

## 11.3 Promotional Functions and Organisations

### 11.3.1 Promotional Functions

The IMT should have a single window service agency for enterprises looking to establish production in the IMT, and provide internationally acceptable and adequate infrastructure, facilities, civil, and public services.

The IMT's organisational structure should comprise the following six functions:

- investment promotion
- technical services assistance
- information services coordination
- management services
- manpower development
- civil and public coordination services

### 11.3.2 Organisations

Construction of industrial model towns throughout India was discussed in previous sections in relation to the IMT's basic concepts. Therefore, to meet management needs, a national-level, IMT promotional organisation should be established to guide the functional requirements that may arise in the future as well as state level organisations. Figure 11-3 illustrates the IMT promotional organisational system and reflects central and state government organisational relationships.

#### (1) IMT Promotional Organisation (IMTPO) System

Provisionally termed the IMT Promotional Organisation, will have a system similar to the organisational system utilised by the EPZs under the Ministry of Commerce. The IMTPO system will allow the Ministry of Industry to effectively carry out and administer the IMT development policies and planning. The Ministry of Industry's national-level management body will utilise a central government advisory committee and a state-level implementation board for addressing relevant issues.

#### (2) The Advisory Committee (central government level)

The advisory committee will be responsible for advising the Ministry of Industry regarding basic policy questions, legalities, and foreign affairs for all industrial model towns that are developed. The committee's members should at the least consist of the Foreign Investment Promotion Board<sup>1</sup>

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<sup>1</sup>The Foreign Investment Promotion Board (FIPB) is located in the Prime Minister's Office. The board is comprised of the principle secretary to the Prime Minister (chairman), Finance Secretary, Commerce Secretary, and the Secretary, Industrial Development. The board acts to invite and facilitate investment in India by international companies in projects which are

members and/or appointed representatives from the Ministry of Industry, other related central government ministries, the private sector, research scientists, scholars from academia, et cetera.

(3) Implementation Board (state government level)

A state-level implementation board should be established in each state and will be responsible for the practical development of an IMT within the state's boundaries. The board's members should consist of representatives from state-level ministries of industries, industrial development corporations, and related state government agencies such as those responsible for urban development, finance, public health, and environmental issues.

(4) IMT Promotion Centre (IMTPC)

The IMTPC should be established as the on-site IMT management organisation responsible for administering the IMT's day-to-day "single window services" and business requirements. The IMTPC will be comprised of the following departments: investment promotion, manpower development, management services, information services coordination, technical services, and civil and public coordination services.

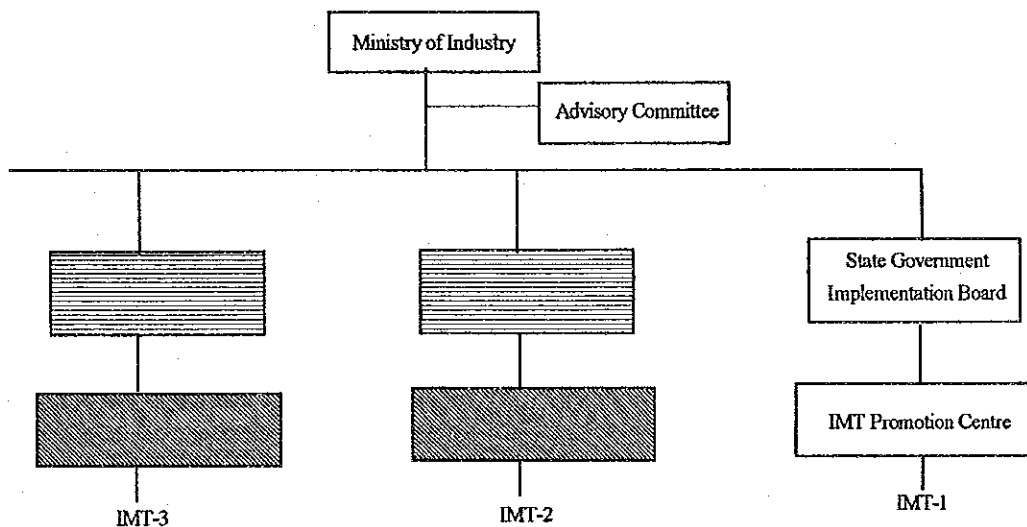


Figure 11-3 IMT Promotion Organisation System Structure

considered beneficial to the domestic economy and do not fall within the parameters of existing policies for foreign investment clearance. Guide to New Industrial Policy: 1992-93:171-172, Second Edition, 1992. Jain, Rajiv. India Investment Publication. Delhi.

## 11.4 IMT: Conceptual Design

### 11.4.1 Township Scale and Functions

#### (1) Population Plan

The IMT is estimated to provide residences for 17,000 employees in section 11.2.3. In this section, 6,000 employees are estimated to reside in the IMT, about 35 per cent of the total number of people working in the IMT because Gurgaon New Town under development will be available for housing. The average household size is estimated to be five persons. Of the 170 foreign employees, average household size for 50 employees is estimated at three, with the remaining residing alone. About 20 per cent of the employees who are engaged in commercial activities will also have residences in the IMT.

#### Estimated Population for the IMT

IMT Employees	Number of Residents
Factory Employees	6,000 x 5 persons/household = 30,000 persons
Foreign Employees	50 x 3 persons/household + 120 = 270 persons
Others	30,000 x 0.2 = 6,000 persons
Total Employees	36,270 persons

#### (2) Types of Housing

Housing types for the IMT residential zone will be arranged according to the residential classifications. Based on experiences observed from NOIDA, the IMT's population density in the industrial area will be about 350 persons per hectare. Foreign worker housing is generally a detached or terraced house structure.

In this study, factory workers are classified into the high density residential area (350 persons per hectare) and medium density residential area (250 persons per hectare). Workers engaged in commercial activities are also classified into the medium density residential area. Foreign employees are classified into detached houses of approximately 1,000 m<sup>2</sup> per plot and terraced houses of 100 m<sup>2</sup> per plot.

