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**Promises and Paradoxes of  
SEZs Expansion in India**

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# PROMISES AND PARADOXES OF SEZS EXPANSION IN INDIA

Malini L Tantri\*

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## Abstract

*This paper attempts to evaluate the trajectories of Indian Special Economic Zones (SEZs) policy and its performance. Specifically, we try to locate: (a) whether the current SEZ policy merely represents 'old wine in new bottle' or there are any new functionalities; (b) how far, operational SEZs meet the expectations of policy makers; (c) are there any basic loopholes still not addressed in the current SEZ policy and if any, how best it can be addressed in the future. The results of the study reveal that, Indian SEZs have failed not only in the idea behind its formulation but also with regard to execution of the policy. Performance analysis of these enclaves reveals a very ambiguous picture. Although in absolute terms, its performance seems quite promising, it is found quite ineffective in diversifying exports basket and also in promoting a strong industrial base.*

## Introduction

Among the various measures introduced as a part of economy-wide reforms, the setting up of Special Economic Zones (SEZs) is quite noteworthy in the Indian context. The idea of SEZs in India is based on the success story of SEZs in China, and it was proposed as a part of the Export Import (EXIM) policy statement of 1997-2002. However, these enclaves were not new to the Indian economy. They had existed even before, in the form of Free Trade Zones (FTZ)/Export Processing Zone (EPZs), since the 1960s. In fact, India was one among the pioneering countries in Asia to experiment with the system of special enclaves as part of its Import Substitution Industrialization (ISI) strategy. Thus, SEZs in the Indian context emerged as modernized versions of EPZs.

Currently, SEZs have covered almost a decade of its expansion in the country and during this period it has received both appreciation and apprehension from different quarters<sup>1</sup>. Appreciation is generally based on the argument that SEZs can act as engine of economic growth of Indian economy, based on their spillover effects on the domestic economy (Aggarwal, 2005 and 2006) including improvements in social and physical infrastructure (Shah, 2009). Further, these zones are also viewed as a mechanism to facilitate better economic integration, and to promote higher levels of growth and development, through optimum utilization of resources and reduction in inefficiency, so that the economy can move to a higher level of a given production frontier (Tantri, 2012b). Based on such premises, it is also stated in the literature that, there is anyhow no other alternative to Indian economy (Menon and Mitra, 2009). As against these expectations, SEZs have also been the subject to criticism for the way it has been executed, specifically stating that SEZs' structure have come in conflict with the broader process of development – through inappropriate method followed in land acquisition, rehabilitation and resettlement, etc. This may give an impression that while playing its role as an engine of economic growth, SEZs may come in conflict with the broader process of economic development of the country.

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A survey of literature pertaining to Indian SEZs<sup>ii</sup>, against the backdrop of such growing academic concerns, however, reveals that much of these studies are kind of piecemeal approach, and what is missing in the literature is a holistic appraisal of SEZs expansion in India. Specifically on the completion of a decade of its working in the economy, it is necessary to determine whether current SEZ policy merely represents old wine in new bottle or are there any new functionalities; how far, operational SEZs meet the expectations of policy makers; are there any basic loopholes still not addressed in the current SEZ policy, and its way forward. With this background, this paper attempts to evaluate the trajectories of SEZ policy making and its performance. The paper is spread over five major sections including introduction. Section two evaluates whether the current SEZ policy merely represents old wine in new bottle or are there any new initiatives and functionalities in the policy. Taking the operational SEZs in the country as reference, third section investigates the overall performance of these enclaves. This section also raises questions over the reliability of the conventional indicators of performance by highlighting its major loopholes. The section also presents an alternative approach to evaluate these enclaves. Section four sketches flaws and failures of the current SEZ policy and proposes the way forward. The last section sums up the paper.

### **EPZs to SEZs– Trajectories of Policy Making**

The policy on promotion of SEZs structure in the country was proposed in the EXIM Policy statement of 1997-2002 and was in emulation of the successful venture of SEZs in China. However, it seems ironical that SEZs are customized versions, *mutatis mutandis*, of the Chinese experiment in Shenzhen and other provinces which, in turn, was inspired by earlier Indian experience EPZs. India in early 1960s, embarked upon a plan to promote such development zones in the form FTZ at Kandla, in Gujarat. This was followed by the creation of similar zones in different parts of the country for different objectives, like trade promotion, promoting industrial base in the country, generating employment opportunities, and so on. It includes: Sanatcruz (1973-74), Cochin (1985-86), Chennai (1985-86), Noida (1985-86), Falta (1985-86), and Vizag (1993-94) EPZs. SEZs, hence, are institutions that have undergone transformation or, one could say, are reincarnations of the earlier EPZs.

During EPZ regime, the Government followed a very cautious path in promoting such zones in the country. Accordingly, only six EPZs had been operating in the country till the end of 1990s. Moreover these zones came into existence based on the recommendations of committee constituted for the purpose-after careful deliberation on locational choice and composition of these zones. Despite these positive notes, EPZs structure lacked consistency in efforts to understand and address the loopholes hindering its pace of growth. This was due to lack of legal provision governing EPZs activities in the country, and thus it had to depend completely on the EXIM policy of the Government. As a result, issues like long bureaucratic procedures, institutional and infrastructure problems remained unattended in these enclaves. Further, the strong presence of the control-license raj and difficulties in accessing imports and exports made EPZs less attractive to investors (Grasset and Landy, 2007). These lacunas contributed to its poor trade performance, and in the year 1999-2000, EPZs were contributing only 4.36 per cent of India's total exports. Moreover, compared to the contribution of such enclaves in other countries, Indian SEZs, were at the bottom of performance ladder. For example, Shenzhen SEZ alone

contributed over 13.48 per cent to China's total trade for the year 2000-01 (CSY, 2006 and SZSY 2006). Further, even within the Asian zone, Indian EPZs were not comparable in performance with such zones in Bangladesh (21.3 per cent) and Sri Lanka (33.2 per cent) (Aggarwal, 2005). Thus the poor trade performance traced to lack of a well structured policy necessitated restructuring the then the existing EPZs structure. The celebrated success of Chinese model of SEZs made its adoption in India a natural choice. Accordingly, the SEZ policy was put in place in the country on April 1, 2000 through the EXIM policy statement of 1997-2002. The required legal framework was instituted in the year 2005 through the enactment of SEZs Act, 2005 followed by the SEZs Rules, 2006<sup>iii</sup>. Besides this, every State Government enacted State specific SEZs acts and policies to fulfill the State specific requirements.

The basic differences between the SEZs and EPZs can be expressed in terms of differences in policy priorities of import-substitution vs. export promotion and economic reforms (Tantri, 2011): The EPZ structure was largely affected by an era of uncertain support for export promotion and related-trade practices. In contrast, the current SEZ policy enjoys various concessions under the ongoing wave of liberalisation, apart from the special fiscal code and administrative structure exclusively applicable to these zones. For the purpose, long bureaucratic procedures are streamlined and brought under single window clearance. Thus, in a way, through SEZs, the government is attempting to address issues related to trade facilitation and thereby improve the status of doing business indicators, albeit with a piecemeal approach. Trade facilitation broadly implies identifying, defining and implementing effective rules of the game to reduce transaction and transport costs pertaining to trade expansion of the country. Specifically, it emphasizes on the effective involvement of the government in simplifying trade related procedures in order to reduce the time line required for trading across borders and the costs involved. At the same time, it also emphasizes the need to build the required hard and soft infrastructure in the country to promote agglomeration of economic activities and reap economies of scale. Towards this, it would be quite motivating to locate 'SEZs as engines of economic growth' and as the first step in identifying and statutorily implementing the provisions required to reduce the timeline and transaction costs required in trade related issues. The major ones are as follows:

