	812

Note: The numbers above are total positive answers to the questions listed below.

- Q1: Does this company have experience in foreign investments such as establishing factories and/or technology transfers in the past?
- Q2: Does this company have new plans for foreign investment?
- Q3: What is the company's objective in foreign investment (Manufacturing base to local market)?
- Q4: Does this company perceive the Indian market as attractive?
- Q5: Has this company ever considered investing in India?
- Q6: Would this company seriously consider a joint venture and/or technology transfer proposal by an Indian company?
- Q7: Would this company be interested in an investment into an IMT located in India?

(2) Results of Second Phase Survey by Simple Questionnaire

The results of the second phase questionnaire survey and interviews are summarised below.

(a) Profiles

The company profiles, response totals, per cent responding, and number of employed for the second phase survey follow.

	Mailing (Number)	Reply	Rate of Reply (%)
Food Processing	76	12	15.8
Textile & Apparel	62	91	4.5
Pulp & Paper	8	1	12.5
Chemical	133	29	21.8
Rubber & Leather	6	1	16.7
Ceramic Stone & Clay	14	4	28.6
Iron & Steel	43	16	37.2
Non-Ferrous Metals	20	6	30.0
Metal Products	30	4	13.3
General Machinery	92	19	20.7
Electrical	199	44	22.1
Transportation Equip.	165	37	22.4
Precision Instruments	103	27	26.2
Miscellaneous Mfg.	63	16	25.4
Others	101	25	24.7
Total	1,115	250	22.4

Respondents by size of work force are given below.

Number of Employees	(Unit: Number of Companies)	
Less than 300	56	22.4%
301 - 1000	88	35.2%
1001 or more	106	42.4%
Total	250	100%

Of the total responding to the second phase survey, 80 per cent of the companies with less than 300 employees, 84 per cent with 301 to 1,000 employees, and 98 per cent with more than 1,001 employees indicated current foreign business activities.

(b) Past Foreign Business Activities

i) Foreign Investment

Of the total companies responding (250) to the survey questionnaire, 201 or 80.4 per cent reported doing business in foreign markets, irrespective of future foreign business activities. But, 49 or 19.6 per cent of the companies reported no foreign business activity.

Of the 201 enterprises reporting foreign business activities, 26 or 12.9 per cent are operating businesses in South West Asia. By industry, many companies engaged in machinery, electric and electronics, transportation equipment, and chemical industries reported foreign activities. The petroleum and coal, and pulp and paper industries were the least likely to be engaged in foreign business activities. The data appear to indicate that larger scale enterprises with large numbers of employees are more likely to be engaged in foreign business activities than smaller scale companies.

Most of the overseas business activities are located in the NIE's, ACEAN, the U.S. and Europe.

The following industries are represented by regional foreign operations.

South West Asia:	Transportation Equipment, Electric and Electronics, Machinery and Glass and Ceramics
NIEs:	Machinery, Electric and Electronics, Transportation Equipment, Chemicals, and Precision Machinery
ASEAN:	Machinery, Electric and Electronics, Transportation Equipment, Chemicals, and Glass and Ceramics
China:	Electric and Electronics, Machinery, and Chemicals.

Table 7-11 gives overseas business by industry and country.

Table 7-11 Foreign Investment by Industry by Region

(Unit: Number)

	A	B	C	D	E	F	G	H	I	J	K	L	Total
Food Processing	4	1	0	1	1	1	6	1	4	0	1	3	23
Textile	2	2	0	2	0	2	2	2	0	0	0	1	13
Pulp and Paper	0	0	0	0	0	0	0	0	0	0	0	1	1
Chemicals	17	15	0	8	0	1	16	3	11	1	1	2	75
Oil & Coal	0	0	0	0	0	0	0	0	0	0	0	1	1
Products													
Rubber & Leather	4	3	0	1	0	2	3	1	2	0	1	0	17
Glass & Ceramics	11	10	0	1	3	2	5	3	5	0	1	2	43
Iron and Steel	1	2	0	0	1	0	1	0	0	0	0	4	9
Non-Ferrous	1	3	0	0	0	1	1	0	0	0	0	1	7
Metal													
Metal Products	9	5	0	0	0	0	3	0	1	0	0	8	26
Machinery	24	17	0	7	3	5	17	4	16	0	3	9	105
Electric &	20	18	1	12	5	2	15	3	14	1	2	4	97
Electronic													
Transport	14	12	0	5	6	3	15	5	7	2	3	6	78
Equipment													
Precision	10	3	0	4	0	1	4	1	3	1	0	3	30
Machinery													
Others	18	16	4	12	7	12	12	11	9	4	2	4	111
Total	135	107	5	53	26	32	100	34	72	9	14	49	636

Legend: Letters represent the following companies.

- A: NIEs in Asia (Korea, Hong Kong, Taiwan and Singapore)
- B: ASEAN countries (Thailand, Malaysia, Indonesia and the Philippines)
- C: South West Asia (India, Sri Lanka, Pakistan and Others)
- D: Other Asian countries
- E: China
- F: Australia and New Zealand
- G: North America (Canada and the U.S.A.)
- H: South and Central America
- I: Europe (excludes former eastern Europe)
- J: Former eastern Europe and CIS
- K: Middle East and Africa
- L: Other

ii) Foreign Investment Classifications

The survey results indicate that joint ventures represented the modal group for foreign investment activities, followed by technology transfer and commissioned production activities. However, for South West Asia, foreign investment activity was equally distributed for the region. Large scale companies reported a preference for joint venture investments, or investments with 100 per cent equity in the company. The smaller scale companies

reported a preference for technology collaborations or commissioned based production.

Table 7-12 lists the questionnaire results for classifications of foreign investment.

Table 7-12 Type of Foreign Investment

(Unit: Number)						
	Group or J/V	Commission Basis	Tech. Tie-up	Others	N.A.	Total
Food Processing	7	3	4	0	3	17
Textile	5	1	4	0	1	11
Pulp and Paper	0	0	0	0	1	1
Chemicals	23	8	19	1	3	54
Oil & Coal Products	0	0	0	0	1	1
Rubber & Leather	3	3	2	0	0	8
Glass & Ceramics	9	1	12	0	2	24
Iron and Steel	2	0	1	0	4	7
Non-Ferrous Metal	3	1	1	1	1	7
Metal Products	8	1	4	0	9	22
Machinery	28	4	19	2	11	64
Electric & Electronic	28	5	15	1	5	54
Transport Equipment	18	2	19	1	6	46
Precision Machinery	10	5	6	1	3	25
Others	20	9	12	1	3	45
Total	164	43	118	8	53	386

iii) Other Purposes for Foreign Investment

Many companies planning to invest abroad stated that investment purposes were to develop local markets and to utilise inexpensive labor available in foreign countries. Following that, product exports to Japan or other countries are another reason for investing in foreign countries. Table 7-13 lists foreign investment purposes by companies with foreign investment.

Table 7-13 Purpose of Foreign Investment

(Unit: Number)

	A	B	C	D	E	F	G	H	I	J	K	L	Total
Food Processing	7	13	7	1	1	9	12	2	4	0	1	3	60
Textile	6	8	2	2	1	6	6	6	0	0	2	1	40
Pulp and Paper	0	0	0	0	0	0	0	0	0	0	0	1	1
Chemicals	29	68	12	13	15	20	24	12	29	9	5	2	238
Oil & Coal	0	0	0	0	0	0	0	0	0	0	0	1	1
Products													
Rubber & Leather	10	17	2	2	3	3	5	2	7	4	3	0	58
Glass & Ceramics	26	34	5	3	5	7	5	8	6	7	18	2	126
Iron and Steel	3	6	0	0	2	0	1	1	0	0	0	4	17
Non-Ferrous	5	4	2	0	3	2	3	2	0	0	1	1	23
Metal													
Metal Products	17	12	1	1	8	3	10	4	1	0	1	8	66
Machinery	49	94	8	10	12	43	26	20	27	17	11	9	326
Electric &	58	82	11	35	27	27	33	21	27	16	15	4	356
Electronic													
Transport	35	72	3	11	30	12	22	14	12	10	7	6	234
Equipment													
Precision	24	21	5	8	1	12	12	8	7	4	2	3	107
Machinery													
Others	80	103	55	47	43	63	61	59	19	24	4	4	562
Total	349	534	113	133	151	207	220	159	139	91	70	49	2,215

Legend: Letters represent the following categories

- A: Inexpensive labor cost
- B: Development of Domestic Market
- C: Inexpensive Procurement of Raw Materials
- D: Incentives for foreign investors
- E: Supply of products to the group companies
- F: Establishment of information center
- G: Export of the products to Japan
- H: Export of products to other countries
- I: Avoidance of risks from the foreign exchange rate
- J: Avoidance of risks from international trade friction
- K: Others

(c) Future Foreign Activities

i) Time Schedule of Foreign Investment

Of the total companies responding (n = 250), 200 have plans to invest in foreign markets regardless of past investment experiences abroad. Among the 200 companies, 33 (16.5 per cent) had plans to invest abroad within one year; 46 (23.0 per cent) within one to two years; 35 (17.5 per cent) within 3 to 5 years; and 4 (2 per cent) some time after 5 years. However, 78 companies (39.0 per cent) reported the company was not in a position to disclose the timing of commercial investments abroad.

ii) Expected Countries for Investment

China is the most popular country for future foreign investment based on the responses obtained. Of the respondents, 32.5 per cent stated some plans for investment in China. The ASEAN, NIEs and European countries were also favorably considered for investment, more so than in the United States.

The chemicals, iron and steel, glass and ceramics, and electric and electronics manufacturing firms responded that these companies have investment plans to South West Asia.

iii) Foreign Investment Types

Primary foreign investment is observed to be joint ventures (accounting for 45 per cent of responses), and technological collaborations (18 per cent).

iv) Foreign Investment Purposes

The primary rationale for foreign investment was to develop or gain access to local markets. Inexpensive labour costs and product exports to Japan or other countries were also cited as important reasons for foreign investments. It is interesting to note that development of local markets is less considered for future investments than in the case of companies that have already invested abroad despite the similar trend. By industry, investment purposes are:

inexpensive labour costs: rubber and leather, and glass and ceramics;
development of local markets: chemicals, rubber and leather, machinery, electric and electronics, and precision machinery;
export of products to Japan or other countries: food processing, textile, non-ferrous metal, and metals;
procurement of Raw Materials: food processing and iron and steel.

Table 7-14 gives the purpose of foreign investment.

