



# PERFORMANCE OF INDIAN SEZS

*1965 to 2010*

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**Abstract :** The first Special Economic Zone (SEZ) in India was established in 1965 followed by six more public sector SEZs by 1990. A decade later, the SEZ Policy and Act were introduced to add impetus and clarity to the concept. The zones, projected as engines of economic growth, were envisioned to boost the export performance of the country apart from creating employment opportunities, generating additional economic activity, and developing infrastructure, among many others. As expected, the policy initiative received a tremendous response, ultimately resulting in the establishment of hundreds of SEZs across the length and breadth of the country, with several more in the pipe line. Over a period of time, the SEZ concept has attracted appreciation as well as criticisms on several fronts from varied quarters. In addition to this, SEZs are a part of a larger and dynamically changing environment. Therefore, it becomes imminent to continuously update and evaluate the performance of these zones. Hence, the primary objective of this paper is to evaluate the performance of Indian SEZs in terms of select indicators such as exports, investment and employment during the period 1965-2010. In addition to the above, the paper also aims at assessing the contribution of Indian SEZs (ISEZs) to India's total exports during the same period.

**IndexTerms - SEZ, Performance evaluation, exports, NFE, employment.**

## I. INTRODUCTION

SEZs are specific geographical regions that have economic laws different from and more liberal than a country's normal economic laws (Wu 2009). They can also be considered as industrial zones with special incentives set up to attract foreign investors, in which imported materials or data, undergo some degree of processing before being (re)-exported again (ILO 2002). More specifically, an SEZ is a fenced-in industrial estate that offers firms, free trade conditions and a liberal regulatory environment and specializes in manufacturing for export (World Bank 1992).

Of late, SEZs have come to constitute an important aspect of the industrialisation strategy of the developing economies for increasing their competitiveness and international trade flows. They are meant to serve the host nation through export earnings and increased employment opportunities (Cling and Letilly 2001, Jayanthakumaran 2002). Further, SEZs are also expected to contribute to the overall development of domestic economy by activating backward linkages (Madani 1999, Singa 2007) and facilitating diversification of the export basket of the host country.

The term 'SEZ' is synonymous with EPZs (Export Processing Zones), FTZs (Free Trade Zones), Maquiladoras, etc., which have been established by countries worldwide to serve as tools for accomplishing different economic purposes and objectives. In India, SEZs were set up with the aim of generating foreign exchange, developing export-oriented industries, stimulating investment and generating employment opportunities besides creating an internationally competitive environment of export production at low cost. The zones were also meant to be safe havens for eliminating constraints imposed by India's trade and industrial policy on exporters.

The first SEZ in India (as well as in Asia) was set up at Kandla in Gujarat in 1965. Thus India became a pioneer among Asian countries to have recognized the effectiveness of the EPZ model in the promotion of exports. This was followed by Santacruz Electronic EPZ (SEEPZ) near Bombay in 1973 followed by the Madras EPZ (now Chennai) in South (1984), Falta EPZ near Kolkata in the East (1984) and Noida EPZ near New Delhi in the North (1984) Cochin EPZ on the West Coast (1984) and Visakhapatnam EPZ on the East Coast (1989) (Aggarwal 2004).

After 1990s, the liberalization, privatization and globalization (LPG) policies of GOI led to the need for drastic changes in the erstwhile policies relating to industrialization and EPZs. This led to the introduction of SEZ Policy in 2000 to permit the establishment of SEZs in the public, private, joint sector or by the State Governments. This policy also converted the erstwhile established EPZs into SEZs. To encourage private participation the SEZ Act was enforced in 2005 followed by SEZ Rules in 2006 and this resulted in an overwhelming response leading to 600 formal approvals of SEZs in the country. The number of operational SEZs has also gone up from seven in the year 2000 to 111 SEZs in 2010, with the notified SEZs rising to 372 in number.<sup>1</sup>

The main objectives of SEZs in India outlined in the SEZ Act are:

- a. Generation of additional economic activity;
- b. Promotion of exports of goods and services;
- c. Promotion of investment from domestic and foreign sources;
- d. Creation of employment opportunities;
- e. Development of infrastructure facilities; and
- f. Maintenance of sovereignty and integrity of India, the security of the State and friendly relations with foreign States.