- Simplified procedures for development, operation, and maintenance of Special Economic Zones and for setting up units and conducting business in SEZs;
- Single window clearance for setting up of SEZs;
- Single window clearance for setting up a unit in a Special Economic Zone;
- Single Window clearance on matters relating to Central as well as State Governments;
- Simplified compliance procedures and documentation with emphasis on self certification

Given the enabling provisions listed above in the new SEZ act, instead of castigating it as old wine in a new bottle, there is a need to study the specifics of these enclaves now endowed with a more nuanced but less restrictive code of operations. These institutions, like others in the post reform period, have drawn much flak both for the way they were setup and their underperformance vis-à-vis expectations. Despite such apprehensions, it is quite encouraging that SEZ policy has initiated the first step in identifying and statutorily implementing such provisions as required to reduce the timeline and transaction costs involved in trade related issues. These, provisions spelt in the SEZs Acts are not only effective in promoting single window clearance, but also in automation of procedures and facilitating

trade on self certification basis. This technically implies that SEZ policies are effective in reducing the time required for doing business within SEZs and also minimizing associated transaction costs. Given this, it is quite necessary to probe further the effectiveness of SEZ policy as against its promises. This aspect brooks further elaboration, and is taken for discussion in the next section.

## Performance of Indian SEZs: Promises and Paradoxes

SEZ policy is being put in place in the Indian economy with a view to boost country's trade performance, promote strong industrial base and thereby diversify country's exports basket, provide better employment opportunities and improve both private and foreign investment in the economy. However, it is high time that we make a comparison of the benefits contemplated by the implementation of SEZ policy with the actual benefits achieved/achievable by the new policy. What is attempted in the following paragraphs is a discussion on this aspect.

Undoubtedly, the last decade has seen a steep increase in the total number of SEZs notified and also number of exporting units (Table 1). Currently<sup>iv</sup>, 584 SEZs have received formal approval, 384 SEZs have been notified, and 130 SEZs are operational in India ([www.sez.nic.in](http://www.sez.nic.in)) with 3139 exporting functioning in these units (Government of India, 2011). In line with this increase in number of SEZs projects in the country, there has also been steady improvement in their export value from Rupees 10.053 crore in the year 2000-01 to rupees 2, 20,711 crore in 2009-10, which is the latest year for which export figures are available. The steady improvement in performance of these enclave is visible not only in absolute but also in relative terms; its share in the country's total trade was around 5 per cent in 2000-01 which has gone up to almost 26 per cent in 2009-10 (Table 2)<sup>v</sup>. There is, however, an apprehension that SEZs' current exports are mainly from the old SEZs which were formerly FTZs/EPZs, and not from the newly notified and operating SEZs in the country. Against this skepticism, it is on record that the exports of new SEZs, i.e. SEZs notified under the SEZ Act 2005, have grown rapidly over the years, reaching in the highest share of 53.4 per cent in 2009-10, compared to the exports of seven Central Government SEZs (26.3 per cent) and State Government /private SEZs established prior to the SEZ Act 2005 (20.3 per cent). This is unquestionably an encouraging trend. Moreover, Tantri (2011) taking the reference period of 1986-87 to 2007-08, statistically argues that the introduction of SEZ policy in place of EPZs structure have had significant impact on exports earnings from these enclaves.

**Table 1: Trends in Notified and Operational SEZs in India**

	2000	2005	2010
Notified SEZs	8	19	374
Operational SEZs	8	8	130

**Table 2: Trends in SEZs Exports during 2000-2010**

Year	2000-01	2005-06	2006-07	2007-08	2008-09	2009-10
SEZs Exports (Crores)	10,053.25	22,840	34,615	66,638	99,689	2,20,711
Share in country's exports (%)	5.2	5.0	6.1	10.2	11.9	26.1

**Source:** Government of India, 2011

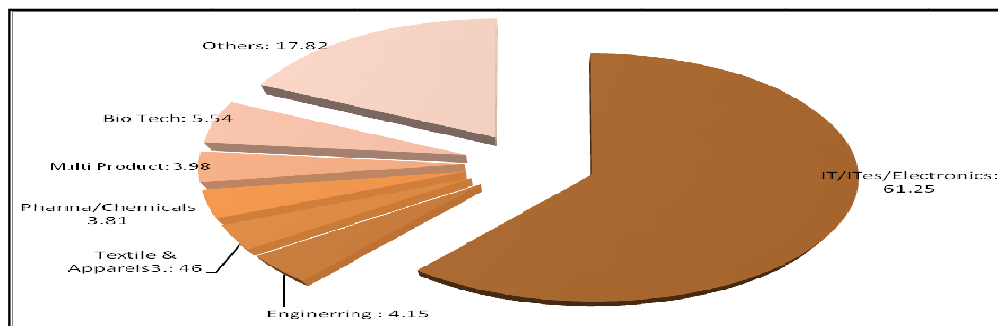
In absolute term though, performance of SEZs over the years presents promising trend, but it can however not be taken as the sole indicator to evaluate the merits of the current SEZ policy due to two reasons. First, the increase in value of SEZs exports may be due to substantial increase in world prices for goods and services, and if so, it tends to indicate the possibility of insignificant increase in the value of SEZs exports in real terms. Moreover, if increase in exports value is accompanied by equal increase in imports value, then in actual practice SEZs might not actually results in substantial increase in net foreign exchange earnings (NFE). For instance, an earlier study, taking the case of seven conventional SEZs, found that SEZs have more than 75 per cent of import intensity in exports for the year 2007-08, with an increasing trend in import intensity noticeable in the current phase of SEZ policy (after 2000) compared to the earlier EPZs structure (Tantri, 2010). Thus these possibilities give a little hope to rely on absolute increase in SEZs exports as a yardstick of its performance. Second, as apprehended in the literature, the substantial increase in value of exports from these enclaves, could be due to realignment of investment from domestic areas to SEZs, as latter provides a bunch of fiscal and non-fiscal incentives to both SEZs exporters and developers. Thereby indicate possibilities of shift in the production base in the country due to SEZ policy than actual increase in it.

Given this, on the trade front, the effectiveness of the policy can be captured from its capacity to promote a well diversified and strong industrial base and thereby diversify the country's exports basket, as a diversified export market has the potential to reduce the threat of international volatility and associated exports instability<sup>vi</sup>. Given this premise, we proceed with supposition that the effectiveness of SEZs in diversifying exports basket in particular can be tested in two ways: First, through locating the sectoral distribution of newly approved SEZs project in the country. This explains how much cautiously the Government is putting forward its agenda of promoting its industrial policy (as a part of the industrial policy) and thereby diversifying its exports basket (as a part of the trade policy). This can possibly be used as a proxy to capture whether there exists any divergence or convergence between industrial and trade policies of the country. Second, the effectiveness of SEZs in diversifying country's exports basket could also be captured through analyzing sectoral distribution of SEZs exports among the existing operational SEZs in the country.

A look at the sector-wise distribution of the formally approved SEZs projects reveals that as against the promise made in policy document, as of now IT/ITes/electronics industries have received maximum approvals in the country (Figure 1). There is however a growing apprehension that a larger part of the increase in SEZs project, specifically, in the case of IT and IT-enabled industries, could be due to reallocation of investments from DTA to SEZs. The prime reason for this could be introduction of the sunset clause on tax holiday for IT industries based upon the recommendations of the Kelkar Committee report on 'Direct and Indirect Tax Policy'. Accordingly, the budget 2002-03 included a sunset clause to be implemented from March 31, 2009 for STPI and EHTP. Though Government attempted to nullify the argument of gradually shifting IT industry from DTA to SEZs, a quick review of profile of the new SEZs as approved by the Government, substantiates the above apprehensions. It is therefore unclear whether there was actual increase in investment and consequent increase in exports from these enclaves. Further it is to be noted that compared to manufacturing industries, IT and IT enabled

industries have a very limited capacity to promote employment on a large scale for our predominantly semi skilled labour force, and also promote strong linkages effect in the domestic economy.

