

Special Economic Zones: Location and Land Utilisation

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SPECIAL ECONOMIC ZONES: Location and Land Utilisation

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*Surya Tewari**

[Abstract: The study examines the issue of utilization of land in Special Economic Zones (SEZs) in the light of the fact that land utilization of existing SEZs is about 37 per cent at the national level. Low proportion of functional SEZs, de-notification of notified SEZs, notification of new SEZs coexist. Since India is a land-starved country, any underutilization of land public or private waste of the scarce resource. The study, therefore, focuses on understanding the use of land in SEZs across the states, sectors and type of promoters (private and government). Much of the analysis is based on cross tabulation and GIS mapping technique.]

Keywords: SEZ, land utilization, processing use, vacant, denotification

1. Introduction

Special Economic Zones (SEZs) were launched with the approval of the Parliament in June 2005 - with much optimism - for generating growth and employment. There was also an idea of capping the number of SEZ to curb large tracts of agricultural land from being converted to non-agricultural use. This led to the rush for setting up of SEZs in the country. In 2006, for example, 235 SEZs were formally approved (*Reddif*, February 21, 2007). The rapid pace of demand for SEZ created fear of acquisition of fertile cultivable land thereby affecting agricultural production. As a consequence there was huge backlash from activists and political parties resulting in conflicts such as that in places like Nandigram in the state of West Bengal. Official data shows that most of the currently functional SEZs were notified between 2006 and 2009. Moreover, many of them are not yet functional. Protests are still going on at some places for the return of unused land (*The Hindu*, October 1, 2018a). In fact, we have come to a time when the attraction of SEZs appears to be waning in the country. De-notification of SEZs is taking place which indicates loss of interest in the efficacy of SEZ. Going by the government's account, by June 2017 some 81 SEZs had been

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de-notified (*The Indian Express*, July 26, 2017). Reasons highlighted for such a state include unsuitable location of SEZs, unviable rehabilitation and compensation package, imposition of Minimum Alternate Tax (MAT) and Dividend Distribution Tax (DDT),¹ benefits outside SEZ like import duty concessions through various free trade agreements, and viability of size. A reason ignored in the preceding list of reasons is the quantum of land originally approved was more than what was required.

It is important to note that the only requirement to apply for SEZ is to possess a minimum quantum of land as specified by the government. As per the Comptroller and Auditor General report land was made available (allotted/purchased) mostly from the government (GOI, 2014a). In such a scenario, interest in the SEZs could be due to the promoters' (or developer; used interchangeably) interest in the land rather than in manufacturing or services. To illustrate, the Export Processing Zones (EPZ) in multiproduct have, in general, a size of below 150 hectare (ha); however, there is almost complete utilisation of land in them.² On the contrary, in multiproduct SEZs that have a permissible size ranging from minimum of 500 ha to maximum of 5000 ha³, land utilisation is 32.6 per cent and 41.36 per cent under state government and privately developed SEZs, respectively.⁴ Furthermore, under the SEZ Act (GOI, 2005), land can be used both for manufacturing of goods or rendering of services (processing use) as well as for the creation of residential, recreational,

¹ Dividend Distribution Tax (DDT) is the tax charged on the companies on the dividend paid to the shareholders. Dividend is the profit shared by the company with its shareholders. A company declares a dividend after paying the corporate tax. The DDT tax rate is 15 per cent plus surcharge and cess paid by the company. Since April 1, 2016, dividends received by resident individuals, Hindu Undivided Family or firm, are taxed at their end at 10 per cent if the amount of dividend exceeds Rs 1 million (Deloitte, 2017). The developers of SEZs were exempted from this tax, but the exemption has been withdrawn from 1 June 2011. Minimum Alternate Tax (MAT) is the tax levied on book profit of the company. Book profit is the net profit shown in the statement of profit and loss prepared in accordance with the Companies Act. Every company is liable to pay MAT if the income tax (including surcharge and cess) payable on the total income as per Income Tax Act is less than 18.50 per cent of its book profit plus surcharge and cess in a year. Since MAT is paid before actual income tax is levied, the excess of it can be claimed by the company as credit in subsequent year/years which is adjusted or carry forward as per the provisions of the Income Tax Act. The current rate is 18.5 per cent plus surcharge and cess (Income Tax Department, 2018). Both the SEZs units and developers of SEZs were exempted from MAT which was, however, withdrawn with effect from April 1, 2012.

² There were 8 EPZs before the introduction of SEZ Policy in 2000. All these EPZs were in multiproduct with 7 developed by Central Government and one by private developer. With the introduction of the SEZ Policy all these EPZs were rechristened as SEZs.

There is one Central Government EPZ in Kandla in Gujarat which is 400 ha in size with almost complete utilisation of land.

³ With notification dated December 17, 2019, all the existing notified SEZs would deem to be multi sector/multi product SEZs with area requirement of 50 ha in all except 8 north eastern states, Himachal Pradesh, Uttarakhand, Goa and UTs. In later the area requirement is 25 ha (GOI, 2019a). There is no minimum land requirement for IT, ITeS, Biotech, Health (excluding hospitals). The analysis in the paper is based on area requirements prior to that. This latest notification would result in partial denotification of SEZ land which however would be known in a year or so.

