

# Indian Streams Research Journal

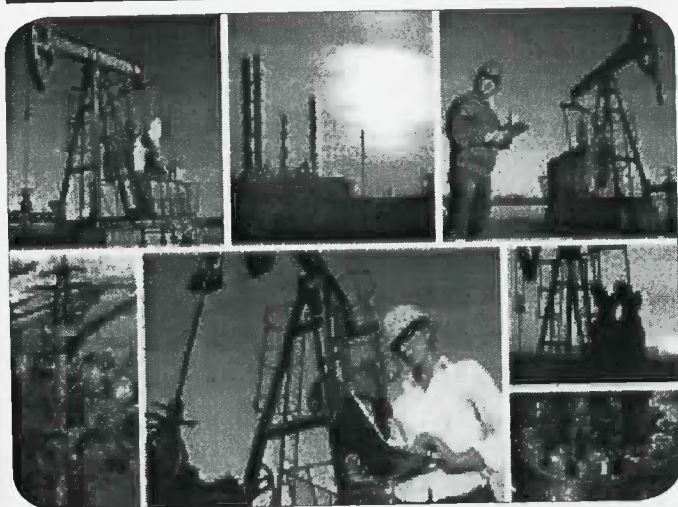


## A STUDY OF PROFILE OF INDUSTRIAL ESTATES IN GOA



**Shami Pai**

Associate Professor, Department of Commerce, VVM'S Shree Damodar College of Commerce and Economics, Margao Goa.



### ABSTRACT

Industrialisation is a process of social and economic change whereby a human society is transformed from a pre-industrial to an industrial state. Industrialisation is considered to be a sign of a growing economy, and is associated with income growth, urbanisation, and improvements in health, lifespan and standard of living for the population. The technique of industrial estates occupies a vital place in promoting and guiding industrialisation both in industrially advanced countries as well as developing countries. Before the Liberalisation, Goa's economy was mainly based on agriculture

and to a large extent on the mining industry. Industrial activity in Goa was basically an offshoot of mining industry. Iron ore mining in Goa was solely export oriented catering to the post world war industrial activities in countries like Japan and Western Europe. Development in mining industry in Goa gave rise in a small way to Industrial Activity in supporting areas of infrastructure, servicing and job works of mining equipments, vehicles etc. However, after Goa's Liberalisation due to various steps taken by the Government, the Industrial Scenario has undergone a vast change. The first industrial estate in Goa was set up in 1966. Today there are 20 industrial estates in Goa. The main objective of this paper is to study the profile of the industrial estates in Goa.

**KEYWORDS** : industrialisation, industrial estate, profile.

### INTRODUCTION:

Industrialisation is a process of social and economic change whereby a human society is transformed from a pre-industrial to an industrial state. Industrialisation is considered to be a sign of a growing economy, and is associated with income growth, urbanisation, and improvements in health, lifespan and standard of living for the population. Industrialisation refers to creation and expansion of industries and use of modern techniques of production in the industries. It has played a very important role in the process of economic development of all the countries of the world including India. The

technique of industrial estates occupies a vital place in promoting and guiding industrialisation both in industrially advanced countries as well as developing countries. The concept of Industrial Estate is a recent addition to the list of industrial techniques that have been applied successfully to the basic problem of initiating and sustaining the development of small and medium scale industries.

### **INDUSTRIAL ESTATE: THE CONCEPT**

Industrial Estate, an important plank of small industry development programme, is a branch of the social technology of development.

The industrial estate is a multipurpose tool taking care of a number of problems viz provision of suitable factory premises, utilities, facilities and services, economy in the investment of social overheads and the increased scope for inter-servicing and inter-trading, developing complimentary in production and creation of the spirit of co-operation, decentralization of industry for the development of backward areas, rural industrialisation, achieving a specific locational pattern, town planning and removal of slums and so on.

William Bredo is probably the first who attempted to define the term 'industrial estate' in a most scientific but general way.

"An Industrial Estate is defined as a track of land which is sub-divided and developed according to a comprehensive plan for the use of a community of industrial enterprises."

The United Nations Industrial Development Organisation (UNIDO) defines an industrial estate as, "a planned clustering of industrial enterprises offering standard factory building erected in advance of demand and variety of services and facilities to the occupants."