Ever since their introduction, the Indian SEZs have attracted significant attention from varied quarters. While a group of studies have focused on the negative aspects of SEZs in India (Venugopal 2005, Ranjan 2006, Suchitra 2006, Debroy 2007, Pali 2007, Gopalakrishnan 2007, Sampat 2008, Vyas 2010, among others), several others have attempted to see them in positive light. There have been studies focusing on the rationale behind their establishment in India (Singhal 2005, Aggarwal 2006) and the critical factors that can influence their success (Exim 2000, Singh 2006, CII 2006). Studies have also focused upon the extent to which the SEZ Act and SEZ Policy have been implemented (Groshek 2008, Raju and Ramakrishna, 2007) and the phases of their development in India (Dhingra and Singh 2009). In continuation to this, while certain studies have advocated lessons to be drawn from China (Modak 2007), others have suggested the adoption of a unique policy for their successful implementation (Fulton 2007). The role and significance of SEZs in strategic issues of firms (Chakrabarti 2006), such as their resourcefulness in globalization of firms (Bhatia 2005), are an attempt to highlight the potential of SEZs in creating opportunities for investment and growth.

There have also been studies related to evaluation of SEZ performance (Kumar, 1989; Aggarwal, 2004), but of late very little research has been conducted in this direction. Moreover, as SEZs constitute a dynamic field, it is essential to update their performance on a consistent basis. Incidentally, the period 2001-2010 has witnessed the most dynamic happenings on the SEZ front (introduction of SEZ Policy in 2000 that led to conversion of EPZs into SEZs, private participation in SEZ establishment, SEZ Act in 2005, SEZ Rules in 2006) and it also completes one decade of SEZ functioning in the country. It is therefore considered appropriate to evaluate the performance of Indian SEZs (ISEZs) during this period.

### Objectives:

The primary objective of the paper is to evaluate the performance of the zones and the extent to which the SEZ objectives of exports, employment and economic activity have been attained. Therefore, the variables of performance chosen for evaluation are exports, employment and investment. Another objective of this paper is to assess the contribution of SEZs to total exports of the country during the same period.

### Methodology and Performance Evaluation:

With respect to the aspects mentioned in the preceding paragraph, the performance evaluation of ISEZs is carried out under the following heads:

- i. ISEZ Exports Growth during 1965-2010
- ii. Share of ISEZ Exports in India's Total Exports during 2001-2010
- iii. Employment Generation of ISEZs during 1965-2010
- iv. Investment in ISEZs during 2001-2010

#### i. ISEZ Exports Growth during 1965-2010

From an annual average of ` 32.6 lakh between 1965 and 1970, the ISEZ exports reached an annual average of approximately ` 89,000 crores during 2005-2010 (Table- 1). They fared well in comparison with the country's total exports which have grown at a nominal rate. While the country's total exports have registered the highest average annual growth rate of 25 % during the period 1990 – 95, ISEZs have not only maintained a higher average annual growth rate of 27 per cent during the same period, but they have also registered very high growth rates throughout the 45 years of their existence, the highest being in the initial five year period and again during 1975 – 80, following the establishment of SEEPZ SEZ in 1974. The average annual growth rate of ISEZ exports is also commendable at 68 per cent during 2005-10, when the SEZ Act led to the establishment of over 300 SEZs in the country.

The growth in exports has been exceptionally phenomenal after the year 2000 which is evidently due to the establishment of 12 SEZs (in the State Government and private sector) between the years 2000 and 2005 (shown in Table- 1). The years following SEZ Act in 2005 which have witnessed the establishment of many private SEZs in the country, have experienced a considerably high annual growth rate in SEZ exports as well. This is clearly reflected in the year-wise growth in ISEZ exports shown in Table- 2. The highest annual growth rate in ISEZ exports during the period of study has been registered in 2009-10 with a growth of 121 per cent over the previous year. The consistently high export growth rates registered in this period since 2002 can therefore be considered as indicators of SEZ success in India.

<sup>1</sup> Fact Sheet on SEZs in India (31<sup>st</sup> March, 2010), accessed from [www.sezindia.nic.in](http://www.sezindia.nic.in) on 25<sup>th</sup> Dec, 2010.