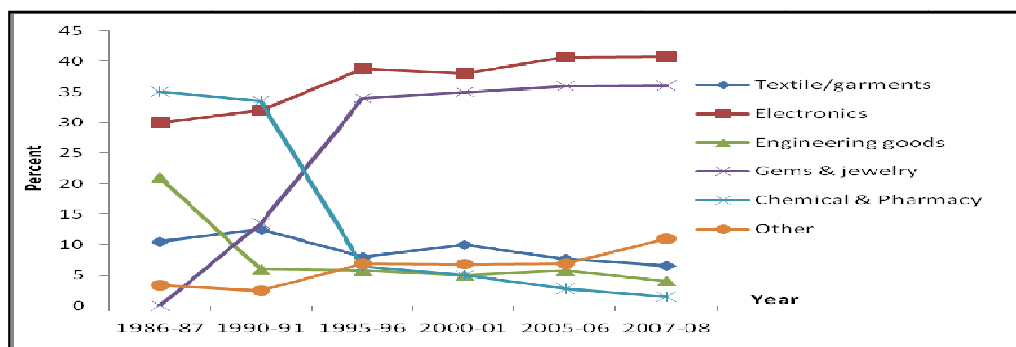
**Figure 1: Sector wise Distribution of SEZs Approval (Formal) in India**



Source: [www.sezindia.nic.in](http://www.sezindia.nic.in)

The above exercise points out that though conceptually the SEZ policy was initiated with the objective of promoting a strong industrial base in the country and thereby diversify exports basket, the government however failed at the time of approval to ensure that the SEZ projects were indeed tailor-made to uphold its stated objective. This also indicates a lack of co-ordination at the policy levels between industrial and trade divisions of the government. A similar pattern would emerge if one were to sketch the exports composition of the operational SEZs in the country. For instance Tantri (2011), taking the case of seven conventional SEZs<sup>vii</sup> of the country for the period 1986-87 to 2007-08, empirically argues that despite having multi-product base, SEZs are disappointingly dominated by the two sectors, viz., Gems and Jewelry and Electronic goods (Figure 2). In fact, Hirschman Sectoral concentration index has increased from 0.52 per cent in 1986-87 to 0.56 per cent in 2007-08. This sectoral concentration of SEZs exports in turn poses two types of challenges (ibid). First, this has resulted in the concentration of SEZs exports to a few world markets<sup>viii</sup>, and secondly,, the sectoral concentration of SEZs exports is also found playing a decisive role in deciding the strength of these enclaves to withstand any form of external economic shocks either in terms of inflation or recession<sup>ix</sup>. Thus, the exercise identifies the necessary measures to be taken to addresses the issue.

**Figure 2: Structure of SEZs Export, by Broad Sector Divisions (1986-87 to 2007-08)**

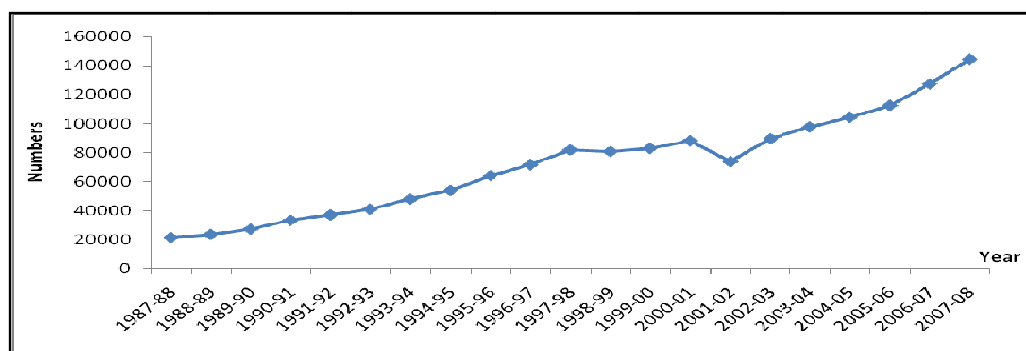


Source: Adopted from Tantri, 2012a



Besides trade promotion, employment generation and facilitating investment accumulation in the country are the other objectives of SEZs expansion in the country. Moreover, in the literature, employment generation through SEZs is considered as a mechanism to alleviate poverty (Engman *et al*, 2007), and investment as deciding factor of spillover from these enclaves. With regard to the role of SEZs in employment generation of the country, it is found that, over the years, there has been steady increase in the number of total employment in these enclaves. In terms of absolute numbers, employment opportunities generated in the seven conventional SEZs have almost doubled in the last eight years. Currently, 130 operational SEZs together generate a total employment of 6,44,073, and an incremental employment of 5,09,369 persons was generated after the SEZ Act came into force (Government of India, 2011). Further, it is assumed that SEZs have also generated minimum double this volume of employment outside the SEZs (ibid). However, the contribution of SEZs to the total organized employment in India is not very impressive. It accounted for just 1.04 Per cent of the total organized employment in the country (Aggarwal, 2005). Considering the apprehension on reallocation of domestic investment in the country from DTA to SEZ, one can rely a little on investment data on these enclaves as an indicator to assess its performance. Till December 2010, all operational SEZs in the country accumulated total investment of approximately Rs. 1,95,348 crore including Rs. 1,91,313 crore in the newly notified zones (Government of India, 2011).

**Figure 3: Trends in Employment Generation in Seven Conventional SEZs**



**Source:** Based on Data collected from the seven Conventional SEZs Offices of the Development Commissioner

Beside these direct benefits, it is also claimed in the literature that SEZs has the capacity to promote human resource development in the economy/country through providing direct and indirect employment opportunities and spillover effects (Aggarwal, 2007). However, what is missing in this genre of argument is the failure to consider the negative impact of SEZs expansion in the economy. Specifically one is seen either acquiring land, or following rehabilitation and resettlement policy at the time of initiating SEZs project in the country. If the process of rehabilitation and rehabilitation is not implemented properly, it may result in pushing a larger section of people below poverty trap. Although, the promotion of new SEZs in the country may assure fresh employment opportunities to those who are unemployed, the unscientific methods followed in the implementation of a few of SEZs projects may

result in loss of livelihood and settlement to large number of local people. Thus, if losers are different from gainers of expanding SEZs activities, then it may not result in optimum benefit to the economy.

**(a) Whether Conventional Measure of Performance Indicators is Appropriate?**

Often, policy and performance of these enclaves are evaluated based on aggregate indicators as if the constancy of these indicators can be taken for granted. Though there are views that these measures may be bit biased in nature, very little in the form of an appropriate alternative methodology has come from any quarters. In an attempt to address the above-mentioned lacunae, we argue that there is a need to look into the (a) fiscal viability of SEZs<sup>x</sup> and, (b) efficacy involved in the process<sup>xi</sup>.