### **INDUSTRIAL ESTATES IN GOA:**

Goa, established on May 30, 1987, is one of the coastal states in India. One of India's smallest states, it is bounded by the states of Maharashtra on the North and Karnataka on the East and South and by the Arabian Sea on the West. The capital is Panaji, on the North Central Coast of the mainland district. In terms of the geographical area cover Goa is the smallest state in India and has a total area cover of 3702 square kilometers. Also, a total population of 14, 57,723 (2011 census), makes it the twenty-fifth most or fourth least populated State in India. Having the highest per capita GDP amongst all Indian States, Goa exhibits a strong economy and is the richest of all Indian States. According to a study conducted by the Rajiv Gandhi Institute for Contemporary Studies and the Confederation of Indian Industry, Goa's industry is ranked fourth in the country. Goa is the fourth best industrial state in the country and one of the top favoured destinations for industrial investment.

Before the liberation, Goa's economy was mainly based on agriculture and to a large extent on the mining industry. Industrial activity in Goa was basically an offshoot of mining industry. However, after Goa's liberation due to various steps taken by the Government, the industrial scenario has undergone a vast change. Soon after the liberation, the concept of 'Planned Industrial Development' was introduced and a Planning Board was constituted.

Recognizing the importance of the existence of physical infrastructure in accelerating the pace of industrial development, the Goa, Daman and Diu Industrial Development Corporation (GDDIDC) was established in February 1966 under the provisions of Goa, Daman and Diu Industrial Development Act, 1965 with the aims and objectives of securing and assisting in the rapid and orderly establishment of industries in Industrial Areas and Industrial Estates in Goa.

The Goa Industrial Development Corporation (Goa-IDC) was established on 11th November 1965 by the Government of Goa to achieve the balanced industrial development of the state of Goa

with the emphasis on developing Industrial Areas / Estate throughout the state and providing facilities for setting up industries at various locations.

The Corporation has set up 20 Industrial Estates. These estates house around 1500 operating industrial units over an utilized area of around 10 million sq.mt. The Government has firm plans for the expansion of eight existing industrial estates in the talukas of Salcette, Mormugao, Canacona, Pernem, Bardez, Tiswadi, Ponda and Bicholim. The Government also proposes to set up 04 new industrial estates in Bicholim, Tiswadi, Dharbandora and Canacona talukas. The Government is in the process of acquiring approximately 3.3 million sq.mt lands for these new industrial estates and expansion of existing industrial estates.

### **OBJECTIVES OF THE STUDY:**

- To highlight the profile of industrial estates in Goa
- To understand the problems faced by the industrial estates
- To offer suggestions to the Government of Goa

### **RESEARCH METHODOLOGY:**

The paper is based on the primary and secondary data. Primary data was collected from the Field Managers of all the industrial estates and Industrial Estate Association Presidents. Data Collection Methods are Structured Questionnaire, and personal interview. Data is analysed with the help of graphs, charts, and content analysis.

Secondary data was collected from the books, journals, reports, websites, newspapers, and magazines. Data was also collected from the head office of Goa Industrial Development Corporation, Panaji Goa.

### **REVIEW OF LITERATURE:**

The concept of 'Industrial Estates' is studied by different scholars since 1960s. The study is also undertaken in different countries and states. Many scholars have attempted to study the different aspects of the industrial estate programme. These studies are as under:

- William Bredo in his study has explained the concept of industrial estate in detail and also given guidelines for using it as a tool for industrialisation process. The study also highlights the advantages as well as the limitations of the industrial estate programme.
- P.C. Alexander has analysed the problems and prospects of industrial estates in India. He has found out that failure of the industrial estate is due to a wrong decision on its location and hence authorities should give proper attention to the planning aspects of the industrial estates. Proper planning will lead to success of industrial estates.
- N. Somasekhara studied the production function of the industrial estates in Mysore. It involved the estimation of the cross sectional production functions of the Cobb-Douglas type, for the seven industrial estates in Mysore. The conclusion was that generally the marginal productivity of the capital was almost zero for the small enterprises in the industrial estates.
- Om Prakash Mathur analysed the problems and prospects of industrial estates. The finding of the study is that the programme of industrial estates is a failure. He has analysed the causes of the failure of the programme and also given various suggestions and directions to the planners and administrators to avoid the shortcomings and improve the future programmes.
- Chopra has undertaken the study of industrial estates in the state of Rajasthan. The study includes the comparative analysis of the performance of the units located in the industrial estate and the units

located outside the industrial estate. The study also involves inter industrial estate comparison and inter-location and inter-industry comparison within the industrial estate.