⁴ Figure is arrived by excluding the area of Surat Multiproduct SEZ from privately developed SEZs as it is already included in deriving level of utilization of EPZs. This EPZ was set up in Private sector in 1994.

social and commercial infrastructure (non-processing use). Moreover, there is no mention of the quality of land to be devoted to SEZs except for one guideline dated October 27, 2010 which states that cultivated area should be considered only when there is a need to meet the contiguity requirement (GOI, 2010b).

Available literature dealing with SEZs focus on issues like employment, export, investment, FDI, incentives, backward and forward linkages, sale to domestic tariff area, land acquisition, and compensation. See for example research works of Aggarwal, 2007; Sharma, 2007; Gill, 2007; Sampat, 2008; Sharma, 2009; Rawat, Bhushan, and Surepally, 2011; Pratap, 2012; Aggarwal, 2012; Khurud, 2013; Shah, 2013; Cook, Bhatta, and Dinker, 2013; Chakraborty, Gudimeda, and Kathuria, 2017; and, Mukherjee *et al.*, 2016. Land as a factor of production has not been adequately explored in these publications.

There are a few studies that consider SEZs as neo liberal mechanism to accumulate more capital (land) in collusion with domestic system by the process of “dispossession” or “encroachment”. State is treated as “land broker,” developer as “land rentier,” and as “rent seeker” with no role in real production but only a role in land circulation (Gopalkrishnan, 2007; Levien, 2011; and, Banerjee-Guha 2008 & 2017).⁵ Going by their argument the location of SEZs in and around large urban areas (Mitra 2007; and, Mukhopadhyay and Pradhan, 2009) may be regarded as nothing but an avenue to gain from land through speculation and concomitant wastage of competing, scarce resource. We expect such wastage to get reflected in the extent of unused land in SEZ, extent of non-functional SEZs and the number de-notifications of SEZs in the country. In this background the objectives set for this study are:

- Analysis of level of utilisation of land in SEZs,
- Examination of factors affecting land utilisation – type of promoter, sector, and locational attributes in terms of accessibility/land quality, and
- Investigation of both the additional and the de-notified SEZs

The analysis is carried out at all India level using secondary data. The paper is divided into seven sections. The following, section two, explains the analytical framework of the study. Section three discusses the specifications for land in SEZs. Section four analyses land distribution and utilisation. Section five investigates additions and denotifications of SEZs. Section six examines the locational aspect of SEZs in the country. Finally, section seven sums up the paper.

2. Analytical Framework

The analysis is carried out using secondary data pertaining to SEZs as existing on January 23, 2014 and December 01, 2017. Data was extracted from the website of the Government of India. Data relating to January 2014 are used for analysing the level of land utilisation and its correlates. This was the only data available on land information viz. notified,

⁵ The concept of “accumulation by dispossession” is attributed to David Harvey. Prabhat Patnaik used the term “accumulation through encroachment.”

utilised, and extent of vacant land in processing area of each notified SEZ at the time of commencement of the work. In January 2014, eighteen states and two union territories (UTs) had SEZs. From this list, the SEZs in Telangana have been separated from those in Andhra Pradesh (Telangana was formed on June 02, 2014). For analysing locational factor, additions and de-notification, data relating to December 2017 have been used. The total number of SEZs considered includes SEZs notified under SEZ Act 2005 and those EPZs/SEZs rechristened or set up respectively, before the introduction of SEZ Act 2005.⁶

In order to understand the location aspect of SEZs the potential areas for setting up SEZs based on accessibility and on accessibility and land quality as identified in the study by Ramachandran and Biswas (2007) have been used as base maps. They have mapped and measured the accessibility of all districts of the country simultaneously on four parameters (a) areas within 10 km from national highway, (b) areas within 30 km from a broad-gauge railway line, (c) within 50–100 km of cities with a population of 1 million, and (d) within 30–60 km from cities with population above three hundred thousand. To reflect land quality in accessible area, parameters of unproductive and scrub land were added. Districts that satisfy the conditions of accessibility, and of accessibility in unproductive and scrub land are considered preferable for setting up the SEZs. While accessibility is important from the perspective of the promoter of SEZ, land quality parameters takes note of environmental aspect. By superimposing districts that are preferable for location of SEZ and districts in which SEZs are located two maps have been obtained with each showing two elements – SEZs located in preferred districts and those in unsuitable districts.

3. Specifications for Land in SEZs

India has a long tradition of setting up industrial estates. After independence, such zones were proposed for small-scale industries. In all some 60 industrial estates were established in the II Plan period containing 1000 factories (Datt and Sundharam, 1990). Later, in 1965 government experimented with EPZ model by setting up such a zone at Kandla in Kutch, Gujarat. The second came almost a decade later in 1973-74 at Santa Cruz in Mumbai, Maharashtra. In 1980's five such zones were set up by central government at Falta (West Bengal), Chennai (Tamil Nadu), Noida (Uttar Pradesh), Cochin (Kerala) and Vishakhapatnam (Andhra Pradesh). In 1994, private sector EPZ came up at Surat (Tantri, 2014). However, multiple controls and procedures, unattractive incentives, absence of

