

- Although Chhattisgarh is rich in terms of availability of mineral resources, it has been unable to exploit this natural advantage to spur industrial growth
- Setting up Industrial Estates would go a long way in fuelling industrial growth, as properly designed and implemented Industrial Estates can attract small and medium scale value-added industries
- Compared to States like Gujarat and Karnataka, which have about 200-300 Industrial Estates distributed across all the districts there are only seven Industrial Estates in the State
- There are about 781 small-scale industries and 72 medium and large-scale industries housed in these Industrial Estates. These Industrial Estates are managed by the Audyogik Kendra Vikas Nigam, Raipur, which is now part of Chhattisgarh State Industrial Development Corporation (CSIDC)
- There is scope for setting up more Industrial Estates in the State. To start with, these could be set up in the regions of Dantewada, Janjgir and Surguja where the mineral processing industries and downstream industries of iron, aluminium and cement could be targeted
- The successful implementation of new industrial estate projects would critically depend upon factors such as detailed location analysis, a proper institutional framework, adaptation of the configuration and design of the industrial estate to local conditions.
- The private sector must be involved in developing these Industrial Estates to improve the commercial viability of the project – the Government must limit itself the policy making and regulatory roles

Section 1: Introduction

Objective

The objectives of this position paper are to:

- ◆ Present the concept of Industrial Estates and the various issues that need to be considered in setting up Industrial Estates in terms of
 - Location, configuration and design
 - Institutional framework for private sector participation
 - Government policies and incentives
- ◆ Review the current scenario of Industrial Estates in the State in terms of the land area, employment generated, infrastructure, etc
- ◆ Identify potential for further development of Industrial Estates
- ◆ Outline steps that the Government needs to undertake

The final section presents the way forward in terms of the steps that Chhattisgarh needs to take to promote Industrial Estates.

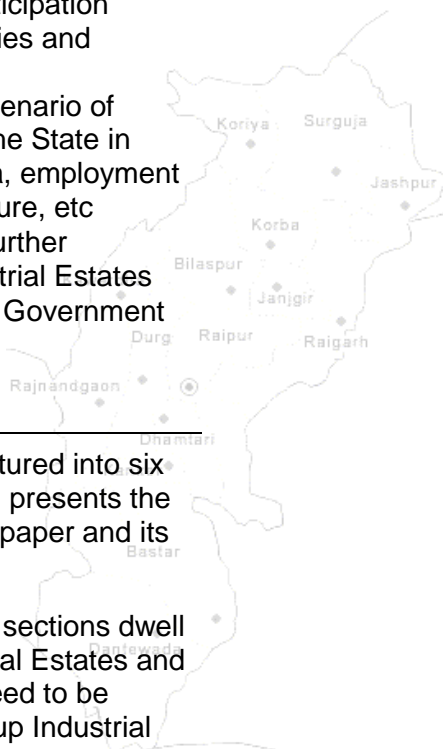
Structure and Scope

This sector paper is structured into six sections. The first section presents the objectives of the position paper and its structure and coverage.

The second and the third sections dwell on the concept of Industrial Estates and the various issues that need to be considered while setting up Industrial Estates including the need for an appropriate institutional framework.

The fourth section presents International and Indian experiences in Industrial Estates and the lessons Chhattisgarh can draw upon.

The fifth section reviews the current scenario of Industrial Estates in Chhattisgarh and the scope for setting up Industrial Estates in the future.



Section 2: Industrial Estates - The Concept

The Concept

The term "industrial estate" is often used interchangeably with industrial district, industrial park, industrial zone, special economic zone, eco-zone etc.

An Industrial Estate (IE) is a self-contained geographical area with high quality infrastructure facilities, which house businesses of an industrial nature. An industrial estate is administered or managed by a single authority that has a defined jurisdiction with respect to tenant companies. The authority makes provisions for operation and management; enforcing restrictions on tenants and planning with respect to lot sizes, access and utilities.

The IEs offer industrial, residential and commercial areas with developed plots/pre-built factories, power, telecom, water, sanitation and other civic amenities such as hospital, sewerage and drainage facilities, security etc.

The main targets of Industrial Estates are the high value adding small and medium scale industries, which do not have the wherewithal to invest in developing their own basic infrastructure facilities, but have the capacity to pay for the services provided to them.

Hence, Industrial Estates are regions where infrastructure facilities are provided for and thus a conducive environment is created to attract small and medium scale industries.

Advantages of Industrial Estates

Industrial Estates can positively influence the socio-economic development and industrialisation of the region by:

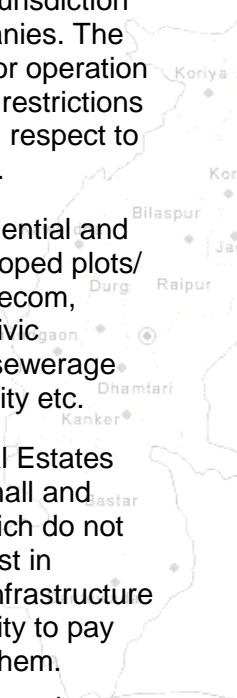
- Attracting investments
- Generating employment

- Leveraging on raw material sources, skilled manpower resources, proximity to end-use markets, etc.
- Adding to and improving social infrastructure in terms of healthcare and educational facilities

Industrial Estates have led to the development of large urban regions especially in the States of Gujarat and Maharashtra, wherein large-scale city/town development has taken place. Bharuch, Vapi and Valsad in Gujarat and Nashik and Nagpur in Maharashtra are examples of such developments.