*(i) Issue of Fiscal Viability*

Evaluation of SEZ policy based on trade performance, employment promotion and/or investment accumulation may sound a bit biased. One may argue that, along with outlining the performance of Indian SEZs, it is equally necessary to sketch the associated costs of SEZs expansion, because in order to realize the objectives behind their promotion, the Government of India has allowed these zones to operate as separate economic entities with their own, unique fiscal codes. The unique privileges granted to these enclaves include exemption from central- and state-specific taxes, apart from the extension of several subsidies. The role envisaged of these zones and the enthusiasm with which the Government has promoted them notwithstanding, the creation and maintenance of these seem to affect the national exchequer in two ways: First, on account of the expenditure involved in creating separate institutional arrangements to reduce the long and taxing chain of bureaucratic procedures and creation of world-class infrastructure. In doing these, the Government is clearly and steadfastly playing the role of a facilitator. Second, from the Government's role as a fiscal manager, considerable revenue loss seem to result from providing fiscal incentives in terms of tax concessions and subsidies. In other words, the establishment and sustenance of SEZs have, so far, implied additional revenue and capital expenditure, on the one hand, and massive revenue loss, on the other. For instance, as per the Union Budget 2011, the revenue foregone to the government under the head of deduction of exports profits of units located in SEZs (Section 10A and 10AA) for the year 2009-10 is Rs. 4233 crore, and projected revenue foregone for the year 2010-11 will be around Rs. 5126 crore. Further, according to Central Board of Excise and Custom (CBEC), so far SEZs have resulted in a revenue loss of Rs. 3,50,000 crore. One can also interpret that, on an average SEZs place revenue constraints of Rs. 3,50,000 crore worth, which perhaps upon realization could have been utilized for various development projects of the country. Central Board of Direct Tax claims that SEZs have resulted in a realignment of investment from domestic area to SEZs area because of the number of fiscal incentives offered in these enclaves. If so, then it supports the concern raised by earlier studies whether or not SEZs had actually channelized any fresh investment in the economy and created any fresh economic benefits. It also raises questions about the financial viability of SEZs in the country. Given these factors, while assessing the growth of SEZs and celebrating their contributions in trade expansion, employment generation and increased private investment, it is imperative that we consider the costs involved in the promotion of such ventures, especially because of the enormous stress they seem to place on the fiscal health of the

economy. Any such investigation, will also help to understand how far the shift in policy from EPZs to SEZs has been financially viable? Moreover, understanding the impact of SEZs on the fiscal position of the country is necessary in view of its known influence in terms of distributional aspects. As in the literature, Government revenue is considered an important channel through which trade policy tends to have an impact on social welfare (Bussolo and Nicita, 2005). In the recent past, there has been a debate among observers of SEZs concerning the issue of analyzing costs associated with the promotion of these enclaves<sup>xii xiii</sup>. This debate, surprisingly, has focused on the very legitimacy of attempts to understand the costs associated with the expansion of SEZs, as if it is to be taken for granted. Though there are proponents for the view that inflow from the national exchequer and also the recurring revenue loss need to be understood in detail, very little in the form of an appropriate methodology has come from these quarters. Further, no attempt is being made to investigate the factors that possibly shape the fiscal implications of SEZs expansion in the country. Also, no empirical data is available in the public domain regarding cost components of SEZ expansion across zones and over the years. More specifically, hardly any estimation is available to quantify the revenue loss to the exchequer and such other items that contribute significantly to additional expenditure, or to measure the resource value that the Government has to forego in order to earn a dollar/rupee in terms of NFE earnings from these zones. Such value may vary between zero and one, and the variation depends on two factors: one, the net foreign exchange earnings, and, two, the value of total costs including both revenue foregone and expenditure incurred by the government. If higher the total costs and lower the net foreign exchange earnings, then higher will be the corresponding costs. On the other hand, if the net foreign exchange earnings are much higher than the total costs incurred by the government, then the costs value will be low. What is unclear though, at this point, is the empirical finding on fiscal viability of SEZs in India. This will be an interesting extension to the current analysis.

*(ii) The Question of Efficacy*

Beside this, so far the scope of studies analyzing performance of these enclaves has been restricted to aggregate indicators, such as the absolute value of exports, Net Foreign Exchange (NFE), employment generation, investment, and growth of these indicators over a period of time. In the light of these indicators, it has been claimed that their role as growth boosters have increased remarkably over the last few years. These studies, however, underestimate the possibility that while the performance of these enclaves might have improved in absolute terms, they may have failed in meeting the objective of improving efficiency in the production processes. Further, the increase in the exports value *per se* over the years may not be necessarily due to improvement in production practices, but could be due to an increase in the number of exporting units among the existing SEZs, or an increase in the number of operational SEZs in the country. Notion of this increase in number of exporting units and operational SEZs in the country itself is questionable considering the apprehension that it merely amounts to just realignment of investment from DTA to SEZs. Thus, these alarming possibilities indicate that SEZs, perhaps, have not contributed much towards overall improvement in production capacity or efficiency of the economy, but only to the realignment of investment, because these enclaves offer numerous fiscal and non-fiscal incentives.

Stepping up efficiency in operation of any economic unit is indisputably an essential ingredient and goal of the policy. In the case of SEZs, the efficiency-related issues gain prominence considering the special attention extended to these enclaves, which in turn, have set a benchmark in terms of performance standards, and also because they are expected to be the engines of growth in the trade sector. For these purposes, various production-enhancing and supporting mechanisms have been made available to them on priority<sup>xiv</sup>. Given these mechanisms, it is imperative to ask whether these enclaves are working at their full capacity or there is an underutilization of resources.

To probe this issue further, let us take the following scenario in which exports from these enclaves have increased almost at double digits in year  $t_1$  compared to its value in the year  $t$  (point a). This, however, does not show that the corresponding increase in exports value is the most optimum possible output given the input mix and special policy-based provisions exclusively available to these zones. In other words, the question is: are these enclaves within the production possibility frontier (PPF) or they are at their optimum level? This scenario indicates the possibility that the figures shown to prove substantial improvement in performance might be still below the most efficient level of output, and failure to understand this facet might result in overrating the performance of these enclaves, and, as a result, lead to underutilization of production capacity, and provide a little scope for further improvements in their role as engines of economic growth. This also leaves us clueless whether the increase in the value of exports over the period is due to better utilization of input mix by the existing exporting units or due to a mere increase in the number of exporting units and operational SEZs in the country. Hence, there is an urgent need to investigate factors affecting efficiency scores of these enclaves.

Studies analyzing performance of these enclaves at the disaggregate levels rank them based on their contribution towards total SEZs exports, NFE, employment, and investment. Thereby, these studies concentrate solely on relative performance of a zone in comparison to others, and ignore the possibility of discrepancies between a higher exporting zone and an efficient zone. For instance, a zone may be the highest exporter in comparison to other zones, but it may not be efficient in the production process i.e., it might be far below the most optimum production level. On the other hand, a zone might show low level of exports in relation to other zones, but might be making optimum utilization of input mix, i.e., either it is on the PPF or very near the optimum production level; thereby, indicating a very low level of inefficiency compared to the other zone. If this scenario is indeed a plausible one, then it warrants comparison of performance of zones based on the efficiency criteria as against the conventional practice of comparing their aggregate indicators, and subsequently explain factors that contribute to variations in efficiency scores across zones and also probe whether, over the years, there has been convergence or divergence in efficiency across zones.

Efficiency as a concept is widely applied to evaluate the performance of different sectors of the Indian economy<sup>xv</sup>. These studies explore both stochastic and parametric approaches in efficiency estimation. However, surprisingly, in the context of SEZs, there are no studies that analyze the efficiency of these enclaves either within the SEZs or between zones over the period. Lack of studies in the area is not so much due to apathy towards the issue but for the difficulties involved in the estimation of efficiency of these enclaves.

## Flaws and Failures of SEZs Policy and Way Forward

The above exercise provides a very ambiguous inference regarding the effectiveness of policy on the performance front. Although in absolute term its performance seems quite promising, it is quite ineffective in diversifying exports basket and henceforth promote strong industrial base. Further, the trade performance itself is questioned on the ground of fiscal viability of SEZs project and efficiency in production processes. Given such an ambiguous scenario, it is quite necessary to probe why there are so many hiccups in the progression of Indian SEZs. Is it due to flaws and failure in the logic behind promotion of SEZ policy, which is based on successful run of Chinese SEZs, or, were implementation of the policy ill-timed? The following paragraphs seek to answer these questions.

