

## Employment Generated by Special Economic Zones in Southern India

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**ABSTRACT** The thrust of the new economic policy of government of India is to integrate the Indian economy into the world economy. To achieve the above goal, the government has taken a number of economic initiatives to make the Indian industry competitive and meet the global market through export promotion. Prior to the introduction of Special Economic Zones (SEZs) in India a number of Export Processing Zones, Export Oriented Units and Technology Parks were established to promote exports. However, the government thought that the above initiatives are not sufficient to meet the current global competition on one hand and to attract foreign direct investment and generate employment on the other hand. To overcome the above, the government of India has initiated the process of establishment of SEZs in the country. In this paper an attempt is made to trace out the employment generation by notified SEZs in southern region of India and analyze the composition of current employment generated by different categories of SEZs in the southern region.

### INTRODUCTION

The word 'Special' mainly means special economic system and policies. The first Special Zone which bears any semblance to the present-day ones was set up in Spain in 1929 with the intention of increasing exports by value addition to the raw materials available in that country. Deng Xiaoping, the inspiring force behind China's economic miracle during the last 30 years, gave a big boost to the concept of SEZ in 1979. In opening up its vast domestic market to Western capital and technology, he used the SEZs as role models to assess the success of his economic liberalization policies. Several other developing countries such as UAE, Malaysia, Jordan, Poland, Kazakhstan, Philippines, Russia, and South Korea are also following the Chinese path to liberalize their economies. Most countries in South Asia- Nepal, Bangladesh, Sri Lanka and Pakistan have all tried to promote their exports and also create employment by establishing SEZs.

### Special Economic Zones in India

India over the past decade has progressively opened up its economy to face effectively new challenges and opportunities of the 21<sup>st</sup> century. Considering the need to enhance foreign investment and promote exports from the country and realizing the need that a level playing field must be made available to domestic enterprises and manufacturers to be competitive globally, the

government had announced the introduction of Special Economic Zones (SEZs) policy on April, 2000, through a revision in the Export and Import policy (EXIM) 1997-2002. The objective of SEZs include making available goods and services free of taxes and duties supported by integrated infrastructure for export production, quick approval mechanisms, and a package of incentives to attract foreign and domestic investments for promoting exports. However, with lacunae like lack of central legislation, rigid labor laws, the SEZs in India were not off to a flying start. In order to avoid these pitfalls and to give a long-term and stable policy framework with minimum regulation, the SEZ Act -2005 was enacted to woo the investors and this has come into force from February, 2006. The new law is aimed at encouraging public-private partnership to develop world-class infrastructure, provide an internationally competitive and hassle-free environment, attract private investment (domestic and foreign), to boost economic growth, exports and employment. Apart from the primary attraction of tax benefits that are offered to SEZs, the government also proposes to introduce fresh incentives such as single window clearance for customs and excise duty, relaxation from various labor law regulations, allowing companies in the SEZ to conduct board meetings via video conferencing by amending the Companies Act, 1956, thus making SEZs the next big investment and growth opportunity for FDI in India. The new Act provides legal framework, covering all im-

portant legal and regulatory aspects of SEZ development as well as for units operating therein.

### Statistical Profile of SEZs in India

There are two types of approvals of SEZs in India i.e., Formal approvals and In-principle approvals. Formal approvals are given only when the promoter has already acquired land to set up SEZ and an in-principle approval is given by Board of Approvals (BOA) when the promoter has given an assurance that he would acquire the necessary extent of land to set up the SEZ. There are altogether 674 SEZs in the country which are given either formal or in-principle approval up to September, 2008. Out of 674 SEZs, 531 SEZs are given formal approval.

The categories of SEZ establishments across the states and regions in India suggest that Andhra Pradesh and Maharashtra have the highest number of Pharma/ Bio-tech SEZs. Maharashtra has the highest number of multi-product and other categories of SEZs. The southern region of India has not only the highest number of SEZ approvals but also the highest number of Information Technology/Information Technology Enabled Services (IT/ITES) and Pharma / Bio-tech SEZs (Panduranga Reddy and Rao 2008).

In India most of the IT/ ITES SEZs are established in capital cities and their vicinities. For example, in the southern region, 53 out of 77 SEZs (about 70%) are in Hyderabad, Bangalore and Chennai only. As a consequence, the above capital cities are facing a lot of problems like traffic congestion, power, water shortage and tremendous increase of house rentals (Panduranga Reddy and Prasad 2007).

As on 31<sup>st</sup> September, 2008 the total land allocated to SEZs (both formal and in-principle approvals) in the country is about 0.063 % in the total land area and 0.116 % in the total agricultural area. In terms of hectares, 1.87 lakh hectares of land is allocated for the 674 SEZs (531 formal and 143 in-principle approvals). About 65 thousand hectares of land is allocated to formally approved SEZs and this is about 35 % in the total land allocation for SEZs (Government of India 2008).

