

Infrastructure Facilities in Special Economic Zones: A Comparative Study of Government and Private SEZs in Gujarat

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Abstract

Infrastructure is the key factor for industrialization as well as the economic development of any country in the world. In late 20th century, many developing countries of the world especially east Asian countries including China have started SEZ policy through which world class infrastructure facilities were built to attract the investors from all over the world. This certainly encourage investment, technology transfer, increase exports and employment in the country. In order to know the infrastructure facilities in India and specially in Gujarat, primary data collected from the 145 units of 7 SEZs out of 676 units of total 20 SEZs located in Gujarat to study the infrastructure facilities available in government and private SEZs. Since collected data were not normally distributed or relatively small in size, Mann Whitney U test was applied to test the hypothesis. The main outcome of this research reflected that out of four major infrastructure facilities, three of them have difference of opinion among the unit holders of SEZs of Gujarat. This also implies that private sector SEZs provide better infrastructure facilities compare to government SEZ (KASEZ) in Gujarat. So far as social infrastructure like housing, school, health and other such basic social amenities are concern, both type of SEZs have similar opinion. This category of infrastructure also ranks lowest compare to physical, service and pool infrastructure facilities in the SEZs.

Keywords: *Physical Infrastructure, Social Infrastructure, Service Infrastructure, Poor Infrastructure, Special Economic Zones.*

Citation: Thapa, P., & Chudasama, K. (2024). Infrastructure facilities in special economic zones: A comparative study of government and private SEZs in Gujarat. Ganpat University Journal of Applied Research in Social Science & Humanities, 12(2), 1–13.

1. Introduction

Every country in the world adopting different policies to achieve specific goal to improve the socio-economic condition of their people and in real sense the overall economic development. The creation of Special Economic Zones (SEZs), earlier known with different names in different countries or in different time periods (Free Trade Zones, Export Processing Zones) with relatively same purposes is one such step in that direction which has helped many developing countries in the world to accelerate their economic development by increasing export and import activities in the country. The first EPZ was set up in 1959 at Shannon, in Ireland, followed by Puerto Rico in 1962 and Kandla, India in 1965. As per World Bank report 2014, there were more than 5200 SEZs operational in 128 countries of the world.

The latest term "Special Economic Zone" means "Geographical region where economic laws are relatively more liberal than country's typical economic Laws". It is a specifically delineated duty-free enclave, and treated as a foreign territory for the purpose of processing, manufacturing, service and trade operations, with exemption from customs duties and more liberal regime in respect of levies, foreign investment, labour laws etc.

Any policy framed by Central and state governments have specific objectives and implementing these policies with following certain procedures by government and any other implementing agencies. In India, SEZ policy 2000 and SEZ Act 2005 clearly mentioned that to achieve given objectives of special economic zones, SEZ developers will provide quality infrastructure for smooth running of business registered inside the SEZs. "Infrastructure" has been defined in the SEZ Act 2005 and draft rules 2006 as follows: facilities needed for development, operation and maintenance of an SEZ and would include industrial, commercial and social amenities like development of land, roads, buildings, sewerage and effluent treatment facilities, solid waste management, port, including inland container depot, or container freight station, warehouses, airports, railways, transport system, generation and distribution of power, gas and other forms of energy, telecommunications, data transmission network, information technology network and social infrastructure like hospitals, hotels, educational institutions, recreational and entertainment facilities, residential and commercial

complex, water supply, including desalination plant in coastal SEZs, sanitation and other facilities as may be required by SEZ units location-wise and notified by the state and the Central Government. Despite the central government and state government policy part, many developers and co-developers are unable to provide world class infrastructure facilities in the Zones. This is an attempt to find out the opinion of the stakeholders regarding the difference of infrastructure facilities in the state with reference to privately owned and operated SEZs and government owned and operated SEZs of Gujarat.