Industrial Estates can be developed either as a:

- General Industrial Park (GIP) which caters to all types of industries, an example of the GIP being the Industrial Model Township at Manesar (Haryana) which has facilities to house different types of industries like auto and auto components, high precision industries, textiles, pharmaceuticals, software etc. or
- Special Industrial Park (SIP) which focuses on a specific industry like software, textiles, plastics, etc. The Software Technology Park at Whitefield in Bangalore is one such example



Section 3: Industrial Estates – The Issues Involved

This section profiles the roles of various stakeholders along with the issues involved in setting up and managing Industrial Estates.

Location

One of the most important factors contributing to the success of an industrial estate is its location. The main criteria that should be considered while deciding the location of an Industrial Estate are as follows:

- Natural competitive advantage of the region in terms of the types of industries that can flourish there
- Potential for forming industrial clusters in the region to ensure the economic viability of Industrial Estates
- Presence of transportation nodes in the region in the form of airports, railway terminals and road networks both from raw material sources and to end-use markets
- Presence of technological research institutions and training facilities such as universities, colleges, etc., which would add value to the growth of these Estates
- Fiscal incentives applicable for setting up the Industrial Estate in a particular region

The competitive advantage of a region can be determined in terms of its:

- Unique socio-economic characteristics arising out of the existence of traditional skills, work culture, etc.
- Proximity of the region to important markets, e.g. the Industrial Park developed in Ghaziabad has been set up to attract industries for whom Delhi is a key market
- Proximity of the region to downstream industries e.g. the ancillary estates in Kalka (Haryana)

has been developed to attract component suppliers to Eicher Goodearth Ltd. at Parwanoo in Himachal Pradesh

- Proximity of the region to important raw material sources e.g. the rubber park located in Ernakulum (Kerala) has been set up to attract rubber processing industries - 94% of the raw material i.e. natural rubber is produced in this region
- Connectivity of the region to other regions e.g. Industrial Estates have been set up in places like Dubai and Singapore to exploit this advantage

Greater the competitive advantage of the region to support specific industries the greater is the potential for forming industrial clusters, since a large number of industries would get attracted. The formation of industrial clusters would in turn, make the Industrial Estates commercially viable.

As is evident, determination of potential location of an industrial estate requires a comprehensive and scientific analysis.

Configuration and Design

Usually, an industrial estate is configured around three zones- the industrial, the residential and the commercial zones.

- The industrial zone encompasses industrial units catering to both domestic and export markets
- The residential zone provides for housing facilities, and
- The commercial zone comprises of support facilities like banks, post office, hospital, shopping centres, clubs etc.

While designing an Industrial Estate, a mix of industrial, residential and commercial zones must be kept in mind.

The design of these infrastructure facilities with regard to layout, size and sophistication can be tuned to the need and affordability of the industries being targeted.

Further, there is flexibility available in designing each of the individual zones. The industrial zones can be divided into:

- Industrial land for medium and large industries. Different industries within the same industrial group can be given contiguous land so that they share common facilities. For e.g. the chemical processing industries could be grouped together as they could share an effluent treatment plant. Similarly the software units could be located nearby and share common IT infrastructure facilities like the earth stations etc.
- Pre-built factories that provide readymade factory space and serve as incubators for start-up organisations

The residential areas can also be commercially exploited by renting out/selling the housing facilities to outsiders to improve the economic viability of the project.

Government's Role and Policies

Promotion of industrial parks was given a boost by the Government of India towards the end of the first five-year plan (1952-57) when the 'Industrial Estates Development Program' was initiated. The role of the Central Government in the establishment and upkeep of Industrial Estates in India has been mainly that of laying down the guidelines for the State Governments. The responsibility for the selection of sites, development of areas, construction of infrastructure facilities etc., has been the mandate of the State Governments. Subsequently, State

Governments created undertakings like the State Industrial Development Corporation (SIDC) to execute this mandate.

Some of the roles of SIDCs include:

- Setting up infrastructure facilities to promote industrial growth by setting up industrial parks
- Identifying and promoting industrial projects
- Providing financial participation in terms of term loans and direct equity participation
- Handling the operations of the industrial parks

Till date, in most States the State Industrial Development Corporation has been the sole promoting, investing, implementing and operating agency for industrial parks. However, the need for private participation in setting up and operating industrial parks has been realised of late because of the:

- Worsening fiscal health of the State forcing the State Governments to reduce their investments in developing industrial infrastructure
- Commercial unviability of many of the Industrial Estates promoted by the State

Private Sector Participation

Private sector participation is being encouraged by all the States to ensure a more commercial approach to the entire exercise of setting up and managing Industrial Estates.

Private sector participation would lead to:

- A better choice of location, design and infrastructure facilities
- Better collection of revenues

- Professional and innovative management
- Greater accountability and responsibility
- Fund mobilisation to bridge the infrastructure investment gaps

The private sector can involve itself in several capacities in the entire process of configuring, investing and implementing these projects.

