CHAPTER 3

Industrial Estates
An Overview
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INDUSTRIAL ESTATES - AN OVERVIEW

Initial efforts in the field of industrial estates were made for the purpose of assembling, improving and sub-dividing tracts of land and frequently for erecting factory buildings according to a comprehensive plan, in advance of or upon demand either for sale or lease to prospective industrial occupants\(^1\).

The industrial estate is, historically, a British concept and this term is used in most of the countries. India preferred to use the British concept in planning the built-up form of industrial infrastructure, inclusive of industrial sites and buildings. Moreover, "Industrial estates is peculiarly a British development as the very first estate in the world was established at Trafford Park, Manchester, in the year 1896\(^2\).

The term in the USA used for industrial estate has been *industrial district* or *industrial park*. Industrial district in the common usage, refers to an area dominated by industrial activity.


INDUSTRIAL ESTATES - SOME DEFINITIONS

The various definitions on Industrial Estates are given below:

The earliest definition of industrial estate was given by William Bredo. According to him: an industrial estate is a track of land developed and sub-divided into plots according to a comprehensive plan with provision for roads, transport and public utilities with or without built-up factories sometimes with common facilities and sometimes without it for the use of a community of industrialists.3

According to the United Nations: industrial estate is defined as, a planned clustering of industrial enterprises, offering developed sites, pre-built factory accommodation and provision of services and facilities to the occupants.4

In other publication, UNIDO defined an industrial estate as: a planned clustering of industrial enterprises offering standard factory buildings erected in advance of demand and a variety of services and facilities to the occupants.5

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The term Industrial Estate has come to be used for a group of factories constructed on an economic scale in suitable sites with facilities of water, transport, electricity, steam, bank, post-office, canteen, watch and ward and first aid and provided with special arrangement for technical guidance and common service facilities. The estate combines in itself some of the important schemes of assistance to small industries and provides a tool for integrated development.

According to Takashi Kato, Industrial estate can be defined as: a body of factories and facilities systematically organised in order to enable each participating enterprise to gain collective benefits.

Industrial Estates can thus be defined as group of factories that are developed on a tract of land with facilities and amenities required for their development and promotion such as transport, communication, water, power, electricity, complementary services etc., aiming at the development of small scale sector and backward areas of the country and thereby contributing to the economic development.

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DEFINITION OF INDUSTRIAL ESTATES IN SELECT COUNTRIES

In England an industrial estate had been defined as: an area of land selected and planned by, as well as being under the control of a development agency whose task it is to construct, or allow to be constructed industrial buildings and to provide those services considered necessary or worthwhile for the development of the estate. The estate can be virtually of any size. The development organisation can be public and built in advance; they can be wholly planned and built in advance; they can be partly built in advance; or they can be built on request according to the specifications of the eventual users. They can be leased or sold at an economic rent or price. The services can be of a wide variety, from the infrastructure of roads, sewers, lighting, gas, electricity etc., The estate can be run at a loss, at a profit or with the aim of only recovering cost.

In Finland an industrial estate, park or village is a group of industrial buildings, located at the same site, which have been established on the basis of a careful techno economic survey and optimization. The group also includes service building, which supply the whole area with heat, power, water, air pressure, canteen, recreational facilities, training possibilities, telecommunications, hotel accommodation and secretarial services etc., forming as such an efficient industrial unity.

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9 *Finland Ekono Consulting Engineers*, P.O. Box 27, SF - 00131 Helsinki, Finland.
In Kenya, an industrial estate had been defined as a well planned cluster of factory premises with all infrastructural facilities (power, water, sewage, roads) in most cases also including a technical service centre for repair work and manufacture of spare parts.\(^\text{10}\)

In India (in physical terms), an industrial estate is a developed area provided with various basic facilities and services including electricity, water supply and roads, and with a number of factories available for rent to prospective industrialists. The purpose is to enable the entrepreneur to install his machines and start operations without spending money and time on the construction of a factory building.\(^\text{11}\)

In general, the industrial estate has been a Multi-purpose tool and an omnibus technique taking care of a number of problems - provision of suitable factory premises, utilities, facilities and services, economy in the investment on social overheads and the increased scope for inter-servicing and inter-trading development of complementarity in production and creation of the spirit of co-operation, decentralisation of industry for the development of backward areas, rural industrialisation, achieving a specific locational pattern, town planning and removal of slums.\(^\text{12}\)

\(^\text{10}\) Kenya Managing Director, Kenya Industrial Estate Ltd., P.O. Box 18282, Nairobi, Kenya.


NOMENCLATURE IN OTHER COUNTRIES

The term *Industrial Estate* is known differently in different countries. Whereas it is so called in countries such as Afghanistan, Algeria, Belgium, Brazil, Burma, ceylon, Denmark, Federal Republic of Germany, the federation of Malaya, Finland, France, Hongkong, Iceland, India, Indonesia, Ireland, Israel, Jamaica, Japan, Nepal, the Netherlands, Nigeria, Pakistan, Singapore, Spain, Switzerland, Sweden, Taiwan and Thailand, in Uk it is called trading estates or industrial estates, in USA industrial parks, or district or tracts, in Italy industrial zones or nuclei, in Canada industrial plaza, in USSR industrial regions, in Puerto Rico industrial subdivisions and in Mexico industrial city.

SIMILAR CONNOTATIONS

It is interesting to mention some of the terms which are of similar nature. Similar connotations that are used are: Industrial district, Industrial Park, Industrial zones, and Industrial area.