#### Type of Housing and Area

Residential Density	Persons per hectare.
High density	350 persons/ha.; approximately 57 ha.
Medium density	250 persons/ha.; approximately 40 ha.
Low density (1)	Detached house; approximately 13 ha.
Low density (2)	Terraced house; approximately 15 ha.

### (3) Public Facilities

Public facilities should be constructed to adequately reflect the demographic changes of the IMT site and adjoining residential zones. The IMT will play a significant industrial role in India, and its public facilities must enhance the function of the industrial area. Accordingly, the public facilities are introduced as follows.

- \* Administration Centre
- \* Promotion Centre
- \* International Seminar Centre
- \* IMT Town Centre
- \* Primary School (including foreign students class)
- \* Hospital
- \* Sports Centre
- \* Sports Club for Foreign workers
- \* Culture Centre

### (4) Scale of Public Facilities

The scale of the schools, commercial, and administrative facilities, etc., can be estimated from the projected population. The scale of other facilities for the extended area are based on others including Japan at this stage of conception. Therefore, it can be supposed 48 hectares multiplying the area excluding industrial area by an estimate rate.

Centre area of industrial zone = 10 ha.

Centre area of residential zone = 30 ha.

Recreational Centre = 08 ha.

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Total = 48 ha.

(600 ha. - 288 ha.) x 15 % = approximately 48 ha.

#### 11.4.2 Planning Preconditions

The land use plan for a 600 ha. project area is based on the following conditions:

- \* The project area is allocated along the sides of National Highway No. 8.
- \* detached from existing towns in the surrounding area of the site.

\* In order to improve the environment, the industrial zone is surrounded by an approximately 30 m. wide green belt.

\* The residential zone and the centre zone are allocated along National Highway No. 8 for clarification of land use.

\* Each landuse zone is facing the center zone.

\* The high density residential area will be arranged on the north side of national Highway No. 8; the low density residential area will be arranged on the other side.

\* As to the industrial zone, large scale factories will be arranged on the north side, and the small scale factories will be arranged adjacent to the centre zone.

### 11.4.3 Land Use Plan

Given the IMT frame work and preconditions, the land use plan is as follows:

**Table 11-1 Land Use Plan**

Land Use Category	Industrial Zone (ha)	Residential Zone (ha)	IMT	
			Total Hectares	Ratio (%)
Factory	288	--	288	47
Residential				
Low Density	--	28	28	05
Medium Density	--	30	30	05
High Density	--	42	42	07
Sub total	--	100	100	17
Center	10 <sup>1</sup>	30 <sup>2</sup>	40	07
Recreation	--	08 <sup>3</sup>	08	01
Utility	10	07	17	03
Park & Open Space	28	23	51	09
Roads	64	32	96	16
Total	400	200	600	100

note: <sup>1</sup> Promotion Centre, et cetera. note: <sup>2</sup> Town Centre

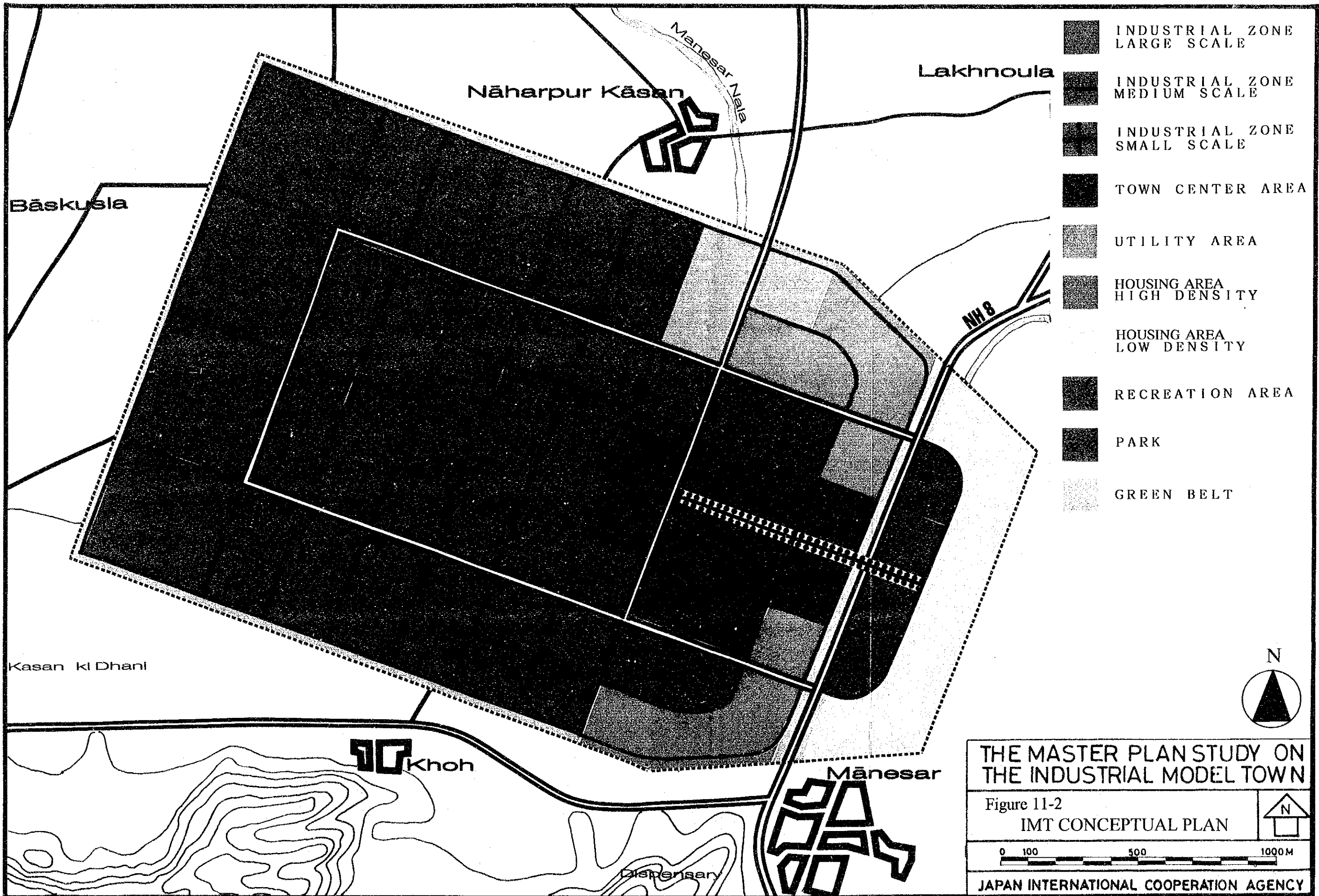
note: <sup>3</sup> Sports Club for Foreign Workers

