



Interrelationship between Investment and Employment in Tuem Industrial Estate

Deepak D. Gosavi

Doctoral Research Scholar,
Department of Economics,
Shivaji University, Kolhapur,
Maharashtra – India 416004.

&

Dr. A. R. Kumbhar

Head,
Department of Economics,
T.K. Kolekar Arts and Commerce College,
Nesari, Gadhinglaj.
Kolhapur.416504.

Article History: Submitted-24/03/2021, Revised-07/04/2021, Accepted-08/04/2021, Published-10/04/2021.

Abstract:

Industrial estate is nothing but a stretch of land that is utilized exclusively for development of industry and related activities with the aim of developing the culture of industrialization for economic development and growth of industries. A conglomeration of industries together for carrying out industrialization through heavy industrial setup can be thought of as broadening and wide spreading of the activities which are also run but on a smaller scale in offices and business areas which on the other hand have activities involving lighter nature of work as opposed to industries. The main objective of the present study is to analyze the investment undertaken and employment generated within industrial estate.

Keywords: - **Employment, Investment, Goa, Industrial Estate, Correlation.**

1.1 Introduction:

The scenario of rising levels of unemployment in many countries specially in India and other developing ones the solution lies in the establishment and enactment of network of industries which are boosted with facilities such as adequate land availability, proper infrastructure for

operational activities, water supply, power supply, good network of transportation routes, storage and go downs facilities, ample method and mode of communication networks, financial institutional availability and ease of doing business, etc. are just some avenues that may end up resulting in attraction of large scale investment in such areas catering to rise of industrial sector in India and can even move the economy towards building a strong base for start-ups and entrepreneurial training and skilling them to venture into unexplored areas of industries of potential in future. It is not necessary that only a single entity or body such as public sector or private sector should invest and encourage industries but rather a mixture of both such as Public Private Partnership (PPP) basis models can also be designed to jointly invest in industries for better collaboration and sharing of expertise in expected areas of interest leading to segregation of responsibilities and smooth conduct of business.

1.2 The Goa Daman and Diu Industrial Development Corporation (GDDIDC)

The stepping stone of the industrialization in Goa can be attributed to the enactment of The Goa Daman and Diu Industrial Development Corporation (GDDIDC) which was a flagship initiative of the state in late 1960's owing to the provisions of the Goa, Daman and Diu Industrial Development Act, 1965. The idea behind this was to create an environment where by much needed boost may be provided to accelerate the process of starting the entire process of establishment of industries throughout the landscape of Goan economy. This would probably focus more on laces which were designated for growth of industrialization in the state of Goa. The broader objective of the corporation was to identify the mass of land which would be adequate enough and suitable to carry out the task of setting up industries for the benefit of the entire state leading to development of local supply chains as well as to drive up the level of industrialization.

In a run up to the current scenario of the state of Goa it can be said that the corporation has done quite a good job which can be reviewed through the establishment of several industrial estates in the state of Goa. In the North Goa and South Goa the two districts which spawn the state of Goa. In North Goa the industrial estates are located at Tuem in Pernem taluka, Colvale, Tivim, Mapusa and Pilerne situated in Bardez taluka, Bicholim in Bicholim taluka, Honda and Pissurlem in Sattari taluka, Corlim in Tiswadi taluka, Kundaim, Madkaim, Shiroda and Bethora in Ponda taluka.



In South Goa the industrial estates are located at Dharbandora in Dharbandora taluka, Sancoale and Verna in Mormugao taluka, Margao and Cuncolim in Salcete taluka, Kakoda in Quepem taluka, Sanguem in Sanguem taluka and finally Canacona in Canacona taluka. The enactment of so many industrial estates is strengthened with the establishment of supporting bodies such as the Goa State Infrastructure Development Corporation Ltd., Economic Development Corporation, Industrial Development Bank of India, Small Industries Development Bank of India & National Small Industries Corporation.

As per the Industrial Policy, 2003 of Government of Goa the following incentives available for industrial units in Goa are relaxation in form of subsidy for employment purposes, schemes for generation and development of capital, Provision of capital for rise of local entrepreneurs in the state economy of Goa, schemes such as subsidies on the interest, provision to get patents, promotion of use of local raw materials for industrial purposes, facilities for healthcare of workers, priority provision for buying from the Small Scale Industries (SSI) specially involving the women from the state of Goa.