Institutional Arrangements with Private Participation

So far the Government has been the sole promoting, investing, implementing and operating agency in this sector. Participation of the private sector requires changes in institutional arrangements. This would lead to increase in the number of players and would encompass:

- The State Government
- A promotional agency set up by the State like the State Industrial Development Corporation (SIDC) or a State Industrial Estate Promotional Authority (SIEPA)
- The Private Sector
- Financial Institutions

With private sector participation, the institutional framework involved in implementing an Industrial Estate would be as follows:

State Government:

The primary role of the State Government would be that of a facilitator. This role would be addressed by framing an investor friendly policy for Industrial Estates

SIEPA/ SIDC:

The role of the promotional authority would be that of a regulator. In this

capacity, the authority would act as a centre of trust and expertise. It would lay down policy guidelines and operating parameters for the establishment of Industrial Estates by the private sector. It would also form an interface with the Government and take on the responsibility of obtaining the necessary approvals to proceed with project implementation. SIEPA/ SIDC would also play a role in the selection and acquisition of land.

As a regulator, the authority would ensure that the parties adhere to their commitments and function as per specified rules, provide an effective dispute resolution and grievance redressal mechanism and impose necessary penalties wherever necessary. The SIDC could also act as an equity partner to the private partners to reflect its commitment and seriousness in getting the project implemented and also to improve project viability.

Private Sector:

The private sector can get itself involved in various capacities for developing Industrial Estates. As a promoter, the private sector player could play the role of a developer. As an investor, the private sector player may be involved actively or passively.

Implementation of an Industrial Estate project by the private sector is usually through the formation of a special purpose vehicle (SPV) / development company. This is a company in which the promoter (private or SIDC), Financial Institutions and/ or the State agencies have an equity stake.

When the promoter from the private sector is involved in the implementation



of the project, he would be an active investor. The promoter would be a passive investor when the SPV appoints an external agency for the implementation of the project and the promoter is not actively involved.

The private sector could also involve itself in the implementation of the project as the external agency responsible for mobilisation of resources, marketing the estate to private investors and later for operation and maintenance (O&M), without any stake in the SPV.

The first example of such an arrangement in India illustrated in the Box VI.1.

Land Acquisition

Land acquisition is considered to be a major hindrance in setting up any industrial estate on account of two main reasons:

- Inability to acquire contiguous land due to reluctance of some owners to sell the land
- Problems in fixing the compensation price of the land

Often, inability to acquire contiguous land because of the unwillingness of a few landowners to sell the land can jeopardise the entire project. These landowners can indulge in speculative activity knowing the importance of their land to the entire project. To put an end to such practices and in cases where large areas of land are to be acquired for the overall development of the region, the Government takes up the role of land acquisition. Land acquisition can be done through two routes:

- Direct negotiation with the land owners; and

Box VI.1: Mahindra Industrial Park Ltd.(MIPL) - A case of private participation in India

The MIPL will be the first planned private sector industrial estate located in the Chengalpattu district of Tamil Nadu. MIPL is an SPV with a unique and pioneering institutional structure comprising of a partnership of three giants in the Indian industry. The institutional framework is as follows:

The promoter:

The Rs.6000 crore Mahindra & Mahindra group is the promoter of the park from the private sector which also owns an equity stake in the project

The investor:

Infrastructure Leasing & Financial Services, which focuses mainly on commercialisation of infrastructure projects, is the Financial Institution investing in the project.

The Government agency:

Tamil Nadu Industrial Development Corporation is the Government agency involved in the project to reflect the commitment of the State Government in the completion of the project.

The implementing agency:

MIPL has hired Jurong Town Corporation (JTC) International to do the master planning of the park. JTC is the private sector player, which has been hired to implement the project.

- Acquisition by Government notification under the Land Acquisition Act

The key advantage in the former method of land acquisition lies in its flexibility, especially for the private owners. However, if there are a large number of landholders, direct negotiations could turn out to be cumbersome as a host of sales transactions would have to be registered, leading to escalation of costs and loss of interest by the private participants.

On the other hand, the latter method of land acquisition is legalistic and rigid. This results in a protracted land acquisition process, thereby reducing the commercial viability of such projects.

Pricing is another major hurdle in the acquisition of land.

Sustainability

The quality of Infrastructure of the Industrial Estates in India is deteriorating, thereby defeating the purpose of their creation.

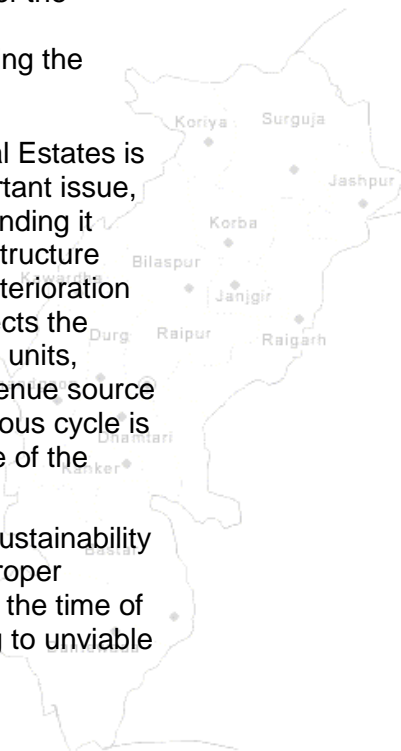
Sustainability of the Industrial Estates is therefore becoming an important issue, with the State Government finding it difficult to maintain the infrastructure facilities in these estates. Deterioration of infrastructure facilities affects the performance of the industrial units, which in turn affects, the revenue source for the estates. Hence, a vicious cycle is created, leading to the failure of the industrial park.