### (a) Failure to understand the Facets of Policy and Performance of Chinese SEZs<sup>xvi</sup>

The current Indian SEZ policy owes its conceptual origin to the successful experience of Chinese SEZs. However, what is missing in the process of emulation is a careful understanding of what made the Chinese experiment so successful and whether these enclaves are really as green as hypothesized, or are there any shades of gray in its success-story. Thus, a larger part of the current controversy over SEZs structure in India is traceable to the failure of Indian policy makers to understand the various components and nuances of SEZ policy in China.

For instance, it is not just SEZ policy, which enabled to transform a traditional economy into a modernized one as in China. Evidently, both internal and external factors had supported the Government's efforts to achieve objectives of reforms through SEZ policy. Specifically, the break from the rigid economic system followed during pre-reform period seems to have unlocked the untapped potential of the nation, which coupled with the subsequent reform measures constituted the main thrust for the success for SEZs in China. Prior to the onset of reforms, all economic decisions in China were determined through centralized planning, which adversely impacted the speed and efficiency of bureaucratic procedure operated in China. Moreover, State enterprises dominated the industrial sector and had complete control over production and import and export of goods (Lardly, 2005), resource allocation, utilization and, consequently, the pace of economic growth. This in particular could be seen in China's engagement in the production and export of those commodities in which it hardly had any comparative advantages, and producers hardly had any incentive to expand production owing to constraints of the planned economic system (Lardly, 2005). Besides, though China had abundant labour products were predominantly capital-intensive.. Further, the Chinese Government considered its hold on land and labour as a means of maintaining its control over the masses (Wall, 1993). These three components, namely Central planning, dominance of the SOE and the rigid labour and land markets, were firm obstacles to China's economic progress in the pre-reform period. In order to rectify this as well as to try out an alternative system of administration, the SEZ policy became handy; it also marked the beginning of decentralization in China and also broke the long tradition of centrally planned economy model of administration.

Additionally, initiatives taken to address the rigidities that existed in land and labour markets<sup>xvii</sup> also boosted the success of SEZs in China. For instance measures like ensuring adequate supply of labour for the operation of SEZs through a '*Labour Service Company*' helped to break the rigidities

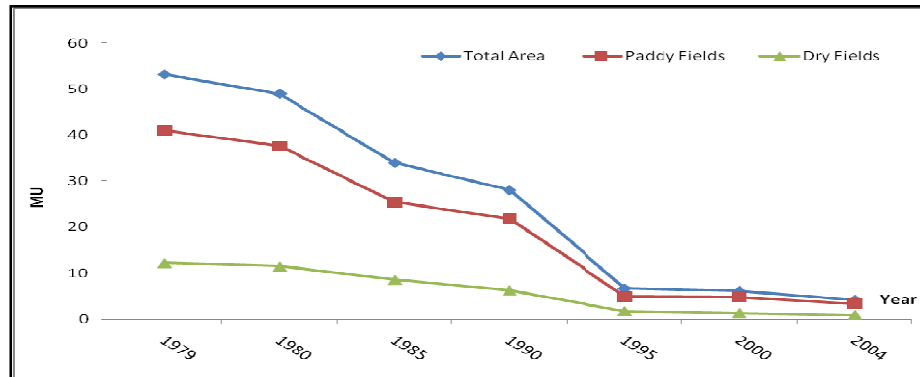
existed in the labour market. In addition to this, SEZs also helped to relax state control on various issues related to labour market (Wall, 1993): First, the practice of '*iron rice bowl*' was relaxed for the first time in China. Accordingly, enterprises ceased to have life long responsibilities over its workers; in its place system of contract labour was put in place for the first time. Second, '*freedom to market one's own labour*' was also encouraged for the first time. Specifically in Shenzhen SEZs, university graduates were allowed to find their job as against the practice of getting assigned to workplaces elsewhere. Third, the system of '*market intervention in food supply*' was introduced in place of the conventional method of '*rationing*'. This was found quite helpful in the long-run to relax the restriction of movement of labour between regions. Four, the '*system of moonlighting*' was encouraged, under which workers were allowed to take up a second job, while still holding on to their 'iron rice bowl'.

Apart from internal factors, a few favorable external factors like the strong and active presence of overseas Chinese investors ensured the success of reform measures. For instance, of the five SEZs, Shenzhen is closer to Hong Kong (36 Kms away), Zuhai is near Macau, Shantou is the hometown of most Chinese living overseas, Xiamen (Fujian Province) is closely linked to Taiwan. A similar approach was followed while locating the fifth SEZ at Hainan as well as other ETDZs and open areas in Shanghai. It enabled these regions to understand and grasp the industrial culture of neighboring regions by targeting nearby overseas investors. Further, when China initiated the reform process, it hardly had any competitors in the world market, particularly in East Asia. Therefore the timings of reform enabled them to reap maximum benefits from the process.

Thus, the lesson from China's experience with SEZs is that the decision to promote SEZs constitutes only the first step; its success however, depends on a set of factors, specifically it requires prior identification of factors hindering the process of economic growth in the country, and how SEZ policy can be used as a mechanism to address the same. Besides, it also seeks effective integration and co-ordination of different conducive policies both at the domestic and external fronts. To be precise, SEZs as a trade policy cannot be expected to work under *ceteris paribus* conditions; rather it requires careful identification and execution of supportive factors, which may vary between countries, SEZs and/or between sectors within a given economy.

A careful scrutiny of the performance of SEZs in China, on the other hand, bring forth clearly that though the process of SEZs expansion was successful in achieving the stated objectives of reform, but at the same time it has adversely affected the sustainable growth of the economy. For instance, Shenzhen witnessed steady decline in the cultivable area, after starting the SEZ in the region (Figure 4). The decline is observed particularly in areas under paddy (Lam and Chu, 1985) and rain-fed farming. On an average, in the post-reform period the decline in area available for agriculture was more than 90 per cent<sup>xviii</sup>. This could be attributed to two major factors: one, due to the shift in the land-use pattern from agricultural to non-agricultural activities (Peimin, 2007) and second, migration of farmers and agricultural labourers from farming to non-farming activities because the later seems to have assured higher wages and better standards of living (Zheng *et. al*, 1985).

**Figure 4: Area under Cultivation in Shenzhen City: Post SEZs Perspective**



**Source:** Based on CSY, 2006 and SZSY, 2006

**Note:** Mu is the Chinese method of measuring agriculture area. It is equal to 0.0667 hectares

This sharp decline in area under cultivation in Shenzhen city is found to have adversely impacted its food self-sufficiency. For instance, in 1980-81, Shenzhen was not only self-sufficient in food grains production but was also a regular supplier of 40 million Cattles to other parts of China (Zheng *et. al*, 1985). Whereas, now it completely depends on other provinces for its day-to-day needs of grains and other basic food items (Tantri 2011). The decrease in cultivable land was more pronounced in post 1990s, corresponding to the decreased share of the agricultural sector in GDP. Over the same period, a decline in cultivable area per agriculture person and per agriculture labour was also noticed (SZSY, 2006). This implicitly points out to the growing pressure of population on agricultural activity in post 1990s owing to the restriction by the Government on movement of labourers from rural areas to urban areas.