⁶ The January 2014 database contains notified SEZs as well as data of 19 EPZs/ SEZs, rechristened or set up respectively, before the enactment of SEZ Act, 2005 (GOI, 2014b). In case of December 2017 database, the list of notified SEZs is of SEZs notified in SEZ Act 2005 (GOI, 2017a). The list of operational SEZs on the other hand contains the EPZs/SEZs prior to SEZ Act as well (GOI, 2017b). SEZs considered in 2017 thus includes notified SEZs as well as EPZs/SEZs set up before SEZ Act of 2005. With one SEZs in Jodhpur got denotified in May 2014 the number of them has reduced to 18. One more SEZ has been added in the list of SEZs of 2017. The SEZ is in ITES located at Madhurwada in Vishakhapatnam, Andhra Pradesh. This SEZ is run by Andhra Pradesh Industrial Infrastructure Corporation Ltd (APIIC) and is being mentioned in the list of operational SEZs but not in the notified list. Its year of notification on the website of APIIC is given as 11 April 2007.

policy, unclear objectives, locational constraints, etc. affected the functioning of EPZs (Agarwal, 2005). By 1990's India started opening up and various relaxations were introduced for EPZs. The major restructuring of EPZs came in the year 2000 when inspired by the Chinese model of SEZ the government remodelled all 8 EPZs to SEZs and introduced the policy for the same.

By 2005, when SEZ Act was introduced, 19 SEZs were in existences with 8 pre-existing and 11 new SEZs were set up by state government and private sector between 2000 and 2005 (GOI, 2017c). The distribution of SEZs (also including rechristened EPZs) before SEZ Act can be seen in Table 1.

With the enactment of the SEZ Act the number of SEZs increased to 375 with operational ones being 222 (as on December 01, 2017, includes SEZs set up before SEZ Act 2005). The SEZ Rules specifies attributes of land required for setting up different SEZs.

Table 1: SEZs (including previously existing EPZs) Prior to SEZ Act 2005

<i>State</i>	<i>Central Government</i>	<i>State Government</i>	<i>Private</i>	<i>Total</i>
Gujarat	1 (Kandla-Multiproduct)	1 (Surat-Apparel)	1 (Surat-Multiproduct)	3
Maharashtra	1 (Mumbai-Multiproduct)	-	-	1
Uttar Pradesh	1 (Noida-Multiproduct)	1 (Moradabad-Handicraft)	-	2
Tamil Nadu	1 (Chennai-Multiproduct)	-	4 (Kancheepuram-IT, Auto, Apparel; Sriperumbudur-Telecom (Equipment))	5
Kerala	1 (Cochin-Multiproduct)	-	-	1
West Bengal	1 (Falta-Multiproduct)	1 (Kolkata-Gems & Jewellery)	1 (Kolkata-IT/ITES)	3
Andhra Pradesh	1 (Vishakhapatnam-Multiproduct)	-	-	1
Rajasthan	-	2 (Jaipur-Gem & Jewellery; Jodhpur-Handicraft*)	-	2
Madhya Pradesh	-	1 (Indore-Multiproduct)	-	1
Total	7	6	6	19

Note: * Jodhpur SEZ was denotified in May 2014 (Patrika, May 10, 2014).

Source: Data is extracted from zone wise notified land area details as on January 23, 2014 (GOI, 2014b), and list of operational SEZs of India as on December 01, 2017 (GOI, 2017b). Accessed on April 26, 2018.

3.1 Quantum and Quality of Land

There is no mention of how the sizes of SEZs have been derived. The principal requirement for setting up an SEZ is land for processing and non-processing activities. The sizes specified vary from minimum of 10 ha to the maximum of 5000 ha. The maximum size of 5000 ha is specified only for the multiproduct SEZs, the minimum specified for the same is 500 ha.⁷ The reduction in area requirement between 2006 to 2013 (for almost all sectors) to 2018 (for biotechnology and health sector excluding hospitals) and further on in 2019 is not supported by any specific reason for reduction (GOI, 2010a; GOI, 2013; GOI, 2018a; GOI, 2019a).

Once the minimum specified land is located, there is a need to take possession of it through ownership or leasehold with lease period of not less than 20 years. There is also a requirement for area to be contiguous and without any thoroughfare. If these conditions are satisfied, the Board of Approval on respective state government recommendation and National Security Clearance wherever necessary approves the proposal.⁸ On approval, a three-year formal Letter of Approval (LOA) is issued by the central government. SEZ is notified by central government on state government certification that all the requirements with respect to land are being met. In-principle approval is accorded for a year. On credible reasons for delays in possession the government may give extensions.

In so far as land quality aspect is concerned, no specification is given except a guideline dated October 27, 2010 which states that cultivable land should be considered for locating an SEZ only when adequate quantum of land is not available.⁹ First preference should be given to waste and barren land, followed by single crop and double crop land to meet the

⁷ In case of SEZs in 8 north eastern states, Union Territories, Jammu & Kashmir, Himachal Pradesh and Uttarakhand (special states) the minimum required in multiproduct is 100 ha. With respect to IT/ITES the minimum 10 hectares requirement has been dropped (GOI, 2013). In case of biotechnology and Health sector excluding Hospitals the minimum land requirement of 10 ha has been dispensed with in amendment carried out through gazette notification dated September 19, 2018 (GOI, 2018a). In original rules of 2006, the area requirement for multiproduct in states other than special states was 1000 ha. For special states it was 200 ha (GOI, 2010a).

