

A Study on the Performance Evaluation of Special Economic Zone Units on the Basis of Infrastructure Development in Kerala

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ABSTRACT

A Special Economic Zone is a trade capacity development tool with the goal to promote rapid economic growth by using tax and business incentives to attract foreign investment and technology. Special Economic Zone (SEZ) is a geographical region that has economic laws that are more liberal than a country's typical economic laws. SEZs attract investment and foreign exchange, spur employment and boost the development of improved technologies and infrastructure. In India, Special Economic Zones are being established in an attempt to deal with infrastructural deficiencies, procedural complexities, bureaucratic hassles and barriers raised by monetary, trade, fiscal, taxation, tariff and labour policies. Special Economic Zones/Export Processing Zones are being established as industrial enclaves for expediting the process of industrialization.

Key words: Special Economic Zone, Formal Approval, In-Principle Approvals, Export Processing zones, Foreign Investments.

INTRODUCTION

A Special Economic Zone (SEZ) is a specified delineated and duty free geographical region that has different economic laws from those of the country in which it is situated. In some countries, such a region is even treated as a deemed foreign territory. A SEZ is a trade capacity development tool, with the goal to promote rapid economic growth by using tax and business incentives to attract foreign investment and technology. By offering privileged terms, SEZs attract investment and foreign exchange, spur employment and boost the development of improved technologies and infrastructure. The word "Special" in SEZ mainly means special economic systems and policies. Special Economic Zone means an area that has been specified as an enclave that is duty free and is treated as a foreign territory for various purposes such as tariffs, trade operations, and duties. India is one of the first countries in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports. Asia's first EPZ was set up in Kandla in 1965. The concept of EPZ was later complemented by schemes like Export Oriented Units (EOU) which was introduced by the Ministry of Commerce in 1980 vide resolution dated 31st December 1980.

Statement of the Problem

Different states have different SEZ stories to tell, while some State has done exceedingly well, but others are not up to expectation. Govt. of Kerala SEZ Policy (2008) have been planned to suit the interests of the Indian state in particular. Kerala is located in the South Western section of the country, with the strategic district of Cochin very near the international maritime highway. From the Govt. of Kerala SEZ Policy it is denoted that the state can use this zone for the production of goods and services for export-oriented activities. The Govt. of Kerala SEZ Policy is so framed to speed up the Kerala economy along with its infrastructure to make the production of the state more export oriented for the world market. The state is offering various kinds of incentives, concessions and exemptions to the business units operating in the special economic zones. No serious research was conducted on the performance evaluation of special economic zone units in the state of Kerala. It has been made an attempt to study on the performance evaluation of special economic zone units in the state of Kerala in terms of Capital Investments.

REVIEW OF LITERATURE

NSSO, (2003), in a report on ‘Some Aspects of Operational Land Holdings in India, stated that in India’s largely agriculture based economy, questions of access to and control over land remain critical to, rural poverty and well-being. Recent estimates show that the nation’s land-holding pattern continues to be sharply skewed with 95.65 per cent of the farmers, within the small and the marginal categories owning approximately 62 per cent of the operated land areas; while medium and large farmers, who constitute a mere 3.5 per cent of the total farmers, own 37.72 per cent of the total area. Banerjee-Guha, Swapna (2008), in an article on ‘Space Relations of Capital and Significance of New Economic Enclaves: SEZs in India’ pointed out that the pattern of concentration in urban areas is consistent with the hypothesis that SEZs are driven by motivations of acquiring real estate or, as some have noted, by a logic of “accumulation by dis-possession”. These consequences reinforce the concerns that have already been expressed regarding other negative consequences of SEZs, primarily on land acquisition. They strengthen the suspicion that while the costs of SEZs are quite real, the benefits of SEZs are not substantial.

Scope of the Study

The present study is mainly concentrated on Special Economic Zone which is operated by the Central Government in the state of Kerala to evaluate the performance Special Economic Zone. It considers the development of SEZs in the States. As this study examines the major Capital Investments in Special Economic Zones in Kerala especially Trivandrum, Kochi/Ernakulum and Kozhikode..

Objectives of the Study

1. To examine the development of Infrastructure in the Special Economic zone Units in the State of Kerala.

Hypotheses of the Study

1. Ho: There exists no significant correlation between the independent variable infrastructure and the dependent variable Performance of SEZ units.