The land allotment to different categories of SEZs suggests that a discernible portion was allotted for Multi- Product / Services SEZs and a

meager share of land was allotted to IT/ ITES and Pharma/ Bio-tech SEZs in the country. It is to be noted that highest amount of land has been allotted to SEZs in the northern region of India. Another striking feature is that a substantial proportion of land was allotted to private sector SEZ companies in the total land allotted to SEZs in India. Out of total land allotted to public sector SEZs in India, Maharashtra state has allotted a perceptible portion of land for its public sector SEZs (Panduranga Reddy and Rao 2008).

An export of all the SEZs (including central, state and private) during 2006-2007 is Rs.34, 615 crores which is a growth of 52 % in rupee terms over the previous year. In 2007 -2008 the exports were Rs. 66,637 crores which is a growth of 92 % over the previous year. The Commerce Ministry has also projected an 89 % growth during the financial year 2008-2009 (Government of India 2008).

In case of investment in SEZs, it is about Rs. 81 thousand crores as on June, 2008 and the incremental investment since February, 2006 is about 77 thousand crores. The employment generated by SEZs as on June, 2008 is about 3.5 lakhs and the incremental employment generated since February, 2006 is about 2.15 lakhs (Government of India 2009).

As regards the size of distribution of units, a study of Noida SEZ by Neetha and Varma (2004) states that a small number of relatively larger units have a disproportionately high share of exports and employment, and that most of the units are small, a situation that is much the same in other Indian SEZs. A possible reason for the smaller size of the average unit in Indian SEZs may be due to the fact that Indian SEZs contain representatives of various types of manufacturing. The study also reveals a low concentration of female workers in Indian SEZs which is attributable to the availability of male workers willing to work under the conditions offered by investors and the regional and socio-cultural gender norms which act as a deterrent against female employment. Of the seven SEZs, only in two, Madras SEZ and Falta SEZ (West Bengal), women outnumber men. It cannot be denied that SEZs have offered employment to a number of women in the Indian context and this has led to some economic empowerment (Aggarwal 2007).

A broad decline has occurred in the percentage of women working in Indian SEZs. In the

case of Noida SEZ, the proportion of women in the workforce has fallen to 18 per cent from between 21 per cent and 25 per cent in the latter half of the 1990s. The fluctuation in export markets has resulted in job losses, especially among women (Mayumi and Nobuko 2009). The decrease in the proportion of women employed was due to a fall in employment in the garment industry which employs a relatively large number of women.

A study by Aggarwal (2007) on three SEZs, Noida, Santa Cruz and Madras, does not support the argument that a substantial proportion of SEZ labour receives less than minimum wages but says zone wages are not higher than non-zone wages. Aggarwal also finds working conditions differ among the SEZs in terms of working hours, overtime practices, overtime compensation, night shifts and the provision of leave and other facilities.

Kumari (2005) in her study "Visakhapatnam SEZ" reveals, that the nature of employment in Visakhapatnam SEZ is temporary except in a few cases. This shows the insecurity of employment. Men are given preference in the skilled and high profit jobs. The working conditions and work environment are long hours of work, standing posture, absence of labour unions, and low wage rates and absence of non-wage benefits.

From the existing literature, it is not possible to come to a firm conclusion about levels of pay and other working conditions of the employees working in the SEZs in India. In this study an attempt is made to find the employment generated by different categories of SEZs in southern India.

### Objectives of the Study

1. To study the nature and significance of Special Economic Zones in India.
2. To trace the direct and indirect employment generated by different categories of notified SEZs in southern India.
3. To map out the intra-state and across the state current employment generated by notified SEZs in southern India.
4. To analyze the current employment generated by notified SEZs, category-wise across the states of southern India.

### DATA BASE AND METHOD

The data has been drawn from the Ministry

of Commerce and Industry (SEZ section), Government of India. The study has been confined to notified SEZs only. There are altogether 218 notified SEZs in India up to March 31<sup>st</sup>, 2008. Out of 218 SEZs, 12 SEZs were notified prior to SEZ Act-2005. Out of the 218 SEZs, 118 SEZs are in the southern states. The main focus of the study is on the 118 notified SEZs of southern India. The employment particulars considered for the study relate to current (direct and indirect) employment generated by the above SEZs.

The SEZs are classified into four major categories such as IT/ITES SEZs; Pharma/Bio-tech SEZs; Multi-Product/Services SEZs; and Other Categories SEZs. The statistical comparisons and presentation of the paper is based on the above classification. In order to trace out the employment generation by SEZs across the southern states, intra-state and intra-regional, percentage shares of current employment generated by the above categories of SEZs have been calculated. Again, the intra-state and across-state percentage shares are calculated at segregate level i.e., direct and indirect employment generated by notified SEZs in the southern region. Further, the percentage shares between direct and indirect employment distribution have been calculated for the southern states and southern-region. The intra-state and intra-regional distribution of current employment by different categories of SEZs is presented through PIE diagrams.