*Industrial District* is tract of land which is subdivided and developed according to a comprehensive plan for the use of a community of industries, with streets, rail-lead tracts and utilities are installed before sites are sold to prospective occupants.13

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Industrial Park consists of a substantial number of industries of different types. The park is well planned with all utilities, services and facilities required by industries of different types where restrictions on the type of tenants allowed in the park and insistence on performance characteristics, architectural controls and other features that will ensure a park-like character and compatibility with surrounding areas.

Industrial Zones are areas in which the land is restricted to industrial uses. The zones normally do not provide specific industrial needs.

An industrial zone is merely an area of raw land set aside for industry. Industrial Area is a track of land developed according to plan to provide with suitable infrastructure facilities for a group of industrial enterprises. An industrial area is a parcel of improved land subdivided into plots for the accommodation of industrial establishments and offered for sale or lease. It can be an effective stimulant to industrial development, especially in the large and medium-scale sectors. Currently another term in used is Industrial Townships. These are similar to industrial areas in regard to the provision of basic facilities and services.

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An added feature is the inclusion of housing accommodation and other amenities associated with a town.

**HISTORICAL BACKGROUND OF INDUSTRIAL ESTATES**

The idea of an industrial estate can be traced back to 1885, when it was planned to set up the Clearing Industrial District in or near Chicago in U.S.A. by a private corporation. But the first private enterprise estate was, however, established in 1896, in the United Kingdom at Trafford Park, Manchester, by a private group. This Trafford park Estates Limited has been known as the Mother of Industrial Estates. The second one was the Clearing Industrial district in the United States of America in 1899 by a private corporation. The third was the Industrial zone of Naples in Italy which was founded in 1904 by a special law of the city.

In the next thirty to forty years, only a few private groups in the United Kingdom and United States of America and a few municipalities in Italy followed suit. All these estates were private, profit-motivated and commercially operated real estate ventures.

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The first positive attempt to use industrial estates for industrialisation purpose by the Government of United Kingdom were seen in areas, hit hard by the economic slumps of the nearly 1930's. In fact, the device was given considerable importance after the World-War II, when the U.K. Government adopted a nationwide policy of industrial location tending to divert new industries from congested areas and to steer them towards certain under-privileged regions and new population centres for better geographic distribution and regional diversification of industry.

In the United States, the Governments' initiative came relatively quite late and large-scale application of estate ideas was stimulated by tremendous upsurge of industries only during and since the World-War II.

The progress in the field was meagre upto 1950. After that, the technique of industrial estates has received world wide attention due to its successful use, especially in the United Kingdom. Since then there has been a phenomenal increase in the setting up of industrial estates, both in industrially advanced and newly industrialising countries\textsuperscript{18}.

\textsuperscript{18} In the early sixties, countries, that had industrial estates were: Italy (52), France (260), Netherlands (100), Malta (2), Canada (74), Puerto Rico (13), Mexico (4), Jamaica (2), Trinidad (5), Tobago (5), India (13), Japan (55), Malaysia (24), Singapore (24), Pakistan (14), Hongkong (14), Australia (3), China (3), Nepal (2), Philippines (2), Iran (1). The Republic of Korea (1) and Thailand (1). (Figures in the bracket indicate the number of industrial estates in respective countries.).
At present, Fifty six countries, twelve in Europe, sixteen in Asia and the Far East, three in North America, eleven in South America and fourteen in Africa have adopted the estate programme for a number of purposes and objectives$^{19}$.

**CASE FOR INDUSTRIAL ESTATES PROGRAMME**

Availability of factory accommodation with a package of facilities and services has been an important attraction for the small scale industrial units. This is provided through industrial estates and industrial areas in locations identified for intensive promotion$^{20}$. Employing industrial estates as a method of fostering the growth of small industries introduces into the development process a dynamic element. "This taps latent entrepreneurial talent and provides a place for investment of small blocks of capital in the industry$^{21}$.

To quote United Nations Publications industrial estate is primarily a device for expanding, strengthening and locating small or medium scale industries as a part of a broad programme of industrialisation and social development$^{22}$.

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Industrial estates is a powerful tool for developing small and medium sized industries which are planned rationally with the aim of decentralisation. This scheme provides a method by which the Governments can regulate the industrial location on geographical basis and foster the growth of small scale industries in accordance with the objectives of broad regional development plans.

A strong case, therefore, exists for the programme of industrial estates in any country, whether developed or underdeveloped. The advantages flowing from the programme are as follows:

**PROMOTION OF SMALL-SCALE INDUSTRIES**

A major objective of industrial estates programme has been the promotion and growth of small industries. They have been successful in attracting substantially a large number of new entrepreneurs. They act as catalysts for the growth of small enterprises by organising technical, managerial and marketing assistance to their members and by making adequate provision for the additional requirements of accommodation arising out of the growth potential in the years to come.

**ACCELERATION OF GROWTH**

Industrial estates accelerate growth in specified area. They generate employment with the construction of sheds and the erection of infrastructure and by stimulating manufacturing and marketing activities as well as the secondary and

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tertiary activities due to the multiplier effect. These in turn, raise the standard of living and create additional demand for durable consumer goods and other services.

**PROVISION OF FACILITIES AND INCENTIVES**

The prime facility offered by an industrial estate to small scale units is a suitably planned accommodation to house a factory in a healthy environment with organised basic facilities such as water, electricity, sanitation etc. In addition, common service facilities such as tool rooms, forging shops, foundries, electroplating, heat treatment plants etc., are also provided by many estates.

Government extends such facilities as railway sidings, banks, post and telegraph offices, telecommunication etc. Credit facilities from the Government and other agencies are also made available to all small scale industrial units. As a special measure of assistance to small industrialists occupying factory sheds in industrial estates on rental basis, provision is made for concession in rents particularly for units housed in estates located in rural and backward areas. Tax and excise concessions are also granted to them.