- D.S Leelavathi has studied the industrial estates in Mysore. The observations made are that there is a significant growth of industrial estates in Mysore; investments have been sizeable; entrepreneurship is induced. However, the main drawbacks of the programme are that dispersal of industries is not done and backward areas are not developed.
- Pravin Gaonkar has studied the role of Goa Industrial Development Corporation in the performance of the industrial estates in Goa. The main issues examined are the delay in the allocation of plots; corruption in land allocation; violation of rules; red tapism in the corporation and so on. The main conclusion is that e-governance is the need of the hour. E-governance will bring about transparency in the functioning of the corporation.

### PROFILE OF INDUSTRIAL ESTATES IN GOA:

There are 20 industrial estates in Goa, namely Corlim ,Margao,Sancoale, Mapusa, Thivim, Bicholim, Honda, Kakoda, Bethora, Canacona,Kundaim, Tuem, Verna, Cuncolim, Pilerne, Madkaim, Shiroda, Colvale, Pissurlem, and Sanguem. However, there are no functioning units in two industrial estates namely, Shiroda and Sanguem

The study of profile is based on the secondary data collected from the GIDC Office; Panaji Goa.The tools used to study the profile includes graphs and charts. Comparative analysis is also undertaken between the industrial estates with reference to the parameters. The parameters used to study the profile of the industrial estates are as follows:

- Name of the industrial estate
- Year of establishment
- Total area
- Total sheds
- Total plots
- Total units
- Number of functioning units
- Number of closed units
- Total employment
- Water consumed per day

The following table indicates an overview of the industrial estates in Goa

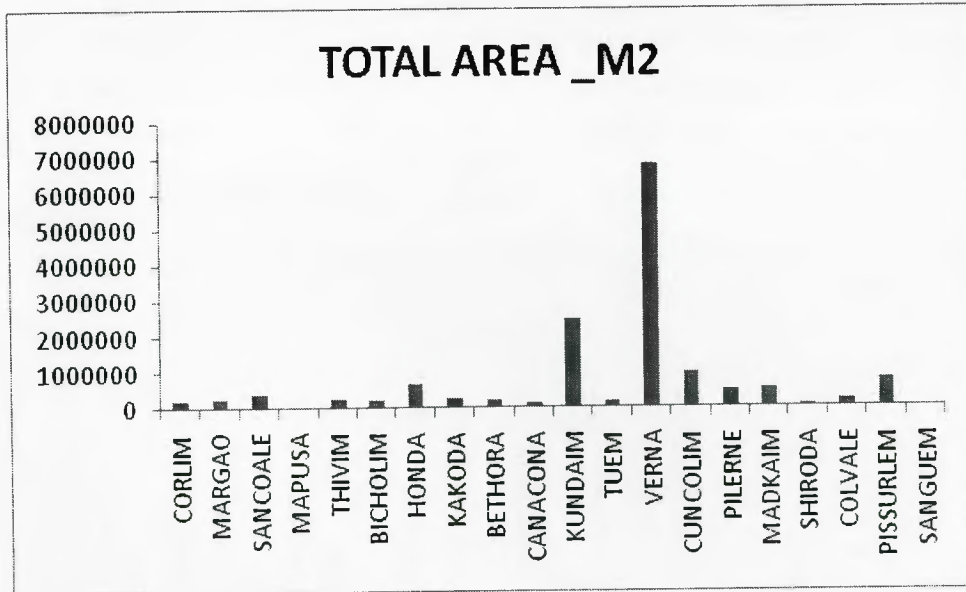
## A STUDY OF PROFILE OF INDUSTRIAL ESTATES IN GOA