## OBSERVATIONS AND DISCUSSION

### Statistical Findings of Current Employment Generated by SEZs

Current employment generated by notified SEZs, intra-state and across the southern states of India up to March 31<sup>st</sup> 2008 is presented in tables 1 to 4.

**Current Direct Employment Generated by all the SEZs in India Prior to SEZ Act-2005:** Before analyzing the southern region's employment figures, an examination of the employment figures at all India level suggests that the Central Government SEZs i.e., EPZs converted into SEZs (seven in number) are providing current direct employment to 1, 93,474 persons, out of which 70,778 are women (about 37%). The notified state, private and corporate SEZs prior to SEZ Act-2005 (12 in number) have generated current employment to 66,749 persons out of

**Table 1: Intra-regional and intra-state distribution of current employment generated by notified SEZs: Both direct and indirect employment, up to 31<sup>st</sup> March, 2008 by category-wise.**

S. No. #1	State#2	SEZ Categories#3	Current employment			%share of direct employment to their respective total direct employment at state / regional/ All India#7	% share of indirect employment to their respective total indirect employment at state / regional/ All India#8	% share of employment to their respective categories total employment at state / regional/ All India#9
			Direct#4	Indirect#5	Total#6			
1	Andhra Pradesh (54 SEZs)	IT/ITES	7682	7907	15589	32.85	52.32	40.49
		Pharma/Bio-Tech	760	2155	2915	3.25	14.26	7.57
		Multi-Product	8120	1350	9470	34.72	8.93	24.60
		Other Categories	6825	3701	10526	29.18	24.49	27.34
		Total	23387	15113	38500	100.00	100.00	100.00
2	Tamil-nadu (36-SEZs)	IT/ITES	19850	23714	43564	54.12	65.91	59.96
		Pharma/Bio-Tech	0	0	0	0.00	0.00	0.00
		Multi-Product	0	0	0	0.00	0.00	0.00
		Other Categories	16829	12267	29096	45.88	34.09	40.04
		Total	36679	35981	72660	100.00	100.00	100.00
3	Karnataka (20-SEZs)	IT/ITES	32212	1766	33978	90.07	49.37	86.37
		Pharma/Bio-Tech	1032	220	1252	2.89	6.15	3.18
		Multi-Product	0	0	0	0.00	0.00	0.00
		Other Categories	2520	1591	4111	7.05	44.48	10.45
		Total	35764	3577	39341	100.00	100.00	100.00
4	Kerala (8 SEZs)	IT/ITES	1980	248	2228	99.00	67.03	94.01
		Pharma/Bio-Tech	0	0	0	0.00	0.00	0.00
		Multi-Product	0	0	0	0.00	0.00	0.00
		Other Categories	20	122	142	1.00	32.97	5.99
		Total	2000	370	2370	100.00	100.00	100.00
5	South-ern (118-SEZs)	IT/ITES	61724	33635	95359	63.09	61.12	62.38
		Pharma/Bio-Tech	1792	2375	4167	1.83	4.31	2.73
		Multi-Product	8120	1350	9470	8.30	2.45	6.19
		Other Categories	26194	17681	43875	26.78	32.12	28.70
		Total	97830	55041	152871	100.00	100.00	100.00
6	All India (208-SEZs)	IT/ITES	86718	83214	169932	60.72	36.52	45.84
		Pharma/Bio-Tech	3415	13420	16835	2.39	5.89	4.54
		Multi-Product	12478	90752	103230	8.74	39.82	27.85
		Other Categories	40200	40503	80703	28.15	17.77	21.77
		Total	142811	227889	370700	100.00	100.00	100.00

Source: This table is compiled using the data available in the Ministry of Commerce & Industry, SEZs section, Government of India. From <<http://www.sezindia.in>> (Retrieved June 28<sup>th</sup> 2008)

which 44,768 are directly engaged and constitute 67 per cent of total current employment. The 19 SEZs (7 central government SEZs and 12 private, state and corporate SEZs) prior to SEZ Act-2005 put together have generated current direct employment to 2, 38,442 persons (Government of India 2008).

***Intra-regional and Intra-state Distribution of Current Employment Generated By Different Categories of Notified SEZs after the SEZ Act of 2005 in India:*** Of the total current employment generated by notified SEZs in India (3,70,700), the IT/ITES SEZs have generated a substantial proportion of employment, i.e., about 46% (1,69,932) followed by Multi-product/ services SEZs and Other Categories SEZs with abo-

ut 28% and 22% respectively and the Pharma/Bio-tech SEZs have generated hardly less than 5% (Table 1). The above percentages are shown in Figure 1. At segregate level, i.e., total direct current employment generated by all the notified SEZ categories in India is 1,42,811 in which the IT/ITES SEZs have generated a substantial portion (about 61%) followed by Other Categories of SEZs (about 28%). In case of total indirect current employment generated by SEZs in the country (2, 27,889), a perceptible portion is generated by the Multi-product/ Services SEZs (about 40%) followed by IT/ITES SEZs (about 37%).