⁸ The Board of Approval is an inter-ministerial body chaired by additional secretary and above rank officer of Union Ministry of Commerce and Industry. It further include two personnel from the department/ministry dealing with revenue, one from the department/ministry dealing with economic affairs, maximum 10 officers from other central government departments/ministries, nominee of the state government concerned, Director General of Foreign Trade or its nominee, development commissioner concerned (all the SEZs across states fall under either of the 7 SEZ zones headed by development commissioner), and a Professor from Indian Institute of Management nominated by the central government. An official not below the rank of deputy secretary dealing with SEZs in the Ministry of Commerce and Industry is nominated by central government as member secretary (GOI, 2005). The word Board of Approval has now been substituted with the word Board in gazette notification dated March 07, 2019 (GOI, 2019b). The National Security Clearance was added in notification dated September 19, 2018 (GOI, 2018a). The National Security Clearance becomes wherever necessary in notification dated March 07, 2019 (GOI, 2019b).

⁹ The state government while recommending an SEZ has to convey whether the proposed area under the SEZ is in reserved or ecologically fragile area (GOI, 2010a).

contiguity requirement. Moreover, the site should have sufficient land and water resource for the population envisioned for the SEZs.

The state Acts also (six state SEZ Acts have been mentioned on the SEZ website, GOI)¹⁰ make no mention of the quality of land desirable for setting up an SEZ. Three state governments – Kerala, Odisha and Karnataka have made some reference to land quality in their SEZ policies.¹¹ While Kerala (Government of Kerala, 2008), has not allowed conversion of paddy fields to SEZs, in Odisha (Government of Odisha, 2015), acquiring least productive agricultural land is allowed. Karnataka asked for acquiring/purchasing land for SEZs preferably of waste, dry and single crop type (Government of Karnataka, 2009).

To the question of how the specified land in SEZs is to be used, there is a stipulation that at least 50 per cent of the area under SEZ should be earmarked for processing purpose. As per SEZ Act, (GOI, 2005), processing area is the area where manufacturing of goods or rendering of services takes place. The area exclusively for trading and warehousing is also part of the processing area. Non-processing area is used for developing residential, recreational, social, and commercial infrastructure. The SEZ rules further specify the minimum built-up area for certain sectors. Built-up area is a constructed space which includes both horizontal and vertical spread. There is no information on how the size and built-up area were specified.

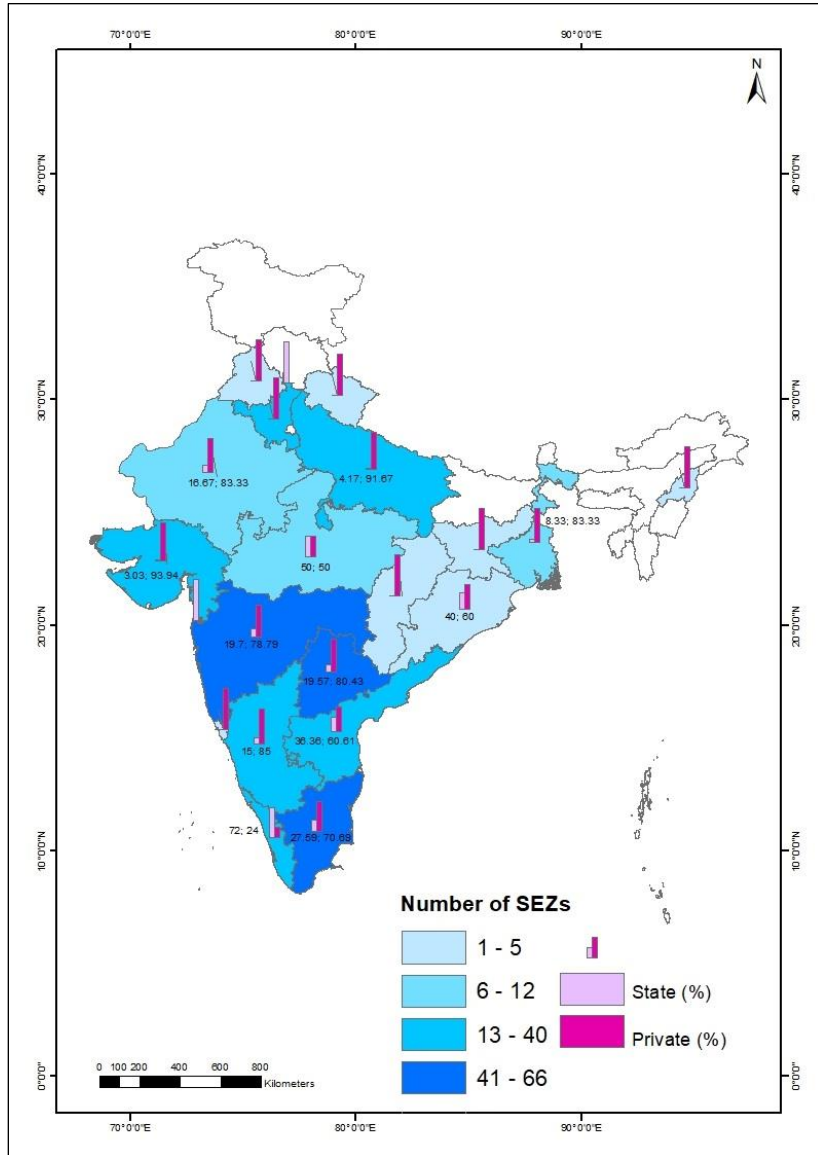
4. Land Distribution and Its Utilisation

Figure 1 records the distribution of SEZs by state across 21 states/UTs of India. Following features stand out from the Figure: 1) Majority of SEZs are located in Maharashtra, Telangana and Tamil Nadu. (2) The SEZs are mainly promoted by the private sector. In many of the states, the share of private sector is high, reaching up to 100 per cent as in Punjab, Haryana, Uttarakhand, Chhattisgarh, Jharkhand, Nagaland, and Goa. However, except Haryana (having 29 SEZs), the number of SEZs is low in all these states. (3) In three states - Kerala, Madhya Pradesh, and Odisha - the state government share is comparable with that of private SEZs. In Kerala, most of the SEZs (72 per cent) have been developed by the state government. This may be due to the fact that the state has categorically specified that it is not going to make land available to private enterprises or undertake acquisition on behalf of the private entity. The state also demands the processing area to be 70 per cent (remaining 30 percent as non-processing) of the notified land, plus it permits implementation of all prevailing labour related Acts in the SEZs.