Another issue affecting the sustainability of the project is the lack of proper demand – supply analysis at the time of project configuration, leading to unviable operations

Fiscal Concessions

The fiscal levies on Industrial Estates have to be examined in the overall context of economic growth of the State, need for infrastructure development, quantum of investments required and the time period for obtaining minimum return on investments and their contribution to social welfare. Industrial Estates are an area where the large-investment high-risk syndrome makes it obligatory to keep the cost of service low and level of efficiency high.

Recognising the above complexities, the Central Government has proposed a 5-year tax holiday followed by a 30% deduction of corporate tax for the next five years to attract the private sector promoters to set up industrial parks. Another step taken to promote industrial parks has been to liberalise the regulations on External Commercial Borrowings (ECB) to enable Foreign Direct Investments into these parks.



Section 4: Industrial Estates – International and Indian Experiences

International Experiences

The concept of fully developed facilities on a commercially viable basis is relatively new in India. However, such Industrial Estates have been commonly used as vehicles for speeding up industrialisation in South East Asian countries.

The experiences of a few South East Asian countries that have used Industrial Estates as a catalyst for economic growth are given below.

Thailand:

The objective of the Government policy in Thailand was primarily to attract investment in the provincial areas. In order to achieve this objective, the Government undertook the development of infrastructure facilities in the provinces through the funding of projects in electricity, water supply, basic telecom and transportation. In addition to this, the Government also provided a number of fiscal incentives (such as tax exemptions to companies with their units in industrial zones with tight pollution control norms) to industries located within these classified areas.

The Industrial Estate Authority of Thailand (IEAT) is the authority concerned with the promotion of Industrial Estates in Thailand. The IEAT directly administers thirteen public estates in that country and jointly manages fourteen private ones. These twenty-seven estates represent 1,700 factories, an investment of about 769 billion baht (\$20.95 billion), and approximately 400,000 employees. IEAT, as the permitting agency for facilities inside the borders of Industrial Estates, is responsible for all aspects of estate management, including the

granting of land-use and operation permits, operating utility and waste treatment systems, monitoring environmental quality, safety, and labour, and regulating industrial operations, taxes and administration.

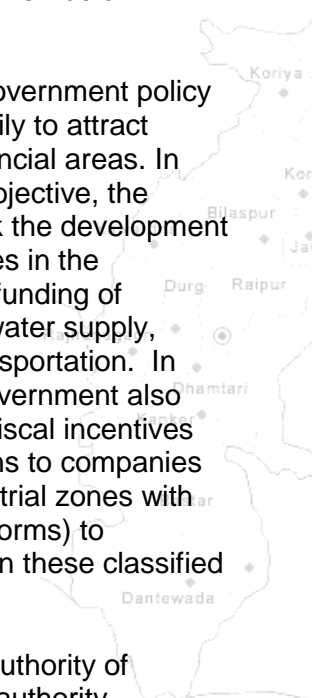
One of the environmental goals of the IEAT is to group factories systematically by industry in order to treat and dispose off waste more efficiently. The policies adopted by IEAT ensures the distribution of electronics, ceramics, gems, agro-industry and metal works industries to the north of Thailand; textiles, paper products, automobiles, and electronics estates through the midlands; and steel, petrochemical, palm oil/rubber, food canning, and electronics estates to the south of Thailand.

IEAT also tries to keep certain industrial sectors away from urban centers and water sources. One example for this exclusion that officials cite is due to particularly high water use and pollution, in industries such as textile dyeing and electroplating.

One of the policy techniques IEAT uses to induce developers away from cities such as Bangkok is a tiered-tax system. The farther one locates from Bangkok, the better one's tax holiday. Locators in Zone 1 Industrial Estates (Bangkok area) earn three years of corporate income tax holidays, those in Zone 2 earn seven, and those in Zone 3 earn eight plus an additional 50 percent reduction for another five years.

The tax concessions offered by the Government of Thailand include:

- Reduction of waiver of import duties and a 50 percent reduction in business tax on imported machinery
- Upto 90 percent reduction in import duties and business tax on imported



raw materials for a period of one year

- Three to eight years income tax holiday, with a provision allowing the carry forward of losses incurred during the tax holiday to be used as tax credit for a maximum period of five years
- Exemption of goodwill, patent and other royalty payments for a period of five years

Other concessions for industries located in the promoted zones include:

- Upto 90% reduction of business tax on sales for a maximum period of five years
- Consideration for a 50% reduction in juristic income tax for a period of five years after the tax holiday period or from the year the operations start to make profit
- Permission to expense cost of transportation, electricity and water at a rate two times the actual amount
- Permission to expense upto 25% of the installation costs of all facilities in any one-year or in several years for a period of 10 years from the date operations start to make profit

In addition to this, industries that are located within these Industrial Estates are granted a concession in the form of a 10% discount on the cost of electricity for a period of five years from the start of the operations.

Singapore

The rapid economic growth of Singapore can be attributed to a process of systematic development of integrated industrial townships and facilities. This nation has thirty State-owned Industrial Estates, of which Jurong Town is the largest estate. Jurong Town Corporation (JTC) is a statutory Body established to spearhead

the process of industrial development of Singapore. It has a tight regulatory grip on the companies operating under its auspices and allocates land to companies that may they build or occupy buildings established by JTC under a thirty-year lease.