**INITIAL ECONOMY IN INVESTMENT**

A significant advantage of organising industrial estates is the initial economy in investment. Entrepreneurs can obtain the use of land and industrial buildings on rental or on hire-purchase, without spending large cash outlays. This strengthens their financial position. Industrial estates act as instrument of mobilising investment in small blocks of capital and of facilitating entry into industry.
ECONOMIES OF SCALE AND AGGLOMERATION

Economies of scale may be reaped by industrial estates in providing infrastructure facilities to industrial occupants. According to Paul. N. Rosentein Rodan: an industrial estate constitutes a strong inducement to invest because it can capture the otherwise, volatile external economies of agglomeration. An industrial estate, where a number of industrial enterprises are clustered together would, in effect, become a complex of industries. Such a complex is expected to have the advantages of agglomeration and external economies which are necessary for the growth of individual industrial units.\(^\text{24}\)

External economies are derived from the availability of trained workers, access to improved production equipment and facilities, improved location with respect to raw materials and markets and access to superior transportation facilities.\(^\text{25}\)


ECONOMIES IN THE USE OF LAND

Since a large area is taken up for development, economies in the use of land and development are possible. Similarly, construction of factories and provision of facilities like water and power can also be undertaken economically.26

Another great advantage of the scheme is its flexibility with regard to tenancy rights. A small unit can take a factory on rental basis. The scheme also provides for sale of factories to the tenants on outright basis or on easy hire-purchase basis.

PROMOTION OF INDUSTRIAL DEVELOPMENT

Industrial estate is one of the most effective instruments for the promotion of industrial development. Industrial estates create the necessary climate in a developing country where small and medium enterprises find better chances of development. As a result of this, new establishments would come into existence to avail themselves of these benefits. Industrial estates are regarded as an effective means of encouraging and supporting the initiation, expansion and modernisation of small-scale industries.27

26 Alexander, P.C. Industrial Estates in India, Asia Publishing House, Bombay, 1963. p.6
DEVELOPMENT OF REGIONS

The industrial estates act as positive tools for directing industries in less developed areas and facilitate decentralisation of industries and also their development in hitherto under-developed areas. Industrial estates also compensate for infrastructural deficiencies which act as serious handicaps in their industrialisation. By stimulating the latent entrepreneurial talent, industrial estates would be able to explore and exploit locally available materials and resources.

INDUSTRIAL EXTENSION SERVICES

The availability of an industrial extension service in an estate is another important inducement to the small entrepreneur, providing him with day-to-day guidance. Further, the organisation of an extension service can be arranged more efficiently and economically in an industrial estate where a large number of small units are located. Common service facilities, such as maintenance and repair shop or a testing laboratory, can operate more successfully on an estate where there is a concentration of factories requiring their services.

GROWTH OF ANCILLARY RELATIONSHIPS

An Industrial estate may also be useful in helping the growth of ancillary relationships between small scale industry and large ones. A large industrial unit may require a variety of components, parts and spares on a subcontracting basis. It is easy to organise their production when small units are located together in an estate which also provides land for large enterprises.
REGIONAL DEVELOPMENT

Industrial estates play a useful role in regional development programmes and in the planned dispersal of industries. In most countries, balanced regional development is one of the objectives of industrial development. Governments offer special incentives to steer industries away from over-populated and over-industrialised centres to relatively less-developed areas. These incentives generally take the form of concessions on tariffs and taxes and the granting of special subsidies and interest-free loans. Provision of factory accommodation with supporting facilities through industrial estates has proved a successful means of encouraging industrial decentralization.

PLANNED URBAN DEVELOPMENT

Industrial estates are also useful in programmes for planned urban development. The problem of rapid urbanization is acute in most developing countries. The tendency is for manufacturing activities to concentrate in one or a few urban centres. In the absence of even the minimum infrastructure in other areas, industrial estates help in maximizing the use of land and achieving economies in the provision of urban services and utilities. When new suburban sectors or towns are developed, industrial estates help to provide an industrial base and to diversify opportunities of employment. They assist in regulating how people settle in industrial and non-industrial zones and in using the facilities of the area economically for production purposes.
EMPLOYMENT GENERATION

By providing a cluster of production units which requires services of diverse technical personnel at various levels, industrial estates help to generate new employment opportunities in a meaningful manner particularly for technical personnel both at the graduate as well as technician levels.

INCREASING PRODUCTIVITY

Since the industrial estates are provided with facilities which are normally not available to the small and medium industrialists, they help to increase productivity of individual enterprises. There is a greater quality control in the units on the estate and a more ready access to technical consultancy which is not readily available to small and medium units located elsewhere.

EXPORT PROMOTION

In some of the industrial estates, there is a marked emphasis on the possibility of export markets. This is particularly so in regard to single product estates where it is possible to provide common facilities of sophisticated nature which will enable their products to compete effectively even in foreign markets. The same idea is now being extended to export processing zones where full facilities are to be made available to industrial units (both foreign as well as indigenous)) to manufacture products meant exclusively for export.
Another useful function of the Industrial Estate Programme is to act as a nursery for new industries to grow in a particular region. By providing ready made facilities and other infrastructural devices, new units can come up much quicker than what is possible otherwise. After a certain amount of growth has been registered, it is possible for them to move over to permanent locations either in the same area or in a different region.