In case of the total current employment generated by SEZs in southern India (1,52,871),

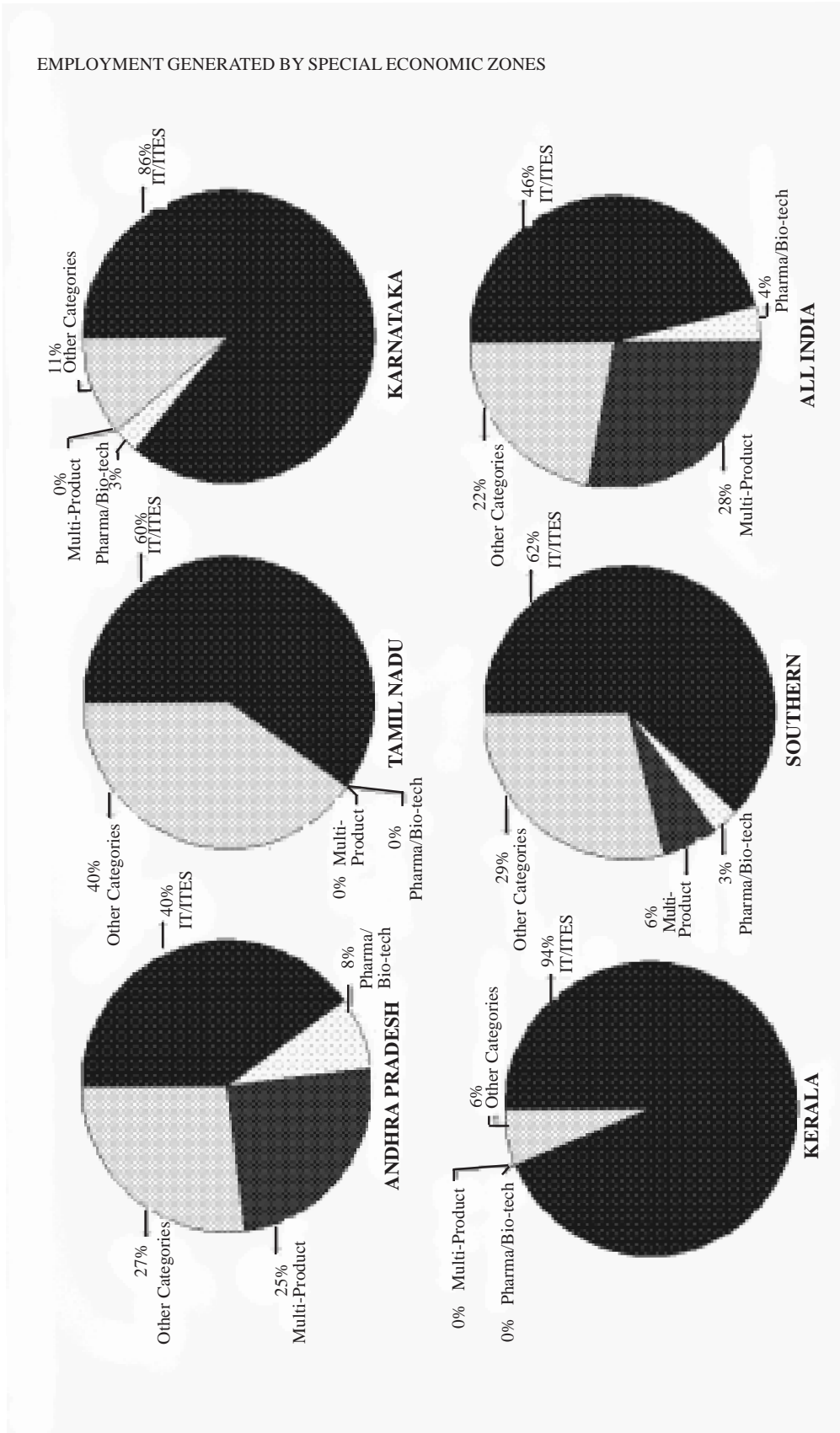


Fig. 1. Intra-regional and intra-state percentage share of current employment generated by different categories of SEZs upto 31st March 2008

about 62 % of employment is generated by IT/ITES SEZs followed by Other Categories SEZs with about 29%. In case of total current direct employment generated by SEZs in southern India (97,830), about 63% is generated by IT/ITES SEZs followed by Other Categories SEZs with about 27%. Regarding the total current indirect employment generated by SEZs in southern India (55,041), again the IT/ITES and Other Categories SEZs have dominated with about 61% and 32% respectively.

The intra- state total current employment generated by SEZs in southern states indicate that the IT/ITES SEZs have generated a substantial proportion of employment in Kerala, Karnataka and Tamil Nadu states in their respective state's total current employment with about 94%, 86% and 60% respectively. The above intra-state and intra-regional percentages are shown in Fig. 1.

The distribution of total current direct employment generated by different categories of SEZs

in the southern states indicate that the IT/ITES SEZs of Kerala, Karnataka and Tamil Nadu have generated a whopping percentage share with about 99%, 90% and 54% respectively in their respective state's total current direct employment.