JTC has built the entire infrastructure—sewers, roads, substations, electrical and communication lines—in the Industrial Estates. The ongoing management of the telecommunications, electrical wiring, and other infrastructure support contracts is given out to other Government agencies for a fee, which JTC recovers through land leases. The JTC is the single largest supplier of pre-built industrial space accounting for more than 18% of the total stock of industrial space. Of the total industrial space available, the private sector owns nearly 70%.

The various kinds of zones offered by JTC are:

- Heavy Industrial Zones, which are large industrial plots, allotted to industries such as petrochemical, metal fabrication, etc.
- Medium and Light Industrial Zones reserved for manufacturing industries such as plastics, automotives, etc.
- Food and Pharmaceuticals Zones
- Urban Industrial Land reserved for multi-storey development projects which are light and labour intensive, such as electronic components
- Warehousing Zones for development of warehousing complexes
- Specialised Industrial Estates to cater to the needs of specific industries

It is the Industrial Estates across the region and their built-in relationship with Government agencies that may come closest to duplicating the conditions that made Singapore a success in the environmental arena. JTC's international arm, JTC International (JTCl) has, as a matter of policy, exported its high environmental performance around the region to other Industrial Estates in which it has investments.

The concessions provided by the Government include:

- Benefit of nil tax for five to ten years after commercial production starts for industries or products that have been granted pioneer status
- Investment allowance is admissible on profits exempted upto 50% of the actual fixed investment in productive equipment, custom designed factory premises. Unused allowances may be carried forward till profits are generated
- 10% tax for a maximum period of 10 years for enterprises possessing post- pioneer status
- Tax Concessions on increase of income from additional investment on productive equipment exceeding \$ 10 million for a period of five years

Indonesia

The development of Industrial estates in Indonesia is linked to the Government of Indonesia's policy of promoting export-oriented units that are labour intensive and have low capital and technology costs.

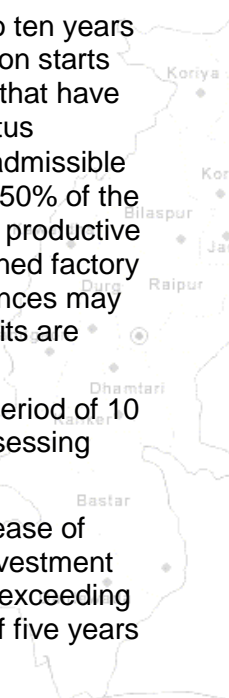
The country has forty-six Industrial Estates in operation and only half a dozen are wholly Government owned. Although Indonesia began developing its Industrial Estates under the Ministry of Industry and Trade in the early 1970s, the private sector was not allowed to

develop and manage them until 1989. The Government sites tend to exist in more remote areas, whereas private estates are located primarily in urban centres. In fact, four-fifths of all of Indonesia's registered industrial enterprises are located near the urban areas on Java, particularly West Java and the capital of Jakarta. About 15 percent of all Indonesia's industrial activity takes place on Industrial Estates, which contain a mix of industrial sectors.

The Industrial Estates also help in managing the adverse environmental impacts by facilitating land use planning. The operators of the Industrial Estates are delegated powers relating to statutory clearances with respect to land and building permits.

Malaysia

In the case of Malaysia also, the Industrial Estates were promoted as a part of the process of export led growth. Malaysia has 222 Industrial Estates, special economic zones and free trade zones developed by the State economic development corporations, port authorities, and municipal governments. Private developers own and operate another sixty-three Industrial Estates and many more are in the planning stage. In the publication of its seventh five-year plan, the Government of Malaysia mentions that it will continue to encourage private developers to own and operate Industrial Estates alone, as well as on a joint-venture basis with Government agencies. If the idea is acceptable direct participation of Government agencies in industrial estate development will eventually be reduced. But for now, the development of Malaysia's Industrial Estates is undertaken principally by the national Government. Malaysian officials report



that most of the large companies are located in the Industrial Estates to take advantage of tax benefits offered by the Government.

services offered by HSIDC include equipment finance, bill discounting, merchant banking services, forex advisory services, etc.

The Indian Experience till now

Almost all the States have taken initiatives to set up Industrial Estates to boost the economic activity. The experiences of select SIDCs, which have developed Industrial Estates as a catalyst for economic growth, are discussed below:

Haryana State Industrial Developmental Corporation

The Haryana State Industrial Developmental Corporation (HSIDC), was established in 1967 by the Government of Haryana to act as a catalyst for promoting and accelerating the pace of industrialisation in the State. The main objectives of HSIDC include identification and promotion of large and medium sector projects and facilitation of infrastructure development. HSIDC has till date promoted 33 Industrial Estates in the State. HSIDC, with a paid-up capital of Rs.35.56 crores has been able to catalyse investment to the tune of Rs.544.70 crore in these estates. HSIDC also recorded an all-time high income of Rs. 25.05 crore and a gross profit of Rs.6.06 crore in 1999-00. The success of HSIDC has been on account of the following reasons:

- It seeks co-promoters from the private sector aggressively
- Has a locational advantage of being situated near cities like Delhi and Chandigarh, which are large markets
- Its ability to adapt the design of industrial parks based on the local characteristics
- Its ability to provide financial assistance to entrepreneurs and established industries. The financial

Gujarat Industrial Development Corporation

The Gujarat Industrial Development Corporation (GIDC), was created by the Government of Gujarat to spur industrial development in the State. GIDC has till date, planned for 257 Industrial Estates of which 169 are functional. As part of the New Industrial Policy 2000, the Gujarat Government has decided to spur the growth of the Industrial Estates by formulating the 'Industrial Park Scheme 2000'.