### 11.4.4 Traffic Plan

The road hierarchy in the project area is as follows:

Road Hierarchy	Width (meters)	No. of Lanes
V <sup>0</sup> : National Highway No. 8	30	04
V <sup>1</sup> : Arterial Road	30	04
V <sup>2</sup> : Distribution Road	20	04
V <sup>3</sup> : Access Road	16	02
VB: Boulevard	50	4 + 2









#### 11.4.5 Park and Green Zone

There are towns adjacent to the IMT candidate site so that the environment has to be sufficiently considered, particularly in proximity to the industrial area. Along the road which surrounds the industrial area, a green belt with 30 meters outside outer roadway be constructed to act as a buffer zone. Parks (approximately 10 ha. total) are arranged adjacent to the centre zone. The residential zone (including low medium, and high density areas) is apart from National Highway No. 8 due to the arrangements for a green belt. The boulevard which crosses two levels National Highway No. 8 at the centre zone and low density zone will have 15 meters open space on both sides of the main road, and a four-lane road used as a service road and pedestrian crossing.

#### 11.4.6 Land Reclamation

The topography of the project area of the IMT is fairly flat agricultural land, and the Nala waterway passes through the area. The reclamation plan has to be carefully considered and minimize the impact on these surroundings; particular attention should be paid to assessing the present topography and watershed. Therefore the land reclamation will be based on the following:

- \* Design level on the project area should minimize effects on the present topography, particularly along National Highway No. 8.
- \* Design levels follow the present watershed.
- \* Balance of excavation and filling should be adequate. In order to consider the landscape, surplus soils are used to mound industrial area lots as the lots will not be in easily seen from the road.
- \* Parks and green belt are mounded by surplus soil for adding landscape variety to the naturally flat topography.

#### 11.4.7 Water Supply

##### (1) Service area

The service area of this water supply scheme is defined based on land utilization follows.

Industrial area	: 400 ha
(Factory/Plant area)	: (288 ha)
(Public area)	: (112 ha)
Residential area	: 200 ha
<hr/>	
Total area	: 600 ha

(2) Design volume of water supply

Design water volume is summarized.

Industrial use : 42,000 m<sup>3</sup>/day  
Domestic use : 5,500 m<sup>3</sup>/day  
Uncounted for water : 4,800 m<sup>3</sup>/day

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Total requirement : 52,300 m<sup>3</sup>/day

(a) Water demand for industrial use

The daily supply volume of water for industrial area is estimated at 42,000 m<sup>3</sup> based on the Evaluation of Locational Conditions. The breakdown is shown below.

Type of Process	Area (ha)	Unit Volume (m <sup>3</sup> /ha)	supply volume (m <sup>3</sup> )
Machinery / Precision machinery	65	182	11,729
Electric / Electronics	56	103	5,784
Transportation machinery	61	83	5,021
Chemical	57	244	13,844
Metalworking	21	70	1,510
Others	28	146	4,115
Total	288		42,003

(b) Water demand for domestic use

A population of approximately 36,000 is projected for the IMT. Assuming that an average family has five members, then one person will consume about 150 liters per day. Therefore, water demand for domestic use is estimated at 5,500 m<sup>3</sup> per day.

#### 11.4.8 Sewerage and Drainage

(1) Sewerage and storm water drainage system

The sewerage and storm water drainage system covers the industrial and residential area. The treated effluent will be discharged into Manesar Nala.

(2) Sewerage quantity and quality

The volume of waste water is assumed to be 90 per cent of the water demand volume for industrial and domestic use. It is assumed that ground water of which volume is 10 per cent of waste water infiltrates into the sewer pipes. Sewerage quantity is summarized below.

Waste water from industry	: 37,800 m <sup>3</sup> / day
Waste water from domestic	: 5,000 m <sup>3</sup> / day
Infiltration of ground water	: 4,300 m <sup>3</sup> / day
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Total quantity of sewerage	: 47,100 m <sup>3</sup> / day

Discharged water after treatment will be used for irrigation to the surrounding farms without dilution..

(3) Storm water

The following design conditions are calculated based on the data submitted by PWD.

Total covering area	: 600 ha
Assuming rain fall intensity	: 3 mm / hour
Total quantity of storm water	: 5m <sup>3</sup> / sec
Add discharge for area along drain @ 10 per cent	: 0.5m <sup>3</sup> /sec
Total discharge quantity	: 6.0 m <sup>3</sup> / sec

#### 11.4.9 Energy

(1) Estimate of Electric Power Demand

Based on the assumptions of electric power demand per unit area and total area of factories, power demand for the IMT is estimated as follows.

$$\begin{aligned} \text{- Power Demand} &= U_e \times D \times A = 741 \times 0.5 \times 288 \\ &= 106,704 \text{ (kVA)} = (85\text{MW Approx.}) \end{aligned}$$

Where,

- Ue : Power demand per unit area according to the requirement of DSIDC for IE, 741 kVA/ha
- D : Demand factor of Electric power, 50%
- A : Total area of factories, 288ha (Approx.70% of IMT total area, 400ha)

## (2) How to Supply Electric Power

Electric power shall be supplied from two sources, i.e., commercial power supply from the Haryana State Electricity Board (HSEB), and from independent power generation plant. In other words, 60 MW of power (approximately 70 per cent of total power demand ) will be provided by HSEB, and the IMT's independent power generation plant will provide the remaining of 25 MW (30 per cent).