Table 7-14 Purpose of Foreign Investment

(Unit: Number)

	A	B	C	D	E	F	G	H	I	J	K	Total
NIEs	7	20	6	2	2	4	5	6	2	0	2	56
ASEAN	18	22	8	6	5	6	12	10	2	2	3	94
Vietnam	2	3	1	0	1	1	0	0	0	0	0	8
China	41	51	14	7	8	8	19	18	4	0	4	174
S. W. Asia	2	4	1	0	0	0	2	1	0	0	1	11
Australia	0	0	0	0	0	0	1	0	0	0	0	1
N. America	2	5	0	0	1	1	2	1	1	4	1	18
S. America	2	2	0	1	2	0	0	1	0	1	0	9
Europe	2	16	2	1	4	8	0	3	3	5	2	46
E. Europe & CIS	0	0	0	0	0	1	0	0	0	0	0	1
M. East	0	0	0	0	0	0	0	0	0	0	0	0
Others	1	0	0	0	0	0	1	0	0	0	0	2
Total	77	123	32	17	23	29	42	40	12	12	13	420

Legend: Letters represent the following categories

- A: Inexpensive labour costs
- B: Development of Local Markets
- C: Procurement of raw materials
- D: Incentives for foreign investors
- E: Supply of products to the group companies
- F: Establishment of information center
- G: Export of the products to Japan
- H: Export of products to other countries
- I: Avoidance of risks from the foreign exchange rate
- J: Avoidance of risks from international trade friction
- K: Others

(d) Introduction of the New Economic Policy

Of the 200 enterprises that responded positively to investment interests in the Indian market, 32 (16.0 per cent) reported awareness of the Indian government's industrial policies, and of the new economic policies that have taken place since 1991. About 86 (43.0 per cent) had some knowledge, and 77 (35.8 per cent) reported not having knowledge of the new economic policy, excluding the remaining 5 that did not respond. This indicates that Japanese companies were short of collecting information about the Indian market as well as that advertising campaigns designed to promote better understanding of India are not adequate.

(e) Investment in India

Among the 200 companies responding with foreign investment plans, 22 (11.0 percent) of the companies plan to invest in India, 61 (30.5 percent) are interested in investment in India, and 111 (55.5 percent) indicated no interest; six companies did not respond.

The responses indicate that political and social circumstances are the most important factors among the six categories, and that the geographical location is less important to the Japanese investor.

The survey questionnaire also asked companies to evaluate the six factors in relation to India. The size of the Indian market was highly evaluated by Japanese manufacturing firms; judging from the results, it would appear that the size of the Indian domestic market should be advertised to further promote Japanese investment to India. However, India's infrastructure has a poor reputation with many Japanese manufacturing firms as shown in Figure 7-2.

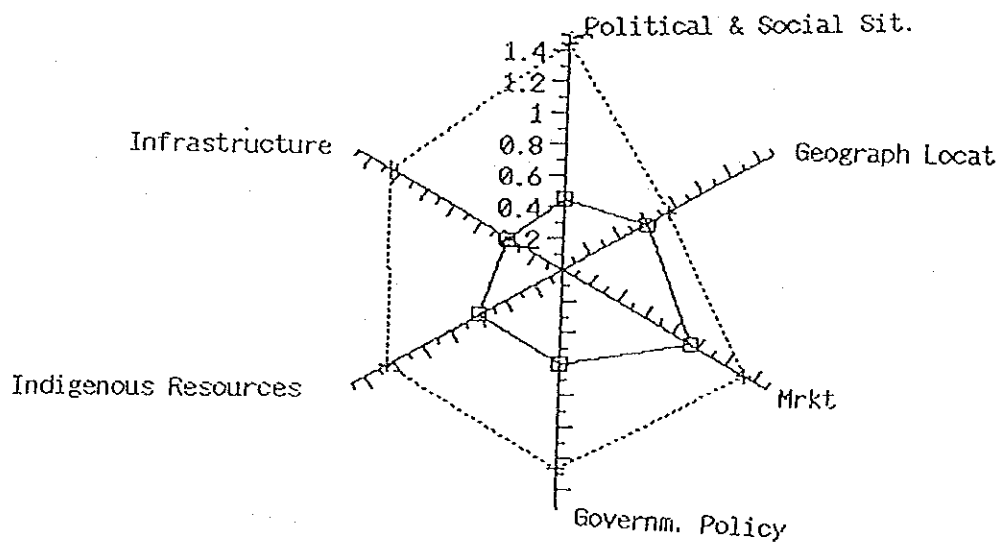
The survey questions classified foreign investment into six categories:

- i) Political and social circumstances
 - Political stability
 - Public order and safety
 - Industrial relations
 - Economic situation
- ii) Geographic location
 - Climatic condition
 - Distance from Japan
 - Distance to export market
- iii) Local market
 - Size of local market
- iv) Government policy
 - Consistency in policy making
 - Administrative procedure
 - Tax incentive scheme for foreign investors
 - Other incentives for foreign investors
- v) Indigenous resources
 - Allied industries
 - Raw materials
 - Middle management staff by local personnel

- Labour costs
- Labor quality
- Business information

vi) Infrastructure information

- Electric power
- Water resources, including influent and effluent
- Telecommunication
- Air port/Ocean port
- Road
- Railway



+ : General Importance □ : Evaluation on India

Figure 7-2 Factors for Foreign Investment

Note: Scoring System is as follows:

General Importance	Evaluation of India
2 : Very important	2 : Very good
1 : Fairly important	1 : Fairly good
0 : Not important	0 : Bad

Of the 83 companies that demonstrated an interest in the IMT in India conception or plan, 60 companies perceived India as a domestic product oriented market.

(f) Collaborations with Indian Enterprises

As for collaborative undertakings with Indian enterprises, 38 companies replied positively to arrangements to form joint ventures or technological collaborations. Three companies reported probable joint venture activity. The interview survey results indicated that most companies were positive regarding further study related to collaboration with Indian enterprises but would consider to do so only when approached by the India's side. Only few responded they would take initiatives by themselves. The companies planning to invest in India are:

- Companies that are requested to invest in India by their parent company.
- Companies trying to manufacture those products in India which are currently exported to India.
- Companies that have established investments in other countries in the Southeast Asia and are looking for other investment options.

Aggressive foreign investors reported that an excellent and capable business partner was a key factor to determine whether to invest in an foreign market. Many of the Japanese companies attached significant importance to locating a reliable partner, especially in the small-scale sector companies that mostly lack the capability on collecting the necessary information. Only 21 companies reported that holding a controlling share of the company's equity stock is necessary, and many stated that the size of a company is not as important as the reliability of the partners.

(g) Interest in an IMT project

Of those surveyed, 32 companies replied that the project was interesting. By industry, about three or more companies that are in the production of chemicals, machinery, electric and electronics, and transportation equipment demonstrated an interest in the IMT project. Table 7-15 gives the results of the survey regarding interest in the IMT by industry group. It should be noted that the Japanese companies stated that responses regarding investment interests in the IMT project were kept at levels of interests at best, as the project is in the early exploratory stages and would

require 4 or 5 years to complete as well as factors i.e., land cost, etc. are yet to be finalized. The companies stated that further examination hence would be necessary.

Specifically, a modest number of companies reported (during interviews) a willingness to participate in the project albeit, the companies were investigating other investment options as well.

Table 7-15 Interest in an IMT Project: Survey Results

(Unit: Number)

	Interested	Not Interested	Total
Food Processing	1	1	2
Textile	0	2	2
Pulp and Paper	0	0	0
Chemicals	3	7	10
Oil & Coal Products	0	0	0
Rubber & Leather	1	1	2
Glass & Ceramics	3	6	9
Iron and Steel	0	1	1
Non-Ferrous Metal	1	0	1
Metal Products	0	1	1
Machinery	5	11	16
Electric & Electronic	6	7	13
Transport Equipment	3	3	6
Precision Machinery	0	2	2
Others	9	5	14
Total	32	47	79

As for the location of the IMT project, six companies indicated a preference for the Delhi region (Noida or Gurgaon), which has urban advantages (various merits for business activities due to proximity to the capital, availability of air transport), and 10 companies selected the Bangalore (Bidadi or Sathnur) area. However, it was observed that many companies were not able to respond to this questionnaire because they did not know about the candidate sites.

(h) Conditions Sought by Enterprises

- i) Among the factors taken (socio-political circumstances, geographical conditions, market(s), government policies, human resources and materials required for local production, infrastructure, profitability of the project, etc.), into consideration by Japanese firms contemplating foreign investments (especially to India), many of the respondents attached importance to infrastructure conditions,

especially the supplies of power and water and the reinforcement of transportation/communication systems. Thus, it would appear that an IMT project should give priority to the establishment of and improvements in infrastructure. Moreover, with respect to the socio-political circumstances, many of the companies reported concerns about India's political stability, conditions of public order and security, and the status of India's economy. Concerning the preconditions of local production, many reported doubts about the availability of subcontractors.

- ii) During interviews, many companies were unaware of the Indian government's recent economic policy changes. Another opinion expressed was that as foreign investment objectives are concerned with earning adequate profits corresponding to levels of investment, India's tax system, investment-related concessions, and other privileges to attract foreign capital should be more generous than those of other Asian countries which have actively introduced measures to attract foreign capital.
- iii) To improve these issues, it is necessary to develop public relations/advertising campaigns designed to promote better understanding of India, innovative business policies not found in other countries that will attract investors, further development of industrial estates in India, and more active, profit-motivated initiatives that can induce foreign investors to bring capital to India. During interviews with selected companies, significant anxiety was expressed about infrastructure conditions, suggesting a general dissatisfaction with current conditions. The further development of infrastructure could prove a key IMT project incentive to investors.
- iv) Manufacturers often cite the following as problems associated with foreign investments: "immaturity of related industries including parts suppliers"; "increased wages, difficulty to secure a work force and labour management"; and "insufficient information regarding local market conditions, commercial practices and legal requirements".

The medium to small-scale manufacturers reported "shortages of qualified personnel available for foreign dispatch" as a primary problem.

- v) In the case of India, a majority of companies perceived as a low priority area for foreign investment and expressed concerns about problems associated with identifying local partners and the immature industrial quality control methods utilised by enterprises. In addition, other frequent reports included "difficulty in labor management" and "insufficient information on the local market, commercial practices and legal systems".

A manufacturer's customers (such as trading houses) are a key source of information regarding the investment environment before an investor attempts to enter a foreign market, followed by "the local partner".

- vi) There were not any clear distinctions among industrial sectors except for the machine-related industries such as the machine/transportation equipment sector, where high concerns on quality of parts suppliers were observed.

7.4 The United States

7.4.1 Framework

The investment demand survey conducted in the United States consisted of a questionnaire and an interview survey. The surveys were conducted by an Indian-American consulting firm under the direction of the Study Team.

(1) Questionnaire Survey

(a) Companies Surveyed

For the survey, a sample size of 2,001 manufacturing companies were selected from the following sources:

- Standard & Poor's Register
- The FORTUNE - Largest U.S. Industrial Corporations

- Nikkei Sekai Kigyo Directory - U.S.A.

(b) Survey Methodology

Mailed questionnaires with return postage.

Questionnaires were mailed to a total of 2,001 selected companies. During the first stage, 1,001 companies were sampled. An additional 1,000 companies were selected to bolster the low response rate of the first sample.

(c) Survey Period

February 1993 to May 1993

(d) Questions

Questions were derived from the following topics:

- Foreign direct investment.
- Perceptions of India.
- Interest in the IMT project.

(e) Responses

A total of 97 companies (4.8 per cent) responded to the questionnaires (includes telephone or facsimile communications).

(2) Interview Survey

(a) Companies Interviewed

Companies demonstrating favorable interest in the IMT project as well as those that failed to respond to the first mailing, totaling 30.