As far as current indirect employment generated by IT/ITES SEZs is concerned, Kerala has again occupied first place followed by Tamil Nadu and Andhra Pradesh with about 67%, 66% and 52% respectively in their respective state's total current indirect employment (Table 1).

**Percentage Share of Current Direct and Indirect Employment Generation by Different Categories of Notified SEZs after the SEZs Act 2005:** Of the total current employment generated by notified SEZs in India after the SEZs Act 2005 (3, 70,700), about 61% is current indirect employment (2, 27,889). At sectoral level, the IT/ITES SEZs and Other Categories SEZs have generated almost equal proportions of current direct and indirect employment. In case of Multi-

**Table 2: Distribution of current employment generated by notified SEZs in Southern India: both direct and indirect employment, up to March 31<sup>st</sup>. 2008.**

S.No.	State 2	SEZ categories 3	Current employment			Percentage share of direct and indirect employment	
			Direct 4	Indirect 5	Total 6	Direct 7	Indirect 8
1	Andhra Pradesh ( 54 SEZs )	IT/ITES	7682	7907	15589	49.28	50.72
		Pharma/Bio-Tech	760	2155	2915	26.07	73.93
		Multi-Product	8120	1350	9470	85.74	14.26
		Other Categories	6825	3701	10526	64.84	35.16
		Total	23387	15113	38500	60.75	39.25
2	Tamilnadu ( 36 SEZs )	IT/ITES	19850	23714	43564	45.57	54.43
		Pharma/Bio-Tech	0	0	0	0.00	0.00
		Multi-Product	0	0	0	0.00	0.00
		Other Categories	16829	12267	29096	57.84	42.16
		Total	36679	35981	72660	50.48	49.52
3	Karnataka ( 20 SEZs )	IT/ITES	32212	1766	33978	94.80	5.20
		Pharma/Bio-Tech	1032	220	1252	82.43	17.57
		Multi-Product	0	0	0	0.00	0.00
		Other Categories	2520	1591	4111	61.30	38.70
		Total	35764	3577	39341	90.91	9.09
4	Kerala ( 8 SEZs )	IT/ITES	1980	248	2228	88.87	11.13
		Pharma/Bio-Tech	0	0	0	0.00	0.00
		Multi-Product	0	0	0	0.00	0.00
		Other Categories	20	122	142	14.08	85.92
		Total	2000	370	2370	84.39	15.61
5	Southern (118 SEZs)	IT/ITES	61724	33635	95359	64.73	35.27
		Pharma/Bio-Tech	1792	2375	4167	43.00	57.00
		Multi-Product	8120	1350	9470	85.74	14.26
		Other Categories	26194	17681	43875	59.70	40.30
		Total	97830	55041	152871	64.00	36.00
6	All India ( 208 SEZs)	IT/ITES	86718	83214	169932	51.03	48.97
		Pharma/Bio-Tech	3415	13420	16835	20.29	79.71
		Multi-Product	12478	90752	103230	12.09	87.91
		Other Categories	40200	40503	80703	49.81	50.19
		Total	142811	227889	370700	38.52	61.48

Source: Same as in case of table-1

product/Services SEZs and Pharma/Bio-tech SEZs they have generated an indirect employment of about 88% and 80% respectively in their respective categories total current employment (Table 2).

In the southern region, of the total current employment generated by notified SEZs (1,52,871), 64% is current direct employment. At sectoral level, barring Pharma/ Bio-tech SEZs the remaining categories of SEZs, i.e., Multi-Product/ Services SEZs, IT/ITES SEZs and Other Categories SEZs have generated a the total current direct employment of 86%, 65% and 60% respectively (Table 2). The above results suggest that at all India level the current indirect employment is more than sixty per cent and in the southern region, the current direct employment is more than sixty per cent.

The state wise total current employment distribution between direct and indirect employment by different categories of SEZs in southern region indicate that the direct employment is more than fifty per cent in all the southern states. At sectoral level, in case of IT/ITES SEZs the total current direct employment generated is more or less the same as above. In case Pharma /Bio-tech SEZs total current employment is concentrated only in two southern states namely Andhra Pradesh and Karnataka .Further, these states have shown mixed results i.e., in Andhra Pradesh about 74% is current indirect employment and in Karnataka about 82% is current direct employment. Regarding Multi-Product/ Services SEZs total current employment in the southern region, it is concentrated only in Andhra Pradesh state and the current direct employment is about 85%. In case of Other Categories SEZs in southern states, the total current employment, barring Kerala (86% indirect employment), in the remaining states the current direct employment is more than 60 % (Table 2).

**Percentage Share of Southern State's Current Employment Generated by Notified SEZs:** The percentage shares of current employment generated (including direct and indirect) by notified SEZs across the states in different categories of SEZs in southern region are presented in tables 3 and 4.