¹⁰ The Acts mentioned are those of Gujarat, Haryana, Madhya Pradesh, West Bengal, Tamil Nadu and Punjab.

¹¹ Odisha SEZ Policy is not mentioned on SEZ Website, GOI. The policies mentioned are of following states: Jharkhand, Uttar Pradesh, Karnataka, Punjab, Chandigarh, Kerala, West Bengal, Maharashtra, Madhya Pradesh.

Figure 1: Distribution of SEZs by Developers (as on January 23, 2014)

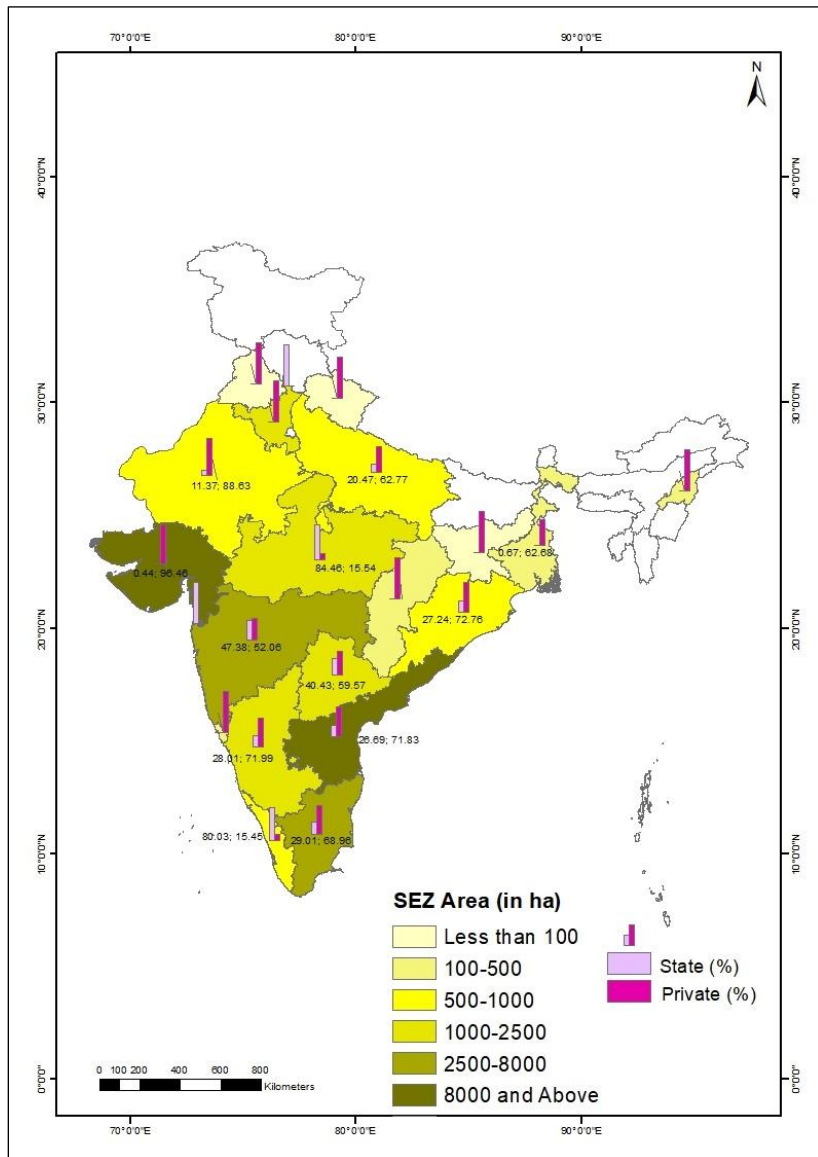


Source: Constructed using data extracted from zone wise notified land area details as on January 23, 2014 (GOI, 2014b). Accessed on April 26, 2018.

A study of Figure 2 brings out *firstly*, that the physical aggregate size of SEZs across states vary significantly - smallest being less than 100 ha to the biggest size of about 13,000 ha. The area in the biggest size bracket is in Gujarat and Andhra Pradesh. Both the states have the highest number of multiproduct SEZs in the country. *Secondly*, northern states have smaller SEZs in comparison to the southern states. *Thirdly*, in the southern states of Kerala, Karnataka, and Telangana, the size of the SEZ is comparatively small due to the fact that

these are mainly in the IT/ITES sector (see Appendix Table A1). The minimum area requirement for this sector was 10 ha, a condition that was dispensed with subsequently. And, *fourthly*, since the share of private SEZs is generally more in each state, the area under private SEZs is also more. Privately developed SEZs account for about 76 per cent in terms of numbers and about 73 per cent in terms of area.