INDUSTRIAL ESTATES IN SELECT COUNTRIES

The establishment of industrial estates is not of recent origin. During the last seventy to eighty years, considerable experience has been gained regarding the policies and programme of industrial estates in most of the developed and underdeveloped countries. The experiences of these countries in the establishment of industrial estates indicate an extensive recognition of the technique as an instrument for stimulating the process of industrialisation in accordance with the policies of regional development and industrial location. It may be recalled here that the earliest industrial estates established in the United Kindom, Canada, South Africa, the United States, and a few other countries were private, profit motivated, commercially operated real estate ventures. These initial efforts in the field of industrial estates were made for the purpose of assembling, improving and subdividing tracts of land and frequently for erecting factory buildings according to a comprehensive plan, in advance of or upon demand either for sale or lease to
prospective industrial occupants. The programme of industrial estates, has achieved real impetus only after the Second World War, and both the developed and developing countries are setting them up with a number of objectives and policies. Progress in the establishment of industrial estates, country-wise, has been indicated in the following pages:

UNITED KINGDOM

The earliest industrial estate was set up at Manchester in England in 1896. In the early 20th century, estates were set up elsewhere in U.K. as joint stock companies without any specific assistance from Government deriving their income from the rentals of sites and buildings and from the supply of utilities and services. Light engineering industries were commonly established in these estates which were located in the vicinity of large cities like Liverpool, Manchester and London. But since the thirties, the Government has played a special role in promoting the establishment of such estates. The first legislation in this context was passed in 1934 at the time of the acute economic depression. This was designed to help certain industrial regions in which a considerable proportion of the working population was unemployed. Under this Act (and the subsequent amendment of 1937) industrialisation was promoted in special areas where Government sponsored non profit making trading estate companies were established under the guidance of Special Commissioners appointed for the purpose. Six such estates were set up in England and Wales and one in Scotland. Several incentives were offered by the

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state companies for attracting industries to these estates: they were in the nature of built up factory space and availability of services at prices close to the national average. Grants and loans at low interest rates were also made available and temporary relief from rent as well as state and local taxes was provided. By middle of 1960, 39 industrial estates comprising more than 1000 factories had been established under this act.

U.S.A

In the United States, the earliest of the industrial estates or parks was located in Chicago but the growth in the first decade of the 20th Century was very slow. There were hardly 33 projects up to 1940 but after the Second World War, the growth had been more rapid. Railroad companies played an important part in the development of industrial districts since they were interested in the indirect benefits afforded by industrial growth resulting in increased freight revenues. They, therefore, offered special inducements in the form of low purchase prices for estate areas and guaranteeing a minimum freight traffic to the industries. Other sponsors of industrial estates included industrial development corporations, individual real estates brokers, contractors, architects and others. Several non profit making community organisations also developed industrial estates. The community sponsored industrial districts aimed at the indirect benefits that industrialisation brought to the community in the form of increased employment, trade, services, tax revenues etc.

The biggest increase in the use of industrial estates has occurred since 1950 and at present the United States industry has a new look planned industrial parks, the industrial counterpart of the residential sub-division. The planned industrial parks provide a focal point for community planning and are promoted and developed primarily by private agencies without any direct intervention from the Federal Government. However, the National, State and Local Governments have actively encouraged the dispersal of new industries and there has been a growing realisation that organised industrial parks constitute a powerful tool for the community industrial development.

**PUERTO RICO**

A significant growth of the industrial estate concept has been experienced in Puerto Rico which was faced with the serious dilemma of a rapidly increasing population with limited natural resources and a low degree of industrial development. The Puerto Rican Government adopted a methodical policy of attracting industry mainly from the mainland of the United States by constructing factories on individual plots or small industrial estates, called *Industrial Sub-divisions*. The entire programme was launched in the early 50's under the title *Operation Bootstrap* and an intensive promotional campaign was launched in the United States to attract new industry.
ITALY

In Italy, industrial zones were created for the development of industry and the first zone was established in 1904 at Naples. Most of the zones set up before 1950, were located in the economically developed northern part of the country and little attention was paid to the promotion of under-developed regions through planned industrial zones. It was only in 1953 that several regional governments, as in Sicily and Sardinia, passed laws permitting the establishment of industrial zones, where a variety of inducement like tax exemptions, loans at low rates of interest and provisions of water, electricity etc. were made available.

After the Second World War, the Government of Italy embarked on an economic development programme for Southern Italy which was then considered to be the most undeveloped region of Europe.

More than 60 percent of the industrial zones in Italy are located in the South and several areas have been demarcated as areas of industrial development. These are planned having regard to three sets of considerations: One, areas lending themselves to further development, surrounding large urban areas; two, areas of integral development where considerable natural resources exist and some capital investment has been already made in infrastructure facilities; and three, improvement of areas where the resources are limited in relation to the population.  

30 United Nations, Industrial Estates in Asia and far East, Department of Economic and Social Affairs, New York, 1962. p.438
JAPAN

There has been considerable interest in the establishment of industrial estates since the sixties in Japan. The primary objective in promoting these estates is to help small businessmen to transfer, as a group, to sites fit for setting up factories and located far from the established city areas. Most of the industrial estates set up in Japan were based on the co-operative principle and the Government has encouraged formulation of such co-operatives for taking the initiative in establishing industrial estates through provision of interest free loans as well as grants for the purpose of providing common service facilities.

The Japanese Government have, however, used the industrial estate programme, so far, mainly as a tool for relieving congestion in the metropolitan areas and to help small and medium enterprises.