2. Problem Statement

The trade reform process undertaken by most of the developing countries in late 20th century. In order to overcome the basic economic problems faced by these countries to choose the path of development, favoured by export-led industrialisation strategy. The export promotion measures of these developing countries established Special Economic Zones (SEZs) in the form of industrial clusters. SEZs presume to produce and export internationally competitive low-cost products. If goods are to be export competitive means, they have to be price-competitive as well as quality-competitive too. Under such a situation, the governments of the developing countries offer a number of export promotion incentives to such SEZs and firms in it. This includes infrastructural services, tax incentives, subsidies, income-tax exemption, duty exemption etc. which attracts national and international companies to invest and carry out business operation in SEZs. The SEZs are also permitted to follow a liberalised labour regime to minimise labour related issues. Apart from all these facilities, SEZs in many countries are struggling to sustain and survive in this competitive world.

India's experience before or after SEZ Act, 2005, faced many controversies and challenges from all sides. First, it never achieved its said objectives like free flow of foreign and domestic investment, could not create enough employment directly or indirectly, and the growth of export was also volatile in all these years. Reasons behind this are mainly poor infrastructure facilities in earlier policy as export processing zones as a major problem along with other reasons like government's inactiveness in regulation & control, absence of technology transfer, difficulties in land acquisition due to old and complicated land laws, rigid labour laws etc.

In order to overcome these anomalies or rectify these problems, government of India decided to enact SEZ Act, in 2005. After enactment in 2005, there was a huge rush to establish SEZs in the country, but also facing serious allegations from civil society, researchers, and academicians about its negative impacts. Many studies proved that allowing so many SEZs to function will create negative externalities like arable land loss, revenue loss, Real estate speculation, labour abuse, re-location of business, conflict of land acquisition laws, environmental related issues and regional imbalance in the country. In this way, SEZ policy of many developing countries are deemed to be not successful accepted in few countries of the world.

3. Literature Review

In India, SEZ policy was adopted and implemented with the objective of the development of high-quality infrastructure by private sectors, to attract considerable amount of foreign investment with advanced technology, increase employment opportunity and finally to boost exports from the country. In other words, SEZ policy of the country will work as an engine of growth for the country and increase the share of global trade (Govilkar, 2008). SEZs were meant for earning foreign exchange, develop export-oriented industries, stimulate investment and generate employment opportunities beside creating an internationally competitive environment for export production at low cost (C & AG, 2014).

In every phase of SEZ policy, Government of India has emphasized and initiated wide-range measures including financial for revamping and restructuring the SEZs and its units related policies (Kundra, 2000). The competitive advantage within these zones would like to attract huge investment internally or from external sources to make them an engine of growth and industrialization. Special economic zones are set up to increase the economic development in the region by increasing investment in infrastructure specially for export sector. The massive investment in these zones will promote the production of export of goods and services and earn foreign exchange (Adam, 2016). Establishment of SEZs in a specific city-region has positive impact on the accumulation of physical capital. Researcher also found the spill-over effect in surrounding area of the region. (Alder, 2016). It also helps to generate employment by shifting the workforce from agriculture to industry and tertiary sectors. Cambodia's

experience in SEZs revealed that country should emphasize to enhance the international competitiveness of the zones are similar to those needed in rest of the economy. In this regard, infrastructure play vital role which consist of electricity supply, trade facilitation (Warr & Menon, 2016). Fiscal incentives can be the effective way to boost investment in ant industrial activities in the country, especially in special economic zones where non-fiscal parameters like rail-road connectivity, availability of port and dry ports, transportation of labours, easy excess of labour market kind of infrastructure is equally important to make export import business competitive (Pandya & Joshi, 2015). The success and failure of SEZ often depend upon the quality of its infrastructure, location and size of the SEZs. According to the researcher, infrastructure in SEZ consist of the condition of road and its maintenance, electricity supply, waste management system etc (Farole & Akini, 2011). The key factors for smooth running of SEZ in the country are; appropriate location, upgraded infrastructure, agglomerations of domestic economy, special economic privileges and factors of production. Amongst them, researchers found that infrastructure and special economic privileges are most influencing factors export business to become effective (Dhingra, Singh & Sinha, 2009). SEZs account for an increasing share of international trade flows and employ a growing number of workers world-wide. "In the global economy, SEZs are viewed as an instrument to promote industrialization, employment and regional development" (Agarwal, 2007). The policy was intended to make SEZs an engine for economic growth supported by quality infrastructure complemented by an attractive fiscal package, both at the Centre and the state level, with the minimum possible regulations (Saleem, Cavusgil, & Tietenberg, 2011).