### 11.4.10 Telecommunication

#### (1) Estimate of Telecommunication Lines

Based on the number and scale of factories' assumptions, telecommunication lines for the IMT are estimated as follows:

##### - Number of Telecommunication Lines

A digital PBX should be installed for the IMT, and it is considered that data telecommunication can be accomplished by minor modifications. The number of telecommunication lines in the IMT are estimated and given in the following formula.

$$\begin{aligned} &= (U_b \times N_b) + (U_s \times N_s) = (5 \times 33) + (3 \times 24) \\ &= 165 + 72 = 237 \text{ (Lines)} \end{aligned}$$

Where,

- U<sub>b</sub> : Assumed number of lines per large scale factory: 5 lines
- N<sub>b</sub> : Number of large scale factories in IMT: 33 factories
- U<sub>s</sub> : Assumed number of lines per small scale factory: 3 lines
- N<sub>s</sub> : Number of small scale factories in the IMT: 24 factories

(2) Telecommunications Facilities in the IMT: Basic Concept

Inter-linkage between the DOT and the IMT is based on the DOT's exclusive management telecommunication business in India. In principle, the large scale factories will have an independent PBX (Private Branch Exchange), and telecommunication lines from the factories will be connected to the DOT public telephone system network through which factory installation of the PBX occurs. A common PBX will be installed in the centre so that telecommunication lines from the small scale factories can be connected to DOT's public telephone network system.

**11.5 Pollution Control**

(1) Quantity and Quality of Industrial Waste Water

Calculations were based on the following assumptions:

- Industrial waste water was set at 1.1 times the volume of water supply, taking into account increases from ground water.
- The amount of water used for domestic purposes was set at 100 liter per one employee.
- Domestic waste water was set at 1.1 times the amount of water used for domestic purposes.
- BOD and SS concentrations.

The concentrations of both BOD and SS in waste water from the six types of industrial plants (food and beverage, pulp and paper, publications and printing, chemicals, plastics, and leather processing ) are too high for the water to be discharged without treatment. For this reason, waste may be released into the sewerage system only after it has been treated in the factories, the pH level has been adjusted, and hazardous substances have been removed.

Discharge	Total Volume of Waste Water	Average BOD Concentration	Average SS Concentration
Sewerage System	19,371m <sup>3</sup> /D	330mg/l	190 mg/l
Drainage System	28,832 M <sup>3</sup> /D	24mg/l	70 mg/l

(2) Other Forms of Pollution Control

(a) Air pollution controls

Air pollution may be an issue for the pulp, paper, iron and steel industries on site. Standards for dust emissions, etc., for these industries are as follows:

Industry	Standards
Iron and steel (coke ovens) (refractory material plants)	Dust: 50 mg/Nm <sup>3</sup> Dust: 150 mg/Nm <sup>3</sup>
Pulp and paper	Dust: 250 mg/Nm <sup>3</sup> H <sub>2</sub> S: 10 mg/Nm <sup>3</sup>

(b) Noise

India does not regulate noise levels by type of industry, but has standards by Zones, and measures must be taken to ensure standards are followed.

(c) Solid and Liquid Waste

Waste treatment and disposal methods inside and outside the factory site will need to be evaluated for the various types of plants after a survey determines the IMT site waste quality and quantity of discharge characteristics.

India does have restrictions on the amounts of different type of hazardous waste generated by factories. Factories in the 18 industries that discharge hazardous wastes must observe those standards.

(d) Polluting Industries

Seven such industries are represented among the proposed tenants on the site, and these companies will need to submit environmental impact assessments with details of intended pollution control measures.

## **11.6. The Development Schedule and Management and Operation System**

### **11.6.1 The Development Schedule**

After completion of the IMT Master Plan Study, the following development stages should be followed for the successful implementation of the IMT (Fig. 11-5).

- \* Feasibility Schedule
- \* Detailed Design
- \* Consolidation of the IMTPO and Commencement of the IMTPO activity
- \* Land Acquisition
- \* Land Reclamation and Infrastructure Development
- \* Facilities Construction

The implementation schedule is shown in Figure 11-5.

### **11.6.2 Management and Operation**

The IMTPO (provisionally termed) will have a management body represented as the IMT promotional centre (IMTPC) with a board of administrators under a chief executive officer. The chief executive officer will be responsible for the day-to-day IMTPC functions and activities. The IMTPC will consist of a planning and development division, a management services division, and a general administration division. The IMTPC will also have a liaison council representing the various companies located within the IMT. A complete description of the organisational structure of the IMTPC is illustrated in Figure 11-6.