Population of the Study

Currently, there are about 204 Operational Special Economic Zones (as on March 2023) operating throughout India. In Kerala there are Sixteen (16) Operational Special Economic Zones (SEZs) and 300 Special Economic Zone Units have been operated in the State of Kerala and total of 21,778 employees are working in these Zones.

Samples of the Study

Area sampling method has been used for selecting the four areas from the State of Kerala namely Trivandrum from the south side of the State, from the middle side of the State Ernakulum and Kochi were selected and Kozhikode was selected from the north side of the State. Stratified Random Sampling method has been used for the selection of employees from these Special Economic Zone Units for the study.

Table: 1 Sample of the Special Economic Zones in the State of Kerala

Location/ Jurisdiction	Total Units	Sample Size For Units	Total Employees	Sample Size For Employees
Trivandrum	55	5 (10%)	6,085	60 (1%)
Kochi/Ernakulam	216	21 (10%)	15,497	155 (1%)
Kozhikode	6	1 (10%)	75	1 (1%)
Total	277	27(10%)	21,657	216 (1%)

Infrastructure Development

The objective of SEZ is to invite entrepreneurs to commence business units to attract Investments from abroad to build infrastructure to the Special Economic Zones in India to enable them to attract foreign exchange to the Government. In the globalised era infrastructure plays a crucial role for determining the growth and development of the economy. Special Economic Zones and Infrastructure play a greater role in the overall growth of the Indian economy. There are several initiatives taken by the Government both central and state for benefiting infrastructural facility to those units which are provide foreign capital to the nation and some of the measures of these include:

- Land acquisition has become the biggest obstacle to the successful implementation of the SEZ policy.
- Minimum Land requirement (area), Minimum Built up Area, Processing area and Non-Processing area etc. required for getting approval form Board of Approval (BOA) for starting SEZs.
- The SEZs have to go through different Approval systems like Formal approval, In-Principle approval and finally Notified SEZs.
- The Minimum Land requirements (Area of operation), Minimum Processing and Non-Processing area needed for both Special and other than special category States/Union Territories
- The processing area shall have specified entry and exit points and be fully secured by taking such measures approved by the Board.
- The non-processing area is the area which is intended to provide support facilities to the SEZ processing area activities.
- Processing Area and Non-Processing are different in case of Multi-Product/Service (one or more product/services) Units. 35 percentage of Processing and 65 percentage of Non-Processing area required for multi-product SEZs out of Minimum area requirements (200 Ha).
- All other type of SEZs there is no difference in processing and Non-Processing area ie.50 percentage for (Processing and Non-Processing area) all type of SEZ. Category-wise details of processing area and non-processing area of SEZs in special category states/Union Territories
- The Special States/Union Territories including the erstwhile Union Territory of Goa and the Special category States of Assam, Meghalaya, Nagaland, Arunachal Pradesh, Mizoram, Manipur, Tripura, Himachal Pradesh, Uttaranchal, Sikkim, Jammu & Kashmir.
- Formal Approval - Given when land is available to set up the SEZ.
- In-Principle Approval- Given when the land has not yet been secured but all other criteria are fulfilled.
- Notified SEZ -Final stage after which physical development work begins.

Infrastructure (Land Acquisition) - SEZ Central and State wise

The trend of Infrastructure (Land Acquisition) of SEZ in India and Kerala for 10 years from 2013-14 to 2022-23 are shown in Table 2

Table 2 Trend of Infrastructure (Land Acquisition) SEZ in India and Kerala during 2013-2014 to 2022-2023

years	India		Kerala		Share of kerala towards India (percentage)
	Infrastructure (Land Acquisition) (Hectares)	Percentage change over years (+/-)	Infrastructure (Land Acquisition) (Hectares)	Percentage change over years (+/-)	
2013-2014	23276.34	0	42.41	0	0.18
2014-2015	27854.56	19.66	42.41	0	0.15
2015-2016	32763.34	40.75	42.41	0	0.12
2016-2017	38134.58	63.84	42.41	0	0.11
2017-2018	45021.34	93.42	42.41	0	0.09
2018-2019	45786.78	96.70	147.02	246.66	0.32
2019-2020	45893.44	97.16	184.15	335.01	0.40

2020-2021	46085.55	97.99	545.49	1186.22	1.18
2021-2022	46656.55	100.44	545.49	1186.22	1.16
2022-2023	47190.98	102.74	545.49	1186.22	1.15

Source: Data compiled on the basis of annual reports/various issues of working papers of Development Commissioner of Cochin SEZ and Ministry of Commerce and Industry, Govt. of India.