Simultaneously, there were negative view on establishment and promotion of SEZs or similar activities in many developing countries of the world. In India, after implementation of SEZ Rule 2006, application for setting up SEZs received by Board of Approval in huge numbers and also got approval to start operations without deep debate and discussion at policy level like relocation of units, revenue loss, land acquisition conflict, loss of agriculture land and regional imbalances in the name of SEZ (Agarwal, 2006).

4. Research Objectives and Methodology

In order to find out the issues related to infrastructure in SEZs located in Gujarat State, researcher has tried to measure the perception of manager/owner of SEZ unit holders through questionnaire regarding required infrastructure facilities available in the SEZs provided by developers and co-developers. This will give broad idea about the facilities that units of the SEZs.

The main objective of this research is:

“To identify the issues related to the infrastructural facilities of Government and private Special Economic Zones in Gujarat state”.

To study the above objective minutely, 17 types of different infrastructure are divided in four major categories of infrastructure are; 1) Physical infrastructure, 2) Social Infrastructure, 3) service infrastructure and 4) Pool infrastructure with following statement as research questions.

1. To analyse the physical infrastructural facilities in private & Government SEZs in Gujarat.
2. To examine the Social infrastructural facilities in private & Government SEZs in Gujarat.
3. To evaluate the service infrastructure facilities in private & Government SEZs in Gujarat.
4. To identify the other infrastructural facilities in private & Government SEZs in Gujarat.

On the basis of the above objectives, the questionnaire was framed with four major questions in two parts. In first part, where primary information in which, unit located in government owned SEZ or private SEZ was asked as independent variable and second part of the questionnaire consist of 17 different questions related to infrastructures like uninterrupted supply of electricity, internal road, sufficient water supply, drainage system, waste management safety and security service, common transportation facility for staff and workers, rent/cost of infrastructure, custom /excise procedure in zones, fast incentive claim, warehousing facility and other financial

services like banking, insurance, transport, CHA, residential facility, , school, hospital, re-creation facilities etc. in non-processing area of SEZ, national/state highway connectivity, Rail connectivity, port/dry port facility, availability of labours in surrounding areas etc. These infrastructure facilities are grouped in to 4 broad categories to simplify the analysis are; 1) physical infrastructure, 2) social infrastructure 3) Service infrastructure and 4) other infrastructure facilities as dependent variables. These statements measuring with Five-point Likert scale from strongly agree to strongly disagree. The scale is 5- Strongly agree, 4-Agree, 3-average/neutral, 2-Disagree, 1- Strongly disagree. This data later converted into continuous data by averaging all responses into 4 problem statements. To find out the relationship of various infrastructure facilities between government and private SEZs in Gujarat, following hypothesis are constructed;

Null Hypothesis: On the basis of the above statements, following Null Hypothesis are constructed as under:

H0=1 There is no significant difference of opinion regarding physical infrastructure facilities between government and private SEZ units in Gujarat.

H0=2 There is no significant difference of opinion regarding social infrastructure facilities between government and private SEZ units in Gujarat.

H0=3 There is no significant difference of opinion regarding service infrastructure facilities between government and private SEZ units in Gujarat.

H0=4 There is no significant difference of opinion regarding pool infrastructure facilities between government and private SEZ units in Gujarat.

This study covers entire Gujarat state as a population frame where there are 20 SEZs and 676 units, working in different region of the state as on 31st March 2020. All types of SEZs are there in Gujarat like multi-product SEZs, product specific (single product) SEZs, multi-service SEZ (GIFT-city) etc. Various industries also come under these different SEZs like Pharma, chemicals, petrochemicals, engineering, textiles, plastic and rubber, agro-product and services like ITs products, warehousing, trading, logistic etc.