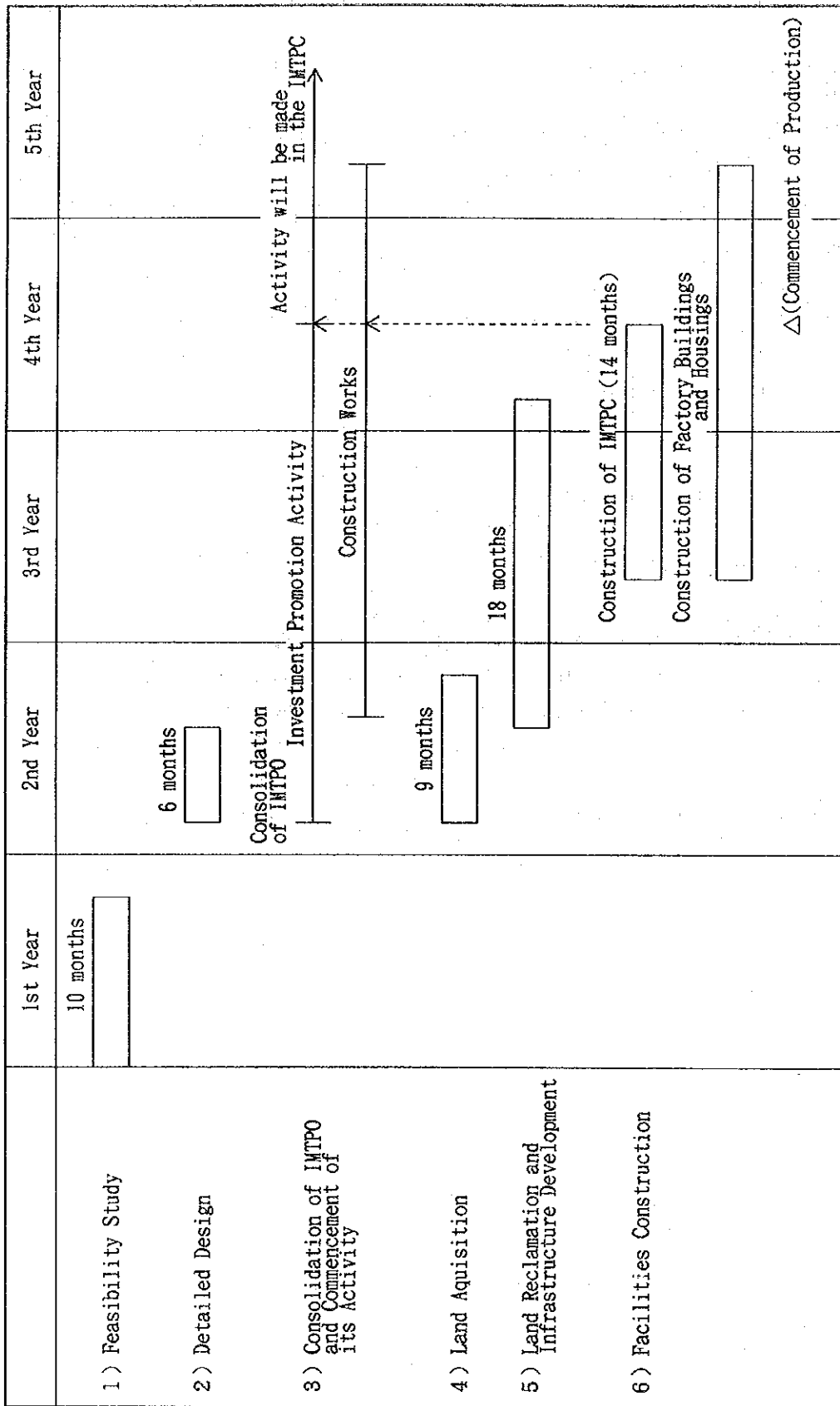


Figure 11-5 Development Schedule



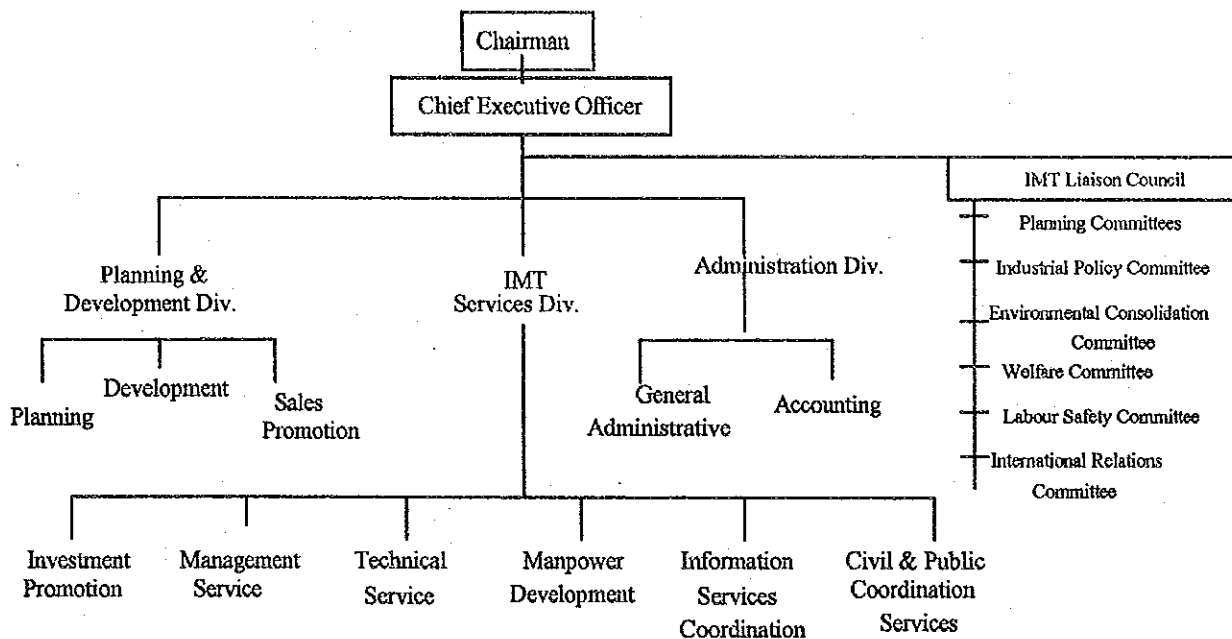


Figure 11-6 IMTPC Organisational Structure



## **CHAPTER 12 COST ESTIMATE AND FINANCIAL ANALYSIS**

In this chapter, the investment cost for the development of the Industrial Model Town is estimated based on the conceptual design mentioned in detail in Chapter 11, and the unit construction cost collected during the field survey. Following that, the sale and lease process of land and operation and management (O&M) costs are calculated based on the estimated development cost of the IMT. The financial feasibility of this project is evaluated by comparing the calculated prices with those of other industrial estates in India, and other countries.

### **12.1 Conditions and Assumptions for Cost Estimates**

The following conditions and assumptions are applied to the cost estimate.

#### **(1) Scope of the Cost Estimate**

In this study, an investment cost estimate of the inside of the IMT was accomplished. As for a building, only the common facilities (administration centre, investment promotion centre, conference room, laboratory, etc.) have been included in the cost estimate. The investment costs for a power plant, water supply system, sewerage treatment and drainage facilities, and solid waste management system to be constructed as a utility facility of the IMT, have been estimated under a separate category.

#### **(2) Price Base**

Total costs are estimated in 1993 constant prices; inflation is not included.