**ii. Contribution of ISEZ Exports to India's Total Exports during 2001-2010:**

It is a known fact that one of the main objectives behind SEZ establishment is to promote exports. During 2001-2010, the share of ISEZ exports in India's total exports increased considerably from just four percent in 2000 – 01 to 26 percent in 2009-10. As can be observed from Table- 2, the spurt in growth is especially observed during the period after the enforcement of SEZ Act in 2005.

TABLE – 1: ISEZ EXPORTS AND INDIA'S TOTAL EXPORTS DURING 1965 – 2010

(` in crores)					
Year	Establishment of SEZs in India	Average annual ISEZ exports	Average annual ISEZ export growth rate	Average annual total Indian Exports	Average annual total export growth rate of India
1965–1966 to 1969–1970	Kandla SEZ in 1965	0.3261	94.65 %	1187	12.66 %
1970–1971 to 1974–1975	SEEPZ SEZ in 1974	1.7358	58.34 %	2194	19.2 %
1975–1976 to 1979–1980	Nil	18.6766	79.27 %	5356	14.5 %
1980–1981 to 1984–1985	FSEZ in 1984 MEPZ SEZ in 1984	231.724	57.54 %	8967	12.84 %
1985–1986 to 1989–1990	NSEZ in 1985 CSEZ in 1986 VSEZ in 1989	582.91	27.11 %	17,382	19.76 %
1990–1991 to 1994–1995	Nil	2084.874	27.19 %	56,543	24.66 %
1995–1996 to 1999–2000	Nil	5918.479	21.68 %	1,30,917	14.28 %
2000–2001 to 2004–2005	12 State Government/ Private Sector SEZs set up	11,993.4	22.86 %	2,67,286	19.05 %
2005–2006 to 2009–2010	348 new SEZs notified	88,898.668	67.95 %	6,74,070	18.07 %

Source: [www.sezindia.nic.in](http://www.sezindia.nic.in) accessed on 10<sup>th</sup> September 2010; Aggarwal, (2004); RBI Bulletins

TABLE – 2: SHARE OF ISEZ EXPORTS IN INDIA'S TOTAL EXPORTS AND THEIR GROWTH DURING 2001-2010  
(` in crores)

Year	India's Total Exports*	ISEZ Exports**	Share of SEZ Exports in India's Total exports (%)	Annual growth rate of India's Total Exports (%)	Annual growth of ISEZ exports (%)
2000 – 01	2,03,571	8552	4.2	27.58 <sup>@</sup>	27.48 <sup>#</sup>
2001 – 02	2,09,018	9190	4.4	2.68	7.45
2002 – 03	2,55,137	10,057	3.9	22.06	9.44
2003 – 04	2,93,367	13,854	4.7	14.98	37.75
2004 – 05	3,75,340	18,314	4.9	27.94	32.19
2005 – 06	4,56,418	22,840	5	21.6	24.71
2006 – 07	5,71,779	34,615	6.1	25.28	51.55
2007 – 08	6,55,864	66,638	10.2	14.71	92.51
2008 – 09	8,40,755	99,689	11.9	28.19	49.6
2009 – 10	8,45,534	2,20,711	26.1	0.57	121.4

Source: \* RBI Bulletins (2006; 2011)

\*\* [www.sezindia.nic.in](http://www.sezindia.nic.in) accessed on 10<sup>th</sup> September, 2010

## STATISTICAL APPLICATIONS RELATING TO TABLE- 2

2001- 2010	India's Total Exports	ISEZ Exports
Compound Annual Growth Rate (CAGR)	19.67 %	42.56 %
Coefficient of Variation (CV)	52.47 %	132.4 %
Correlation Coefficient between India's Total Exports and ISEZ Exports= 0.8358		

<sup>@</sup> This growth rate is calculated by taking India's total exports during 1999-2000, which is ` 1,59,561 crores.

<sup>#</sup> The growth rate is calculated by taking ISEZ exports during 1999-2000, which is ` 6709 crores.

Source: Calculations based on data available in Table- 2

The erstwhile target of ISEZs contributing five percent share to India's total exports by the end of Eighth Five Year Plan could ultimately be accomplished in 2005 – 06. The SEZ contribution of 26 per cent to the country's overall exports in 2009-10, nourishes the hope of achieving the objectives behind SEZ establishment, especially of contributing significantly to country's total exports.