Of the total current employment generated by SEZs in India (3,70,700), about 41% current employment is generated by SEZs in the southern region. Across the states in the southern region Tamil Nadu stands first with about 20%

followed by Karnataka and Andhra Pradesh with about 10% each in the total current employment in India (Table 3).

At sectoral level, the employment generated by IT/ITES SEZs India is 1,69,932, out of which the southern region is contributing about 56%. Across the southern states, namely Tamil Nadu and Karnataka have occupied the first two positions in IT/ITES SEZs category with about 26% and 20% respectively. In case of Pharma / Bio-tech SEZs total current employment in India is 16,835. The southern region has generated about 25% and this is concentrated in two southern states, namely Andhra Pradesh and Karnataka with about 17% and 8% respectively. Of the total current employment generated by Multi-product/Services SEZs in the country (1,03,230), hardly 9% is generated in southern region and this is concentrated in Andhra Pradesh state only. The Other Categories SEZs have generated a total current employment of 80,703 of this about 54% is in the southern region and across the southern states Tamil Nadu stood first with about 36% followed by Andhra Pradesh with about 13% in the total current employment generated by Other Categories of SEZs in India (Table 3).

The state- wise percentage shares of direct and indirect current employment in the southern region by different categories of SEZs are shown in table 3. In the total direct current employment generated by SEZs in India (1,42,811), about 69% of employment is generated by southern region's SEZs and at sectoral level except Pharma/ Bio-tech SEZs (about 52%), the remaining categories of SEZs in the southern region have generated more than two-thirds employment in their respective categories total current direct employment.

Of the total indirect current employment generated by notified SEZs in India (2, 27,889), about 24% is in the southern region. At sectoral level barring the Multi-product/ Services SEZs (1.49%) the remaining sectors, particularly IT/ITES SEZs and Other Categories of SEZs have generated about 40% and 44% employment in their respective categories total indirect current employment in India.

**State-wise Percentage Share of Current Employment Generated by Notified SEZs in Southern Region:** State-wise percentage share of current employment generated by notified SEZs in southern region are given in table 4. Of the total current employment generated by notified SEZs

**Table 3: State-wise current employment generated by notified SEZs: Direct and indirect employment, up to March 31<sup>st</sup>, 2008 by category-wise.**

S. No.	State	State-wise percentage share of current employment generated to total current employment in India (Category-wise).																
		IT/ITES			Pharma/Bio-tech			Multi-product			Other categories				All categories			
		D 3	ID 4	Total 5	D 6	ID 7	Total 8	D 9	ID 10	Total 11	D 12	ID 13	Total 14	D 15	ID 16	Total 17		
1	Andhra Pradesh	8.86	9.5	9.17	22.25	16.06	17.32	65.07	1.49	9.17	16.98	9.14	13.04	16.38	6.63	10.39		
2	Tamilnadu	22.89	28.5	25.64	0.00	0.00	0.00	0.00	0.00	0.00	41.86	30.29	36.05	25.68	15.79	19.60		
3	Karnataka	37.15	2.12	20.00	30.22	1.64	7.44	0.00	0.00	0.00	6.27	3.93	5.09	25.04	1.57	10.61		
4	Kerala	2.28	0.30	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.30	0.18	1.40	0.16	0.64		
5	Southern	71.18	40.42	56.12	52.47	17.70	24.76	65.07	1.49	9.17	65.16	43.65	54.37	68.50	24.15	41.24		
	All India (Number of employees)	86718	83214	169932	3415	13420	16832	12478	90752	103230	402000	40503	80703	142811	227889	370700		

Note: D- Direct Employment; ID- Indirect Employment; Total – Total Employment. Source: Same as in case of table 1

**Table 4: State-wise current employment generated by notified SEZs in Southern India: Direct and indirect employment, up to March 31<sup>st</sup> 2008 by category-wise.**

S. No.	State	State-wise percentage share of current employment generated to total current employment in Southern India (Category-wise)																
		IT/ITES			Pharma/Bio-Tech			Multi-Product			Other Categories				ALL Categories			
		D3	ID4	Total5	D6	ID7	Total8	D9	ID10	Total11	D12	ID13	Total14	D15	ID16	Total17		
1	Andhra Pradesh	12.45	23.51	16.35	42.41	90.74	69.95	100.00	100.00	100.00	26.06	20.93	23.99	23.91	27.46	25.18		
2	Tamilnadu	32.16	70.50	45.66	0.00	0.00	0.00	0.00	0.00	0.00	64.25	69.38	66.32	37.49	65.37	47.53		
3	Karnataka	52.19	5.25	35.63	57.59	9.26	30.05	0.00	0.00	0.00	9.62	9.10	9.37	36.56	6.50	25.73		
4	Kerala	3.21	0.74	2.34	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.69	0.32	2.04	0.67	1.55		
	Southern India (Number of employees)	61724	33635	95359	1792	2375	4167	8120	1350	9470	26194	17681	43875	97830	55041	152871		

Note: D- Direct Employment; ID- Indirect Employment; Total – Total Employment. Source: Same as in case of table-1



in the southern region (1,52,871), Tamil Nadu state stood first with about 48% followed by Karnataka and Andhra Pradesh with about 25 % each and Kerala state has generated hardly less than two per cent. The above percentages are shown in Figure 2.