#### **(3) Currency and Exchange Rates**

The estimates are in local currency (India Rupee), and any cost estimated in foreign currencies were converted to local currency by utilising the following exchange rates:

US\$ = Rs. 30.5 = 105 Japanese Yen.

#### **(4) Taxes and Duties**

All taxes and duties including customs duty, are not considered in this study.

(5) Disbursement Schedule

This study assumes that 40 per cent of the investment cost is paid in the first year, 40 per cent in the second year, and the remaining 20 per cent in the third year.

(6) Financing the Plan

According to the guidelines of the IDBI, it is assumed that one third of the investment cost is in equity and the balance is financed by a loan(s). The loan interest rate is set at 16.5 per cent per annum based on the interest rates of the IDBI, IFCI, and the ICICI.

## 12.2 Financial Analysis

### 12.2.1 Financial Analysis Methodology

A financial analysis was conducted using the following methodology.

- Sale and lease prices of the IMT are calculated based on the estimated investment cost.
- The financial feasibility of the IMT project is evaluated by comparing the calculated land sale and lease prices with those of other industrial estates in India and ASEAN member countries.
- If the calculated prices are not competitive with those of other industrial estates, the study team recommends measures to promote the project as financially feasible.

### 12.2.2 Land Sale and Lease Price

(1) Land Sales

Land sales price was calculated at Rs. 583/m<sup>2</sup> by dividing the total investment costs of Rs. 2,493 million by 428 hectares.

## (2) Land Lease

The land lease charge was set to recover the investment cost. It was calculated utilising the following formula.

$$a = A \times \frac{r(1+r)^{n-1}}{(1+r)^n - 1} \quad \text{--- 12}$$

where,

a = Lease Price (Rs./m<sup>2</sup>/month)

A = Sale Price (Rs/m<sup>2</sup>)

r = Discount Rate (%)

n = Payment Period (years)

Discount rate and payment period is assumed to be 15 per cent and 30 years, respectively. From the above, the monthly land charge is Rs. 6.43/m<sup>2</sup>.

### 12.2.3 Operation and Maintenance Cost

The O&M cost is set at 3 per cent of the total investment cost excluding those for utility facilities. Thus, the O&M cost of the IMT per square metre of land is Rs. 17.48/year (Rs. 1.46/mo).

### 12.2.4 Comparison with Other Estates

The calculated land sale and lease prices of the IMT are competitive with those of other industrial estates.

## 12.3 Summary

### (1) Investment Costs

The total investment costs are Rs. 4,322.4 million (US\$141.7 million) for the development of the IMT, including the utility facilities, and are shown in the following table.

**Table 12-1 Summary of Investment Costs**

(Unit: Rs. million)

Item	Investment Costs
Industrial Model Town (excluding utility facilities)	2,493.1
Power Generation Facility	1,177.0
Water Supply Facility	349.6
Sewage Treatment and Drainage Facility	262.8
Solid Waste Management System	39.9
<b>Total</b>	<b>4,322.4</b>

**(2) Price and Charge**

The prices of land and charges for utilities and services of the IMT are as follows:

- Land Sale Price	:	Rs.583 (US\$19.10)/m <sup>2</sup>
- Land Lease Price	:	Rs.6.43 (US\$0.21)/m <sup>2</sup> /month
- Operation and Maintenance Charge	:	Rs.1.46 (US\$0.05)/m <sup>2</sup> /month
- Electricity (for own plant)	:	Rs.1.83 (US\$0.06)/k/Wh
- Water Supply (including sewage and drainage):	:	Rs.2.69 (US\$0.09)/m <sup>3</sup>
- Solid Waste Management	:	Rs.540 (US\$17.70)/ton

## **CHAPTER 13    PROMOTING FOREIGN INVESTMENT: RECOMMENDATIONS**

For successful implementation of the IMT project, the inducement of foreign and domestic investment into the IMT is one of the most essential matters.

To attract the potential investors to the IMT, the various points are recommended as follows with the observation of the results of the investment demand survey.

- (1) Political Stability
- (2) Public Peace and Order
- (3) Infrastructure
- (4) Ancillary Industries
- (5) Government Policy for Research and Development

Considering the above, the study team proposes recommendations in accordance with the following principles:

- (1) Comparison studies of competitive Asian and neighboring countries with India.
- (2) To eliminate obstacles for the promotion of foreign investments by analyzing foreign investors' issues.
- (3) To fully consider India's domestic market industries, as well as the country's small and medium scale industries, and large scale industries.
- (4) To provide for expansion and development of India's economy, particularly related to industrial development.
- (5) To propose pragmatic amendments as a result of discussions with the Government of India and concerned authorities.

### **13.1 General Issues for Investment Promotion : Recommendations**

To further promote foreign investments to the country's industrial base, the following subjects are recommended.

#### **13.1.1 India's Investment Climate: Public Relations Efforts**

The following recommendations are presented:

- (1) Investment promotion centers in overseas will be enriched.
- (2) India's investment seminars will be held more frequently in overseas.
- (3) Special issues about India in overseas respectable news print media will be planned.
- (4) Enhancing the relationships between economic federations between India and other countries, and promote the invitation of economic delegations from abroad.

#### **13.1.2 The Improvement of the Government of India Regulations and Policies**

The Indian Government has implemented occasional improvements of its regulations beginning with the "NIP-91", but further improvements are required. The following recommendations are suggested:

##### **(1) Investment Approval Scheme**

Automatic investment approval scheme should be expanded to other industries to contribute to development of domestic industries such as the scheme is abolished.

##### **(2) Dividend Balancing System**

The Dividend Balancing System which is presently applied to consumer goods manufacturing industries will be abolished. Consumer goods manufacturing industries are attractive investment opportunities for foreign investors, and foreign investment in these industries will significantly help domestic industries improve productivity and product quality.



(3) **Mandatory Convertibility Clause**

The Mandatory Convertibility Clause scheme will be completely abolished.

(4) **Import Negative List**

Clear descriptions about the import negative items list is strongly recommended to avoid unnecessary confusion.

(5) **Technology Collaboration Contract**

Improvement in the boundary of automatic approval for royalties, is recommended.