The foreign countries have long adopted the framework of industrial estates as a means to achieve the stability and for the development of the business activities either small or medium or large in countries such as United Kingdom, United States of America, etc.

But the origin of the industrial estate was in the United Kingdom a century ago. Though the industrial estates or the trading estates were first started in the U.K. before World War II to divert industry into what were called “depressed” or “distressed” areas, i.e. areas of heavy unemployment, the concepts of industrial estates is much older there, and over the years have expanded in volume and scope. Trading areas/estates of the United Kingdom were not Government financed or Government controlled until much later. In fact, the Trafford Park Estate at Manchester, England, which was started in 1896, commonly referred to as the “Mother of Industrial Estates.” The next country to adopt the philosophy of industrial estates was the United States. In 1899, in Chicago, USA, the most prominent and well known industrial estate was established through the efforts of a private corporation. In Europe, the concept of industrial estate has been slower in spreading. But the rise of industries through the establishment of industrial estates most prominently in countries such as Germany, Austria, Netherlands, Scandinavia overcame the horizons and the scope of the original concept in the two pioneering countries. In 1904, the industrial estate was established in Italy at Naples as the “Industrial Zone” and was

formed by a special law of the city. Post the conclusion of Second World War the countries around the world felt the need and started with their developmental plans and initiation of industrial estates for several purposes both from economic perspectives as well as defense purposes. This led to creation of web of industrial estates throughout the world in varying numbers based on several parameters and purposes.

The major determining factor that led to the fueling of development of industrial estates was the success achieved by countries such as United Kingdom for business purposes combined several other objectives as well. Developing countries have been specifically using the industrial estates to spawn across the economic sphere the advantages of mass production with reduced average costs leading to economies of scale which will spin off to greater gains in the near future.

Towards the end of the First Plan, the Small-Scale Industries Board suggested to the Government of India to use the industrial estate as a important tool to build the platform for promotion and speeding up the process of starting more planning for setup and expansion of the small scale industries and this idea was spearheaded right through the Second Five Year Plan.

The first industrial estate was started in Sourashtra (now Gujarat) in 1955 on a vast piece of land adjoining the nearest railway station at Rajkot. In last quarter of 1955 the work was started and by end of the year first shed was allocated a small industrial unit. Rajkot Industrial Estate may be described as the fore founder of the industrial estates programme in India. It was so significant that it was preceded by the dedication of the central Government to go forward with the programme of creation of more such type of industrial estates across the country.

1.3 Industrial Estates in Goa

Goa, is the western state of India which is enshrined with beautiful flora and fauna. Notwithstanding the fact that it is one of the most prominent travel destinations makes it most suitable to carry out business operations. Businesses can be fostered by availability of goods and services which can only be produced in the presence of industrial estates therefore it is imperative that good industrial estate network be present to support the rising needs of businesses in the state of Goa. Goa stands at fourth place with respect to the industry in the country. Goa is the fourth best industrial state in the country and one of the top favored destinations for industrial investment.



1.4 Tuem Industrial Estate

The Tuem Industrial Estate was commenced in the year 1986. It comprised of Total 162418 m² land area of the Pernem taluka. It consists of Total 48 units; from which 32 are currently functioning, 7 are closed down and 9 are under progress. Example of some of the units which are in progress are the estate endowed with all the facilities require for its growth and expansion like Canteen, Transport network, water supply, medical, police and fire service, electricity, etc.

The study aims to find out the employment opportunities which are provided by this estate in Pernem and rest of the state/country. The interesting part will be to make comparison of how much amount of Employment is provided by this estate in Pernem and rest of the State/country, as it consists of both kind of peoples that is from Pernem and other parts of taluka/country. Whether this estate is capable to absorb all the unemployed peoples from Pernem or there is need for further expansion in its size to enhance the number of employments in the estate. What measures needs to be undertaken to give a boost to the employment scenario from Pernem compared to rest of the areas. What are the major hindrances behind not absorption of required people in the estate from taluka, whether it is because of poor facilities, low wages, long hours of work or other problems etc.