CHINA

The success of China's industrialisation programme can, to a certain extent, be attributed to the development of industrial districts which are mainly aimed at providing investors with suitable industrial land along with other basic facilities and a favourable environment. At present, three industrial districts have been established and they have already started functioning as pilot projects. The first industrial district known as the Northern Industrial District is located about 8 kilometres to the south west of the port of Keelung (locational factors are favourable to the district). The Southern Industrial District is located in the
harbour area of Kaohsiung, and the provisions of improved land with the basic facilities and public utilities is to be made available under a master plan. The district has been partly developed as a foreign trade zone, in order to meet the increasing demand of labour facilities for the growing export and import trade of the island. The Central Industrial District was proposed to be located near a harbour. Provision for basic facilities and services were made with 200 acres of land reserved for this purpose. Besides basic utilities, these organised districts were to be provided with a service centre comprising a post office, telecommunication station, a clinic, a fire brigade and a canteen.

PAKISTAN

The Pakistan government started the programme of industrial estates after the attainment of independence in 1947. The Sind Industrial Trading Estate Ltd., a government corporation established in 1947, set up two industrial estates at Hyderabad, 100 miles north of Karachi, and at Mango Pir on the outskirts of Karachi. These estates were only for large industries and were managed by a Board of Directors representing both the government and the industrialists. One industrial area in Tejgaon (now it comes in Bangladesh) was also established for providing developed sites to large industries. It seems that the Government of Pakistan preferred to establish industrial areas for large industries rather than for small industries.
According to the latest information about 14 industrial estates have been established in Pakistan\textsuperscript{31}. These estates offer technical assistance, services to management, common service centres and engineering workshops to industrial enterprises. The factories are built by the government through its departments and agencies or by cooperative societies or private companies, and they are available to industrialists on rent, hire-purchase, outright purchase. Thus, it may be noted that the industrial estates are playing a significant role in stimulating the establishment of new industrial enterprises, in modernising existing industrial units relocated on the estate through technical assistance and guidance, in associating small industry development with urban planning\textsuperscript{32}.

\textit{SOUTH AFRICA}

In South Africa, in the early 1930's few industrial areas were set up privately with the object of earning profit by selling land. These areas provided plots equipped with water, power, roads, and railway sidings. Later on, in the 1940's local authorities took the initiative in establishing industrial areas in order to rehabilitate old mining areas, attract foreign investors and increase local employment. The local authorities implemented this scheme under town planning legislations with loans provided by the Government. During the last decade, the central government diverted its attention towards the less-developed regions which were not sufficiently

\textsuperscript{31} \textit{United Nations}, \textit{Establishment of Industrial Estates in Under-developed Countries}, Sales No. 60, II B. 4, 1961. New York, p.54

attractive to private developers and local authorities. A few industrial areas were therefore financed by the government. These areas vary in size from 10 acres to 500 acres. Special inducements in the form of tax concessions and cheap water and power supply are being provided to industries located in these under-developed regions.

OBJECTIVES OF INDUSTRIAL ESTATES PROGRAMME

The principal objectives of the programme of Industrial Estates is to provide factory accommodation to small industries at suitable sites with facilities of water, electricity, steam, transport, banks, post offices, canteens, watch and ward, first-aid etc., and thereby create the necessary atmosphere for advancement of industries. Besides, Industrial Estates bring a number of different industrial units together and facilitate the establishment of common servicing centres, introduction of modern techniques, collective purchase of raw materials and sale of finished goods. As industries are located nearer to each other in Industrial Estates they are better able to use the goods and services of one another, so that they become inter independent and complementary. They also help shifting industries from congested areas and facilitate the dispersal of industries. "In backward regions Industrial Estates serve as centres of industrial activities and area development."

33 Industrial Estates Programme in India, IND-COM Journal, Special Issue, Madras, 1961. p.2
In economically advanced countries the objectives sought in establishing industrial estates are either to make a profit for the private groups, which own and operate them, to secure advantages of an economic and social nature to a community or a region or to promote industrial development, frequently within the context of assistance to small scale industry\textsuperscript{34}

**OBJECTIVES OF INDUSTRIAL ESTATES IN INDIA**

The major objectives of the scheme of Industrial Estates in India may be stated to be two, viz\textsuperscript{35}

1. They should promote rapid development of small scale industries and
2. They should facilitate the industrialisation of economically backward and rural areas.

In this context United Nations state: A result expected from the creation of industrial estates is that this would contribute to discouraging further concentration of industry and population in large urban centres, a notoriously serious problem in India\textsuperscript{36}.

\begin{itemize}
\item \textsuperscript{34} United Nations, *Establishment of Industrial Estates in Under-developed Countries*, Department of Economic and Social Affairs, New York, 1961. p.4
\item \textsuperscript{35} Alexander, P.C, *Industrial Estates in India*, Asia Publishing House, Bombay, 1963. p.8
\item \textsuperscript{36} United Nations, *Establishment of Industrial Estates in Under-developed Countries*, Department of Economic and Social Affairs, New York, 1961. p.4.
\end{itemize}
Objectives behind the industrial estates programme in India has been changing ever since its conception to keep pace with the industrial growth of the country. During the First and Second Five Year Plans, the principal objectives of the programmes of industrial estates was to provide factory accommodation to small industries at suitable sites, with all necessary facilities including those of water, electricity, steam, transport, bank, post office, canteen, watch and ward and first aid, and thereby create a proper environment for the advancement of small industries.

There was a major shift in the policy of industrial estates programme during the Third Five Year Plan. Industrial estates were shifted from small industry development to decentralisation and development of backward areas. Besides, the programme was given a rural bias and all new industrial estates were expected to be located, as far as possible, near small and medium sized towns.

During the Fourth Five Year Plan (1969-74), the policies of encouraging ancillary and functional industrial estates and the construction of factory sheds for unemployed engineering graduates were emphasised.

In the Fifth Plan, industrial estates were promoted for the development of exporting industries and industrial complexes. Flatted factory estate gained some momentum, at least in metropolitan centres, and plots also were allotted to medium and large industries, on the commercial basis, in big urban centres.