Further, SEZs have also resulted into aggravating regional disparity in China as SEZs received preferential treatment and privileges that are not available to the rest of the economy<sup>xix</sup>. Besides, these regions received more than their natural share of government resources at the cost of the development of other regions. As a result, in the long run, it resulted in regional disparity not only between SEZs and non-SEZ areas but also between rural and urban areas. A huge gap was observed in terms of income, social, physical and institutional infrastructure between SEZ and non-SEZ areas. Specifically, coastal areas developed more rapidly than the eastern regions of China<sup>xx</sup>. It also resulted in social unrest in the SEZ regions (Goswami, 2007) and provided scope for a few more maladjustments in the economy like excessive migration and rising of the general price index above the national average. These facts convincingly reinforce the contention that Chinese SEZs are not as green as hypothesized and claimed by Indian policy makers. The promotion of SEZs has resulted in much maladjustment in the Chinese economy, which was overlooked by the Indian policymakers in the haste of emulation of the same in the Indian context. One can also argue that failure to understand the same can be held responsible, to a great extent, for various apprehensions and hiccups faced by India's current policy on SEZs.

### **(b) Problem with One Size Fit for All Policy**

SEZ policy in the present context appears to be a policy proposed by the Central Government and followed by the State Governments, which has consistently failed to consider problems and prospectus at zone level. For instance, among the seven conventional SEZs in the country, each zone is facing specific problems and prospectus, which need policy attention. Further, within each zones problems faced by exporting units differ depending on its sectoral composition. These issues, however, do not get reflected either in the Central or State Government SEZs policy. To remedy this, there is a need to empower the respective state Governments to periodically survey the scenario in zones in their jurisdiction and to deal with the issues. Further, there are sector specific requirements and problems involved in the promotion of SEZs. Thus, instead of having a uniform policy applicable to all States/zones and sectors, there is a need to revisit the policy based on the sector and zone specific problems and prospects. This offers a more investor friendly atmosphere to achieve the stated objectives of SEZs promotion in the country.

### **(c) Issues Related to Size and Location of SEZs**

Within ten years of the implementation of the SEZs policy in India, the economy has seen a surge in the number of exporting units as well as fresh proposals for setting up of different types of SEZs (See Table 1). It should also be noted that there are large discrepancies between the number of SEZs project approved in the country and those actually operationalized. This highlights the longer gestation period involved in the realization of SEZs project in the country. In contrast, China had only five SEZs in the last three decades and they came into being through a piecemeal approach based on the experience of the initial SEZs. India, on the other hand, has given indiscriminate permission to SEZs projects put before the Board of Approval (BoA) without considering the probability of their success, locational advantage and availability of manpower in the region. Moreover, as of now, no study has been undertaken by the Government to analyse the problems and prospects of these upcoming SEZs.

The Government's approach with regard SEZs is also in conflict with its general practice, wherein most development policies are first tested on experimental basis and later, based on experience, promoted further or modified accordingly<sup>xxi</sup>. The need to stop the process of approving more SEZs gains importance given the amount of revenue foregone in each zones<sup>xxii</sup>. The current practice of SEZs approval is in variance with the practice followed in the country during the EPZs regime, where the Government was prudent in taking decision on new EPZs. All the seven conventional EPZs of the country were based on the recommendations of committees appointed for the purpose. These committees not only analysed the feasibility of setting up of new zones, but also carefully analysed the locational advantage and demand for the products that these zones sought to promote. In fact, a couple of EPZs as proposed by the committee did not see the light of day in the late 1980s due to flaws in the project proposal.

An analysis of sector-wise and state- wise distribution of approvals for SEZs has brought to a light a few more failures in the system. As explained elsewhere in the paper, sector wise, IT/ITes/electronics industries received the maximum number of approvals in the country (Figure 1) and the over-emphasis on these sectors is linked to the failure to promote SEZs in those industries in which

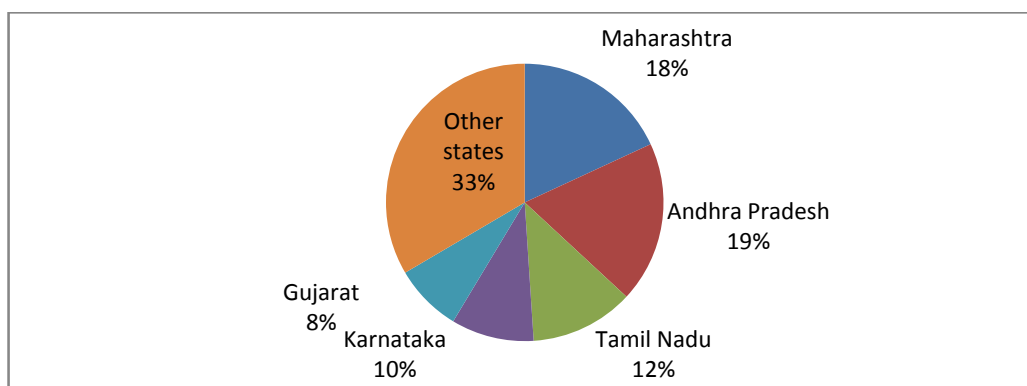


India had comparative advantage and capability to promote employment generation as well, such as handicraft products. Alternatively, government could have given priority to other sectors as identified under the 'target approach' announced in the various EXIM policy statements and/or those products in which India has an assured international market like those listed in bilateral trade agreements between India and other countries. Such attempts will also minimize the risks associated with fluctuations in international markets and its corresponding impact on these enclaves<sup>xxiii</sup>.

Towards this, understanding the stages of industrial development traversed by China within the banner of SEZs will be quite helpful. Far from being totally SEZs-centric, the process of industrialization in Shenzhen was broad-based, and pursued in three stages (Wong and Chu 1985), each of which was introduced sequentially. Initially considering the advantages and difficulties specific to the region, emphasis was placed on small-scale industries; specifically, labour intensive but modern industries were encouraged. This, in the second stage was followed by a selective approach, i.e. a special emphasis on high technology industries. In the third stage, industrialization process was oriented towards diversifying the industrial base of the region; specifically industries with advanced technology and modern scientific methods of production were promoted. The approach was quite helpful in developing the infrastructure base in the region in a systematic way and also to meet the target set in its promotion. Moreover, the need for caution in diversifying SEZs exports also gains importance in view of their decisive role in deciding the import intensity of exports, and thereby their real contribution in net foreign exchange earnings.<sup>xxiv</sup>

A look at the region- wise spread of SEZs indicate that SEZs are presently concentrated in developed states rather than in underdeveloped ones in the country. For instance, few developed states like Maharashtra, Andhra Pradesh, Tamil Nadu and Karnataka have cornered a disproportionately higher percentage of approvals while the others State together have proportionately lower (33 per cent) of the total approved SEZs in the country (Figure 5). Further, little attention seems to have been paid to the regional composition of SEZs so as to be in line with the region's trade potential. Veery little is known, whether the zones promoted in each of the states, and within each state across regions, are in line with its comparative advantage and resource base or allotment of SEZs project was arbitrary.

**Figure 2: State wise Distribution of SEZs Approval (Formal) in India**



Source: [www.sez.nic.in](http://www.sez.nic.in)

Within the developed states, SEZs are found located in districts that are much above the national average in terms of development parameters (Mukhopadhyay, 2009). This in turn is assumed to have had adverse impacts on the urban infrastructure due to congestion and diseconomies of scale (Mitra, 2007); specifically, it is feared that these zones may ruin the existing infrastructure without actually adding to the new infrastructure base in the country (Mukhopadhyay and Pradhan, 2009). Thus, SEZs may pose two types of threats in the promotion of balanced development: One, the developed states have received the lion's share of SEZs approvals in the country compared to other states. This in turn has widened already existing gap between developed states and lagging ones, and threaten to further worsen the same. It is quite possible that regions with SEZs project receive more attention, which in turn depletes the resource base of the surrounding regions; it therefore promotes more of backwash effects than expected spread effects. Second, too much concentration of zones in a region exhausts the resource base of the region and results in diseconomies of scale and congestion, which in turn give rise to a completely different set of challenges. Importantly, attempts should be made to integrate employment objectives with the commercial objectives of SEZs, but this cannot be achieved by merely assigning one more objective to SEZ policy. It demands more concentrated Government intervention the most important of which is to make relevant information available in employment exchanges in regions/states where the units are operating besides ensuring speedy overall development of the region. While doing so, the Government should eliminate the role of middlemen and reduce labour exploitation. Therefore, it would be quiet useful if the Government revisited the SEZ policy in this regard.