(b) Survey Method

Telephone interviews

(c) Survey Period

April to June 1993

(d) Questions

Details of the mailed questionnaire; as well as problems and issues regarding investment in India were discussed.

7.4.2 Survey Results

The questionnaire and interview survey results are presented below.

(1) Company profiles of the survey samples are as follows.

Table 7-16 Questionnaire Responses
(Unit: Number)

	Mailed	Replied	Rate of Reply (%)
Food Processing	209	4	1.9
Textile	98	9	9.2
Pulp & Paper	110	7	6.4
Chemicals	207	14	6.8
Oil & Coal Products	60	5	8.3
Rubber & Leather	58	1	1.7
Glass & Ceramics	58	1	1.7
Iron & Steel	160	4	2.5
Non-ferrous Metal	70	4	5.7
Metal Products	110	4	3.6
Machinery	267	8	3.0
Electric & Electronic	181	14	7.7
Transport Equipment	71	3	4.2
Precision Machinery	103	4	3.9
Others	239	15	6.3
Total	2,001	97	4.8

(2) Foreign Investment

Of the companies responding (n = 97), 63.9 per cent reported having experience in foreign direct investment. Classified by type of industry, the oil, machinery and glass industries were identified as the industries with currently developed foreign business activities. But, the pulp, non-ferrous metals and metal industries were less active in foreign business activities. U.S. investors demonstrated significant business activities (62.4 per cent) in North, Central and South America, Western Europe and Asia, particularly the Far East as summarized in Table 7-17.

Table 7-17 Foreign Investment by Region

North America	18.3
Central & South America	20.9
Oceania	3.1
former Soviet Republics	1.7
Western Europe	14.0
Eastern Europe	2.2
Africa	1.3
Middle East	1.7
Asia	23.7
Not Available	13.1

It should be noted that the interview survey results indicated substantial foreign investor interest in Mexico, Central and South America, and Asia.

(3) Investment in India

About 35.1 per cent (34 companies) of the total 97 respondents has stated plans for investment to India are likely to occur. Among those respondents, 14.7 per cent or 5 companies have plans to do so within the next 12 month period, 26.5 per cent or 9 companies within a two year period, and 8.8 per cent or 8 companies some time after two years. The remaining respondents (47.1 per cent) have no firm plans in the foreseeable future (one company did not report a schedule for future investment).

The results of the U.S. survey indicated:

- companies without investment experience in India were not interested in pursuing investments there and reported less understanding of the country's investment environment.
- large scale enterprises with an investment history in India were considering the country's large domestic market.
- medium and small scale enterprises were reluctant to consider investments to India due to a lack of financial resources and manpower.

The respondent were asked to evaluate India based on the below 6 categories in terms of foreign investment factors.

- political and social conditions
- geographic location
- local market size

- iv) government policies
- v) indigenous resources
- vi) infrastructure.

The respondents indicated that political and social conditions are significant factors for U.S. foreign investors, and that geographic locations are less important.

The market size and indigenous resources are highly rated among the U.S. companies, similar to those of Japan. Hence the large local market could further promote U.S. investment to India. However, as shown in Figure 7-3, the U.S. business community perceived political, social conditions, geographic location, government policy, and infrastructure as below acceptable levels.

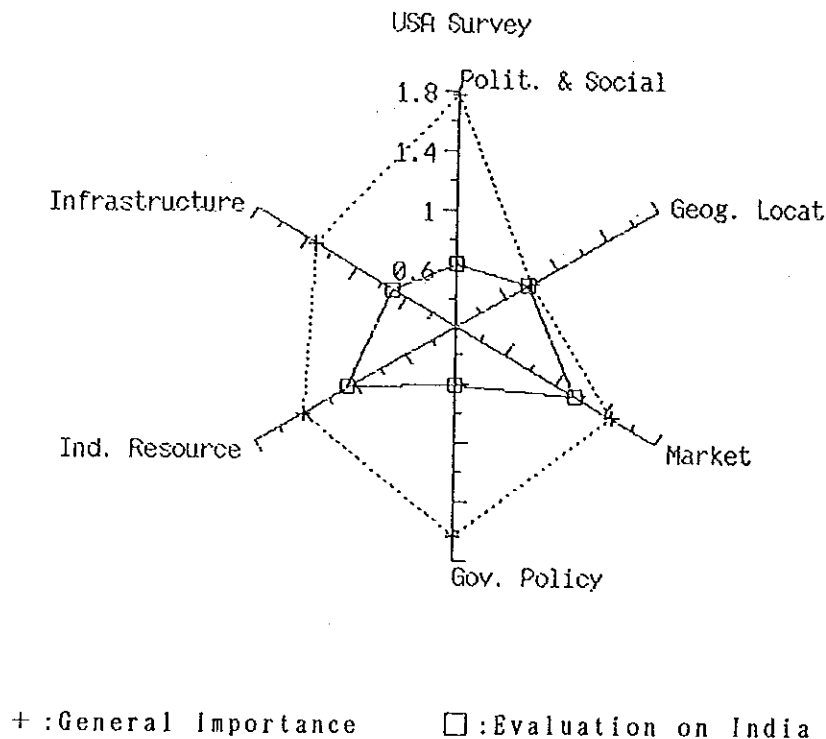


Figure 7-3 Factors of Foreign Investment General Importance and Perceptions of India

Note: Scoring System is as follows:

General Importance	Evaluation of India
2 : Very important	2 : Very good
1 : Fairly important	1 : Fairly good
0 : Not important	0 : Bad

Details of the evaluation by U.S. companies on investment to India are listed in Table 7-18. U.S. companies have highly rated the market size and inexpensive and high quality of labour. However, infrastructure conditions (especially power generation and supplies), public order and security, and consistent government policies have been rated poor.

Table 7-18 Evaluation of India for Investment
(Unit: %)

Variables	Very Important	Important	Not Important	Score (0-2)*
POLITICAL & SOCIAL SITUATION				
Political Stability (n=80)	2.5	63.8	33.7	0.7
Public Order & Safety (n=80)	2.5	47.5	50.0	0.5
Industrial Relation (n=80)	1.3	69.2	17.8	0.7
Economic Situation	2.5	55.7	41.8	0.6
GEOGRAPHIC LOCATION				
Climatic Condition (n=79)	3.8	81.0	15.2	0.9
Distance from Country (n=78)	0.0	52.6	47.4	0.5
Distance to Export Mkt (n=76)	0.0	90.8	9.2	0.9
MARKET				
Size of Local Market (n=80)	30.0	55.0	15.0	1.2
GOVERNMENT POLICY				
Consistency in Policy (n=78)	1.3	48.7	50.0	0.5
Administrative Procedure (n=78)	0.0	29.5	70.5	0.3
Taxation System (n=72)	0.0	76.4	23.6	0.8
Tax Incentive Scheme (n=70)	0.0	84.3	15.7	0.8
INDIGENOUS RESOURCES				
Allied Industries (n=73)	5.5	69.9	24.6	0.8
Raw Materials (n=73)	12.3	72.6	15.1	1.0
Sub-components & Parts (n=73)	4.1	50.7	45.2	0.6
Middle Management Staff (n=74)	21.6	70.3	8.1	1.1
Labor Cost (n=74)	81.1	17.6	1.3	1.8
Labor Quality (n=74)	37.8	50.0	12.2	1.3
Business Information (n=74)	4.1	73.0	22.9	0.8
INFRASTRUCTURE				
Electric Power (n=73)	2.7	26.0	71.3	0.3
Water (n=73)	4.1	64.4	35.6	0.7
Telecommunication (n=74)	1.4	54.1	44.5	0.6
Air/Sea Port (n=73)	2.7	86.3	11.0	0.9
Road (n=73)	1.4	74.0	24.6	0.8
Rail way (n=74)	8.1	85.1	6.8	1.0
Satellite Link (n=71)	0.0	71.8	28.2	0.7

Note 1: Average point calculated as TWO points for "very Important",

One for "Important", and NIL for "Not Important"

2: No Answers excluded

(4) Degrees of Interest in an IMT Project

Of the respondents surveyed, 22.7 per cent indicated interest in the IMT project; 62.9 per cent responded negatively to the IMT project. (14.4 per cent did not respond.)

Industry sectors with five or more companies indicating interest in the IMT are as follows: Chemical (pharmaceutical, plastics, and chemical producers); electric and electrical (electronics and environmental electronic instrument producers); and others (computer software, furniture manufacturers, etc.).

As for the location of an IMT, 50 per cent on 11 companies indicated a preference for the Delhi area sites compared to only 36.3 per cent (18 companies) that responded in favor of Bangalore area sites. (13.7 per cent or 3 companies did not respond) Table 7-19 reveals interest in the IMT project by U.S. industry and the preferred location of establishing an IMT for those companies demonstrating an interest in the IMT.

Table 7-19 Interest in IMT by Industries
(Unit: Number)

Interest No Interest no Answer	(n=97) 22.7% 62.9% 14.5%	Preferable Location			Positive Answer Total
		Delhi Area	Bangalore Area	NA.	
Food Processing		0	0	0	0
Textile		0	0	0	0
Pulp & Paper		0	0	0	0
Chemicals		3	1	1	5
Oil & Coal Products		0	0	0	0
Rubber & Leather		0	0	0	0
Glass & Ceramics		0	0	1	1
Iron & Steel		1	0	0	1
Non-ferrous Metal		0	0	0	0
Metal Products		0	0	0	0
Machinery		1	1	0	2
Electric & Electronic		3	3	0	6
Transport Equipment		2	0	0	2
Precision Machinery		0	0	0	0
Others		1	3	1	5
Total		11	8	3	22

With regard to questions of target markets for goods produced in the IMT, about 70 per cent of the respondents (n = 33) stated that participation in the IMT would be dependent on access to local and foreign markets. Only 18.2 per cent replied that local market access was of primary concern; 12.1 per cent stated exports were a primary concern.

The findings suggest that U.S. companies perceive an IMT in India as domestic-oriented production base with exports to some extent.

About 48.1 per cent of the sample respondents (n = 27) indicated that medium and small scale companies, over those of larger scale (14.8 per cent), are preferred for local joint venture partners in an IMT project in India.

(5) Collaboration with Indian Companies

Of the 38 companies responding, 65.8 per cent responded favorably to forming joint ventures. Table 7-20 provides summary details.

Table 7-20 Types of Collaborations with Indian Companies

Categories	Unit in per cent (n = 38)
Wholly owned Subsidiary	18.4
Joint Venture with Local Partner	65.8
Licensing Agreement	15.8

note: respondents failing to answer were excluded from calculations.

The relationship of equity shares and control of joint ventures with Indian companies were evaluated. Table 7-21 reveals that 24 respondents, 75 per cent of the U.S. companies were interested in owning 50 per cent or more of the equity shares in a joint venture.

Table 7-21 Equity Relationships for Collaborations with Indian Companies

Partner's Equity Share	Unit in per cent (n = 24)
Major (more than 50 per cent)	37.5
Equal Share holding	37.5
Minor (less than 50 per cent)	24.0

note: respondents failing to answer were excluded from calculations.