**Figure 2: Distribution of Notified Area in SEZs by the Type of Developer
(as on January 23, 2014)**



Source: Constructed using data extracted from zone wise notified land area details as on January 23, 2014 (GOI, 2014b). Accessed on April 26, 2018.

However, when it comes to utilisation of land (including utilization in processing and amenities),¹² utilisation by privately developed SEZs is similar to state government SEZs (Table 2). Both have been able to utilise a little over 1/3 of the respective notified land.

Table 2: Percent Utilised Land to Notified Area (as on January 23, 2014)

<i>State/UT</i>	<i>Total</i>	<i>State Government</i>	<i>Private Sector</i>
	<i>% Land Utilised from SEZ Area in the state/UT</i>	<i>% Land Utilised from SEZ Area under State Government</i>	<i>% Land Utilised from SEZ Area Under Private Sector</i>
West Bengal	57.90	73.76	37.23
Gujarat	53.38	100	51.70
Odisha	49.45	48.09	49.96
Kerala	46.74	47.84	25.89
Tamil Nadu	40.94	58.57	31.78
Chandigarh	40.40	40.4	
Karnataka	39.27	33.18	41.65
Andhra Pradesh	37.6	41.61	34.96
Uttar Pradesh	30.25	7.11	19.18
Maharashtra	23.74	28.67	18.43
Chhattisgarh	21.76		21.76
Telangana	19.93	23.86	17.27
Punjab	18.19		18.19
Rajasthan	16.77	37.55	14.11
Madhya Pradesh	13.27	15.71	0
Haryana	3.34		3.34
Dadra and Nagar Haveli	0	0	
Jharkhand	0		0
Uttarakhand	0		0
Nagaland	0		0
Goa	0		0
Total	36.96	35.40	35.79

Note: In Karnataka, in two SEZs, same area equivalent to total notified area was mentioned in the categories of utilised and vacant which is not possible. Since IT/ITES are quick to start we have considered the area as utilised and make vacant area as zero. The blanks denote non-existence of SEZ under that entity.

Source: Computed from zone wise notified land area details as on January 23, 2014 (GOI, 2014b). Accessed on April 26, 2018.

¹² The official data provides figures on total utilisation of land in SEZs. Utilisation has not been defined anywhere in the Act or Policy. From the Secretary, NOIDA SEZ, it was known that the total utilised area includes area utilised under processing; under amenities like roads, parks, substations, and common facility; and under green belt. The area utilised under processing is also known as plot area.

However, comparison at intra-state level reveal differences with better utilisation in state government SEZs. The results of paired t test on 12 states (having both state and privately developed SEZs) show that the difference is significant at 5 per cent confidence level ($t=2.7889$; $p=0.018$). The results further show that the standard error of private SEZs is half of that recorded by SEZs developed by state governments. There is better utilisation of land in state government promoted SEZs *vis-à-vis* privately promoted SEZs (Appendix Table A2).

Land utilisation is slightly above 50 per cent only in the state of West Bengal and Gujarat. At the promoter level in the privately developed SEZ, Gujarat tops in land utilisation at 51.7 per cent. Interestingly, in Madhya Pradesh, Jharkhand, Uttarakhand, Nagaland, and Goa, no land has been utilised in the privately developed SEZs. Since the per cent land utilised also covers the area under amenities, no utilisation means that the private sector in these states has not yet started work to develop the SEZs. In case of state government developed SEZs such situation exists in the UT of Dadar and Nagar Haveli. In state promoted SEZs, utilisation of land is over 65 per cent in case of Gujarat (100 per cent) and West Bengal (73.76 per cent).

4.1 Extent of Vacant Land in Processing Area

Low utilisation of land in SEZs is also brought out by the extent of vacant land in the processing area (Table 3).

From Table 3 one can notice that vacant land in processing is almost half the area (45 per cent of the total notified area) under SEZs in the country. Moreover, in Dadra and Nagar Haveli, Goa, Jharkhand, and Nagaland, the entire notified area meant for processing is vacant. Among other states the share of vacant land is notable in Telangana, Maharashtra, and Tamil Nadu. These are states with large areas and the higher number of SEZs in the country.

In privately developed SEZs, vacant land is the largest in Telangana (75.25 per cent). Vacant land amounts to over 50 per cent of the notified land in the states of Kerala (69.34 per cent), Punjab (67.04 per cent), Tamil Nadu (57.59 per cent), Maharashtra (56.41 per cent), and West Bengal (54.20 per cent). In state government promoted SEZs, vacant land in processing area varies from 50 per cent to 93 per cent, with highest in Uttar Pradesh, followed by Telangana, Maharashtra, Rajasthan, Karnataka, and Odisha.

There are, for example, sectors like IT/ITES, biotechnology, gems & jewellery and handicrafts, which are less land-intensive than say engineering, textiles, or chemicals. However, there is no difference in the extent of vacant lands.