1.5 Investment and Employment in Tuem Industrial Estate

Tuem industrial estate has been setup for the overall development of Tuem area as well as for the employment prospects of the people residing in the proximity of Tuem and surrounding areas. The objective also lies in the fact that the industrial estate will garner revenue for the state exchequer and also will lead to growth of trade and commerce in Tuem area. Following table bring out the details related to this.

Table 1: Employment and Investment in Tuem Industrial Estate Units

Name Of The Unit	Employment	Investment (Lakh)
M/s. Plasto Well Plastic	180	13.54
M/s. Shivam Entriperies	141	12.8
M/s. Fantasy Spirit Pvt Ltd.	170	13.9
M/s. Goa Plast Pvt. Ltd.	149	18.5
M/s. Omkar Industries	178	19.4
M/s. S. M. Pen & Plastics Industries	169	11.6

Interrelationship between Investment and Employment in Tuem Industrial Estate

M/s. Enarkey Enterprises	119	18.7
M/s. D.B.Enterprises	113	19.2
M/s. Slicer Grinding Wheels	121	17.3
M/s. Veronik Micronutrients Pvt. Ltd.	124	12.3
M/s. Raj Industries	112	12.6
M/s. Kamleshwar Detergents	109	13.4
M/s. Nisusee Products Pvt. Ltd.	133	11.8
Swastik Industries	226	11.7
M/s. R.J.Industries	269	11.2
M/s. Matoshri Cashewnut	136	15.68
M/s. Surya Concrete Industries	151	18.76
M/s. N.P.Aerated Waters	191	23.4
M/s. Acostic Components	89	14.5
M/s. Remedica Pharma	76	12.4
M/s. Mauli Associates	55	15.7
M/s. Shree Packaging	68	16.8
M/s. Sudha Gurudas Korgaonkar	55	17.3
M/s. Mahalsha Power Retels	23	18
M/s. Veronik Bioniks Pvt. Ltd.	44	19.5
M/s. Om Sai Industries	13	11.5
M/s. Sai Arts	23	15.6
M/s. Ramkrishna Marbles	10	17.7
M/s. Super Fabrication and Engg Works	13	18.4
M/s. Geeta Gopal Parsekar	22	19.6
M/s. Samarth Industries	20	23.5

Source:- Field data obtained from Primary Survey.

Data from above table reveals the fact that employment has been almost similar in majority of the industrial estates while for some units employment has been very low due to lower demand for the products. Overall investment undertaken in units has been uniformly undertaken above 10 lakhs which is a good indicator of investment. Correlation between investment and employment is ascertained with respect to above table 1 data using regression analysis. Investment is assumed



to be independent variable here which determines employment which is dependent variable. Results of Regression Analysis can be seen below.

SUMMARY OUTPUT	
<i>Regression Statistics</i>	
Multiple R	0.315031413
R Square	0.099244791
Adjusted R Square	0.068184267
Adjusted R Square	0.068184267
Standard Error	66.14841121
Observations	31

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	13980.98508	13980.99	3.195207	0.084310591
Residual	29	126892.7569	4375.612		
Total	30	140873.7419			

	<i>Coefficient</i>	<i>Standard</i>		<i>P-</i>	<i>Lower</i>	<i>Upper</i>	<i>Lower</i>	<i>Upper</i>
	<i>s</i>	<i>Error</i>	<i>t Stat</i>	<i>value</i>	<i>95%</i>	<i>r 95%</i>	<i>95.0%</i>	<i>95.0%</i>
Intercept	205.882868	56.84	3.62	0.0015	89.62	322.14	89.62	322.14
Investment (Lakh)	6.2069172	3.47	-1.78	0.084	-13.30	0.89	-13.30	0.89

The results reveal that P-value is 0.08 which is very less as compared to baseline value of 0.5. Hence, we can say that investment has a determining effect on employment in industrial estate units of Tuem.