As Table 7-22 indicates, more companies prefer to lease facilities and properties than purchase land holdings and buildings in the IMT.

Table 7-22 Building and Land Acquisition
Unit in per cent (n = 97)

	Purchase/Construction	Lease	No Answer
Land	10.3	14.4	75.3
Building	8.2	14.4	77.3

note: respondents failing to answer were excluded from calculations.

(6) Request for Living Accommodations and Facilities

International standardized housing facilities and international standardized medical facilities are of significant importance for the survey respondents, with more than half stating that such facilities would be necessary within the IMT, as well as shopping complexes and business service facilities.

7.5 Germany

7.5.1 Framework

The investment demand survey in Germany consists of a questionnaire and an interview survey. As before with those of the U.S., the surveys were conducted by the same Indian-American consulting firm located in Europe under the direction of the Study Team.

(1) Questionnaire Survey

(a) Companies Surveyed

A sample size of 1,001 manufacturing companies were selected from the following sources:

- Hoppenstedt Wirtschaftsdatenbank - Deutscher Branchencode
- The FORTUNE - The Largest Industrial Corporations in the World
- Nikkei Sekai Kigyo Directory - Europe

(b) Survey Methodology

The questionnaires have been mailed with return postage. In addition telephone surveys were conducted to cover the low response rate (n=5) by mail..

(c) Survey Period

February to May, 1993

(d) Questions

Questions were derived from the following topics:

- Foreign direct investment
- Perceptions of India
- Interests in the IMT project

(e) Responses

Of the total sample size ($n = 1,001$), 72 companies responded (67 via telephone).

(2) Interview Survey

(a) Companies Interviewed

Companies demonstrating a favorable interest in the IMT project during the questionnaire survey were interviewed.

(b) Survey Method

Telephone Interviews

(c) Survey Period:

April to May, 1993

(d) Questions

Details of the topics described in the mailed questionnaire, especially concerns and issues related to investment in India were discussed.

7.5.2 Survey Results

The results of the questionnaire and interview survey are as follows:

(1) Company Profiles

Company profiles of respondents are described below. The chemical industry indicated the highest response rate among the manufacturing industries as summarized in Table 7-23.

Table 7-23 Summary of Questionnaire Responses

Industry Category	Mailed	Replied	(Unit: Number)
			Rate of Reply %
Food Processing	51	04	7.8
Textile	50	03	6.0
Pulp and Paper	50	01	2.0
Chemicals	55	15	27.3
Oil & Coal Products	40	01	2.5
Rubber & Leather	50	01	2.0
Glass & Ceramics	51	05	10.0
Iron & Steel	100	03	3.0
Non-ferrous Metal	51	00	0.0
Metal Products	50	04	8.0
Machinery	253	13	5.1
Electric & Electronic	49	05	10.2
Transport Equipment	50	02	4.0
Precision Machinery	51	02	3.9
Others	50	13	26.0
Total	1,001	72	7.2

Number of Employees for Companies Responding

Size of Work Force	No. Companies Responding	Percent Distribution
less than 300	00	0.0
301 to 1,000	05	6.9
1,001 or more	65	90.3
no answer	02	2.8
Total	72	100

(2) Foreign Investment

Of the 72 respondents, 75 per cent (n = 54) have had foreign investment activities. As shown in Table 7-24, the major investment regions by German companies are Western Europe, North and South America, and Asia. Interviews indicated that similar cultural backgrounds, lower labor costs, higher levels of technology, and abundant skilled labor are also attracting German investors to Eastern European countries.

Table 7-24 Foreign Investment (N=204)

World Regions	Respondents (Percent Distribution)
North America	23.0
Central and South America	11.8
Oceania	4.4
Former Soviet Republics	0.1
Western Europe	26.5
Eastern Europe	2.5
Africa	5.4
Middle East	2.9
Asia	15.7
no response	6.8

(3) Investment in India

Of the 72 companies surveyed, 31.9 per cent (n = 23) have plans to invest in India. Among the total, 1.4 per cent have plans to invest within two years, and 27.8 per cent declined to comment due to company policies. The remaining 51 companies did not respond to the questionnaire.

Factors that determine foreign investment in India were analyzed. As before questions were sub-classified into six categories:

- i) political and social conditions
- ii) geographic location
- iii) local market size
- iv) government policies
- v) indigenous resources
- vi) infrastructure

The respondents indicated that political and social conditions, and local market size are more important to German investors than geographic location. The

respondents were asked to evaluate India based on the above factors. The results demonstrated that market size and indigenous resources were highly rated (similar to the U.S. survey). However, political and social conditions, geographic location, government policy, and infrastructure conditions in India were perceived as below acceptable levels. Figure 7-4 illustrates the factor findings.

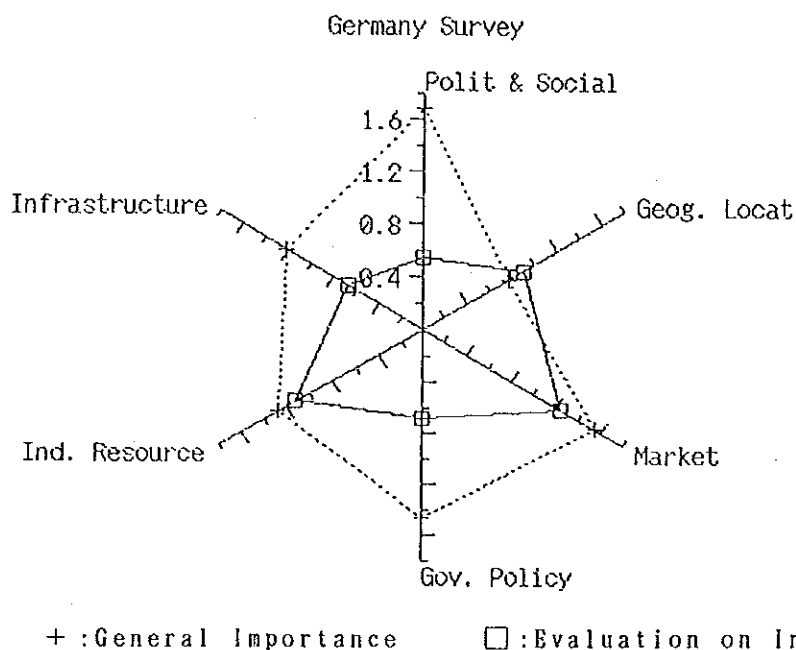


Figure 7-4 Factors of Foreign Investment General Importance and Perceptions of India

Note: Scoring system is as follows.

General Importance	Evaluation of India
2: Very Important	2: Very good
1: Fairly Important	1: Fairly good
0: Not Important	0: Bad

The evaluation of India as an investment destination by German companies is listed in Table 7-25.

Table 7-25 Evaluation of India for Investment

(Unit: %)

	Very Important	Important	Not Important	Score (0-2)*
POLITICAL & SOCIAL SITUATION				
Political Stability (n=61)	0.0	44.3	55.7	0.4
Public Order & Safety (n=61)	1.6	40.9	57.5	0.4
Industrial Relation (n=61)	0.0	80.3	19.7	0.8
Economic Situation (n=61)	0.0	50.8	49.2	0.5
GEOGRAPHIC LOCATION				
Climatic Condition (n=61)	0.0	90.2	9.8	0.9
Distance from Country (n=60)	0.0	85.0	15.0	0.9
Distance to Export Mkt (n=59)	0.0	94.9	5.1	0.9
MARKET				
Size of Local Market (n=60)	26.7	70.7	3.3	1.2
GOVERNMENT POLICY				
Consistency in Policy (n=60)	0.0	68.3	31.7	0.7
Administrative Procedure (n=60)	0.0	30.0	70.0	0.3
Taxation System (n=60)	0.0	86.7	13.3	0.9
Tax Incentive Scheme (n=60)	0.0	90.0	10.0	0.9
INDIGENOUS RESOURCE				
Allied Industries (n=59)	0.0	88.1	11.9	0.9
Raw Materials (n=58)	3.4	96.6	0.2	1.0
Sub-components & Parts (n=56)	0.0	73.2	26.8	0.7
Middle Management Staff (n=60)	21.7	75.0	3.3	1.2
Labor Cost (n=60)	91.7	8.3	0.0	1.9
Labor Quality (n=60)	43.3	50.0	6.7	1.4
Business Information (n=60)	3.3	63.3	33.4	0.7
INFRASTRUCTURE				
Electric Power (n=61)	0.0	6.6	93.4	0.1
Water (n=61)	1.6	54.1	44.3	0.6
Telecommunication (n=61)	0.0	42.6	57.4	0.4
Air/Sea Port (n=61)	0.0	91.8	8.2	0.9
Road (n=61)	0.0	88.5	11.5	0.9
Rail way (n=61)	8.2	86.9	4.9	1.0
Satellite Link (n=61)	1.6	77.0	21.4	0.8

Note 1: Average point calculated as two points for "very important", one for "important", and NIL for "not important"

2: No Answer excluded

(4) Interest in an IMT Project

Among the 72 companies responding, 15.3 per cent or 11 companies demonstrated interest in the IMT project, compared to 59.7 per cent that responded negatively. The remaining 25.0 per cent gave no answer. Of the 11 companies indicating an interest in the IMT project, 45.5 per cent preferred the Delhi area as a location for establishing the IMT project, compared to 27.3 per cent that indicated a preference for the Bangalore area (refer to Table 7-26).

About two-thirds (71.4 per cent) of the respondents indicated that production facilities in the IMT would be for the local and export markets. 28.6 per cent replied production would be exclusively for the local market and none solely for exports. It appears that German companies interested in an investment to the IMT would be more likely to invest in India as a production base for local markets.

Respondents indicated a preference for large scale or independent blue chip companies rather than medium and small scale companies when considering joint venture partners.

International level housing and medical facilities were most desired by German companies, with more than 50 per cent of the respondents indicating such facilities are essential for the IMT site.

Table 7-26 Interest in IMT by Industries

(Unit: Number)

Interest (n=72) 15.3% No Interest 59.7% no Answer 25.0%	Preferable Location			Positive Answer Total
	Delhi Area	Bangalore Area	NA.	
Food Processing	0	0	0	0
Textile	0	0	0	0
Pulp & Paper	0	0	0	0
Chemicals	1	1	0	2
Oil & Coal Products	0	0	0	0
Rubber & Leather	0	0	0	0
Glass & Ceramics	0	0	0	0
Iron & Steel	0	0	0	0
Non-ferrous Metal	0	0	0	0
Metal Products	1	0	2	3
Machinery	1	0	0	1
Electric & Electronic	0	1	0	1
Transport Equipment	1	0	0	1
Precision Machinery	0	0	1	1
Others	1	0	1	2
Total	5	3	3	11

7.6 Summary of Investment Demand

The investment demand survey was designed to analyze the domestic and foreign investment trends in India, identify potential industries for the IMT project as well as to clarify the conditions sought by investors. The levels of interest demonstrated by potential investors in India, the U.S., Germany, and Japan, are summarized below. These, however, are yet to be finalized at this stage as the project requires several yards to complete, and factors important to them (location, land prices, available facilities etc.) are still unknown. Overall, relatively few showed interests in investing in the IMT during interviews.