Even in comparison with India's total exports, ISEZ exports have exhibited a superior growth rate during 2001-10. While the total exports of the country increased 4.15 times from ` 2,03,571 crores in 2000-01 to ` 8,45,533 crores in 2009-10, thereby registering an annual average growth rate of 18.6 per cent, the ISEZ exports increased more than 25.2 times from ` 8552 crores to ` 2,20,711 crores during the same period, registering an annual average growth rate of 45.4 per cent. Except for one year, SEZs have maintained a higher growth rate in exports in comparison with India's total exports during the period of study, with exceptionally high growth rates during the period especially after the enforcement of SEZ Act, 2005. The growth in SEZ exports in comparison with the country's total exports is a positive indicator which can therefore be considered in order to justify the establishment of SEZs in the country.

Further, from the statistical applications relating to Table- 2 it is observed that the Correlation Coefficient between India's total exports and ISEZ exports during 2001-10 is highly positive at 0.8358 indicating a highly positive correlation between the two. Moreover, while the Coefficient of Variation (CV) of the country's total exports works out to be 52.5 per cent the CV of ISEZ exports arrives at 132 per cent thereby indicating the highly positive growth of the latter during the period.

#### i. Employment Generation of Indian SEZs during 1965-2010

In order to evaluate the performance of ISEZs, their total employment since the year of their inception has been considered as it enables a clear picture. From an employment level of 70 persons in 1965, SEZs have reached an employment level of over five lakh persons in 2010 (shown in Table- 3), which is due for further expansion given the number of SEZs that have been approved during 2001-10 by the Government of India. It is worth noting that after the enforcement of SEZ Act in 2005, the new-generation SEZs provided more employment. The total employment in SEZs between the years 2000 and 2006 increased from 81,371 persons to 1,34,704, thereby registering an increase of 1.6 times. The average zone employment has also increased considerably from just 450 in 1970 to 4537 in 2010. However, the average zone employment decreased in 2006 evidently due to the rise in the number of newly-approved SEZs which was very high compared to operational SEZs.

TABLE – 3: EMPLOYMENT IN INDIAN SEZs DURING 1965-2010

Year*	No. of operational SEZs (a)	Total SEZ Employment (persons) (b)	Average SEZ Employment (persons) (c=b/a)
1966	1	70	70
1970	1	450	450
1975	2	1450	725
1980	2	6000	3000
1985	4	16,200	4050
1990	6	35,205	5868
1995	6	61,431	10,239
2000	7	81,371	11,624
2006	19	1,34,704	7090
2010	111	5,03,611	4537

Source: [www.sezindia.nic.in](http://www.sezindia.nic.in) (Official website of MOC, GOI) accessed on 24<sup>th</sup> September, 2010

#### ii. Investment in Indian SEZs during 2000-2010

Government of India invested a substantial amount in providing physical and trade-related infrastructure and for meeting the development expenditure of the SEZs in the country. The respective State Governments have also earmarked some investment for laying roads in the Zones. Private investment is being increasingly made after the enforcement of SEZ Act in 2005.

At the beginning of the period 2000-2010, the SEZs existing in India belonged only to the Central Government of the country and the cumulative investment which included from all the three parties namely, Central Government, respective State Governments and private firms, amounted to ` 2193.9 crores. By the year 2006, the SEZ scenario in the country had changed as 12 new SEZs belonging to State Governments and private entities (both domestic and foreign) had been established between 2000 and 2005. The total investment then had totaled to ` 4035.51 crores which included cumulative investment of ` 2279.2 crores in Central Government SEZs and an investment of ` 1756.31 crores in the SEZs established by State Governments and private SEZs (see Table- 4).

\* Figures of the year 2006 are, as of 10<sup>th</sup> February in that year, after which SEZs were notified under the SEZ Act.

The investments attracted by SEZs established between the years 2000 and 2005 were of the order of 77 per cent of the total investments made in Central Government SEZs over 40 years (i.e. from the inception of first SEZ in 1965 to 2005). The scenario had turned much more dynamic with the advent of the year 2006 when the Government of India passed the SEZ Act formulated in the previous year and released the SEZ Rules, 2006 to attract large private investments into the arena of SEZs.