INDUSTRIAL ESTATES IN GOA : AT GLANCE										
Sr.No	NAME OF I.E	YEAR OF ESTABLISHMENT	TOTAL AREA	TOTAL SHEDS	TOTAL PLOTS	TOTAL UNITS	NO OF FUNCTIONING UNITS	NO OF CLOSED UNITS	TOTAL EMPLOYMENT	WATER CONSUMED
1	CORLIM	1966	2,11,363 M2	76	78	102	82	20=1 NEW	800	230 M3/DAY
2	MARGAO	1967	2,93,031 M2	97	58	152	95	51+6 NEW	1400	300 M3/DAY
3	SANCOALE	1972	4,29,270 M2	98	78	176	146	30	1700	400 M3/DAY
4	MAPUSA	1975	66100 M2	31	20	32	27	5	900	100 M3/DAY
5	THIVIM	1976	1,79,108 M2, 74,715 M2	89	65	132	109	23+1 NEW	2000	450 M3/DAY
6	BICHOLIM	1977	2,12,276 M2	65	65	126	87	39	950	225 M3/DAY
7	HONDA	1982	6,63,618 M2	31	43	51	34	13+4 NEW	800	65 M3/DAY
8	KAKODA	1984	2,60,815 M2	28	150		55	12+40 NEW	600	400 M3/DAY
9	BETHORA	1982	2,04,558 M2	95	130	95	79	16+1 NEW	1150	150 M3/DAY
10	CANACONA	1985	1,43,310 M2	27	73	53	30	15+8 NEW	150	28 M3/DAY
11	KUNDAIM	1982	24,99,658 M2	72	391	288	223	30+34 NEW	3560	1000 M3/DAY
12	TUEM	1986	1,62,418 M2	31	82	48	30	18	800	90 M3/DAY
13	VERNA	1989	68,39,746	NIL	200	325	301	24	10000	750 M3/DAY
14	CUNCOLIM	1993	9,72,335 M2	6	127	110	90	20	2000	600 M3/DAY
15	PILERNE	1994	4,89,225 M2	NIL	154	115	82	21+11 NEW	4000	800 M3/DAY
16	MADKAIM	1997	5,30,410 M2	NIL	139	88	64	09+15 NEW	1600	300 M3/DAY
17	SHIRODA	1998	1,05,100 M2	NIL	10+5=15	NIL	NIL	NIL	NIL	NIL
18	COLVALE	1998	2,31,070 M2	NIL	35	24	20	NI+04	1250	200 M3/DAY
19	PISSURLEM	1997	8,01,720 M2	NIL	149	35	20	05+10 NEW	300	20 M3/DAY
20	SANGUEM	2002	-	-	-	-	-	-	-	-

SOURCE: GIDC, PANAJI

The above table has been represented with the help of following figures/ diagrams:

FIGURE 1



The above figure indicates that Verna industrial estate is the biggest industrial estate and Mapusa industrial estates is the smallest industrial estate on the basis of the area. The total functioning units in Verna industrial estate are 301 which provide employment to 10000 people. However, total functioning units in Mapusa industrial estate are only 27 providing employment to 900 people.

### FIGURE 2:

The below figure indicates that functioning units are highest in Verna industrial estate and lowest in Colvale and Pissurlem industrial estates. There are no functioning units in Shiroda industrial

estate and Sanguem industrial estate respectively.