7.6.1 India

(1) Interests in an IMT

Many Indian companies demonstrated interests in an IMT project aimed to promote foreign investment and technology transfers to local industries. Although the companies surveyed are mostly large scale and have experiences with foreign collaborations, Indian companies appear to be willing to collaborate with foreign firms, especially Japanese companies. It is likely that foreign investors will not have difficulty in finding a local partner. Of the companies surveyed indicating some kind of interest in the IMT (80 per cent of total), the manufacturers of chemicals, steel, non-ferrous metals, and transport equipment have shown the most interest.

As a number of Indian companies are willing to participate in foreign collaborations, foreign investors will play a major role in forming the investment demand of the IMT.

The results obtained from Indian companies regarding interests in the IMT and location are summarized below.

Interest in the IMT		(N=72)
Very Interested	n=17	23.6%
Deserves Scrutiny	n=39	54.2%
Beyond Consideration	n=12	16.6%
No Specific Answer	n=4	5.6%

Desirable Location for the IMT

(unit: %)

Present Location	Delhi Area	Bangalore Area	Others*	No Answer
North (n=27)	70.4	11.1	3.7	14.8
East (n=17)	17.6	5.9	35.3	41.2
South (n=38)	0.0	36.8	26.3	36.8
West (n=32)	3.1	43.8	21.9	28.1
Total (n=114)	21.1	28.1	21.1	29.8

Note: "Others" refers to location of existing factories.

(2) Desired Features of the IMT

An adequate industrial infrastructure appears to be the most desirable characteristic for the IMT facilities along with services, including incentives. Among infrastructure requirements, stable electric power supplies are the most critical based on the reports of Indian companies. It is important, however, that infrastructure should meet international standards, not local standards, in order to attract foreign companies.

Although Indian investors want the IMT to be located near existing plants, many companies reported a willingness to consider a foreign partner's choice. This implies that foreign investors are decisively important in the IMT project.

7.6.2 Japan

(1) Interests in an IMT

(a) The first phase survey results by a simple questionnaire

The first survey questionnaire intended to solicit a large number of company responses, thus optimizing the overall sample population's responses. The result of the first questionnaire indicates that the chemicals, glass, machinery, and electric and electronics industries among the manufacturing sector in Japan appear to have relative investment potential to India; joint ventures and technological

collaborations with Indian companies. In addition, these industries also demonstrate investment potential in the IMT project

(b) Second Phase Survey Results

A sample size of 1,115 companies were mailed a questionnaire. Of that total, 250 companies responded, and 32 indicated interest in the IMT project in the second phase survey. Chemicals (3 companies), glass (5 companies), electric (6 companies) and electronics, and transport equipment (3 companies), responded positively along with 9 from others.

The responses regarding interest in an IMT project and location of the project are summarized below.

Interest in IMT (N=250)			Desirable Location (N=32)	
Interest	n=32	12.7%	Delhi Area	18.7%
No Interest	n=47	18.8%	Bangalore Area	31.3%
No Specific Answer	n=171	64.5%	Others/no specific answer	50.0%

(c) Interest and plans to participate in the IMT Project

With regard to the first and the second phase surveys, the results as summarized were obtained if a company met the following conditions, and thus are likely to participate in the IMT project.

The first phase survey

- Has interest in India's domestic market
- Had a plan for investment in India
- Consider a joint venture/technological collaboration
- Has interest in the IMT Project

The second phase survey

- Currently looking at feasibility of the concrete plan for foreign investment
- Has either a plan to establish a foothold in India or interest, though without any plans

- Likely to establish either a joint venture or a technological collaboration with an Indian company
- Has interest in the IMT Project

The analysis of the questionnaires revealed that the at least one of following manufacturing industries met the prior discussed factors: food processing, chemicals, glass and ceramics, non-ferrous metal, machinery, electric and electronics, and transport equipment. It should be noted that a significant majority of the Japanese companies responding as to investment plans or considerations regarding the IMT were limited at present due to the project's early study stages with many unknown important factors. Hence, not all companies showing interests in the IMT are expected to actually invest in the project.

(2) Comments to the Industrial Model Town

The result of the second phase survey questionnaire and interviews are summarized below.

- (a) Japanese companies that undertake foreign investment reported the following factors for making investment assessments: sociopolitical circumstances; geographical locations; markets; government policies; indigenous resources; infrastructure; and profitability of the project. Among these factors, infrastructure, the supply of power and water, transportation and communications facilities were reported as key elements. A majority of companies consider infrastructure conditions are not satisfactory to meet a company's manufacturing needs. Similar concerns were discussed during interviews, indicating a general dissatisfaction with infrastructure conditions.

Consequently, improved infrastructure could be a key factor that could encourage foreign investment in the Industrial Model Town. The IMT project harbors great expectations not only for improved industrial infrastructure, but also improvement in the country's social infrastructure. In addition, many companies also indicated concern for the socio-economic factors including political stability, public order, and current economic circumstances.

- (b) During interviews, many companies reported no awareness of India's new economic policies in addition to the above stated topics. It appears that efforts are required to promote and extend global investor perceptions about India's new economic policies.
- (c) A majority of companies reported that a prime investment objective would be accessibility and the conditions to India's domestic market, and the earning of adequate and reasonable profits corresponding to the levels of investment. To fulfill those objectives, some companies expressed desires for more generous and competitive taxation and concession measures for investors in relation to existing investor incentives in other Asian countries. It appears then, that it is necessary for the central and state governments to initiate effective policies that can attract foreign investors and compete with other countries for limited capital resources. Also, policies affecting the IMT should provide superior incentives that allow companies to effectively compete against other foreign producers and industrial estates in India.
- (d) The data appear to indicate that manufacturers are concerned with the level of maturity of support services industries, especially parts suppliers. Also, manufacturers are concerned with difficulties in securing an adequate labour force, human resource management, access to relevant and timely information about local market conditions, commercial practices and legal requirements vital to the establishment of operations abroad.

However, small- to medium-scale enterprises are faced with difficulties when the need arises to assign qualified personnel abroad. Another common finding among the majority of companies surveyed was the low profile given to investment to India. Companies reported that internal investment targets exclude India due to difficulties with identifying local partners, inadequate quality control methods and practices, difficulties of obtaining adequate labour force management, and in accessing information about local markets, commercial practices and legal systems.

Client companies (such as trading houses) in business are an important source of investment information for most companies examining the feasibility of entering a foreign market, followed by information gained

by local partners. There were not any clear distinctions observed across industrial sectors except for concerns regarding quality standards and the likelihood a local industry could meet a manufacturer's parts supplies requirements. This was of particular concern to companies represented in the machine/transport equipment industry.

7.6.3 The United States

A sample size of 2,001 companies were mailed a questionnaire. Of that total, 97 companies responded, and 22 indicated interest in the IMT project. The categories of industries with three or more companies demonstrating an interest were the chemical (n=5), electric and electronic (n=6), and the other sector industries (n=3).

The results of the responses are summarized below.

Interest in IMT (N=97)			Desirable Location (N=22)	
Interest	n=22	22.7%	Delhi Area	50.0%
No Interest	n=61	62.8%	Bangalore Area	36.4%
No Specific Answer	n=14	14.5%	Others/no specific answer	13.6%

7.6.4 Germany

Seventy-two companies, including those surveyed by telephone, responded to the questionnaire mailed to a sample of 1,001 companies. Of the 72 respondents, 11 indicated interest in the IMT. The type of industries with two or more companies that demonstrated interest in the IMT were the chemical (n=2), metal working (n=3), and other sector industries (n=2). A summary of the responses are given below.

Interest in IMT (N=72)			Desirable Location (N=11)	
Interest	n=11	15.3%	Delhi Area	45.4%
No Interest	n=43	59.7%	Bangalore Area	27.3%
No Specific Answer	n=18	25.0%	Others/no specific answer	27.3%

German companies' investment priority of India has been on the decline, particularly after German unification. The survey interviews revealed that a majority of German companies shifted investment priority to Eastern European countries due to

convenient location, inexpensive labour, availability of well-qualified engineers, and the size of the domestic market (as well as a similar culture, economy, religion, etc.). However, it also appears to be difficult for many German companies to access current and reliable information on investment development opportunities in India. Although companies interested in the Indian market highly rated the country's market size and relatively competitive wage rates, negative impressions of India's infrastructure, particularly power generation and supply, also affect investors confidence. Under these conditions, it is advisable that proper public relation campaigns regarding India be launched in addition to providing social infrastructure and attractive concessions to investors to facilitate investments in the IMT.

CHAPTER 8 INVESTMENT CLIMATE FOR SELECTED IMT CANDIDATE SITES

CHAPTER 8 INVESTMENT CLIMATE FOR SELECTED IMT CANDIDATE SITES

8.1 State Development Plan and Policy

8.1.1 State Development Plan

The Eighth Five Year Plan was projected by the central government planning commission for a five year period (1992 to 1997), and is based on the socio-economic macro-indexes of the preceding plan period and the planned numerical targets (achievements) of the Sixth and Seventh Five Year Plan.

Following the objectives and policies of the Centre's plans, the planning commission of each state government makes projections related to socio-economic development for the same plan periods. The plans of state governments differ from the Centre's plans, and vary also between states. The central government's planning commission is concerned with furthering the development of all states, and state governments are concerned with implementation and obtaining resources and revenues from the Centre.

(1) Subjects given by the Central Government

The Planning Commission has listed the following objectives and priority areas to be pursued during a plan period.

- (a) Employment generation
- (b) Containment of population growth
- (c) Universalisation of elementary education, complete eradication of illiteracy among people of the age group of 15 to 35 years.
- (d) Eradication of scavenging and provision of safe drinking water, health care and immunisation to all villages
- (e) Growth and diversification of agriculture to achieve self-sufficiency in food and generation of surplus for export.
- (f) Strengthening of infrastructure facilities i.e. energy, transport, communication and irrigation, in order to support the process of growth in a suitable manner.

- (g) Effective decentralisation, encouragement of local initiatives, voluntary efforts, et cetera.

The first four objectives relate to the development of human capital and other three objectives relate to economic growth. State governments are in a position to keep in direct contact with the people living in the state and vigorously pursue above mentioned objectives and priority areas. Consequently they project their own action plans and strategies in their Eighth Five Year Plan and annual plan according to the objectives and priority areas of the central government.

(2) Scale of Public Sector Plan in the State Government

- (a) In the period of the Eighth Five Year Plan, the aggregate outlay for the public sector plan is projected at Rs.4,341 billion (refer to Table 2-13). The distribution of this outlay between the Centre and the states is based on the following.
 - (i) A careful evaluation of the resource position of the Centre and the states and the need to maintain a certain degree of fiscal discipline.
 - (ii) The need to improve the states' share in the public sector plan because sectors such as agriculture, irrigation, health, education, and other related programmes contribute to well-being of India's people are the primary responsibility of the states.
 - (iii) The requirement of investment in the central plan for the development of basic infrastructure for sustaining long term growth; such as petroleum, coal, railways, and telecommunications, et cetera.
- (b) Consistent with the expected resource position, the size of the state's plans is projected at Rs.1,799.85 billion and the central plan at Rs.2,541.15 billion (including Rs.62.5 billion for the Union Territories), which are given in Table 8-1.