Table 3: Percent Vacant Land in Processing Area to Notified Area (as on January 23, 2014)

<i>State/UT</i>	<i>Total</i>	<i>State Government</i>	<i>Private Sector</i>
Dadra and Nagar Haveli	100	100	
Goa	100		100
Jharkhand	100		100
Nagaland	100		100
Telangana	75.61	76.14	75.25
Punjab	67.04		67.04
Maharashtra	64.15	73.42	56.41
Chandigarh	59.60	59.60	
Tamil Nadu	50.90	38.56	57.59
Odisha	50.55	51.92	50.04
Kerala	48.20	46.75	69.34
Rajasthan	47.52	58.29	46.14
Karnataka	45.76	52.86	43
Gujarat	40.13	0	41.57
Chhattisgarh	38.18		38.18
West Bengal	36.73	26.24	54.2
Madhya Pradesh	31.09	30	37.07
Uttar Pradesh	28.39	92.89	14.93
Andhra Pradesh	27.63	32.04	26.43
Haryana	4.08		4.08
Uttarakhand	0		0
Total	44.6	52.08	43.17

Note: The percentage of area vacant under each category (total, state, and private) is calculated from the total area under that category in the state/UT. The blanks denote non-existence of SEZ with the state/private sector in that state or UT.

Source: Computed from zone wise notified land area details as on January 23, 2014 (GOI, 2014b). Accessed on April 26, 2018.

5. Additions and De-notification of SEZs

By analysing the SEZ data of 2014 and 2017, we found additions of 49 SEZs and probable denotification of 78 SEZs in the country between 2014 and 2017 (those SEZs of 2014 which do not appear in the list of 2017 can be seen in Table 4).

Table 4: Change in the Number of SEZs between January 2014 and December 2017

<i>State/UT</i>	<i>Notified SEZs (2014)</i>	<i>Removed SEZs</i>	<i>New Notified SEZs</i>	<i>Total Notified SEZs (2017)</i>
Andhra Pradesh	33	7	2	27*
Chandigarh	2			2
Chhattisgarh	1			1
Dadra & Nagar Haveli	1	1		
Goa	3			3
Gujarat	33	5		27*
Haryana	29	9		20
Jharkhand	1			1
Karnataka	40	3	14	51
Kerala	25		1	26
Madhya Pradesh	10	4		6
Maharashtra	66	22	7	51
Manipur			1	1
Nagaland	2			2
Odisha	5	1	1	5
Punjab	2		1	3
Rajasthan	12	3		9
Tamil Nadu	58	8	2	52
Telangana	46	5	16	57
Uttar Pradesh	24	5	4	23
Uttarakhand	1	1		
West Bengal	12	4		8
Total	406	78	49	375

Note: The total number of SEZs is 408 in January 2014. But in that list, two SEZs—Luxor Cyber City and Uppal Developers Private Limited in Gurgaon, Haryana—are marked crossed through horizontal line running in the middle, thereby bringing the number down to 406. In Andhra Pradesh, Kakinada SEZ 1 and 2 were merged in 2016, which brought the number to 27 rather than 28. Similarly, in Gujarat, Adani, and Mundra Ports were merged in 2016, thus bringing the number down to 27 rather than 28.

Source: Extracted from zone wise notified land area details as on January 23, 2014 (GOI, 2014b), and list of SEZs as on December 01, 2017 (GOI, 2017a). Accessed on April 26, 2018.

Out of the 49 SEZs added, 37 have been added in just three states - Telangana (16) Karnataka (14), and Maharashtra (7). Moreover, are essentially in the IT/ITES sector (Table 5).

Highest number of SEZs were denotified in Maharashtra (Table 4). Some 22 SEZs have probably been denotified in the state. Haryana has also probably denotified nine SEZs. Clearly, these are cases of total denotification, partial denotification may also have taken

place after the revision of the area in August 2013. The denotification is basically of private SEZs and mainly of the one in IT/ITES sector (Table 6).

Table 5: New Notified SEZs between January 2014 and December 2017

<i>State</i>	<i>IT/ITES</i>	<i>Electronic Hardware & Software Inc ITES</i>	<i>Multi Product</i>	<i>Textile</i>	<i>Footwear</i>	<i>Agro Based</i>	<i>Biotechnology</i>	<i>Total</i>
Telangana	15						1	16
Karnataka	13	1						14
Maharashtra	5	1	1					7
Uttar Pradesh	2	1		1				4
Tamil Nadu	1				1			2
Andhra Pradesh	1					1		2
Kerala	1							1
Odisha			1					1
Punjab	1							1
Manipur	1							1
Total	40	3	1	1	1	1	1	49

Source: Extracted from zone wise notified land area details as on January 23, 2014 (GOI, 2014b), and list of SEZs as on December 01, 2017(GOI, 2017a). Accessed on April 26, 2018.

Table 6: SEZs Removed from the List between January 2014 and December 2017

<i>Sector</i>	<i>Private</i>	<i>State</i>
IT/ITES	29	5
Electronic Hardware & Software Inc ITES	9	1
Biotechnology	4	
Energy	3	
Textile	3	3
Service	2	
Engineering	2	
Agro & Food Processing	2	2
Mineral	2	1
Gems & Jewellery	2	1
Pharmaceutical	2	1
Chemical	1	
Handicraft	1	1
Multiproduct		1
Total	62	16

Source: Extracted from zone wise notified land area details as on January 23, 2014 (GOI, 2014b), and list of SEZs as on December 01, 2017(GOI, 2017a). Accessed from the website on April 26, 2018.

6. Locational Aspects of SEZs

Figure 3 displays the location of SEZs in the country in terms of districts. From the figure, one can see that the SEZs spread is more in the peninsular part of the country, with concentration in coastal districts. High external connectivity, ample availability of water resources, and dense population could be the reasons for such location of SEZs. In the northern part of the country, majority of the development has basically happened in districts neighbouring Delhi. In terms of number (based on Figure 3), SEZs are spread across 94 districts in the country.