As evident from the table, the total investments made in the newly notified SEZs has reached a mammoth figure of ` 1,34,494.76 crores which constitutes more than 90 per cent of the total investment made in all the SEZs in the country as of March 2010. However, the total investments made in all the SEZs in India totaled to 1,48,488.62 crores which is incomparable with the corresponding figure just a decade back in March 2000. Quite explicitly, the Central Government SEZs and other Zones established erstwhile also seem to have benefited from the new order, as the investments in these have grown by over three times and four times respectively in a relatively short span of four years.

One may therefore, assess the impact of these investments on the generation of additional economic activity in the country, which is yet another objective outlined by the Government of India in the SEZ Act, 2005. The infusion of industrial dynamism into the country's economy, as anticipated by the planners, appears to be achievable looking at the enthralling investment figures given in the table.

TABLE – 4: INVESTMENT, EXPORTS AND EMPLOYMENT IN INDIAN SEZs DURING 2000 – 2010

(` in crores)

Year	Total Investment*	Total Exports	Total Employment (number)
March 2000	2193.9 (2193.9a+0b+0c)	6709	84,545
February 2006	4035.51 (2279.2a+1756.31b+0c)	22,840	1,34,704
March, 2010	1,48,488.6 (6986.95a+7006.91b+1,34,494.76c)	2,20,711.3	5,03,611

Source: [www.sezindia.nic.in](http://www.sezindia.nic.in) (Official website of Ministry of Commerce, GOI) accessed on 25<sup>th</sup> December, 2010.

Note: \* 'a' indicates cumulative investment made in Central Government SEZs established during 1965-1990;

'b' indicates cumulative investment made in State Government and private SEZs established during 2000-2005; and

'c' indicates cumulative investment made in private SEZs notified after Feb, 2006.

#### STATISTICAL APPLICATIONS RELATING TO TABLE- 4

Variables	Correlation Coefficient
Between Total Investment and Total Exports	0.99839
Between Total Investment and Total Employment	0.99512
Between Total Exports and Total Employment	0.99912

Statistical applications relating to Table – 4 show that a very high correlation exists between any two of the three performance variables viz., Total Investments, Total Exports and Total Employment during the period 2000 – 2010. The correlation coefficient was found to be above 0.995 among the three variables. The inference is quite encouraging as the three variables are closely associated with SEZ growth and are of strategic importance to the country.

#### Findings:

It is clear from the foregoing analysis that the SEZ Policy which was evolved in the year 2000 led to the establishment of several SEZs in the country. This quantum jump in the number of SEZs resulted in the establishment of hundreds of units within the zones. As a result of this, the exports in this sector grew phenomenally during the period 2001-2010 and considerably increased the SEZ contribution to India's overall exports, thereby attempting to accomplish one of the prime objectives behind their establishment. Further, the other associated variables of SEZ performance namely, investment and employment, registered an equally appreciable growth during 2001-2010. Hence, with respect to the growth in investment, exports and employment, and the number of SEZs established in the country during the period, it is understood that the SEZ establishment has made significant progress in attaining its objectives.

#### REFERENCES:

1. Aggarwal, Aradhna (2004): "Export Processing Zones in India: Analysis of the Export Performance". WP No. 148, ICRIER, New Delhi, India.
2. Aggarwal, Aradhna (2006): "Special Economic Zones: Revisiting the Policy Debate". Economic and Political Weekly, XLI (43), 4533-4536.
3. Bhatia, Rajiv (2005): "The orchestrated growth of Indian enterprises through global FTZ/SEZs". Based on a presentation given at World Free Trade Zone Conference, 3-5 Feb, 2005, World Trade Centre, Mumbai, India. (Presenter is Director & Chief Opportunities Executive, Bee Management Consultancy Pvt. Ltd., Mumbai).
4. Chakrabarti, Arindam (2006 ): "Indian SEZs-A Disruptive force in Strategy Formulation". Accessed from [www.tsmg.com](http://www.tsmg.com) (The author is Practice Head, Automotive and Engineering, Tata Strategic Management Group, Mumbai, India.
5. CII (2006): "Driving Investment & Exports: Building Growth Centres". Background paper of 'India SEZ Summit 2006', New Delhi.