In this way the principal short term and log term objectives of industrial estates programme are as follows:

i. rapid development of small scale industries,

ii. shifting the small scale industries from congested areas to industrial estate premises with a view to increasing their productivity.

iii. industrialisation of economically backward and rural areas.

iv. achieving de-centralised industrial development in small towns and large villages.

v. assisting in the growth of ancillary industries in townships, surrounding major industrial undertakings (both in public and private sectors) and

vi. provision of opportunities of work for students in universities and polytechnics to enable them (sort of) *earn while you learn*.

**INDUSTRIAL ESTATES PROGRAMME IN INDIA**

A major impediment to the development of small-scale industries is that by reason of their smallness in size they are unable to command on their own certain facilities and services such as transport, power, lighting, servicing, etc. The lack of such amenities affects the location of small industries. The inherent advantages which small industries might claim over larger units are that they can be located over a wide area near sources of raw materials and to markets, thereby reducing costs of transport considerably. Moreover, if located in rural and semi-urban areas,

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ey would have access to the vast mass of underemployed or unemployed labour. However, the absence of suitable facilities relating to power, water, etc. has made the concentration of these industries in large industrial cities where such amenities are available, thereby losing the main inherent advantages they hold over large-scale units.

The absence of suitable factory accommodation has been one of the major handicaps of small industries in India. These industries are generally located in congested areas with no space left for expansion. This is due to the natural tendency on the part of industries to be attracted to areas where facilities like raw material, power, etc., are readily available. This has resulted in the exodus of rural population to the cities and towns with the attendant evils of over-crowding in the metropolitan areas, creation of social problems and disintegration of village life. Moreover, the new units experience difficulties in getting land in suitable area, power, water, transport and other facilities. These facilities are not only difficult to arrange, but they also consume a bigger slice of the limited finances of small entrepreneurs.

A solution to this problem has been found in the establishment of Industrial Estates. Industrial Estate is a well planned unit with ready-built factory space which is let out on rent or sold to industrialists. Small industrialists who have no capital to build their own premises, are, thus in a position to acquire factory space at reasonable rent. The ideal location for an estate would be near railway stations or within easy access of the national highways. It may also be possible in suitable cases to provide a railway siding or a wharf within the estate itself. Other considerations,
which play a part in the selection of the site are the availability of suitable labour, ease of communications, facilities for workers and facilities for further expansion and development.

The Industrial Estate as a means of promoting small-scale industries occupies a prominent position in industrial planning in India. The programme of industrial estates is part of the country's small scale industry development plan. India's Industrial Estates programme which is the biggest of its kind launched by any developing country in the world, has made significant progress under the Five Year Plans. The particular objective of the programme is to provide factory accommodation to small industries at suitable sites with facility of water, electricity, steam, transport, banks, post offices, canteens, watch and ward etc., 39.

The success of industrial or trade estates, which were started in the Great Britain before the World War II as a positive method of stimulating industrial growth encouraged the Government of India to start similar estates in this country.

Their potential as a powerful tool for modifying the location and technological patterns of industry, particularly in the small-scale sector was deeply appreciated. The Government realised that it would be an effective method of fostering industrial development on a decentralised basis. The grouping of industries in such estates facilitates a more intensive operation of the various special agencies set up by the Government to aid small industries.

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The Industrial Estates programme was launched in India in the year 1955, under the recommendations of the International Planning Team (Ford Foundation). The objectives of the programme were two fold:

a) To promote a rapid development of small industries and
b) To promote the decentralisation and dispersal of industry, i.e., to relieve cities of congestion and to promote industries in rural, semi-urban and backward areas.

The first instance of a Government assisted industrial estate in India was the Hadapsur Industrial Corporation in 1952 with a loan from the then Bombay State Government. This was followed by the establishment of an industrial estate in the year 1955 at Rajkot by the Saurashtra Government.

**PROGRESS OF INDUSTRIAL ESTATES**

A brief account of the development of industrial estates programme in India with the available data is presented in the Table 3.1.

It is shown in Table 3.1 that the programme gathered its momentum during the Third Five Year Plan Period (1961-1966) Later the policy was adopted to consolidate the existing estates in the rural and backward areas of the country. The total number of industrial estates rose from 83 in December 1961 to as high as 799 March 1981. The number of sheds completed increased from 2692 in December '63 to 21547 in March 1981. The Table also reveals that there had been an
appreciable increase in the sheds occupied. For instance, the number of sheds occupied went up from 2083 in December 1961 to 17,253 in March 1981.

There are as many as 632 industrial estates spread over all the states and union territories, with Gujarat accounting for the highest number of 140 industrial estates as on 1992, as revealed in Table 3.2.
### TABLE 3.1