Out of 20 SEZs, one government SEZ (KASEZ) and 6 private SEZs were taken as sample SEZs and out of 145 sample units, 93 were units from government SEZ and 52 were from private SEZs. Primary data collected from the operational units of managers/owners who are managing SEZs units directly. Structure questionnaire has been prepared and approach to each unit manager or owner in their respective unit with prior permission from SEZ authority as well as specific unit managers/owners by researcher personally. It was like an interview cum survey, except few responses (3/145) were received through google form. Convenient method of data collection was adopted because of homogenous respondents, geographical coverage was large i.e., entire Gujarat state and the availability of the respondents at their workplace is very difficult as they are owners or managers of the firms.

Inferential analysis was adopted to derive the outcome of the research. To examine the four major infrastructure facilities with respect to private and government SEZs. Since primary data were collected in five-point Likert scale and ordinal in nature, later converted into ratio scale by averaging all responses. The researcher is unable to apply t-test due not normality of distributed data sets. Then researches have applied non-parametric test i.e. Mann-Whitney U test to derive result from the sample data.

These data have been tabulated and analysed with the help of SPSS software.

5. Result and Discussion

Table-1

Test of Normality						
Variables	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	statistic	df	Sig.
Physical Infrastructure facilities in SEZs	.172	145	.000	.837	145	.000
Service Infrastructure facilities in SEZs	.098	145	.002	.960	145	.000
Social Infrastructure facilities in SEZs	.246	145	.000	.886	145	.000
Pool Infrastructure facilities in SEZs	.143	145	.000	.902	145	.000

Above table 1, represents the normality test of sample data collected before applying appropriate statistical tool for data analysis. Significant value of all the four dependent variables in the above table shows less than 0.05 in Kolmogorov-Smirnova and

Shapiro-Wilk normality test suggests that sample data are not normally distributed. Because of this reason, researcher have decided to use non-parametric test i.e. Mann-Whitney U test for deriving the result for this research.

On the basis of given objectives, following hypothesis are discussed as under.

Table-2

Test Statistics'				
	Physical Infrastructure facilities in SEZs	Service Infrastructure facilities in SEZs	Social Infrastructure facilities in SEZs	Pool Infrastructure facilities in SEZs
Mann-Whitney U	1653.000	1408.000	1987.500	1825.000
Wilcoxon W	6024.000	5779.000	6358.500	6196.000
Z	-3.215	-4.180	-1.851	-2.466
Asymp. Sig. (2-tailed)	.001	.000	.064	.014

Table-3

Ranks				
Type of SEZ (Govt./Pvt.)		N	Mean Rank	Sum of Rank
Physical infrastructure facilities in SEZs	Govt. owned SEZ (KASEZ)	93	64.77	6024.00
	Private SEZs	52	87.71	4561.00
	Total	145		
Service Infrastructure facilities in SEZs	Govt. owned SEZ (KASEZ)	93	62.14	5779.00
	Private SEZs	52	92.42	4806.00
	Total	145		
Social Infrastructure facilities in SEZs	Govt. owned SEZ (KASEZ)	93	68.37	6358.50
	Private SEZs	52	81.28	4226.50
	Total	145		
Pool Infrastructure facilities in SEZs	Govt. owned SEZ (KASEZ)	93	66.62	6196.00
	Private SEZs	52	84.40	4389.00
	Total	145		

H₀₁: There is no significant difference of opinion regarding physical infrastructure facilities between government and private SEZ units in Gujarat.

Explanation-1: In above table 2, significant value of physical infrastructure in SEZs is 0.001 which is less than 0.05, we reject the Null hypothesis means physical infrastructure facilities in govt. SEZs and private SEZs has a significant difference.

Above table 3 represent that mean ranks of private SEZs is 84.40 which is higher than Government SEZ mean rank of 66.60. This implies that private SEZ unit holders are more satisfied with the availability of physical infrastructure facilities than government SEZ unit holders.