At sectoral level, IT/ITES SEZs have generated a total current employment of 95,359 in the southern region. Tamil Nadu stands first with about 46% followed by Karnataka with about 36% and the above two states put together have generated about 82%. Regarding total current employment generated by Pharma/ Bio-tech SEZs in the southern region (4,167), all the employment has been generated by two states only i.e., Andhra Pradesh and Karnataka with 70% and 30% share respectively. In case of total current employment by Multi-product SEZs in southern region (9,470), the entire employment is generated by Andhra Pradesh state alone. The Other Categories SEZs in the southern region have generated a total current employment of 43,875. About 66% of this is in Tamil Nadu followed by Andhra Pradesh with about 24% and these two states put together have generated about 90%. The above percentages are shown in PIE diagrams for each category of employment (Figure 2).

Of the total direct employment generated by SEZs in Southern region ( 97,830), Tamil Nadu and Karnataka states have generated about 37% each followed by Andhra Pradesh with about 24% and Kerala has hardly generated two per cent. At sectoral level, in case of IT/ITES and Pharma/ Bio-tech SEZs employment generation, Karnataka state stood first with more than 50% in their respective categories total direct current employment in the southern. In case of Other Categories SEZs direct current employment in southern region (26,194) Tamil Nadu state stood first with about 64% followed by Andhra Pradesh with about 26% and these two states put together have generated 90% of the total direct current employment generated by Other Categories SEZs employment in the southern region.

Of the total indirect employment generated by notified SEZs in southern region (55,041) Tamil Nadu state stood first with about 65% followed by Andhra Pradesh with about 27% and the above two states put together have generated about 92% of the total current indirect employment in the southern region. At sectoral level, Tamil Nadu stood first in IT/ITES SEZs and

Other Categories SEZs indirect current employment with about 71% and 69% in their respective categories total current employment in the southern region. In case of Pharma /Bio –tech and Multi- product SEZs employment, Andhra Pradesh state stood first with 91% and 100% respectively in their respective categories total current indirect employment in the southern region.

### Summary of the Statistical Findings

Of the total current employment generated by notified SEZs in India (3, 70,700), about 41 % employment has been generated by SEZs of southern –region. Among the states in the southern region Tamil Nadu stands first with about 20% followed by Karnataka and Andhra Pradesh with about 10% each in the total current employment in India.

The current employment generated by SEZs at segregate level in India indicates that about 61% is indirect employment where as in southern region about 64% is direct employment. The variation is mainly because most of the SEZs in the southern India are technical and service oriented. For example, the current employment generated by IT/ITES SEZs of southern region is about 56% of the total current employment generated by IT.ITES SEZs of India. Therefore, when compared with all other categories of SEZs, the IT/ITES SEZs have generated more direct employment (65%) than indirect employment in the southern region.

Of the total employment generated by notified SEZs in Southern region (1,52,871) , Tamil Nadu stood first with about 48% followed by Karnataka and Andhra Pradesh with about 25% each and Kerala has generated hardly two per cent.

At sectoral level, the IT/ITES SEZs in the southern region have generated a current employment of about 56% of the total IT/ITES SEZs employment in India. Tamil Nadu and Karnataka have occupied first two positions in IT/ITES SEZs current employment generation in the country with 26% and 20 % respectively. In case of southern region's total IT/ITES SEZs employment (95359), Tamil Nadu stands first with 46% followed by Karnataka with about 36% and the above two states put together have generated about 82% of IT/ITES SEZs total employment in the southern region.