**INDUSTRIAL ESTATES IN INDIA PHYSICAL ACHIEVEMENTS (1961-1981)**

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of estates completed</th>
<th>% change</th>
<th>No. of sheds completed</th>
<th>% change</th>
<th>No. of sheds occupied</th>
<th>% change</th>
<th>Employment</th>
<th>% change</th>
<th>Output (Rs. In million)</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 1961</td>
<td>83</td>
<td>-</td>
<td>2692</td>
<td>-</td>
<td>2083</td>
<td>-</td>
<td>14695</td>
<td>-</td>
<td>13.0</td>
<td>-</td>
</tr>
<tr>
<td>Mar. 1966</td>
<td>283</td>
<td>+ 241.0</td>
<td>6396</td>
<td>+ 138.0</td>
<td>5997</td>
<td>+ 188.0</td>
<td>76109</td>
<td>+ 418.0</td>
<td>502.1</td>
<td>+ 376.2</td>
</tr>
<tr>
<td>Mar. 1969</td>
<td>346</td>
<td>+ 22.3</td>
<td>8673</td>
<td>+ 36.0</td>
<td>6620</td>
<td>+ 10.4</td>
<td>82748</td>
<td>+ 8.7</td>
<td>992.3</td>
<td>+ 97.6</td>
</tr>
<tr>
<td>Mar. 1974</td>
<td>520</td>
<td>+ 50.0</td>
<td>13351</td>
<td>+ 54.0</td>
<td>11010</td>
<td>+ 66.3</td>
<td>175700</td>
<td>+ 112.3</td>
<td>4045.0</td>
<td>+ 307.6</td>
</tr>
<tr>
<td>Mar. 1979</td>
<td>705</td>
<td>+ 35.6</td>
<td>19056</td>
<td>+ 42.7</td>
<td>17146</td>
<td>+ 55.7</td>
<td>282201</td>
<td>+ 60.6</td>
<td>8029.3</td>
<td>+ 98.5</td>
</tr>
<tr>
<td>Mar. 1981</td>
<td>799</td>
<td>+ 13.3</td>
<td>21547</td>
<td>+ 13.1</td>
<td>17253</td>
<td>+ 0.62</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Development Commissioner, Small Scale Industries, Government of India, New Delhi.
TABLE 3.2

NO. OF INDUSTRIAL ESTATES IN VARIOUS STATES / UNION TERRITORIES

<table>
<thead>
<tr>
<th>State/Union Territory</th>
<th>Industrial Estates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>103</td>
</tr>
<tr>
<td>Arunachala Pradesh</td>
<td>3</td>
</tr>
<tr>
<td>Assam</td>
<td>-</td>
</tr>
<tr>
<td>Bihar</td>
<td>29</td>
</tr>
<tr>
<td>Goa</td>
<td>8</td>
</tr>
<tr>
<td>Gujarat</td>
<td>140</td>
</tr>
<tr>
<td>Haryana</td>
<td>2</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>7</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>20</td>
</tr>
<tr>
<td>Karnataka</td>
<td>67</td>
</tr>
<tr>
<td>Kerala</td>
<td>18</td>
</tr>
<tr>
<td>Madyapradesh</td>
<td>78</td>
</tr>
<tr>
<td>Manipur</td>
<td>1</td>
</tr>
<tr>
<td>Maharastra</td>
<td>69</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>3</td>
</tr>
<tr>
<td>Mizoram</td>
<td>2</td>
</tr>
<tr>
<td>Nagland</td>
<td>2</td>
</tr>
<tr>
<td>Orissa</td>
<td>18</td>
</tr>
<tr>
<td>Punjab</td>
<td>-</td>
</tr>
<tr>
<td>Rajsasthan</td>
<td>-</td>
</tr>
<tr>
<td>Sikkim</td>
<td>-</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>57</td>
</tr>
<tr>
<td>Tripura</td>
<td>-</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>-</td>
</tr>
<tr>
<td>West Bengal</td>
<td>-</td>
</tr>
<tr>
<td>Andaman &amp; Nicobar Islands</td>
<td>-</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>-</td>
</tr>
<tr>
<td>Dadra and Nagarttaveli</td>
<td>-</td>
</tr>
<tr>
<td>Daman and Diu</td>
<td>-</td>
</tr>
<tr>
<td>Delhi</td>
<td>1</td>
</tr>
<tr>
<td>Lakshdweep</td>
<td>-</td>
</tr>
<tr>
<td>Pondicherry</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>632</strong></td>
</tr>
</tbody>
</table>

Source : Data compiled from Kothari Industrial Directory of India - 1992, Kothari Enterprises, Madras.
The extent of employment provided by the units that were located in the industrial estates rose from 14,695 persons in December 1961 to 2,86,201 persons in March 1979. The output by the industrial enterprises located in these estates registered an increase from Rs.13.0 millions in December 1961 to Rs.8029.3 millions in March 1979.

INDUSTRIAL ESTATES UNDER FIVE YEAR PLANS

The history of the programme of industrial estate in India can be traced back to the year 1947, when, the then Bombay State Government appointed a special officer to recommend centre in the State where industrial estates could be established. Though a number of centres in the State were suggested, the scheme did not materialise due to lack of finance\(^{40}\). However, the idea lingered on and the first Government assisted industrial estate in India was the Hadapsar Industrial Estate set up by the Poona Municipal Corporation in 1952 with a loan from the then Bombay State Government. This was followed by the establishment in 1955 of an industrial estate near Bhaktinagar Railway Station at Rajkot by the erstwhile Saurashtra State (now merged in Gujarat)\(^{41}\). The idea of industrial estates were originally suggested by the International Planning Team provided with the aid of the Ford Foundation at the request of the Government of India. The Team visited various parts of the country alongwith the Indian counterparts, undertook a study


\(^{41}\) The Rajkot Industrial Estate was the first official industrial estate to be constructed in India. The Construction work of the estate commenced in September 1955, and the first shed in it was allotted in December, 1955.
of small industries and their condition in India in the latter half of the year 1953 and made a series of recommendations for their development in the report submitted in 1954. The programme, however, got the real impetus when the Small Scale Industries Board recommended the adoption of this technique of industrialisation for the development of small industries at its meeting held in January 1955. It was in the same year that a comprehensive scheme for industrial estates was formulated and this historic programme was launched by the Ministry of Industry, Government of India in pursuance of the resolution of the board.