H₀₂: There is no significant difference of opinion regarding social infrastructure facilities between government and private SEZ units in Gujarat.

Explanation-2: In above table 2, significant value of service infrastructure in SEZs is 0.000 which is less than 0.05, we reject the Null hypothesis means service infrastructure facilities in govt. SEZs and private SEZs has significantly different. This means that the opinion regarding service facilities like safety and security of units, cost rent of the units, warehousing, mass transportation, banking, insurance and CHA service in govt. SEZs and private SEZs are different.

Above table 3 represent that the mean rank of private SEZs is 92.42 which is higher than Government SEZ mean rank of 62.14. This implies that private SEZ unit holders are more satisfied with the availability of service infrastructure facilities than government SEZ unit holders.

H₀₃: There is no significant difference of opinion regarding social infrastructure facilities between government and private SEZ units in Gujarat.

Explanation-3: In above table 2, significant value of social infrastructure in SEZs is 0.064 which is higher than 0.05, we fail to reject the Null hypothesis means social infrastructure facilities are not significantly different in govt. SEZs and private SEZs. Respondents of both the SEZs have similar opinion regarding the facility of housing, schools, hospitals, re-creation etc. are in govt. SEZs and private SEZs

Since we fail to reject Null hypothesis, and there is no difference of opinion regarding social infrastructure between both the SEZs, there is no meaning of comparing mean ranks of the SEZs.

H₀₄: There is no significant difference of opinion regarding other infrastructure facilities between government and private SEZ units in Gujarat.

Explanation-4: In above table 2, significant value of service infrastructure in SEZs is 0.014 which is less than 0.05, we reject the Null hypothesis means pool infrastructure facilities like road & rail connectivity, port and dry port facility, availability of manpower in surroundings in govt. SEZs and private SEZs has also significantly different. This implies that respondents of the government SEZs and private SEZs have different opinion regarding the above facilities.

Above table 3 represents that mean ranks of private SEZs is 84.40 which is higher than Government SEZ mean rank of 66.60. This implies that private SEZ unit holders are more satisfied with the availability of pool infrastructure facilities than government SEZ unit holders.

6. Research Findings and Suggestions

On the basis of above result and discussion, following implications are suggested regarding infrastructure facilities deadly needed for smooth operations of export import activities from special economic zones.

Since this is a comparative study between government SEZs and private SEZs and suggestions are made on the basis of relatively better position in each other. It doesn't mean a maximum satisfaction in one category consists of many sub factors which may have different value in stakeholder's mind.

Excepts social infrastructure, physical infrastructure, services infrastructure and pool infrastructure has clear-cut difference between government SEZ's infrastructure facilities and private SEZ's infrastructure facilities in which later one provides better facilities compare to government SEZ.

So far social infrastructures like housing, school, health, and other basic social amenities have a similar opinion in both types of SEZs in Gujarat. In rank, it lies in the lowest level of preference given by the unit holders among all the infrastructure facilities available in the zones. Here, similar opinion implies that in both type of SEZs social infrastructure is poor comparatively.

7. Scope for Further Research:

Area of study is confined to Gujarat state only and seven SEZs and 145 units are covered out of 20 SEZs and 676 units operational in Gujarat during study period of 2019-20. This study included only infrastructure related policy of SEZs compared between government and private SEZs. The effectiveness of the working of SEZs can be analysed by linking the performance of SEZs with that of the subsidies and tax allowances that are provided to the working of SEZs in Gujarat.

8. Conclusion

The main outcome of this research reflected that out of four major infrastructure facilities, three of them have difference of opinion among the unit holders of SEZs of Gujarat. This also implies that private sector SEZs provide better infrastructure compare to government SEZ (KASEZ) in Gujarat. So far as social infrastructure like housing, school, health and other such basic social amenities are concern in which both type of SEZs have not only same opinion but also fall in the lowest rank compare to physical, service and pool infrastructure facilities in both type of SEZs in Gujarat.

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