The trend line on the Infrastructure of Special Economic Zones in India and Kerala during the ten years from 2013-2014 to 2022-2023 is fitted and is depicted in fig: 1

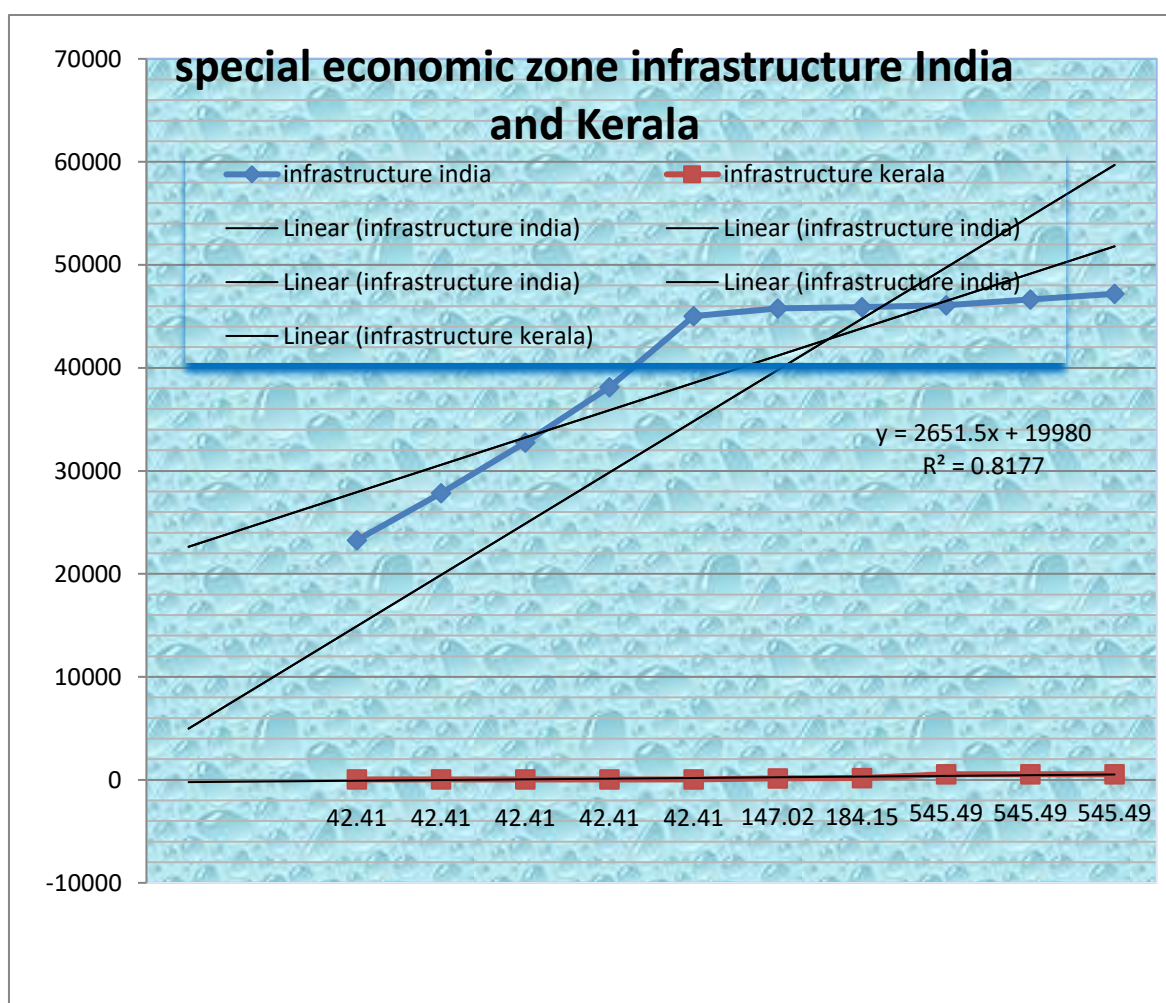


Figure: 1 The trend line of Special Economic zone Infrastructures in India and Kerala during the ten years 20013-14 to 2022-23

Source: Table: 2

The trend value is calculated for the comparison purpose. The first line shows the trend of Infrastructure of Indian Special Economic Zones and the second line shows the straight line trend fit to the data. The value of $Y=2652.x+19980$ and R squared value is 0.817. R Squared (R^2) value shows the ratio of variance in the data (Infrastructure), as explained by the figure 1, to the total variance in the data. A high R squared value is more stable than low R squared value. It means that Infrastructures of India during the last ten years is very stable and it shows an increasing trend.