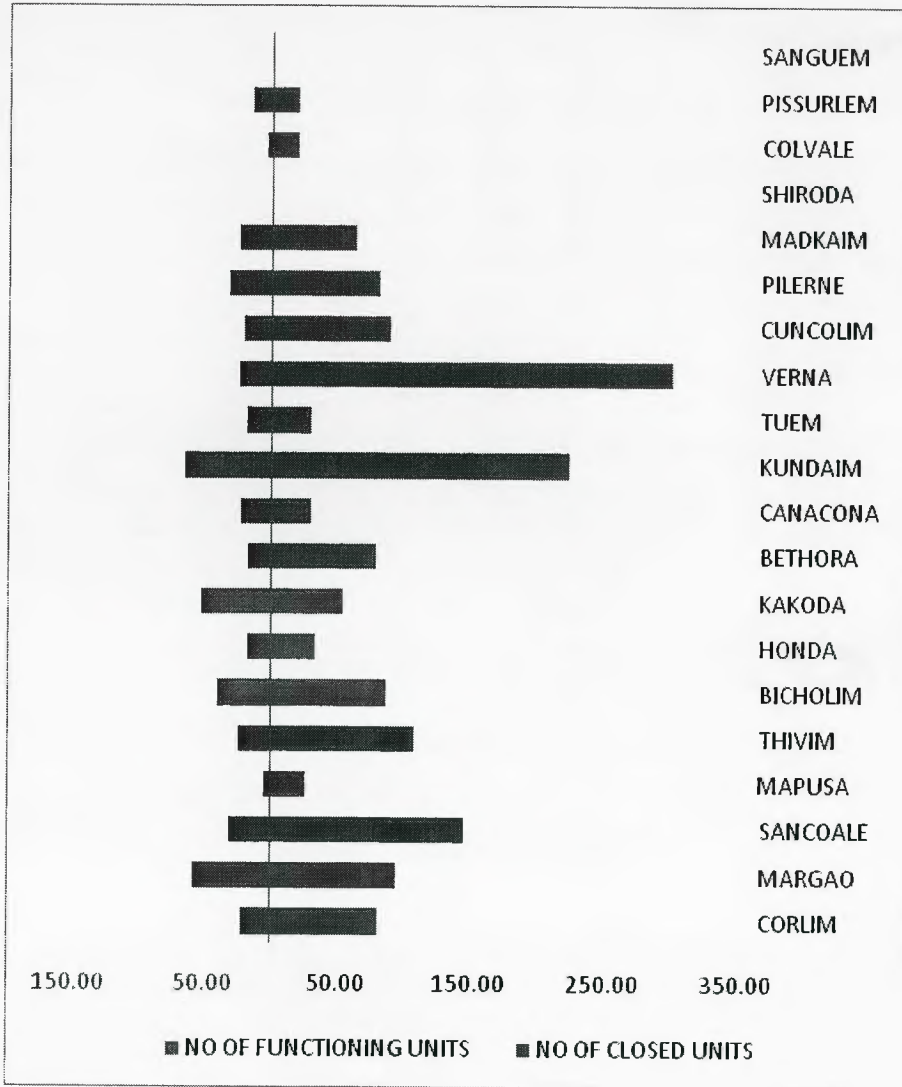
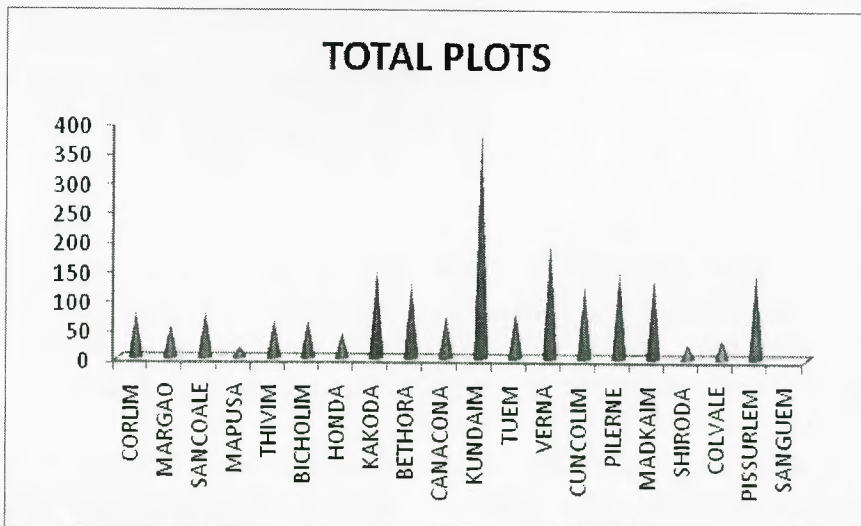
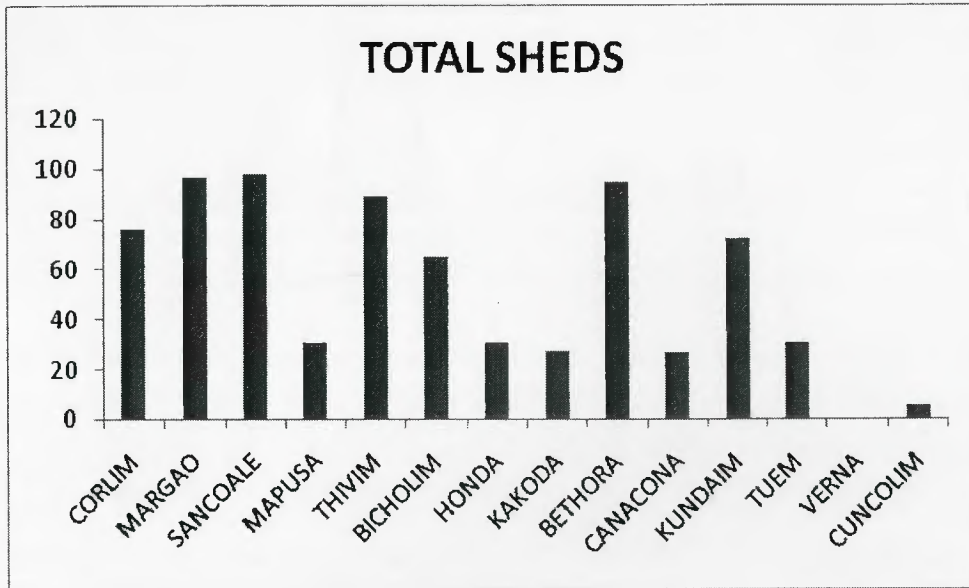