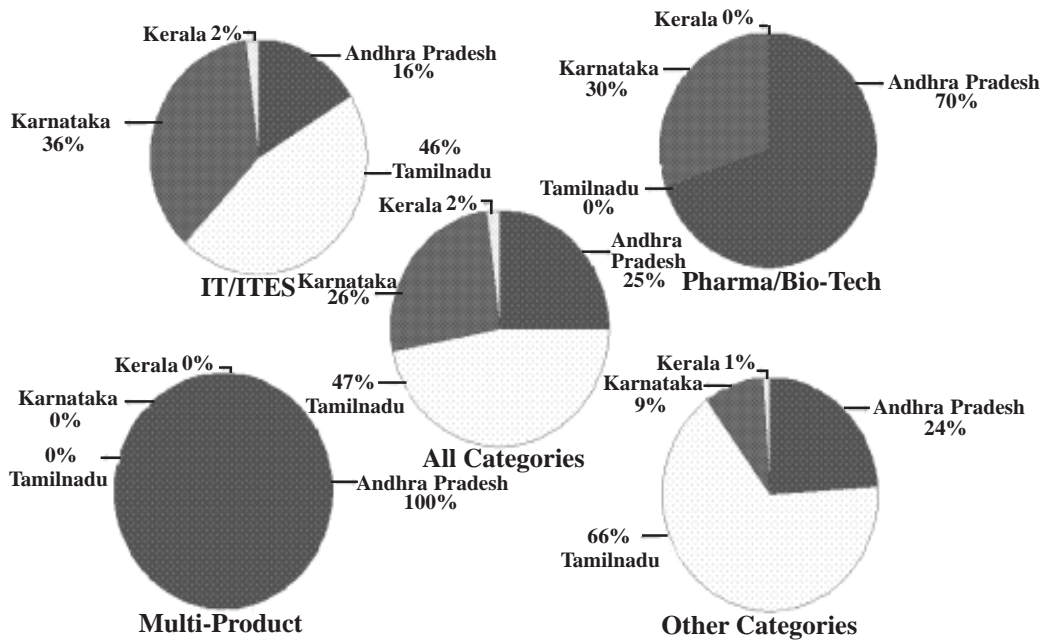


Fig. 2. State-wise Percentage Share of Current Employment Generated in Southern India by Notified SEZs, Category-wise up to 31 March, 2008

The Pharma / Bio-tech SEZs in the southern-region have generated about 25% in the total current employment generated by Pharma/ Bio-tech SEZs in the country. In the southern region, the entire Pharma/Bio-tech SEZs employment is generated by two states only i.e., Andhra Pradesh and Karnataka with 17% and 8% respectively in the total Pharma/Bio-tech employment in the country. In case of Pharma/Bio-tech SEZs total employment generation in the southern region is 4,167 and Andhra Pradesh stands first with 70% followed by Karnataka with 30% and the above two states have contributed all the Pharma/Bio-tech employment in the southern region.

The Multi-product / Services SEZs in the southern region have hardly generated 9% current employment in the total Multi-product /Services SEZs employment (9,470) in India and moreover the entire employment in this category is generated by Multi-product /Services SEZs of Andhra Pradesh

As far as Other Categories SEZs total employment generation in the southern region is concerned, they have generated about 54% of the employment in this category's total employment. Tamil Nadu and Andhra Pradesh have generated a substantial percentage share of this category's

employment in India with about 36% and 13% respectively. In case of Other Categories SEZs total employment in the southern region (43,875), about 66% is generated by Tamil Nadu followed by Andhra Pradesh with about 24% and the two states put together have generated about 90% of total Other Categories SEZs current employment generation in the southern region.

## RECOMMENDATIONS

The above statistical findings suggest that the current employment generated by SEZs in southern region is highly technical and service oriented. As a consequence, the SEZs in southern region have generated employment to highly educated and technical persons only. As a result the local semi-skilled, unskilled workers and people who were displaced due to the establishment of SEZs have not been engaged in SEZs. In order to generate employment to the above sections of people the state governments and the central government should take initiative to establish manufacturing type of SEZs.

Another salient feature of the IT/ITES SEZs current employment, it is highly concentrated in capital cities of southern states, such as

Hyderabad, Bangalore and Chennai. As a result these cities are facing traffic congestion and other infrastructural shortcomings. To overcome the above problems and to spread the IT/ITES benefits to other cities, the state and central government should encourage the establishment of IT/ITES SEZs in tier-two and tier-three cities through the installation of Broadband Internet Services to every nook and corner of the country. As a consequence the digital divide may be avoided, to some extent.

The employment results indicate that the Multi-Product and Other Categories of SEZs are generating more direct employment in their respective categories total employment. These SEZs are highly labour-intensive, for example, food processing, footwear, gems and jewelry. The states and the central governments should encourage the establishment of labour-intensive Multi-product and Other Categories of SEZs rather than high technology based SEZs.

In order to generate direct employment to large number of farmers and artisans, the Farmers Cooperative Organizations (FCOs) and specific Artisans Cooperative Organizations (ACOs) may be given permission to set up 'Kisan SEZs' and 'Artisans SEZs', to provide state of art infrastructure facilities to a range of industries with primary focus on food processing, agri-based and semi-skilled works.

The governments must lay down detailed guidelines for developers to develop social infrastructure such as schools, hospitals, shopping areas, recreational and sports facilities, air ports, banks etc. in the areas earmarked for SEZs and these developments generate an indirect employment in the vicinity of SEZ.

The existing literature on the employment generation by SEZs reveals that they have contributed significantly to employment generation at the regional level whereas their contribution to national employment is limited. The national

employment can be increased if fresh investment is attracted to SEZs, particularly Foreign Direct Investment.

Many SEZs have opened up opportunities for women, thereby increasing their position in domestic life. This is an important contribution of SEZs. But necessary measures must be taken by the governments to see that women employed in SEZs are not exploited.

The global meltdown and the sub-prime lending crisis in the US have cast a shadow on SEZs. For example, many people employed in textile and garment SEZs have lost their jobs because the global slowdown has hit the garment industry. The government must work on giving a package of measures to SEZs to face the slowdown in the wake of global financial crisis.

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