The trend value is calculated for the comparison purpose. The first line shows the trend of exports of Indian Special Economic Zones and the second line shows the straight line trend fit to the data. The value of $Y=67.23x-286.3$ and R squared value is 0.773. R Squared (R^2) value shows the ratio of variance in the data (exports), as explained by the figure 1, to the total variance in the data. A high R squared value is more stable

than low R squared value. It means that export of Kerala during the last ten years is not stable and it shows a decreasing trend.

The Export of Special Economic Zones in India for the last ten years has been taken for the trend analysis. A straight line trend can be fitted to the Export of Special Economic zones in India are based on the principle of least squares. The trend line of Total Special Economic zone Exports in India for the last ten years (2013-2014 to 2022-2023) are given in the figure 2

The trend line on the Infrastructure of Special Economic Zones in India during the ten years from 2013-2014 to 2022-2023 is fitted and is depicted in fig: 2

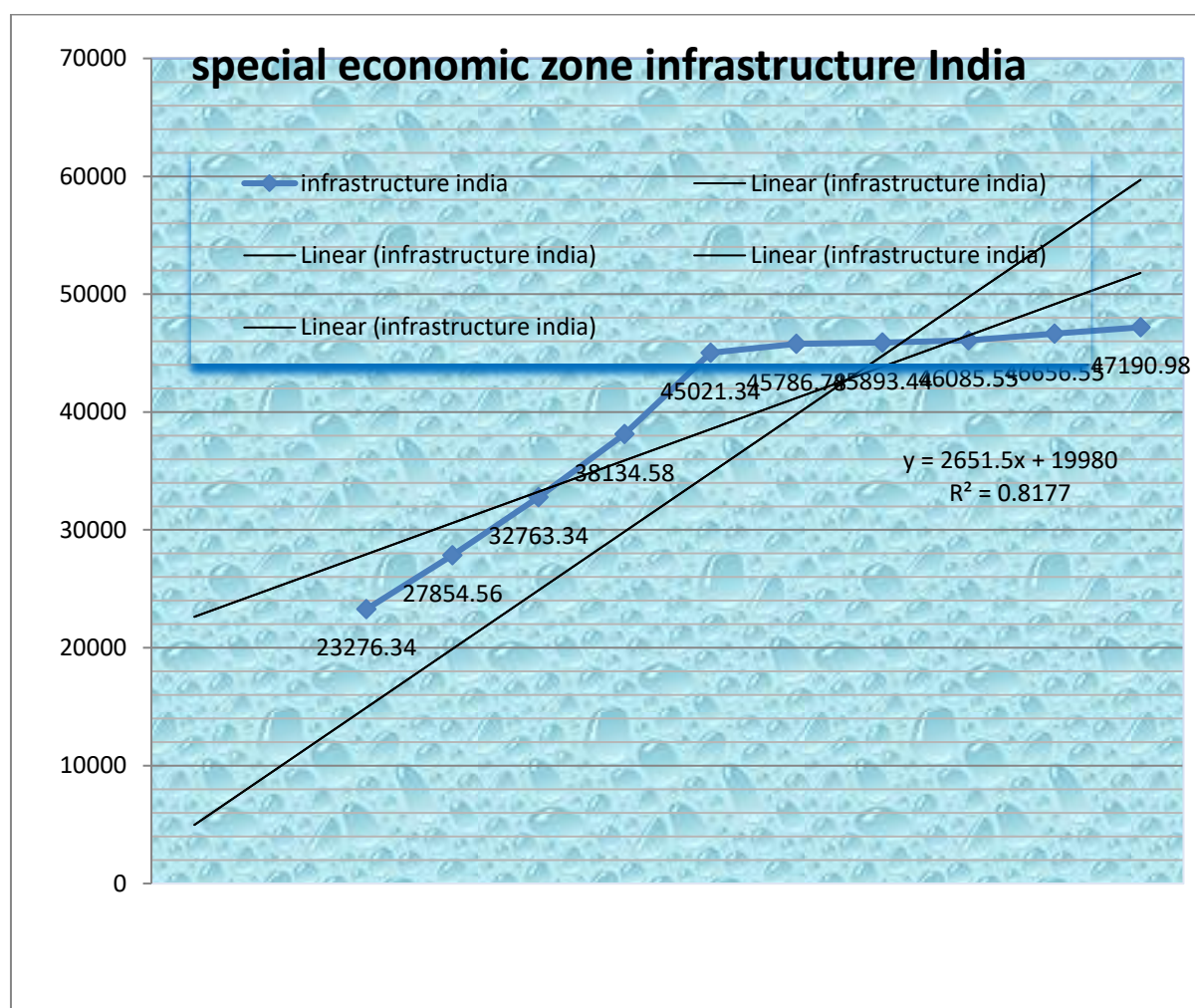
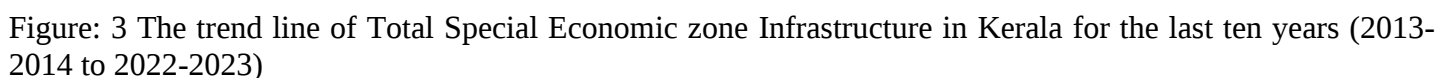