TABLE 8-1: SHARE OF CENTRE AND STATES IN PUBLIC SECTOR PLAN OUTLAYS

(Rs. 10 million)

ITEM	ANNUAL PLAN 1991-92	ANNUAL PLAN 1992-93	EIGHTH PLAN AT 1991-92 PRICES
1. CENTRAL DEPARTMENTS			
1.1 Outlay	42,969	48,407	2,47,865
1.2 Budgetary Support	19,015	18,501	1,03,725
1.3 IBEX	23,954	29,906	1,44,140
STATE AND UST OUTLAY	28,107	32,365	1,86,235
2. UNION TERRITORIES			
2.1 Outlay	1,277	1,291	6,250
2.2 Budgetary Support	1,277	1,291	6,250
3. STATES			
3.1 Outlay (1)	26,830	31,074	1,79,985
3.2 Central Assistance	13,428	14,820	78,500
3.3 States Own Resources	13,402	16,254	1,01,485
TOTAL PLAN OUTLAY (1.1+2.1+3.1)	71,076	80,772	4,34,100

Source: Eighth Five Year Plan, Volume 1, Table 3.6

Note: * indicates AT CURRENT PRICES.

The states' share of the public sector outlays has declined beginning with the Fifth Plan and continued with the Sixth and Seventh plans. However, the states have sought to increase shares from 39 per cent in the Seventh Plan to 41.5 per cent (Rs.1,799.85 billion/Rs.4,341 billion) in the Eighth Plan. The states will be required to improve resources, curb expenditures, and improve resources from state-run enterprises, particularly in the electricity and transport sectors.

(3) Financing the State Plan

As previously explained, the public sector outlay for the states totalled about Rs.1,799.85 billion as given in Table 8-1. The source of funds to finance this outlay will come from central assistance of Rs.785 billion and from state revenues of about Rs.1,014.85 billion (43.6 per cent of the total is provided by the central government, and 56.4 per cent by the states).

TABLE 8-2: STATE/UNION TERRITORY-WISE AND BROAD SECTOR-WISE OUTLAY FOR THE EIGHTH PLAN 1992-97

HEADS OF DEVELOPMENT (Rs. 10 million at 1991-92 prices)

State	Agr & Allied Activities & Irrigation & Flood Control	Rural Develop	Special Area Program	Energy (incl. IREP)	Industry & Minerals	Transport	Communication	Science & Tech.	Ecology & Environ	Social Services	Others	Total
Haryana	966.68	119.30	20	1711.84	220.47	391.38	0.0	6.62	123.70	1968.0	171.21	5700
Karnataka	3079.2	427.50	575.00	3046.50	984.00	448.00	0.00	8.00	209.76	3260.5	261.75	12300
U. Pradesh	4670.4	1569.15	290.00	7006.26	569.30	1902.5	0.00	10.00	379.54	4009.2	593.57	21000
Total	42135	10213	6750.1	47291	9284.8	13786	12.50	188.72	3654.1	4158.7	5079.0	17995

SOURCE: EIGHTH FIVE YEAR PLAN VOLUME 1, TABLE 3.20

(4) Comparison of State's Public Sector Outlay

- (a) Total outlays for all states is Rs. 1,799.85 million as per Table 8-2. The component ratio is based on total outlays for manufacturing and population ratio given in Table 8-3.

Table 8-3 Component Ratio of Public Sector Outlay of Main States

States	Total Outlay %	Manufacturing %	Population (million)
Andhra Pradesh	5.83	2.92	66.3
Bihar	7.22	4.93	86.3
Gujarat	6.38	4.18	41.1
Haryana	3.16	2.36	16.3
Karnataka	6.83	10.59	44.8
Kerala	3.03	8.72	n.a.
Madhya Pradesh	6.16	5.00	66.1
Maharashtra	10.28	8.76	78.7
Orissa	5.55	8.45	31.5
Punjab	3.65	1.74	20.1
Rajasthan	6.38	5.76	43.8
Tamil Nadu	5.66	5.92	55.6
Uttar Pradesh	11.66	6.12	139.0
West Bengal	1.68	11.56	67.9
Total:	100.00	100.00	844.0

Source: Eighth Five Year Plan, Volume 1.

- (b) As a means of comparison, total outlays for each state were calculated based on state population figures. The total average for the states is Rs.2,132 per person, with Haryana garnering about Rs.3,490 (the largest per person amount), followed by Punjab (Rs. 3,268), Orissa (Rs. 3,174). A comparison of three IMT candidate states is given Table 8-4.

Table 8-4 Comparison of Three IMT Candidate States

States	Total Outlay (billion Rs.)	Manufacturing Outlay (Billion Rs.)	Outlay per Capita	Amount (Rs)
			Total Outlay	Manufacturing
Haryana	57	2.20	3,490	135
Uttar Pradesh	210	5.69	1,530	41
Karnataka	123	9.84	2,740	220
All States Average	1,799	92.84	2,132	110

Source: Eighth Five Year Plan, Volume 1.

- (c) The average component ratio of total state outlays (Rs.1,799.8 billion) for manufacturing (including mining Rs.92.8 billion) was 5.15 per cent, and the states' ratios are shown in Table 8-3. According to this table, West Bengal recorded the highest (11.56 per cent) followed by Karnataka's (10.59 per cent). However, Haryana posted a low of 2.36 per cent.
- (d) The average total outlay amount per head for manufacturing (refer to Table 8-4) is Rs.110 with the largest amount recorded by Kerala (Rs. 279), followed by Karnataka (Rs.220) which is almost double the average. Haryana (Rs. 135) is also higher than the average, but Uttar Pradesh (Rs. 41) is below the average.
- (e) For further study, the average component ratio of main outlay sectors out of a state's total outlay are compared with the three IMT candidate states as Table 8-5.

Table 8-5 Average Component Ratio of Main Outlay Sectors

(Unit %)

Sectors	All States' Average	Haryana	Karnataka	Uttar Pradesh
Agriculture and Allied activities and irrigation & flood control	23.4	16.9	25.0	22.2
Rural Development	5.6	2.0	3.4	7.4
Energy	26.2	30.0	24.7	33.3
Industry & Minerals (manufacturing)	5.1	3.8	8.0	2.7
Transport	7.6	6.8	3.6	9.0
Social Services	23.1	34.5	26.5	19.0
Total	100	100	100	100

Note: Calculated on the basis of Table 8-2

Each state has thrust areas for further investment and development in the Eighth Five Year Plan period according to the degree of fulfilment for each sector, which can be compared with the all states' average for each sector.

The "Agriculture" sector: Karnataka's ratio is 25.0 per cent and larger than the 1.6 per cent average (23.4 per cent).

The "Rural Development" sector: Uttar Pradesh is larger by 1.8 per cent than the average, and is 7.4 per cent.

The "Energy" sector: Uttar Pradesh's ratio is 33.3 per cent and larger than average (26.2) by 7.1 per centage points. Haryana's is also higher by 3.8 per centage points, and is 30.0 per cent.

The "Industry and Minerals (manufacturing)" sector: Karnataka's ratio is 8.0 per cent, which is 2.9 per centage points larger than the average.

The "Transport " sector: Uttar Pradesh ratio is 9.0 per cent, which is 1.4 per centage points larger than the average (7.6 per cent).

The "Public Services" sector: Haryana's ratio is 34.5 per cent and larger than the average by 11.4 per centage points, and Karnataka's is also larger by 3.4 per centage point than average and is 26.5 per cent.

8.1.2 States' Industrial Policy

As already observed, the thrust areas of each state in the Eighth Five Year Plan period are diverse due to different socio-economic conditions. Also, in the manufacturing industry sector, the policies applied by states differ.

States must follow the central government's Eighth Five Year Plan objectives, as the Centre's planning commission works closely with state counterpart agencies in determining revenue sharing and the priorities related to industrial development projects. Guiding principles outlined in the central and state government plans are summarised below.

- (1) Creation of maximum possible employment opportunities by the development of labor-oriented industries for the alleviation of poverty.
- (2) Removal of disparities in the levels of development within state regions and modernisation of backward areas through rural industries development schemes.
- (3) Stress on the development of agro-based, food processing industries and industries utilising resources available in a particular state.
- (4) Promoting the activities of artisan, cottage, and other small scale industries with special assistance.

- (5) Creating suitable linkage between small scale industries (SSI) and medium/large scale industries (LSI), and promoting ancillary (or subcontract) relations among the various industries.
- (6) The development of export oriented industries.

8.2 Industrial Characteristics: Selected Candidate States

Industrial characteristics and social economic conditions for selected candidate states such as Karnataka, Uttar Pradesh, and Haryana are as follows.

8.2.1 Industrial Development Conditions

(1) Social Indicators

For comparison purposes, various indicators of the three states are given in Table 8-6. Uttar Pradesh has the largest area and population, however, the population residing in urban areas accounts for approximately 20 per cent of the total population; a relatively small percentage compared to the other states, and India's urban population (26 per cent).

Haryana has the smallest area and population, but economic and social data indicate the state has the best relative position among the three states, and a higher average compared to national figures. The data indicate income per capita is approximately 50 per cent higher than the national average.

Based on social indicators, Uttar Pradesh would seem to be approximately three-fourths of the national average. Karnataka, on the other hand, almost mirrors the country's national averages.

(2) Income per Capita

State Domestic Product (SDP) per capita by state at constant prices (1980-81) is given in Table 8-7 and Karnataka (Rs. 2,125) demonstrates similar levels to national SDP averages (approx. Rs. 2,200). Uttar Pradesh (Rs. 1,620) which is less than 30 per cent of national SDP averages. Haryana is about Rs. 3,500, which is about 50 per cent higher than the national SDP averages. With an increased ratio for the past 10 years, Haryana demonstrates the highest growth rate, which implies social indicator stated previously is higher than in other states.

**Table 8-6 Infrastructure Development and Social Services by State:
Selected Indicators.**

State Indicators	Karnataka	Uttar Pradesh	Haryana	India
Area (km ²)	1,791 (5.8%)	294,416 (8.9%)	44,212 (1.3%)	3,287,263 (100%)
Population	44,977,201 (8.31%)	139,112,287 (16.48%)	16,463,648 (1.94%)	846,302,688 (100%)
Rural	31,069,413 (69%)	111,506,372 (80%)	12,408,904 (75%)	628,691,676 (74%)
Share of Population *				
Urban	13,907,788 (30.1%)	27,605,915 (19.8%)	4,054,744 (25%)	217,611,012 (26%)
Annual Growth Rate (1981-1991)	1.92 %	2.27 %	2.42 %	2.14 %
Density (pop./km ²) *	16.63	20.27	18.98	17.94
Literacy Rate	56.04	41.06	55.85	52.21
Worker Participation Rate	44.34	32.20	31.00	37.46
Net Domestic Product				
Current Prices (1988) *	156,553.00	350,255.00	82,794.00	541,888.00
Constant Prices (1980) *	88,703.00	200,763.00	48,445.00	212,316.00
SDP/Capita (Rs. Crore)				
Current Prices (1988) *	3,602.00	2,698.00	5,274.00	3,835.00
Constant Prices (1980) *	2,041.00	1,547.00	3,086.00	2,082.00
Rank *	4	9	2	--
Share of Secondary Sector in SDP at Current Prices (1988)	26.9%	19.9%	19.2%	24.4%
Electricity Consumption per capita (1988) *	233 kwh	144 kwh	334 kwh	2217 kwh
Villages with Electric Power (% total) *	97.0%	69.8%	100%	75.0%

Source: Economic Survey: 1992-1993, Government of India

Handbook of Industrial Statistics:1991, Office of the Economic Adviser, Ministry of Industry, Government of India, New Delhi.