(6) **Investment Restricted Industries**

Entertainment electronics (VCRs, Colour TVs, CD Players, Tape Recorders, etc.) will be liberalized.

**13.1.3 Improvement in Practical Procedures**

(1) **Establishment of adequate communications systems for official notices of the central government.**

(a) **Announcements in Official Gazettes and Press Notices**

(b) **Establishment of a system to notify by detailed Circular Letters**

(c) **Monthly seminars reporting government actions by the chambers of commerce and industry and/or the Confederation of Indian Industry, in each city**

(2) **Single Window Services**

As a fundamental, simplification of government procedures is expected. The least the function of "Single Window" will be enhanced and concerned persons will be authorised broad power, or other measures will be taken to simplifying the procedures.

## **13.2 Special Treatment for IMT**

To successfully implement the IMT Project, special arrangements and incentives should be provided to industries locating in the IMT.

### **13.2.1 Establishment of Legal Standings**

Similar legal arrangements arranged for EPZs should be enacted for IMT industries. The Ministry of Industry is expected to govern the IMT's industrial developments.

### **13.2.2 Central Government's Special Actions**

#### **(1) Automatic Approval for Investments**

For all industries participating in the IMT, except for eight industries (reserved only for the public sector) and 16 industries (required industrial licenses), will be automatically approved.

#### **(2) Industrial License**

Entertainment Electronics (VCRs, Color TVs, CD Players, Tape Recorders, etc.) will be eliminated from the Industrial License obligation.

#### **(3) Dividend Balancing**

Same as above. Dividend Balancing should not be applied to the IMT industries' manufactured consumer goods.

#### **(4) MRTP Act**

The MRTP Act should not be applied to IMT industries similar to EPZ industries.

#### **(5) Tax Incentives**

##### **(a) Corporate Income Tax**

India should provide attractive incentives to exempt corporate income tax at least on same level of neighboring countries.

(b) Import Duties for Capital Goods

India should exempt import duties for capital goods, observing that the total effect of long-term operations of foreign collaboration industries.

(c) Withholding Taxes

Withholding taxes for dividends and royalties should be exempted for five years as found in neighboring countries.

(6) Special Finance

Additional special interest rates, for example, two percent below the normal commercial bank rate, will be expected for the IMT.

**13.2.3 State Governments' Special Incentives**

Recommendations for the State of Haryana are as follows:

(1) Sales Tax

Sales taxes will be exempted for nine years with a limit of 150 per cent of invested capital for IMT industries; designated as "A Zone", in spite of the fact that the candidate IMT site of Gurgaon is located actually in designated "B Zone" in Haryana.

(2) Octroi

The octroi for capital goods, construction materials, production materials, etc., will be exempted for nine years as treated in "A Zone".

(3) Capital Subsidy

The state governments will provide invested capital subsidies of a maximum Rs. 75 million for IMT industries as designated pioneer industries.

(4) Subsidy for Environment Counter Measures

The state governments will provide Rs. 5 million maximum for environmental counter measures for IMT industries as other state (the State of Karnataka).

**(5) Electricity Duty**

**Electricity duty ( two percent of electricity fees ) will be exempted for 5 years.**

## **CHAPTER 14 SOCIAL ENVIRONMENTAL IMPACT ASSESSMENT**

### **14.1 Definition of Social Environment**

Based on preliminary investigations and documented findings for the candidate sites, the IMT project social environment was defined as follows:

- |  |  |                                      |
|--|--|--------------------------------------|
| •Land Use and Relocation               | •Economic Activities                             | •Disruption of Community Relations   |
| •Transportation                        | •Social Infrastructure (hospitals schools, etc.) | •Poor living conditions (slum Issue) |
| •Historical and Religious Preservation | •Natural Preservation                            | •NGO's activity                      |

The social environment variables were investigated at the site, and 10 km. and 25 km. radius distances from the center of the candidate site.

### **14.2 Mitigation Measures of Social Environmental Issues**

This section reviews the mitigation measures that were mentioned in the previous sections (see Table 14-1).

**Table 14-1 Social Environmental Issue and Measures**

Social Environmental Issue	Objective	Methodology
(Gurgaon) 1. Land Acquisition Issues	<ul style="list-style-type: none"> <li>- Fair evaluation of compensation</li> <li>- Compensation for landowner (Prevention of intermediate commission)</li> <li>- Employment opportunity for agrarians</li> </ul>	<ul style="list-style-type: none"> <li>- Destination of land owners by registered records</li> <li>- Clarification of evaluation Standards for land compensation</li> <li>- Diversification (compensation many, lands, employment) of compensation method for land acquisition</li> <li>- Priority employment and vocational training for local people</li> </ul>
2. Road Disconnection	<ul style="list-style-type: none"> <li>- Establishment of community roads among Manesar and Naharpur Kasan/Nawada Fatchpur</li> </ul>	<ul style="list-style-type: none"> <li>- Keep of the existing roads or construction new roads</li> </ul>
3. Squatter/Colonies	<ul style="list-style-type: none"> <li>- Prevention of illegal occupancy</li> </ul>	<ul style="list-style-type: none"> <li>- Control of public space</li> <li>- Housing construction and control for construction labours</li> </ul>
4. Top Soil Erosion	<ul style="list-style-type: none"> <li>- Prevention of Soil erosion areas due to brick factories</li> </ul>	<ul style="list-style-type: none"> <li>- Study for new construction materials (using by flyash, etc.)</li> <li>- Reduction of brick factories</li> <li>- Limited use of bricks for the IMT</li> </ul>
5. Bird Sanctuary	<ul style="list-style-type: none"> <li>- Minimised impact to the bird sanctuary of Sultanpur Lake</li> </ul>	<ul style="list-style-type: none"> <li>- Further study in F/S stage</li> </ul>
6. Rising of Surrounding Agricultural Land	<ul style="list-style-type: none"> <li>- Prevention of an increase in land prices</li> </ul>	<ul style="list-style-type: none"> <li>- Guidance of upgrading for agricultural production</li> <li>- New employment opportunity and increasing income under industrialisation</li> </ul>
7. Countermeasure to Movement	<ul style="list-style-type: none"> <li>- Protect from the movement against the project</li> </ul>	<ul style="list-style-type: none"> <li>- Enough explanation of local people</li> <li>- Enough prevention for environmental changes</li> </ul>

### **14.3 Feasibility Study Scope**

This section describes the SEIA in the future detailed feasibility study.