Figure: 2 The trend line of Total Special Economic zone Infrastructures in India for the last ten years (2013-2014 to 2022-2023)

Source: Prepared from Table 2

The trend value is calculated for the comparison purpose. The first line shows the trend of Infrastructure of Indian Special Economic Zones and the second line shows the straight line trend fit to the data. The value of $Y=2651.x+19980$ and R squared value is 0.817. R Squared value shows the ratio of variance in the data (Infrastructure), as explained by the figure: 2, to the total variance in the data. A high R squared value is more stable than low R squared value. It means that Infrastructure of India during the last ten years is very stable and it shows an increasing trend.

The Infrastructure of Special Economic Zones in Kerala for the last ten years has been taken for the trend analysis. A straight line trend can be fitted to the Infrastructure of Special Economic zones in India are based on the principle of least squares. The trend line of Total Special Economic zone Exports in Kerala for the last ten years (2013-2014 to 2022-2023) are given in the figure: 3



The trend value is calculated for the comparison purpose. The first line shows the trend of Infrastructure of Indian Special Economic Zones and the second line shows the straight line trend fit to the data. The value of $Y=67.23x-286.3$ and R squared value is 0.773. R Squared value shows the ratio of variance in the data (Infrastructure), as explained by the figure: 3, to the total variance in the data. A high R squared value is more stable than low R squared value. It means that Infrastructure of Kerala during the last ten years is very not stable and it shows a decreasing trend.

In order to test the association between dependent variable and its independent variables Karl Pearson's coefficient of co-relation (r) is used and interpretation is made accordingly. As far as testing the significance of difference is concerned, two methods are administered, viz., (i) for testing the significance of difference between two variables independent *t*-test is used and (ii) for testing the significance of difference between more than two variables, Analysis of Variance (ANOVA) – One Way Classification is used. Here also the finding is validated and cross checked through Post-Hoc test using computer software package, i.e., Statistical Package for Social Sciences (SPSS).

H01: There exists no significant correlation between the independent variable 'Infrastructural Facilities and the dependent variable 'Performance Evaluation of SEZ Units.

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Table: 3 Co-relation between Infrastructural Facilities and Performance Evaluation

		‘Infrastructural Facilities	Performance Evaluation of SEZ Units
‘Infrastructural Facilities	Pearson Correlation	1	.523**
	Sig. (2-tailed)		.000
	N	216	216
Performance Evaluation of SEZ	Pearson Correlation	.523**	1
	Sig. (2-tailed)	.000	
	N	216	216

** . Correlation is significant at the 0.01 level (2-tailed).

The Pearson co-relation as seen from the Table 3 shows that there exist a significant co-relation between Infrastructural Facilities and Performance Evaluation of SEZ units which is 0.523 at 0.01 levels. Hence, the null hypothesis can be rejected and the alternate hypothesis is accepted. It means that there exists a significant co-relation among the relationship between Infrastructural Facilities and Performance Evaluation of SEZ units.

Suggestions

The following suggestions are made for improving the performance of SEZ units in Kerala:

- 1 Permit more participation from Foreign Direct Investment in all the sectors of the Special Economic Zone in India to enhance the Infrastructure development.
- 2 Infrastructure & Land: SEZs provide high-quality, specialized infrastructure (power, water, connectivity). Land requirement for specialized sectors like IT/Biotech can be as low as 10 hectares.
- 3 Develop high-quality road, rail, port, and airport links to SEZs.
- 4 Strengthen multimodal logistics networks to reduce transportation costs.
- 5 Invest in solar parks, rooftop solar systems, and energy-efficient infrastructure.

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