Note: * = provisional or quick estimates.

Table 8-6 (continued)

Total Length of Surfaced Road/100km ² (1988)*	59.6 km	25.2 km	49.0 km	22.7 km
Total Length of Surfaced Road/100,000 population (1988)*	138.5 km	63.4 km	156.0 km	103.2 km
Senior, Middle Schools per 100,000 population (1987)*	09	13	08	18
Higher Secondary/Intercollegiate Schools per 100,000 population (1987)*	13	05	14	09
Hospitals/Dispensaries per 100,000 population (1988)*	04	02	01	05
Hospital Beds per 100,000 population (1988)*	96	42	50	78
Post Offices per 100,000 population (1988)*	--	--	14	18
Banks per 100,00 population (1989)*	9.40	6.20	5.80	7.20

Source: Economic Survey: 1992-1993. Government of India

Handbook of Industrial Statistics:1991. Office of the Economic Adviser, Ministry of Industry.

Government of India. New Delhi.

Note: * = provisional or quick estimates.

TABLE 8-7 SDP PER CAPITA AT CONSTANT PRICES 1980-81

(Unit: Rs)

Year	Karnataka		Uttar Pradesh		Haryana		India	
	Rs.	Index	Rs.	Index	Rs.	Index	Rs.	Index
1980	1,612.00	100	1,284.00	100	2,370.00	100	1,630.00	100
1983	1,727.00	108	1,373.00	107	2,457.00	104	1,790.00	110
1984	1,828.00	113	1,355.00	106	2,483.00	105	1,811.00	111
1985	1,723.00	107	1,378.00	107	2,852.00	120	1,841.00	113
1986	1,848.00	115	1,436.00	112	2,779.00	117	1,871.00	115
1987	1,914.00	119	1,452.00	113	2,652.00	113	1,901.00	117
1988	2,041.00	127	1,547.00	121	3,247.00	136	2,065.00	127
1989	2,183.00	135	1,575.00	123	3,234.00	136	2,134.00	131
1990	2,125.00	132	1,618.00	126	3,449.00	145	2,199.00	135
1991	not available		not available		3,456.00	146	2,175.00	133

Notes: Index based on the year 1980 = 100.

Sources: Economic Survey: 1992-1993. Government of India Handbook of Industrial Statistics:1991. Office of the Economic Adviser, Ministry of Industry. Government of India. New Delhi.

8.2.2 Industrial Characteristics

The industrial production index by state and industrial group is given in Table 8-8, and the number of industrial units, scale of industry, employment and capital investment are presented in Table 8-9. Current (1990) data for state-wide production in electronics industry, per cent share of total and employment are found in Table 8-10. Industrial and production-oriented observations and selective characteristics for the states are summarized and presented as follows.

Table 8-8 Index of Industrial Production by Selected State¹

NIC Code	Industries	Karnataka	Uttar Pradesh	Haryana	India
20-21	Food products	12.23	34.55	5.49	5.33
22	Beverages, tobacco, tobacco products	5.32	1.06	4.69	1.57
23	Cotton textiles	39.21	4.17	8.01	12.31
24	Woolen, silk, synthetics	0.45	1.26	1.54	--
25	Jute, hemp, mesta textiles	--	0.27	0.33	2.00
26	Hosiery/garments	0.34	1.66	0.19	0.82
27	Wood/products	0.77	0.51	0.24	0.45
28	Paper products/printing	3.24	5.52	7.26	3.23
29	Leather products	0.12	2.34	0.07	0.49
30	Rubber, plastic, coal, petroleum products	1.37	4.01	9.12	4.00
31	Chemicals/Chemical products	6.60	6.07	0.75	12.51
32	Non-Mettalic mineral	4.36	9.49	6.89	3.00
33	Basic Metals & Alloys	9.57	1.84	5.69	9.80
34	Metal products/parts	0.54	8.85	4.90	2.29
35	Non-electrical machinery and machine tools	4.12	7.19	16.76	6.24
36	Electrical machinery & appliances	6.31	6.01	5.54	5.78
37	Transportation Equipment/Parts	0.34	1.86	8.03	6.39
38	Other Industries	0.96	1.74	0.77	0.90
	TOTAL	95.96	98.46	86.18	77.11

Notes¹: Figures indicate weighted values for an industrial group.

Index of Uttar Pradesh is applied by the Study Team based on the fixed capital amount.

Source: Economic Survey: 1991-92, Government of Karnataka.

Economic Survey: 1992-93, Government of India.

Table 8-9 Number of Industrial Units and Employment

SI Number	Karnataka	Uttar Pradesh	Haryana
1. Large & Medium Industries			
a) Number Units	678	1,098	510
b) Capital Investment (Rs. Crore)	--	9,215	--
c) Employment	--	464,959	150,000
2. Small Scale Industries			
a) Number of Units	115,451	262,945	109,941
b) Anticipated Investment (Rs. Crore)	1,120	1,559	--
c) Anticipated Employment	1,200,000	1,658,662	639,000
3. Total			
a) Number Unit	116,129	264,043	110,451
b) Anticipated Investment (Rs. Crore)	--	10,774	--
c) Anticipated Employment	--	2,123,621	789,000

Source: Economic Survey: 1992-93, Government of India.

Table 8-10 Electronic Industry State-Wide Production: 1990

Rank	State	Total	Share	Total	Employment
I	Karnataka	17,758	19.83	257	44,000
II	Uttar Pradesh	16,792	18.92	159	37,000
III	Maharashtra	14,245	16.07	671	56,500
IV	Delhi	9,420	11.58	322	37,000
V	Andhra Pradesh	5,873	6.61	141	25,000
VI	Tamil Nadu	5,688	6.41	249	13,500
VII	Gujarat	3,930	4.43	182	15,000
VIII	Punjab	2,749	3.04	43	6,000
IX	West Bengal	3,008	3.56	142	12,000
X	Kerala	2,663	3.05	74	9,000
XI	Rajasthan	2,437	2.80	64	9,200
XII	Haryana	1,628	1.85	59	7,000
XIII	Madhya Pradesh	1,301	1.44	39	6,000
XIV	Orissa	432	0.46	11	1,700
XV	Goa	163	0.18	14	600

Note: Figures are for units reporting to the Department of Electronic, Ministry of Industry.

1) Karnataka

a) Observations

The data indicate that the food products, beverages and tobacco products, cotton textiles, and the electrical machinery industries are more developed

than national averages. Further, the cotton textiles industry figures measure substantially above India's national average.

However, the transportation equipment industry, leather and fur products, rubber and plastic products, chemicals and chemical products, as well as metal products and parts industries demonstrated a lack of industrial productive activity on par with other state-wide industrial groups (Table 8-8).

b) Selected Characteristics

The chemical industry in Karnataka State accounts for approximately 40 per cent of total industrial production and generated Rs. 60,519 million in 1988-89. The electrical and electronics industries followed with about 23 per cent of the industrial production in the state. In 1990, Karnataka's electronic sector comprised some 257 units, and employed 44,000 workers. The state posted Rs. 17,750 million in revenues from this sector and ranked first among the states. (Refer to Table 8-10.)

The state's sericulture industry produces 6,000 tonnes per annum of mulberry silk as yarn, about 70 per cent of all the silk produced in India. The World Bank has made substantial commitments to allow the industry to increase production to 9,000 tonnes per annum over the next five years. Increased production is expected to foster further productive activity in the small- and large-scale industrial sectors.

2) Uttar Pradesh

a) Observations

A review of Table 8-8 demonstrates that developed industries fall into the production categories of food products, textile products, paper and paper products, non-metallic minerals products, metal parts and products. Overall, the food industry indicates a higher index of industrial production than the other states surveyed. Also, the number of large- and medium-scale industries listed as operating in the state totals nearly twice the number of similar units in Haryana and Karnataka (Table 8-9).

b) Selected Characteristics

Based on the number of units, fixed capital expenditures and employment data, the state's primary industrial activity is found in the food products industry and accounts for one-third of the factors examined (Table 8-8 and Table 8-11). The foodstuffs, non-metallic, metal, machinery/machine parts, electrical machinery, paper and printing products industries are also the state's core industries according to a data comparison of Tables 8-8 and 8-11.

Table 8-11 Uttar Pradesh Classified Industries Registered Under the Factories Act: 1990¹

NIC Code	Industries	Registered Units	Fixed Capital (Rs. Crore)	Employment
20-21	Food products	3,448	87,372.32	260,668
22	Beverages, tobacco, tobacco products	108	2,733.48	8,165
23	Cotton textiles	417	10,566.78	31,525
24	Woolen, silk, synthetics	126	3,192.84	9,526
25	Jute, hemp, mesta textiles	28	709.52	2,117
26	Hosiery/garments	166	4,206.44	12,549
27	Wood products	52	1,317.68	3,931
28	Paper products/printing	552	13,987.68	41,731
29	Leather products	234	5,929.56	17,690
30	Rubber/plastic products	400	10,136.00	30,240
31	Chemical products	606	15,356.04	45,813
32	Non Metallic Industries	948	24,022.32	71,669
33	Basic Metal Industries	184	4,662.56	13,910
	Metal Products	885	22,425.00	66,906
35	Machinery/parts	719	18,219.46	54,356
36	Electrical machinery parts	599	15,178.66	45,284
37	Transportation Equipment/Parts	186	4,713.24	14,061
38	Misc. Mfg. Industries	173	4,383.82	13,078
	Repair Services	153	3,877.02	11,567
	TOTAL	9,984	252,991.32	753,806

Note¹ : Defense Organisations, public sectors, IIT, Engineering & Polytechnical not included.

(3) Haryana

(a) Observations

A comparison of the state's industrial production index to national averages reveals that Haryana has developed relatively more productive industrial activities in the following industrial groups: beverages and tobacco products; paper and paper products; rubber; plastic; petroleum/coal products; non-metallic mineral products; metal products; non-electrical machinery; machine tools; and transportation equipment. But, cotton textiles, textile products, wood and wood products, leather and fur products as well as chemicals and chemical products manufacturers, lag in production activities when compared with the state's other industrial groups. (Refer to Table 8-8.)

b) Selected Characteristics

Haryana has rapidly developed a productive industrial base. The state's production of automobiles, farm equipment, motorcycles, off-the-road vehicles, bicycles, armaments, scientific instruments, chemicals, agriculture, sanitary wares and engineering goods ranked first and second among India's most productive states.