The Industrial Park Scheme 2000 recognises the need for private sector participation in setting up Industrial parks and creating employment opportunities. In order to encourage private sector investment in this sector, the State Government has decided to implement an incentive scheme for setting up employment-oriented industrial parks, high-tech parks, investment-oriented parks and trade centres.

Details of the various incentives provided by the State Government are highlighted in Table VI.1 (overleaf)



Table VI.1

SCHEMES FOR PROMOTING INDUSTRIAL PARKS		
Type	Condition	Criteria for assistance
Employment Oriented Park	To develop facilities for setting up a minimum of 100 units or more or creating more than 2,500 employment opportunities in the Industrial Park	Subsidy at the rate of 10% of capital investment up to a maximum of Rs. 1crore
	200 units or more than 5,000 employment opportunities	Subsidy at the rate of 10% of capital investment up to a maximum of Rs. 2 crores
Hi-tech park	-	Subsidy at the rate of 50% of capital investment, subject to a maximum Rs. 250 lakhs will be admissible
Investment park	-	Subsidy at the rate of 10% of capital investment subject to a maximum of Rs. 250 lakhs will be admissible
Trade Centre	Trade centre having a built-up area of 5,000 sq. mtr or more for use	Subsidy at the rate of 10 % of the eligible capital investment – maximum cash subsidy of Rs. 50/-lakhs
	Trade-centre having a built-up area of 10,000 sq. mtr or more for use	Subsidy at the rate of 10 % of the eligible capital investment-maximum cash subsidy of Rs. 100 lakhs

While there have been numerous success stories, a few of the projects have also failed as they were set up with the sole motive of inducing industrial growth in backward regions. This motive led to the improper selection of location, resulting in the inability to sustain industrial activity in these regions.

The other reasons for the failure of these estates in India include:

- Lack of funds
- Inability to tailor the estate to the characteristics of the region
- Improper implementation and design leading to poor quality of infrastructure facilities
- Frequent changes in administrative heads and political interference

Lessons for Chhattisgarh

Some critical lessons offered by various case studies described in this section include:

- Need for a specialised agency at the State level to lay down guidelines and operating parameters like IEAT in Thailand, JCT in Singapore and MIEL of Malaysia. This specialised agency (CSIDC) must be given full powers of all the departments for the industrial estates (either by statute or through amendments in relevant acts)
- The Industrial Estates must not be set up with the sole motive of inducing industrial growth in the backward regions
- A profit motive must be brought into the entire exercise by the

- involvement of the private sector, thereby improving efficiency
- The location of the estate and its design must be tailored to leverage the natural competitive advantage
 - Concessions to industries in the area in the form of fiscal and tax incentives to attract more units must be granted
 - The local Government must be involved. Their participation would considerably enhance the speed of setting up these estates by removing bottlenecks during the process of land acquisition and mobilising of resources during project implementation



coverage of growth centres/ Industrial Estates in Chhattisgarh is fairly limited. This could also be one of the reasons for the imbalanced industrial development as well as the low level of industrial activity in the State.

Chhattisgarh State Industrial Development Corporation:

The Chhattisgarh State Industrial Development Corporation (CSIDC) is the promotional agency set up by the State Government to improve the industrial growth and industrial infrastructure of the State. Its main objectives are:

- Develop the industrial infrastructure of the State. This is being done through the AKVNs which are responsible for the setting up and operating the Industrial Estates

- Act as the promoter of industries in the State and as a liaison between industry and the private sector. In this role, the CSIDC conducts potential surveys for setting up of industries

A brief comparison of the same is given in Table VI.3. Discussed below are the key highlights of the same.

Industrial Growth Centre – Urla:

The industrial growth centre Urla (including industrial area of Bhanpuri and Ravabhata) is spread over an area of 700 hectares in Raipur district. It has around 60 medium and large-scale industries and 550 small-scale industries. Investments made in this growth centre are to the tune of Rs. 400 crore and it provides employment to over 16000 people. It is completely



Table VI.3

PERFORMANCE OF THE INDUSTRIAL PARKS IN CHHATTISGARH					
		Urla	Siltara	Borai	Sirgitti
	Available Land	700 h.a.	1310 h.a.	437 h.a.	430 h.a.
No. of industries	Medium and Large scale Ind	44	3	2	7
	Small scale ind.	550	9	27	195
Investment	Medium and Large scale Ind	Rs.328.5 crore	Rs.688.2 crore	Rs.106.9 crore	Rs.31.34 crore
	Small scale ind.	Rs.59.25 crore	Rs1.63 crore	Rs.7.28 crore	Rs.30.64 crore
Employment	Medium and Large scale Ind	5200	1468	858	891
	Small scale ind.	6997	55	453	2324
Units Shut down	Medium and Large scale Ind	11	1	nil	3
	Small scale ind.	83	nil	11	27
Banks		2	1		na
Post Office		1	1		na
Telephone		1800 lines	35 lines	80 lines	na
Health Services		2 hospitals	1 mini PHC	1 Dispensary	1 Dispensary
Electricity		1 HT & 1 MT Sub-station	1 MT Sub-station	1 HT & 1 MT Sub-station	na
Roads		34.5 km	33.7 km	24.75 km	20.20 km
Drainage		3.5 km	6 km	0.4 k.m.	31.6 km
Street lights		336 lights	347 lights	170 lights	180 lights
Sheds		80	10	35	40

n.a-not available

Source-AKVN Raipur

developed and has the necessary infrastructure like roads, street lights, water supply, shopping complex, communications network, banking services, warehouses, weigh bridges, petrol pumps, dispensary, police station and a school. A fire station is in the offing in this area. A container freight station has also been established here, wherein all custom formalities are fulfilled.