#### **(d) Too much Emphasis on Incentives**

In the current SEZs structure, both central and state governments offer a set of fiscal and non-fiscal incentives to developers, unit-holders, domestic suppliers and financial institutions in these special enclaves, through what is known as 'Offshore Banking Units' (OBUs)<sup>xxv</sup>. As against this, in the EPZs, incentives were offered only to exporting units. This was due to the restrictive practices followed in the EPZs regarding ownership and types of economic activities.

A critical evaluation of the various incentives offered in the SEZs, however, reveals that in the bid to push the SEZs as engines of growth, the governments (both Central and State) have placed too much emphasis on incentives. This is specifically so, because the objective behind the promotion of SEZs in the country was based on the national SEZ policy rather than the comparative advantage of each State. Given identical programme objectives, particularly the compulsion to target as many international clients as possible, it becomes necessary for different State Governments to engage in incentives war and under-cutting of rates. Of course, lack of incentives to boost the confidence of exporters was a lacuna in the EPZs, and different committees had reiterated it in the 1970s and 1980s. This seems to have been wrongly interpreted in the present context. A glance at the basket of incentives offered across the States under the SEZs framework clearly shows that the tax incentive alone is being used as the strategy to attract investments. In this context, a cursory look at the literature explaining factors shaping the export performance of a country brings out important demand

and supply side factors. Until recently, the policy focus in India was on the demand side to the total neglect of supply side factors like well-maintained institutional set-up, infrastructural facilities, macroeconomic environment, incentives, attitude toward foreign investment and issues related to labour market. Further, at the firm level, factors like size of the firm, location, availability of raw materials, technology and ownership pattern influence the phenomena.

In the context of other countries, the literature on the subject lists certain factors responsible for the success or failure of such enclaves. Factor identified in the literature include location of the zone (Madani, 1999; Cling and Letilly, 2001; Ota, 2003 and others), clustering and linkages with the domestic economy (Jenkins et al, 1998; Jayanthakumaran, 2003), infrastructure and supportive policy framework (Madani, 1999; Ge, 1999), etc. Further, incentives and subsidies are also considered essential for attracting investors' attention and hence crucial to the success of zones, though empirical evidence on this issue is inconclusive. Thus, there is a need to concentrate on other factors on the supply side as any handicap in these factors may adversely affect the efficient working of other factors and the economy as a whole. For example, lack of high quality infrastructure may cause under-utilization of foreign investment and further increase transport cost. In fact, a good number of industrial sectors outside the zones are contributing significantly in generating trade surplus without any additional incentives. For instance, without any equivalent tax concessions on par with SEZs, the EOUs are contributing almost 21 per cent to national trade (2008-09). Thereby it challenges the argument that tax concessions offered outside the SEZs are incapable of promoting competitiveness. The experience of Chinese SEZs makes it further clear that incentive is a necessary but not a sufficient condition for the promotion of SEZ policy. Chinese government had realized this and accordingly had taken precautionary steps while extending incentives to these enclaves. Accordingly, it prescribed different slabs of incentives structure across zones, investor types and type of projects. Meanwhile due recognition was given to other factors, particularly infrastructure and institutions as any lacunae in these factors can adversely affect the efficient working of other contributory factors and even the total economy.

Moreover, as explained elsewhere in the paper such incentives and subsidies may affect the Government exchequer in two ways: first this adds to revenue and capital expenditure of the Government. Second, it may incur massive revenue loss to the Government exchequer, which in turn may influence the distributional aspects of government budget due to depletion of Government revenue. A further limitation of the current SEZ policy relates to its stipulation of uniform tax soaps applicable to all sectors. As against the current trend of uniform incentive across sectors, the Government could also think of restructuring the incentives based on the priority of the sector's development i.e., different incentives slabs applicable to different sectors, with emphasis on comparative advantage of each region and priority of development needs. As already explained elsewhere in the paper, a proper understanding the practice followed in Shenzhen SEZ will be of great help in evaluating the success of Indian SEZ policy.

#### **(e) Labour Related issues**

SEZs Act, 2005 transferred issues of labour relations from the jurisdiction of State Labour commissioners to DCs of the respective zones. The apparent objective of this move is to promote hassle

free business environment, and specifically forestall avoidable labour unrest and consequent loss of production and profits. It is observed that across seven conventional SEZs, four different types of arrangements are used to solve labour related issues. Development commissioners, by law, exercise the powers of Labour Commissioner in Kandla, Santacruz, Noida and Vizag SEZs, while in Falta SEZ, the State Labour Commissioner is vested with control over labour related issues. The Development Commissioner of Chennai SEZ has now voluntarily transferred authority over labour related issues to the State Labour Commissioner but occasionally oversee the work of the latter. In Cochin SEZs, Development Commissioner has been provided with inspection officers to handle labour issues in the zone; therefore he assigns the State Labour Commissioner to deal with labor issues. It needs to be pointed out that the above arrangements are not in conformity with the provisions of the SEZs Act, and thereby reveal inconsistency between actual practice and provisions in the SEZs policy in regard to labour relations.

Further, the SEZs Act is not very clear about the source from which the needed labour force can be drawn. It is assumed that labour market in each zone can supply the required number of workers and therefore there is limited scope for Government intervention. This, however, in the long run, might give scope for middleman and exploitations of workers. Thus, there is pressing need for Government intervention in this area. Government supervision will not only assure supply of required manpower to these zones but also would prevent exploitation of labour, in addition to being a safeguard against interference by middleman/agents in labor supply. As a first step in this direction, Government can promote educational institutions to cater to the man-power requirements of the respective zones. Towards this, as explained elsewhere in the paper, an understanding of the Chinese experience, particularly of Shenzhen SEZ, will be quite helpful. Shenzhen SEZ authorities had taken steps not only to supply the required number of labour through various channels but also had established institutions to train to unskilled workers with a view to ensure future supply of labour to the SEZs.

## **Summary and Conclusion**

When we discuss an economic policy, three of its crucial components need to be examined carefully. First is to determine whether the idea behind promotion of the economic policy was clear? i.e., is there clear understanding why a particular policy is being put in place; do we have a clear idea of expected benefits and associated negative impacts of the policy; do we know sufficiently well about the experience of similar policy, if any, in other countries, i.e. were they successful ventures or failed attempts and what factors would explain such outcomes? Second, is to investigate how a policy is being implemented. Because, a policy may fulfill the first order condition, i.e. being clear on the idea behind its promotion, but there may be flaws at the implementation level. This is specifically so, because a policy is proposed by the government<sup>xxvi</sup>, but executed at different levels of administrative hierarchy. The co-ordination or conflict between these two players involved in the formulation and execution of a policy would explain the third order condition for evaluating a policy document, namely, performance. However, studies evaluating a policy document largely concentrate on the performance based on a few indicators and fail to accommodate ideas and implementation part of it which actually explain the outcome of it, i.e., policy document is always explained based on symptoms rather than the cause. The

investigation of India's current policy on SEZs with this criterion brings forth a few important points for consideration.