6. Cling, Jean-Pierre and Gaele Letilly (2001): "Export Processing Zones: A threatened instrument for global economy insertion?" DT/2001/17, Paris: DIAL.
7. Debroy, Bibek (2007): "The Special Economic Zones (SEZs) Debate". Economic Developments in India, Vol No. 111, (17-30). Academic Foundation, New Delhi, India.
8. Dhingra, Tarun, Tripti Singh and Ambalika Sinha (2009): "Location Strategy for competitiveness of Special Economic Zones: A generic framework for India". Competitiveness Review: An International Business Journal incorporating Journal of Global Competitiveness, 19 (4), 272-289.
9. Exim Bank (2000): "Export Processing Zones in Select Countries: Critical Success Factors", Occasional Paper of the Exim Bank, Mumbai, India. (The paper was released at the hands of Shri Murasoli Maran, the Honourable Ex-Minister of Commerce and Industry of India, at the Board of Trade Meeting, New Delhi, March 25, 2000). Fact Sheet on SEZs in India (31<sup>st</sup> March, 2010)
10. Fulton, Lauren (2007): "India's Way: Crafting Special Economic Zones". Harvard International Review, winter 2007, Asia Pacific.
11. Gopalakrishnan, Shankar (2007): "Negative Aspects of Special Economic Zones in China". Economic and Political Weekly, XLII (17), 1492-1494.
12. Groshek, Gerald (2008): "The Entrepreneurial States: Special Economic Zones in India". Journal of Management and Entrepreneurship, 2 (1), 3-10.
13. International Labour Office (ILO) (2002): "Employment and Social Policy in respect of Export Processing Zones (EPZs)". GB. 285/ESP/5, Geneva.
14. Jayanthakumaran, Kankesu (2002): "An Overview of Export Processing Zones: Selected Asian Countries". WP 02-03, Department of Economics, University of Wollongong, New South Wales, Australia.
15. Kumar, Rajiv (1989): "India's Export Processing Zones". A research study conducted on behalf of Indian Council for Research on International Economic Relations (ICRIER), New Delhi. Oxford University Press, Oxford.
16. Madani, Dorasati (1999): "A Review of the Role and Impact of Export Processing Zones". Washington DC: World Bank Research Report.
17. Modak, S K (2007): "Special Economic Zones: An Overview". Draft prepared for Akruti Citygold Institute of Infrastructure Management, Andheri (East), Mumbai, India.
18. Raju, Yerram B and N Ramakrishna (2007): "Special Economic Zones in India: Policies, Problems and Perspectives". Occasional Paper No. 1, The Indian Institute of Economics, Hyderabad, Andhra Pradesh, India.
19. Ranjan, Ram Krishna (2006): "Special Economic Zones: Are They Good for the Country?" WP. No. 156, Summer Research Internship Program 2006, Centre for Civil Society, India.
20. RBI Bulletins (1953, '55, '56, '63, '68, '72, '76, '82, '95, 2002, '06, '11)
21. Sampat, Preeti (2008): "Special Economic Zones in India". Economic and Political Weekly, XLIII (28), 25-29.
22. Singa Boyenge, Jean-Pierre (2007): "ILO Database on Export Processing Zones (Revised)". Sectoral Activities Programme, , WP. 251, ILO, Geneva, Switzerland.
23. Singh, Aparna Shivpuri (2006): "India's Tryst with Special Economic Zones", 23 August, 2006, [www.opinionasia.org](http://www.opinionasia.org)
24. Singhal, L B (2005): "SEZs and India's Trade Policy: Export Promotion Council for EoUs & SEZ Units". The Indian Journal of Commerce, 58 (4), 1-10.
25. Venugopal, P N (2005): "Cochin's SEZ: Economic or Exploitation Zone?" 17<sup>th</sup> August, 2005.
26. Vyas, Mahesh (2009): "SEZs aren't delivering. Time to scrap them?" 23<sup>rd</sup> June, 2009. Rediff Business News.
27. World Bank (1992): "Export Processing Zones". Paper prepared by Industry Development Division, Industry and Energy Department and Trade Policy Division, Country Economics Department, USA.
28. Wu, Yiming (2009): "Special Economic Zones of China". Journal of Management and Entrepreneurship, 2 (2), Xavier Institute of Management and Entrepreneurship (XIME), Bangalore, India.