Figure: 3



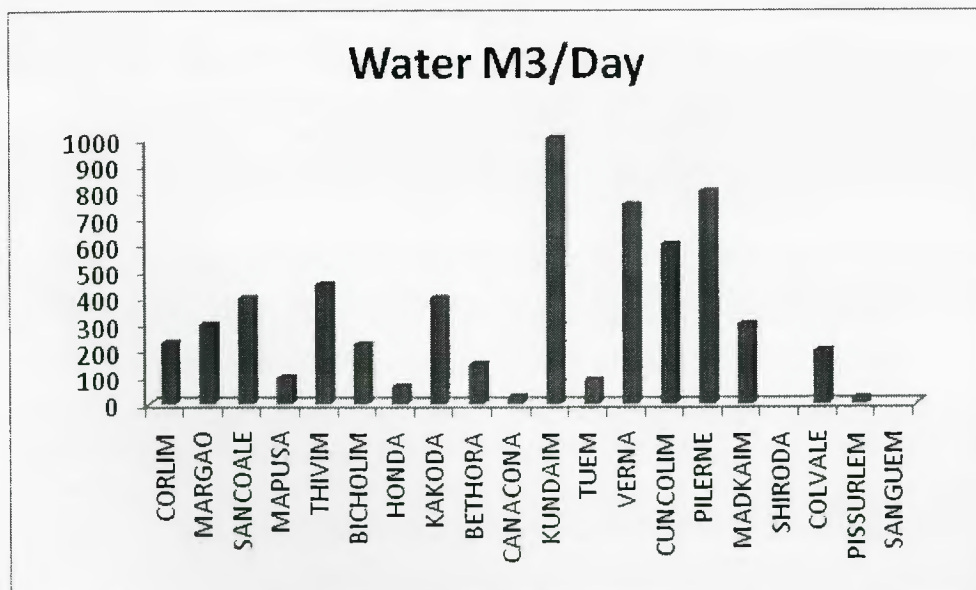
The above figure indicates that Kundaim industrial estate has highest number of plots where as Mapusa industrial estate has lowest number of plots. There are 391 plots in Kundaim where as Mapusa industrial estate has only 20 plots.

Figure 4:



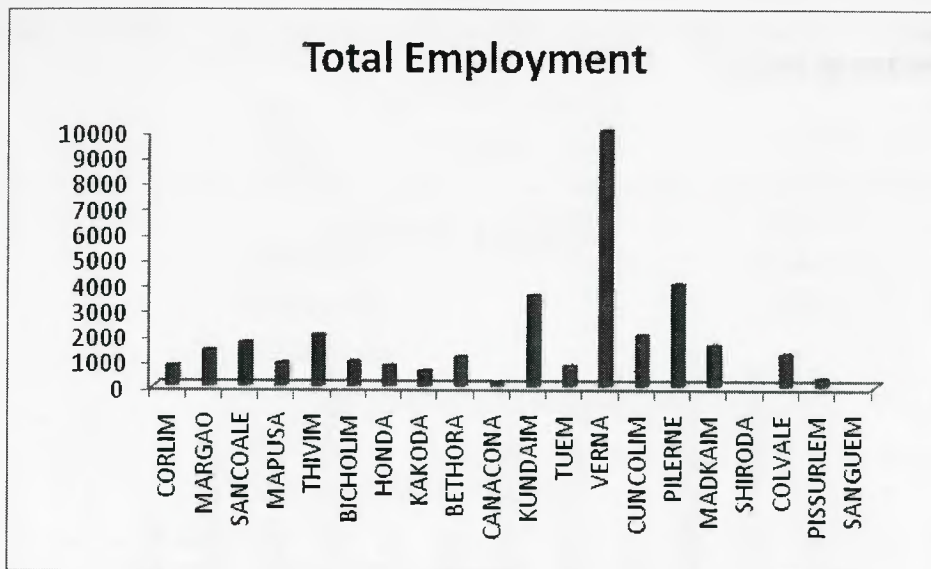
The above figure indicates that Margao industrial estate and Sancoale industrial estate has highest number of sheds where as Cuncolim industrial estate has lowest number of sheds. There are no sheds in Verna industrial estate. Verna industrial estate has only plots.