Legal binding of the hours of work has been strictly followed in the Tuem industry. The 96.81 percent male and 5.12 female are working in shift. It implies that majority of the females are working in day only. It is good sign so far as the female's responsibility regarding their family and safety is concern. Thus at aggregate level it can be stated that nearly 82.97 workers are working in shifts. It has been observed that around 94.87 percent workers (who are working in shifts) are working in both day and night shift.

Average experience of the 775 employees is 8.4 years and average year class is 6 to 9 years. It means that Tuem Industrial Estate Goa has possessed good and significant experienced employee's staff. The cumulative percentage reveals that the nearly 51.74 percent workers are having work experience of 0 to 6 years. The 65.29 percent workers have worked experience of 0 to 9 years.

The 32.02 percent respondents are received incentives in the form of shelter. The 81.17 percent of total incentives benefited workers are argued that they are receiving loan facility or advances from employers.

1.6 Conclusion

The present research study has derived following conclusion after taking into consideration the various aspects of employment and investment undertaken in the Tuem Industrial Estate. Literature on industrial estate investment and employment over the period of time has shown positive correlation between investment and employment. In other words, as investment in units of industrial estates increases it boosts the infrastructure and related activities leading to rise in intake of jobs hence employment rises in the units.

With the help of present literature on investment and employment statistics and study reports and several doctoral dissertations available in public domain future studies may be conducted focusing on investment needs and employment concerns that are plaguing several industrial units across not only India but throughout the world. Complexity of geographical location and other measures if ignored then other industrial estates throughout the country can be studied on similar basis to assess the similarity and contrasting features of investment patterns and employment challenges or opportunities available in several areas.

Women workforce participation has been less n our country since independence as their majority of work is done at home. Studies on similar lines would help to highlight the women



workforce participation both in organized as well as unorganized sector. Present research work focusses on several good practices and certain other aspects related to investment and employment occurring in Tuem industrial estate. The policy decision of the government can be shaped keeping into light the prospects of job and problems faced by labour.

Works Cited:

- 1) D.S. Leelavathi (1994), “Role of Industrial Estates in developing small scale industries in Karnataka”, Southern Economist, Vol 33.
- 2) Gurusamy (1994), “An analytical study of the problems of small scale industrial units in the industrial estates of Tamilnadu”, Department of Commerce, Periyar University.
- 3) D.S Leelavathi (1995), “Industrial estates in Karnataka - A study with special reference to Mysore District”, Department of Studies in Economics, Mahatma Gandhi University of Health Sciences.
- 4) M.D. Shainul Haque (1995), “INDUSTRIAL ESTATE IN INDIA: Organisation, Structure and Role”, GYAN SAGAR PUBLICATIONS.
- 5) H.V. Shankaranarayana (1995), “Performance Evaluation of Industrial Estates in Karnataka”, Small Enterprises Development Management and Extension Journal, vol. 22, no. 4 (December 1995), pp. 43-56.
- 6) Debal Prava (1997), “Education-employment profile of women: an analytical case-study of small scale units in an industrial estate”, School of Language Literature and Culture Studies, Jawaharlal Nehru University.
- 7) Suresh Parulekar (1998), “Management problems in globalizing at the level of a case study of Tarapur industrial estate”, Department of Commerce, University of Poona.
- 8) Leung Kwan-chi (1988), “The Planning for Industrial Estate in Hong Kong”, Open Dissertation Press.
- 9) Khursheed Ahmad Bhat (2001), “Unemployment alleviation through Regional Social Enterprise Development (with special reference to Jammu and Kashmir)”, Management Paradise.com.
- 10) S.G. Vibhuti (2001), “Regional Disparities in the Development of Industrial Estates in Karnataka: A Case Study”, GITAM Journal of Management, Vol. 6 No. 1, January – March, pp. 142-166.

- 11) Amita Shah (2001), “Improving quality of life among informal industrial workers: Lessons from an innovative approach”, *The Indian Journal of Labour Economics*,44(4).
- 12) Singhbal and Kapur (2002), “Industrial estate planning and management in India—an integrated approach towards industrial ecology”, *Journal of Environmental Management*, 66(1), 19-29.
- 13) Muhammad Faisal Ibrahim & Sim Wei Chung (2002), “Quality of Life of Residents Living near Industrial Estates in Singapore”, *Social Indicators Research* 61(2):203-225.