The state is responsible for 61 per cent of the country's total passenger automobile production and nearly 50 per cent of all tractors produced for domestic use. Also, 60 per cent of the ammunition produced for the country's armed forces is made in the state. About 25 per cent of the country's sanitary wares and bicycles are manufactured in Haryana.

Data indicate that the state's production activities in the engineering goods, chemicals, handloom products, agro-based and leather products, and automobile industrial groups exported Rs. 62.4 million in products for the year 1990-91.

8.2.3 Comparison of State Industrial Development

Measures of industrial development and growth were derived from central and state government documents. One measure, industrial licenses and letters of intent issued, was examined for Haryana, Uttar Pradesh and Karnataka. Comparisons were made to

evaluate the per capita and aggregate differences between the three states and are presented below in Table 8-12. The aggregate totals indicate that Uttar Pradesh comprises a larger per centage of letters of intent and industrial licenses issued compared to the other two candidate states, and ranks second in the country following Maharashtra based on data for all states.

**Table 8-12 State-Wide Industrial Licensing for Selected States:
1977 to 1990.**

(Unit: number)

States	1977-1987		1988		1989		1990		Total		Per 1 million population		LOI/LI Ranking Among Top 10 States ¹
	LOI	LI	LOI	LI	LOI	LI	LOI	LI	LOI	LI	LOI	LI	
Haryana	558	326	40	20	68	15	44	13	710	374	43.50	22.9	IX
Uttar Pradesh	1075	542	163	30	196	51	124	55	1558	678	11.23	04.89	II
Karnataka	770	464	75	30	75	39	59	30	904	563	20.16	12.56	V
INDIA	10,123	6,669	1083	360	1182	418	825	387	13213	7834	15.65	09.30	

Note: LOI = Letter of Intent. LI = License Issued.

Note¹: Ranking is based on aggregate totals for LOI and LI issued. Source: *Handbook of Industrial Statistics: 1991*, Table 100. Office of the Economic Adviser, Ministry of Industry, Government of India, New Delhi.

India, Economic Information Yearbook, 1992-93, A.N. Agrawal, et. al., National Publishing House, New Delhi. "Invest in Uttar Pradesh", State Government of Uttar Pradesh Pamphlet, 1992.

Upon closer inspection, however, per capita population values indicate a stronger relative trend of industrial letters of intent and licenses issued for Haryana State. Based on the years surveyed (1977 to 1990), Haryana issued nearly five times as many industrial licenses than the State of Uttar Pradesh when population characteristics were considered.

Karnataka State also demonstrated a positive trend in the issuance of letters of intent and licenses issued, posting nearly three times as many as Uttar Pradesh on a per capita basis.

The per capita and aggregate totals seem to indicate stable state-wide growth in the number of letters of intent and licenses issued for the 14-year period. A simple linear regression reveals that the three states are exhibiting positive growth in the number of licenses issues to the number of letters of intent issued (Refer to Table 8-13).

**Table 8-13 Simple Regression for LOI/LI Issued 1977-1990:
Selected States**

States	Slope (b)	Y intercept	r	r ²
Haryana	.3409	9.4263	.5268	.2775
Uttar Pradesh	.2364	22.1208	.5192	.2696
Karnataka	.3511	17.5413	.5467	.2989

8.3 Industrial Support System

There are numerous industrial development authorities and organisations to support investment and a wide range of industrial development in the states of Karnataka, Uttar Pradesh and Haryana. Table 8-14 that follows lists the primary support organisations for the three states; primary roles, functions and types of assistance attributed to the various organisations are listed by subject for the reader's convenience. Also Table 8-15 shows various incentives given by the state.

8.3.1 Karnataka

(1) Organisations and Functions

- (a) Karnataka's Directorate of Industries and Commerce located in Bangalore, is the coordinating body for all activities related to the state's industrial development. The Directorate plans various activities in the industrial sectors, allocates and distributes funds, and is responsible for policy making and the implementation of policies at the district level.
- (b) Karnataka Udyog Mitra (KUM), established under the Directorate of Industries and Commerce, provides information and guidance to entrepreneurs as a single window service entity. The KUM functions under the chairmanship of the Commissioner for Development and Director of Industries and Commerce. The organisation acts as a nodal agency for Non-Resident Indians and helps to promote NRI/foreign investments, as well.
- (c) The Karnataka State Industrial Investment and Development Corporation Limited (KSIIDC) is an agency of the State of Karnataka for the promotion and development of medium to large scale industries. The KSIIDC sanctions term loans for projects (maximum of Rs. 5 crores) and sanctions loans to Rs. 150 lakhs per project. The agency also provides assistance and guidance to NRI(s) planning to establish firms in the state.
- (d) The Karnataka State Electronics Development Corporation Limited (KEONICS) is a state agency established to promote and develop electronic industries in the state. The organisation provides market assistance to the small scale industries producing electronic products, and establishes

specialised infrastructural facilities for the development of electronic industries.

- (e) The Karnataka Industrial Areas Development Board (KIADB) is an agency established by the state government for the development of infrastructure. KIADB also acquires land for development and is responsible for having developed 57 industrial areas in all the state's districts. The industrial estates are located in the following districts:
- (f) The Technical Consultancy Services Organisation of Karnataka (TECSOK) offers consultancy services at reduced prices and or through subsidies. TECSOK provides small scale industry entrepreneurs assistance with the identification of products and projects, preparation of market surveys and project reports, and helps organise various training programmes in a wide variety of fields. TECSOK also provides energy audits, energy conservation studies, state and central government policies guidance to its clients.
- (g) The Karnataka State Financial Corporation (KSFC) is the primary financial agency for the small and medium scale sectors industries. The agency sanctions terms loans to a maximum of Rs. 90 lakhs, and finances jointly with the Karnataka Industrial Investment and Development Cooperation.
- (h) The Karnataka State Small Industries Development Corporation (KSSIDC) is an agency for the promotion and development of the state's small scale industries. Primarily, KSSIDC is concerned with the establishment of industrial estates with built up sheds for various categories, and with complete infrastructure, e.g., roads, drainage, water power, telecommunications, social services, et cetera. Also, the agency procures raw materials from primary manufacturers in bulk and distributes supplies at reasonable rates to SSI units. KSSIDC has established 94 industrial estates in all the state's districts and major talukas.
- (i) The Karnataka Small Industries Marketing Corporation Limited (KSIMC) is a subsidiary of the KSSIDC, and acts to assist small scale industries in product marketing. KSIMC participates in government tenders and agencies, public sector undertakings, railways, and helps procure orders for the SSI sector units.

(2) Single Window Service

In the past, Karnataka State had a Single Window Agency (SWA) comprised of 25 members representing various state government departments and agencies for the purpose of considering large investment projects. The government observed that the SWA was too large and in May 1991, reconstituted the SWA and provided a high level committee made up of only eight members with the Minister of Industries acting as chairman.

The state SWA will continue to make decisions on projects with investments up to Rs. 50 crores and assist entrepreneurs with obtaining land, power, water, communications, i.e., assist with infrastructure requirements. The high level committee however, will consider projects exceeding Rs. 50 crores. Further, the SWA and the high level committee can co-opt the heads of departments or chief executives of any government agency depending upon the investment need on a case to case basis.

(3) The State of Karnataka offers the following incentives:

(a) fiscal concessions

- sales tax exemptions for selected zones and thrust areas such as electronics, telecommunications, informatics, leather, pollution control equipment, and exemption upto six years to units in electronic cities of Mysore and Dharwar.
- exemption from entry toll on raw materials for 100 per cent Export Oriented Units.
- training schools, testing and development facilities.
- single window agencies at the state and district level for permit and license clearances.

(b) financial incentives

- investment grants (maximum Rs. 2.5 million).
- additional investment grants to pioneer units.
- for export oriented units, 10 per cent assistance on fixed capital assets (maximum Rs. 1 million).
- special assistance upto Rs. 5 million for installation of pollution control equipment.

8.3.2 Uttar Pradesh

(1) Organisations and Functions

Uttar Pradesh has at least seven major state-wide agencies that act to promote and support industrial development in the state. The agencies provide investment subsidies, market research, product design and functional industrial estates in an attempt to attract investors to the state.

- (a) The Provincial Industrial and Investment Corporation of Uttar Pradesh, acts as a primary agency for entrepreneurs looking to obtain term loans for the purpose of locating medium and large scale industries to backward areas. The agency also operates a feasibility study subsidy scheme on behalf of the state government; prepares feasibility studies for prospective investors; and undertakes the preparation of rehabilitation packages and syndicating requirements for concessions and relief for the arrangement of funds for the rehabilitation of sick units.
- (b) The Uttar Pradesh Electronic Corporation, established in 1974, for the promotion and development of the state's electronic industries, promotes the creation of basic infrastructure through electronic estates, joint/assisted sector projects with the participation of private investors, and the establishment of projects involving sophisticated technology or large investments in the public sector.
- (c) The Uttar Pradesh Small Industries Corporation (UPSIC) provides raw materials to the small scale industries sector. Also, the UPSIC provides marketing assistance to the SSI sector by collecting purchase orders for bookings and the Corporation pays about 75 per cent against dispatch documents to the member units which receive balance payments from customer purchases.
- (d) The Uttar Pradesh State Industrial Development Corporation (UPSIDC) is involved in numerous activities aimed at creating suitable infrastructure (such as the execution of civil construction works for public and semi-public organisations) for the promotion of joint venture projects in the medium scale industrial sector. The UPSIDC has developed a total of 87 industrial estates

in 13 different cities. Of these industrial estates, however, more than 10 per cent of the sheds and plots remain vacant. Industrial estates are located at:

- (e) The Uttar Pradesh Financial Corporation (UPFC) primarily functions to provide term loans and seed money capital assistance for establishing tiny, SSI and medium scale sector industries. The UPFC also provides term loans and seed money capital assistance to ex-servicemen under the SEMFEX Scheme. The corporation offers financial assistance under the modernisation scheme of the Industrial Development Bank of India.
- (f) The Uttar Pradesh Pollution Control Board assists entrepreneurs in the SSI sector by designating some 179 industries as non-polluting. The state in conjunction with the UPPCB is in the process of adding another 90 more units to this list.
- (g) The Uttar Pradesh Export Corporation established in 1966, promotes exports of the state's handicrafts as well as marketing within India.

(2) Single Window Service

The State of Uttar Pradesh offers various agencies to facilitate investment. There are multi-tiered committees at district, division and state levels that act as forums for investors to expedite sanctions, permissions and No Objection certificates, as well as to remove inter-departmental bottlenecks at the local level. Also, the state has formed Udyog Bandhu, a two-tier coordination agency with the Secretary, Heavy Industries as Chairman. How successful the multi-tiered approach is remains to be further studied. Two examples follow that more closely resemble a single window service agency.

- (a) The New Okhla Industrial Development Authority (NOIDA) is a statutory body constituted by the state government under the Uttar Pradesh Industrial Area Development Act, 1976. The NOIDA board is the main policy making body and the state government's department of industry is the administrative department. An empowered committee under the chairmanship of NOIDA's chairman, provides single window service to entrepreneurs.

The committee can sanction electricity load, sales tax exemptions, special state capital subsidies, building plans, and grant consent on behalf of the