- India's current policy on SEZ partially fails to meet the first order condition, i.e., there are indeed several flaws in the idea behind promotion of the same. For instance, Indian policy makers failed to learn important lessons and non lessons from Chinese experience, which was the template for India's current policy on SEZs. In fact, a larger part of the current controversy over SEZs structure in India is traceable to the failure of Indian policy makers to understand the various components of SEZ policy in China. Further, the success of SEZs in China could not be attributed only to the Chinese 'SEZ policy'; rather the various supporting mechanisms, both internal and external, are found to have played an important role in scripting this success story. It is clear therefore that *SEZs cannot be expected to deliver optimum performance under ceteris paribus condition; rather it requires careful identification and execution of supportive factors, which may vary between countries, SEZs and/or between sectors within a given economy*. Moreover, Chinese SEZs are not as green as hypothesized and claimed by Indian policy makers. Also, the promotion of SEZs had resulted in much maladjustment in the Chinese economy.
- At the outset, the replication of the Chinese model of trade policy in the country appears as an improvement over conventional EPZs. It therefore fulfills its promise of promoting qualitative transformation of EPZs. Despite the numerous credits in its favour, the SEZ policy in India needs a pragmatic re-visit. Specifically, the current SEZ policy also seems suffering from flaws at execution level. The most important argument against it stems from the various flaws in the policy, which come in conflict with other development objectives of the economy. The major flaw is the Government's stand on incentives offered to different actors involved in the process, particularly land acquisition and compensation formulae and the sectoral and geographical expansion of SEZs in the country. Thus, as a way ahead, we argue that there is a need to restructure the SEZs scheme in the country, specifically by identifying the problems and prospects in expansion rather than just extending liberal incentive schemes.
- With regard to performance of these enclaves a very ambiguous inference emerges. Although in absolute terms its performance seems quite promising, it is however quite ineffective in diversifying our exports basket and thereby promote a strong industrial base. Further, hardly any evidence is available to commend its role in employment promotion and investment accumulation in the economy. In addition to this, the trade performance itself is often questioned on grounds of fiscal viability of SEZs project and efficiency in production processes.
- Based on the above policy analysis, we offer the following suggestions:
  - Put a sunset clause on the number of SEZ projects in the country;
  - Diversify the export content of India's SEZs. This is essential to boost performance of these zones and also to insulate the country from any type of external economic shocks.
  - As against the current trend of uniform incentive across sectors, the Government could also think of restructuring the incentives based on the priority of the sector's development i.e., different incentives slabs applicable to different sectors, with emphasis on comparative advantage of each region and priority of development.

- In the current SEZ policy, it is assumed that labour market in each zone can supply the required number of workers and therefore there is limited scope for Government intervention. This, however, in the long run might give scope for middlemen and exploitations of workers. Thus, there is a pressing need for Government intervention in this area. Government supervision will not only assure supply of required manpower to these zones but also would prevent exploitation of labour, in addition to being a safeguard against interference by middlemen/agents in labor supply. As a first step in this direction, Government can promote educational institutions in the regions according to the requirements of each zone.

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## End Notes

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- <sup>i</sup> See for instances, Kundra, 2000; Aggarwal 2004, 2006, 2007, 2010; Shah 2009, Mukhopadhyay, 2009; Mukhopadhyay 2007; Rao, 2007, Gill, 2007; Kasturi, 2008; Menon and Mitra 2009; Banerjee et al 2007; Bhaduri, 2007; Sharma 2007; Gill 2007; Kasturi 2008; Mukhopadyay and Kanha, 2009; Patnaik, 2007; Rao, 2007; Shah, 2009. Tantri (2010a, 2010b, 2010c, 2011a, 2011b), Gopalakrishnan, 2007; Sivaramakrishnan, 2009; Mukherji 2008; Goswami, 2007
- <sup>ii</sup> See for instance, Aggarwal 2004, 2005, 2007, 2010; Mukhopadhyay, 2007; Rao, 2007; Bhaduri, 2007; Sharma, 2007; Gill, 2007; Kasturi, 2008; Patnaik, 2007; Gopalakrishnan, 2007; Bhaudri, 2007; Banerjee et al 2007; Shah, 2009; Mukhopadyay, 2009; Menon and Mitra, 2009; Gupta, 2008 and 2009; Arunachalam, 2009; Das, 2009; Carter, 2010; Sundarapandian, 2012; Aggarwal, 2012
- <sup>iii</sup> Following this, a few amendments have been made in the SEZs Act and Rules in the last few years
- <sup>iv</sup> As of August, 2011 ([www.sez.nic.in](http://www.sez.nic.in)).
- <sup>v</sup> For the period 2010-11 it is expected to be 29.7 per cent.
- <sup>vi</sup> For theoretical justification on export diversification, see, Nurkse (1953), Prebisch (1959), Masell (1970), Kingston (1973), Kingston (1976)
- <sup>vii</sup> Of the seven conventional SEZs, six are multi product based SEZs and Santacruz SEZ is meant for the promotion of Electronics industry and Gems and Jewelry.
- <sup>viii</sup> Tantri 2010a found that exports from seven conventional SEZs are highly restricted to USA Market
- <sup>ix</sup> For instance, the disintegration of the USSR in the early 1990s hardly had any negative impact with respect to performance of the Santacruz, Noida and Chennai zones due to their sectoral composition, which was also helpful in shaping their trading partners (Tantri 2010b and 2011).
- the East Asian crisis of late 1990s also had its negative impact on the performance of Kandla, Chennai and Cochin SEZs both in terms of export value and in terms of number of exporting units
- <sup>x</sup> Adopted from Tantri (2012c)
- <sup>xi</sup> Adopted from Tantri (2012b)
- <sup>xii</sup> This is mainly due to the resource crunch that government is facing in the implementation of most of the development projects at the one hand and also on the backdrop of the fear that SEZs are perhaps leading to realignment of investment from DTA to SEZs than promoting fresh investment in the economy.
- <sup>xiii</sup> See for detail Aggarwal (2007), Mukhopadhyay (2007), Rao (2007)

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- xiv For instance, these enclaves are treated as 'public utility' service, and, accordingly, a single window clearance system is put in place, labor related rules and regulations have been relaxed; raw material and capital goods are made available at zero tax; a number of fiscal and non-fiscal benefits are offered by both the central and state governments. The major central government tax exemption includes tax holiday on income tax, service tax, VAT, central sales tax, R & D Cess. In the State-specific policy, every State has extended further tax concessions to various actors involved in the promotion, development and facilitation of SEZs. Uniformly across the States, tax exemptions are allowed in local taxes and levies including sales tax, purchase tax, octroi cess etc.
- xv See for instances Goldar (1985), Bhavani (1991), Ray (2002), Parameshwaran (2002), Goldar *et al* (2004), Trivedi (2004), Mukherjee and Ray (2004), Bhandari and Maiti (2007).
- xvi Adopted from Tantri (2012)
- xvii Changes in approach towards capital market can be noticed in government emphasis on fiscal and non fiscal incentives measure to attract domestic and foreign capital. And, these incentives mechanism used to attract capital in these enclaves is already explained in the earlier section.
- xviii The similar experience is noticed in the case of other zones as well. For instance, Fujian Province have experienced transfer of 3,50,000 hectare of arable land for industrial purposes (Cartier, 2001 Quoted in Gopalakrishnan, 2007; p-1493). As a result, farmers gradually reduced investment on agriculture development in the possible threat of future further acquisition and land transfer.
- xix See Jones *et al* (2003)
- xx See Fujita and Hu (2001), Ota (2003), Srinivas (2004), for further discussion on this.
- xxi For instance, NREGA, The Pradhan Mantri Adhrsha Gram Yojana
- xxii This has been elaborated elsewhere in the paper
- xxiii For discussion on empirical evidence on the cause and effect of fluctuations in world economy and Indian SEZs, See Tantri (2010a, 201b and Tantri, forthcoming).
- xxiv See for detail Tantri (2010c)
- xxv The financial institutions engaged in these delineated duty-free enclaves are known as Off Shore Banking Units (Government of India, 2005).
- xxvi It can be either central government and/or state/provincial level government

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