#### **(1) Land Acquisition Issues**

In order for land acquisition to proceed for the IMT site, the study should specify land ownership and identify affected persons. At the same time, a fair and just compensation system and evaluation method of the land should be developed. The list of landowners should be prepared based on a land ledger. The affected villages and villagers, in addition to landowners, need to be identified utilizing a site survey. Farm land yields around the IMT site should be confirmed.

#### **(2) Employment**

After specifying which factories will locate to the IMT, the available labor supply from surrounding villages needs to be examined based on the number of workers and skills required. If factories require a substantial number of skilled laborers, vocational training programs should be considered. An employment system and an organisation for establishing employment priorities for localities should be considered.

#### **(3) Squatter /Colonies**

Urban slums should not be a problem in the IMT, however, squatter camps that inadequately house construction workers are common in India, and deteriorate living conditions. Furnished housing structures for construction workers should be considered.

#### **(4) Water Rights**

The Manesar drain canal crosses the Gurgaon IMT site, but needs to be investigated. The water rights, if any, and utilization of the drain canal, shall be surveyed as part of the SEIA.

**(5) Road Disconnection**

Traffic volume and frequency of traffic along the connection road between Naharpur Kasan / Nawada Fatehpur and Manesar should be surveyed. A substitution road plan needs to be evaluated.

**(6) Traffic Increase**

An increase in traffic to and from the IMT is expected. Traffic studies and projections should be derived and included in the SEIA.

**(7) Top Soil Erosion**

The use of flash as a new construction material should be studied, and other possible materials should be identified.



## **CHAPTER 15    RECOMMENDATIONS**

The Master Plan Study has demonstrated the importance of formulating an IMT in India as one of the most effective measures for revitalising the country's economy. In order to build on the concept of establishing an IMT in India, the following future subjects and recommendations should be noted.

### **15.1    Macro Economy and Industrial Policy**

India's macro economy, industrial policies, and industrial development were studied and described in the chapters preceding Chapter 6, the formulation of the IMT concept. From the results of the studies, it should be noted that major influences, however indirectly related to the IMT, continue to be economically important issues for the country and are discussed below.

#### **(1)    Simplification and further liberalisation of capital goods import**

In order to decrease imports, further simplification and the liberalising of capital goods imports is necessary to produce a higher quality of domestic intermediate and capital goods.

#### **(2)    Promotion of technical collaboration and establishing joint venture companies with foreign manufacturers.**

Previously, manufacturers could market products relatively competition free under a "less supply than demand" circumstance. Thus, domestically manufactured products that were of internationally accepted quality levels were quite limited. To improve product quality, the introduction of competition in the market is a necessary first step, followed by the introduction of foreign technology through establishing technical collaborations and joint ventures with reliable foreign manufacturers.

#### **(3)    Increasing the production of capital goods and other manufactured goods.**

The production of capital goods and other manufactured goods totaled about 35 per cent of the country's GDP, which is relatively low in comparison to Thailand; a country with agricultural production that mirrors India. Again, to decrease imports, requires increasing domestic production.

- (4) Production of quality goods that meet consumption demand and structure.

As the middle class consumer becomes more interested in high quality goods, the domestic production of consumer durables that can meet consumers' demand, and structure should increase.

## **15.2 To Actualize the IMT**

Concrete measures should be immediately introduced for attracting foreign investors that effectively competes with incentives promoted by neighboring countries.

### **15.2.1 Feasibility Study: Selection of Candidate Site**

Four candidate sites were evaluated and awarded priorities based on the IMT development concept. After a consensus is arrived at regarding the appropriate candidate site, the IMT Master Plan Study is expected to proceed to the feasibility study stage.

### **15.2.2 Feasibility Study Implementation: Subjects**

Further study of the Soft and Hard factors should lead to successful actualisation of the IMT as defined in the Master Plan Study. Subjects for the feasibility study implementation should address the following:

- (1) Investment Demand Survey

At the implementation stage of the investment demand survey in this study, the IMT site location, completion of industrial estates, scale of estate, sales price, etc., were not as yet decided. Therefore, the investment potential of individual enterprises is difficult to grasp.

It is significant that grasping investors' demand to affect the IMT's fruitfulness. Therefore, investment potentiality of individual enterprises should be surveyed in more detail during the Feasibility study.

(2) Foreign Investor Promotion

The measures listed below should be adopted as soon as is possible.

- Public Relations efforts that reveal India's investment climate.
- Improving industrial licensing systems.
- Developing practical procedures for implementing industrial policies.
- Special incentives for the IMT.

(3) Social and Industrial Infrastructures

The following detailed study should be conducted after reviewing the conceptual design made in the Master Plan Study.

- Types of Industry and Development Scale
- Land Utilisation
- Traffic Planning
- Planning and Zoning of Green Belt and Parks
- Land Reclamation Planning
- Infrastructure (water supply, sewerage, energy, telecommunications)

Infrastructure planned in proximity to the candidate site is required for implementation in accordance with the IMT development schedule as these directly effect the success of the IMT's formulation.

In order to facilitate efforts, the necessary discussions and coordination among the relevant central and state level organisations should be accomplished during the preparation stage.

(4) Consolidation of the IMTPO and associated activities.

The IMTPO should be studied and established in the early stages for furthering realisation of the IMT's goals as an effective and functional organisation. The IMTPO's functions and organisation should be clarified and separate from existing organisations. Also, incentives and financial resources should be studied.

**(5) Social Environmental Assessment**

The following items should be supplementary or further studied to prevent possible social and urban development problems during the IMT's implementation, or after completion.

- Land Acquisition
- Employment related issues (local people)
- Slums
- Water Rights
- Access Roads
- Traffic Conditions and Forecasts
- Protection of Soil from Effluents



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