Industrial Growth Centre – Siltara

The industrial growth centre in Siltara situated on NH-200 is spread over an area of 1,300 hectares in Raipur district. There are three medium and large-scale enterprises and nine small-scale industries in this centre. About Rs.700 crore have been invested in this centre and it provides employment to more than 1500 people. With private sector participation, arrangement has been made to provide continuous water supply during summer by channelling water from the Kharoon river. Future projects in the pipeline include a power-generating unit, two sponge iron units and one Ferro alloy unit and a LPG bottling plant. The infrastructure facilities in this area include two petrol pumps, a school and a mini-PHC.

Industrial Growth Centre – Borai

The industrial growth centre of Borai in Durg district is spread over an area of 437 hectares. It is situated on NH-6 and has two medium and large scale and twenty-seven small-scale enterprises. More than Rs.115 crores have been invested in developing this centre and it provides employment to around 1300 people. Future plans include increasing the water supply to 300 lakh litres/day from the existing 40 lakh litres/day.

Industrial Growth Centre – Sirgitti

This growth centre in Bilaspur district is spread over an area of 430 hectares. The centre has 7 medium and large-scale industries and around 195 small-scale units. Rs. 93 crore have been invested in developing this growth centre and it provides employment to 4500 people. Owing to the fact that Bilaspur is the divisional headquarter for south-eastern railways and also to the presence of South Eastern Coalfields Limited in the region, several ancillary units based on these thrive here.

Scope of Industrial Estates in Chhattisgarh

Industrial estates can spur economic growth in Chhattisgarh by promoting several small and medium scale industries in the region. Since setting up industrial units in Chhattisgarh gives natural competitive advantages to several categories of industries on account of:

- **Nearness to raw materials:**
The rich mineral deposits in the State provide opportunity for setting up Industrial Estates near the source of raw materials where it would be beneficial for the small and medium scale industries. Table VI.4 (overleaf) presents potential for extraction of minerals in various areas. These are also the areas that offer potential for setting up Industrial Estates which would house the mineral processing units. Another group of industries, which could benefit from the same source of competitive advantage, are cement/ steel and aluminium downstream industries for which the raw materials sources are large core industries.

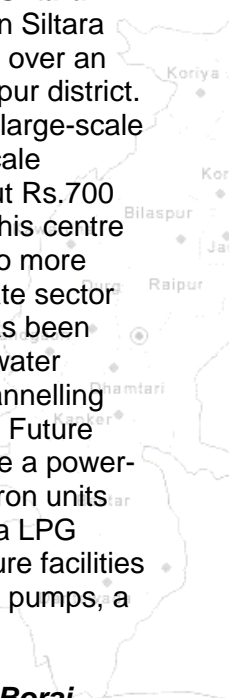


Table VI.4

Mining Potential in Chhattisgarh				
Sl.No.	Name of the Mineral	District	Reserves (Metric Tonnes)	Grade
1	Iron Ore	Dantewara	In excess of 590	60%-68% Fe
		Bastar	35	64%-66% Fe
		Kanker	669	50%-62% Fe
		Rajnandgaon	51	60%-66% Fe
2	Limestone	Rajnandgaon	5	60-68% Fe
		Raipur	1155	44%-46% Cao
		Durg	320	45%-48% Cao
		Bastar	46	45%-46% Cao
		Janjgir	37	45% Cao
		Bilaspur	12	46% Cao
		Rajnandgaon	49	44%-46% Cao
3	Bauxite	Kawardha	20	45% Cao
		Surguja	17	Metal
		Raigarh	1	Metal
		Bastar	5	Refactory
4	Dolomite	Bastar	1.5 (apprx)	Metal
		Bastar	45	High Grade
		Janjgir	48	High Grade
		Durg	28	Flux
5	Coal	Hasdeo-Arand	1201	NA
		Mand - Raigarh	2621	NA

Source : Directorate of Geology and Mining, Raipur

Industrial estates for industries based on 'Forest produce' & 'Agriculture produce' also have tremendous potential in Chhattisgarh, as it is rich in forest based natural resources and since it has a thriving agriculture based economy

- Nearness to market:**
 Chhattisgarh does not provide a huge market for inducing the industries to set up shop to exploit the market potential. However, the presence of large core industries in the region provides opportunity for ancillary units to set up their industrial units near these mother units. The list of core industries in the State is given in Table VI.5 The areas of Raipur, Bilaspur and Durg already have growth centres. To ensure equitable regional development, Chhattisgarh should identify new sites for setting up Industrial Estates. This could be in

districts like Dantewada, Janjgir and Surguja, which could house the mineral processing and downstream industries for iron, cement and Aluminum respectively. However, a detailed study comprising of locational analysis, demand estimation and potential survey would need to be undertaken to establish economic viability of Industrial estates in these districts

Infrastructure Gaps

Infrastructure facilities in terms of road connectivity, IT infrastructure, water availability, etc., need to be strengthened considerably. Hence, in order to set up Industrial Estates in the above-mentioned areas, basic infrastructure facilities like road connectivity, power and water supply situation must be improved.