**PROGRESS DURING THE FIRST FIVE YEAR PLAN**

In the last year of the First Five Year Plan, the Government of India, sanctioned ten industrial estates, to be constructed by the State Governments. They were: 5 in Kerala (Palghat, Trivandram, Kottayam, Quilon and Trichur, 2 in Madras (Guindy and Virudhunagar), 2 in Uttar Pradesh (Kanpur and Agra)) and the remaining one in Gujarat (Rajkot). Besides this, two estates one at Okhla (near New Delhi) and the other at Naini (near Allahabad) were set up by the National Small Industries Corporation, only as an interim arrangement. A long term loan of Rs. 57.89 lakhs (for land and buildings) and a grant of Rs. 0.495 lakhs (for blueprints and estimates) were given to the State Governments for the purpose.

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42 Later on, the administration of the Okhla Industrial Estates was transferred to the Delhi Administration in April 1959. However, Naini Industrial Estate continues to be managed by the NSIC.
PROGRESS DURING THE SECOND PLAN

In the second Plan period (1956-61), the Industrial estates programme received greater impetus and a definite shape because a provision of Rs.11.12 crore was made (Table 3.3) and 110 industrial estates were sanctioned in different parts of the country. At the end of this plan, sixty seven industrial estates had been completed, of which 53 were functioning and 5 others were under various stages of construction. In the case of 29 estates preliminary steps viz., acquisition of land, preparation of estimates etc., were under way. The total expenditure incurred on industrial estates as reported upto the end of the second five year plan was Rs.1098.47 lakhs (including through N.S.I.C. expenditure)

TABLE 3.3

OUTLAY FOR INDUSTRIAL ESTATES PROGRAMME UNDER VARIOUS PLANS

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Plan</th>
<th>Outlay (Rs. in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>II Five Year Plan</td>
<td>11.12</td>
</tr>
<tr>
<td>2.</td>
<td>III Five Year Plan</td>
<td>30.20</td>
</tr>
<tr>
<td>3.</td>
<td>Annual Plans</td>
<td>4.98</td>
</tr>
<tr>
<td>4.</td>
<td>IV Five Year Plan</td>
<td>18.15</td>
</tr>
<tr>
<td>5.</td>
<td>V Five Year Plan</td>
<td>24.97</td>
</tr>
<tr>
<td>6.</td>
<td>VI Five Year Plan</td>
<td>45.00</td>
</tr>
</tbody>
</table>

NOTE: The First Five Year Plan does not provide the outlay for industrial estates separately under the heading of village and small-scale industries. So, this plan is omitted from the above table.

Source: Five Year Plans, planning Commission, Government of India.
PROGRESS DURING THE THIRD PLAN

The Phenomenal development of Small-scale industries during the Second Plan encouraged a large number of persons with entrepreneurial ability to start small industrial units. Hence, the demand for factory accommodation increased all over the country. Actually the usefulness of industrial estates as a tool for rapid development of small-scale industries was recognised in the Third Plan and a provision of Rs.30.20 crores (Table 3.3.) was made for this programme in this Plan (as against Rs.11.12 crores in the Second Plan). In addition, it was expected that a substantial amount will be spent by private agencies, including industrial estates cooperatives and joint stock companies, for setting up of industrial estates during the Plan. The idea was that, in the urban and industrially advanced areas, the State Government might not meet the entire expenditure for the setting up of industrial estates, as they did in the Second Plan. Instead, it might only develop the land and provide the common services and leave actual work of construction of buildings to the entrepreneurs who could be asked to conform to certain approved norms and standards.

PROGRESS DURING THE PERIOD OF PLAN HOLIDAY

However, because of many reasons, the Fourth Five Year Plan, could not be taken upon on its commencement date. A Plan Holiday of three years (Or three annual plans - 1966-67, 1967-68, 1968-69) was adopted to give breathing time to the planners, so that something better could be formulated for the Fourth Plan. Even then the programme of Industrial Estate has not been altogether suspended. It was
E1 being carried but the theme was consolidation rather than expansion. At the
tid of the Third Annual Plan. 346 industrial estates had been completed, of which
43 were not functioning. The expenditure incurred on the industrial estates
programme, in these three Annual Plans was 4.98 crores (Table 3.3).

**PROGRESS DURING THE FOURTH PLAN**

The major emphasis during the Fourth Five Year Plan was still continuing
to be consolidation of the industrial estates programme rather than expansion and
efforts were made to enable the existing estates to function successfully. The idea
of 'developed sites' has been pushed up in cities and large towns on lease-hold
terms to cooperatives and joint-stock companies of small entrepreneurs, which could
construct their own factory buildings at the sites. So all the expenditure were made
mainly for spill-over schemes to provide requisite facilities like water, gas and
power. The policy was to encourage new ancillary and functional industrial estates
and also undertake the construction of factory sheds for unemployed engineering
graduates, who might me launching enterprises of their own.

At the end of the Plan, 520 industrial estates had been completed (Table 3.1)
An outlay of Rs.18.15 crores (Table 3.3) was made on the programme during the
Fourth Five Year Plan period.
PROGRESS DURING THE FIFTH FIVE YEAR PLAN

The Fifth Five Year Plan has envisaged an outlay of Rs.24.97 crores (Table 3.3) for the industrial estates programme. The provision is mainly in the nature of seed capital and margin money for State Corporations to enable them to obtain larger inflow of institutional finance for promoting industrial estates.

PROGRESS DURING SIXTH FIVE YEAR PLAN

An outlay of Rs.45 crores (Table 3.3) was made for the industrial estates programme. By March 1979, there were 705 completed industrial estates in which 13,467 small scale units were functioning, accounting for an output of Rs.8029.3 millions and providing employment to about 2.82 lakh persons\textsuperscript{43}.