Figure: 5



The above figure indicates that water consumed per day is highest in Kundaim industrial estate and lowest in Pissurlem industrial estate. Kundaim industrial estate consumes 1000 m3 of water per day where as Pissurlem industrial estate consumes only 20 m3 of water per day.

Figure: 6



The above figure indicates that the total employment provided is highest in Verna industrial estate and lowest in Canacona industrial estate. Verna industrial estate provides employment to 10000 people where as Canacona industrial estate provides employment to only 150 people.

**FINDINGS OF THE STUDY:**

- Two industrial estates were established in 1960s, four were established in 1970s, seven were established in 1980s, six were established in 1990s and only one was established in 2000. Thus, the maximum industrial estates were established in 1980s.
- Corlim industrial estate is the oldest industrial estate and Sanguem industrial estate is the new industrial estate set up in Goa.
- As far as area is concerned, Verna is the biggest industrial estate and Mapusa is the smallest industrial estate in Goa.
- Total sheds are highest in Sancoale industrial estate and lowest in Cuncolim industrial estate. There are no sheds in Verna, Pilerne, Madkaim, Colvale and Pissurlem industrial estates.
- Total plots are maximum in Kundaim industrial estate and minimum in Mapusa industrial estate.
- Functioning units are maximum in Verna industrial estate and minimum in Colvale and Pissurlem industrial estates.
- Closed units are maximum in Bicholim industrial estate and lowest in Colvale industrial estate.
- Employment generated is highest in Verna industrial estate and lowest in Canacona industrial estate.

**CONCLUSION:**

The utility of Industrial Estates as a tool for industrialization is accepted universally. They are in fact seed-beds for the promotion of small scale industries. However, as has been indicated earlier, their working has still to improve. There is an avoidable time lag in their construction, the demand for the units is not great, the selection of candidate industries was not very proper, the admission policies have not strictly been adhered to, their working by way of follow-up has not been reviewed, the success of the industries that have been set up has not been very satisfactory and the cost of construction has been high. The deficiencies could be attributed to lack of proper planning at every stage. While these industrial estates could be effective tools of development, it should be realized that they will become



ineffective if proper attention is not given to their planning and organization.

Based on the findings of the study, the Goa Government's policy in respect to the future of these industrial estates has to be taken into consideration. Before it is decided to launch more industrial estates, it is necessary to examine whether it will not be more desirable to develop sites with all these amenities and allow the industrialists to build their own factories of approved types.

In view of the present performance of the Industrial Estates and the difficulties involved, it would be more desirable to go slow in the matter of establishing new Industrial Estates in Goa. The new industrial estates are to be set up with proper planning and with proper economic considerations rather than political considerations.

### **SUGGESTIONS TO THE GOVERNMENT OF GOA:**

- The planning of industrial estates should be conceived by the Government of Goa as an integral part of the Urban and Regional development process and should be related to the industrial development of regions.
- In Goa, the planning of industrial estates has been largely at macro level. Government decides to set up an industrial estate in a particular place and proceed with further procedure. However, the establishment of an industrial estate requires micro level planning. An industrial estate cannot be undertaken without the pre-investment techno-economic surveys of the alternate locations.
- Development costs of the industrial estates can be reduced by the Goa Government by increasing their design efficiency and by reducing the areas set apart for roads and ancillary buildings.
- Admissions of the units to the industrial estates should be planned and regulated.
- Municipalities and local governments should also be involved by the GIDC in the programme of industrial estates for providing water for industrial use, sewage and drainage facilities.
- Prompt and regular payment of rent should be made compulsory by the GIDC and a progressive rate of penalty should be imposed on the arrears of rent.
- Co-operative Industrial Estates may be encouraged in Goa since such estates have the advantages of a spirit of ownership by the entrepreneurs, and it also reduces management problems to the minimum as far as official agencies are concerned.

Thus, Government of Goa should keep in mind that industrial estates are not something which can be sprinkled generously all over the geographical area uniformly. Their location should be carefully determined, more so with respect to the backward regions and rural areas.

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