It is unlikely that the Government alone can fund improvement in physical infrastructure on such a large scale, thus necessitating private sector participation.

Table VI.5

Mineral	Name of Company	District of location
Coal	South Eastern Coalfield Ltd	Korba, Raigarh, Surguja & Koria
	Jindal Steel and Power Ltd	Raigarh
Limestone	Grasim Cement	Raipur
	Century Cement	Raipur
	L&T Cement	Raipur
	Lafarge Cement	Raipur
	Ambuja Cement	Raipur
	Raymond Cement	Janjgir
	Jamul Cement	Durg
Iron Ore	Bhillai Steel Plant	Durg
	NMDC	Dantewada
Dolomite	Bhillai Steel Plant	Durg
	MP State Mining Corp.	Bilaspur
Bauxite	Bharat Aluminum Company	Surguja
	MP State Mining Corp.	Surguja
Tin Ore	Hindalco Limited	Surguja
	MP State Mining Corp.	Bastar
Corundum	MP State Mining Corp.	Bastar

Section 6: The Way Forward

It is apparent that the active promotion and development of Industrial estates would have to be a key strategy for the industrial growth in the State, which would in turn, require immediate and substantial improvement in the industrial infrastructure.

Abundance of natural resources and poor state of industrial infrastructure facilities provide an enormous potential for the growth and expansion of economically viable Industrial Estates in the State.

Given below are suggestions with respect to the role of various stakeholders that constitute the institutional framework described earlier for development of Industrial Estates in the State.

Role of the State Government

The State Government must recognise the importance of Industrial Estates and take a proactive stance towards their development.

The first step in this regard would be to formulate a long-term policy for the promotion of industrial parks. This policy must address issues like location identification, land acquisition and the institutional framework.

The institutional framework would have to accommodate private sector participation, in order to catalyse the growth of industrial parks. However, the private sector would be attracted only if a profit potential exists.

Locational Analysis

As stated earlier, the location of the estate plays a critical role in its success. Hence, a detailed scientific analysis is

warranted before zeroing down on a particular project site. In conducting the location analysis the three most important factors that have been considered are:

1. Cost - including the repayment schedule
2. Distance of the proposed locations from
 - City Centre
 - Key locations of potential markets/ raw materials
3. Status of physical infrastructure

Role of CSIDC

CSIDC should play the role of a regulator leaving the actual implementation of the project to the private sector. It would be responsible for:

- Identification of potential sites for setting up Industrial Estates
- Laying down policy guidelines and operating parameters for the establishment of Industrial Estates by the private sector
- Ensuring that the policy guidelines are fair and equitable
- Ensuring that bottlenecks in obtaining all the necessary approvals from the different Government agencies, acquisition of land etc. are removed
- Scouting aggressively for promoters in the private sector who are willing to take a stake in the entire process of setting up and operating the Industrial Estates
- Co-ordinating with other State Government departments to improve the quality of infrastructure in the State
- Ensuring that the different parties function along the specified policies and fulfil their commitments

- Addressing the grievances of the parties and also imposing penal mechanism

In its role as a policy formulator and regulator, CSIDC must ensure:

- Dovetailing the conceptualisation and development of Industrial Estates with an integrated developmental plan for the region
- Limited regulation and provision of adequate freedom to operating units
- Streamlining the documentation procedure

Private Participation:

The private sector should be involved in the development of industrial estate projects. As promoters, they would be responsible for arranging the funds and the implementation of industrial estate projects.

The private sector could also be involved in the implementation of the projects. In such a role, the private participant would be responsible for designing and implementing the project without necessarily investing in it.

Industrial Units

Once an industrial estate is set up, the main task of the promoters is to ensure proper operation and maintenance of the estate.

At this stage, the interest, participation

and co-operation of the industrial units becomes very important, because these industrial units are the most affected by change in policies and also have the best knowledge of their problems.

Therefore, the industrial units must be given a role in the management of the estate by giving them an equity stake in the entity. This will ensure their active involvement in the operation of the estate.

Local Government role

As the industrial estate is intricately linked to and also dependent upon the area in which it is located, the involvement and support of the local Government is essential for its success. The Government must try to improve the image of the region and also set up promotional agencies to oversee the development of the Industrial Estates.

The local Government can greatly reduce the delays caused by land acquisition and also help in removing the bottlenecks during the implementation of the project.

Table VI.6 gives the roles of each of the agencies in the different activities.

Land acquisition

The State Government can act as a facilitator ensuring that the negotiations are free and fair and explain to the

Table VI.5

Division of responsibility between each player for the activities										
		Activity								
		Policy making	Regulation	Identifying the location	Design of park	Legal clearance	Financial Structuring	Land acquisition	Implem entation	O&M
Agency	SIPPA/ SIDC									
	FIs									
	Private Player									
	Industrial Units									

landowners the use their land would be put to and the benefits that would accrue by undertaking such a project. Such a facilitating role of the State in a transparent environment could be a welcome institutional framework for growth with fair play. It should also be possible for a private investor-negotiator to look up to the Government for its supportive intervention to resolve the problems of breaks in land contiguity.