Considering the attributes of districts in terms of accessibility and land quality (see section 2 for criteria), the districts with SEZs are divided into two groups: preferred and unsuitable. A district with SEZs is said to be preferred if it is accessible (on the criteria of accessibility), and if accessible in land characterised by unproductive and scrub land (on the criteria of accessibility and land quality). A district is unsuitable for locating SEZ if it is inaccessible or having agriculturally productive land.

From Figure 4 it can be seen that most of the districts with SEZs are the ones with accessibility advantage. Based on this criterion, the SEZs are spread across 58 preferred districts (Figure 4).

In terms of location in districts characterized by accessible unproductive and scrub land, the SEZs are located only in 26 preferred districts (Figure 5). Remaining 68 districts of locations of SEZs are unsuitable districts. It means 68 districts of location of SEZs are characterised by agriculturally productive land.

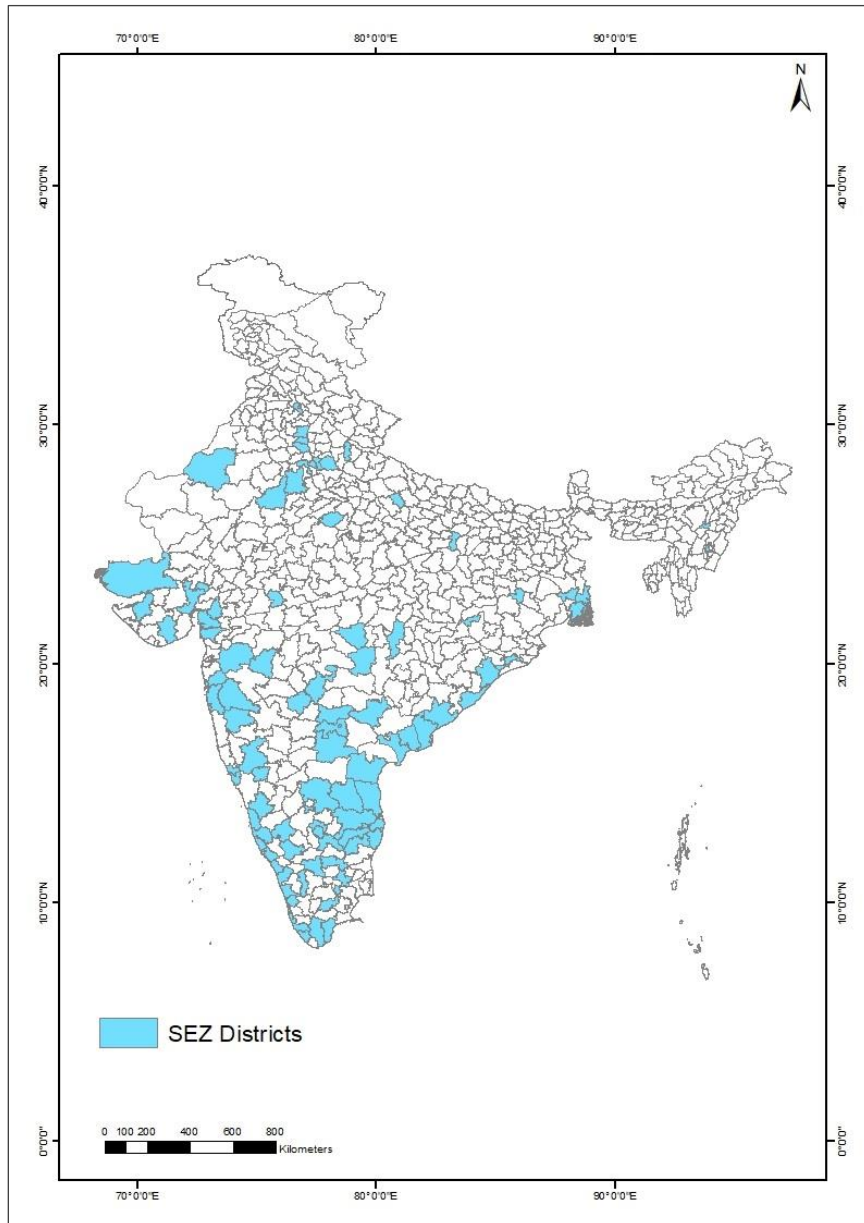
In terms of number of SEZs, accessibly preferred districts account for 268 SEZ (Table 7). With accessibility and unproductive and scrub land together, number of SEZs in preferred districts reduced to 120. The remaining 255 SEZs are located in districts with agriculturally productive land.

In terms of accessibility factor, across states SEZs are mostly located in preferred districts. In Tamil Nadu, all SEZs are located in accessible districts. But when it comes to accessible districts with unproductive and scrub land, the SEZs are mostly located in unsuitable districts – a feature found in all states with the exception of Telangana, Maharashtra and Rajasthan. In case of Telangana out of 51 SEZs located in accessible districts, 50 are located in districts characterized by unproductive and scrub land. In Maharashtra, out of 48 SEZs, 33 are accessible in unproductive land type district. The SEZs located in productive land in Maharashtra are 18. Rajasthan has 9 SEZs out of which 8 are preferably located with respect to accessibility. These 8 are also preferable with respect to land quality needed in terms of unproductive and scrub land type.

We may say thus conclude that SEZs not only enjoy accessible locations but they are also located in productive lands. The developer does not appear to be suffering from any

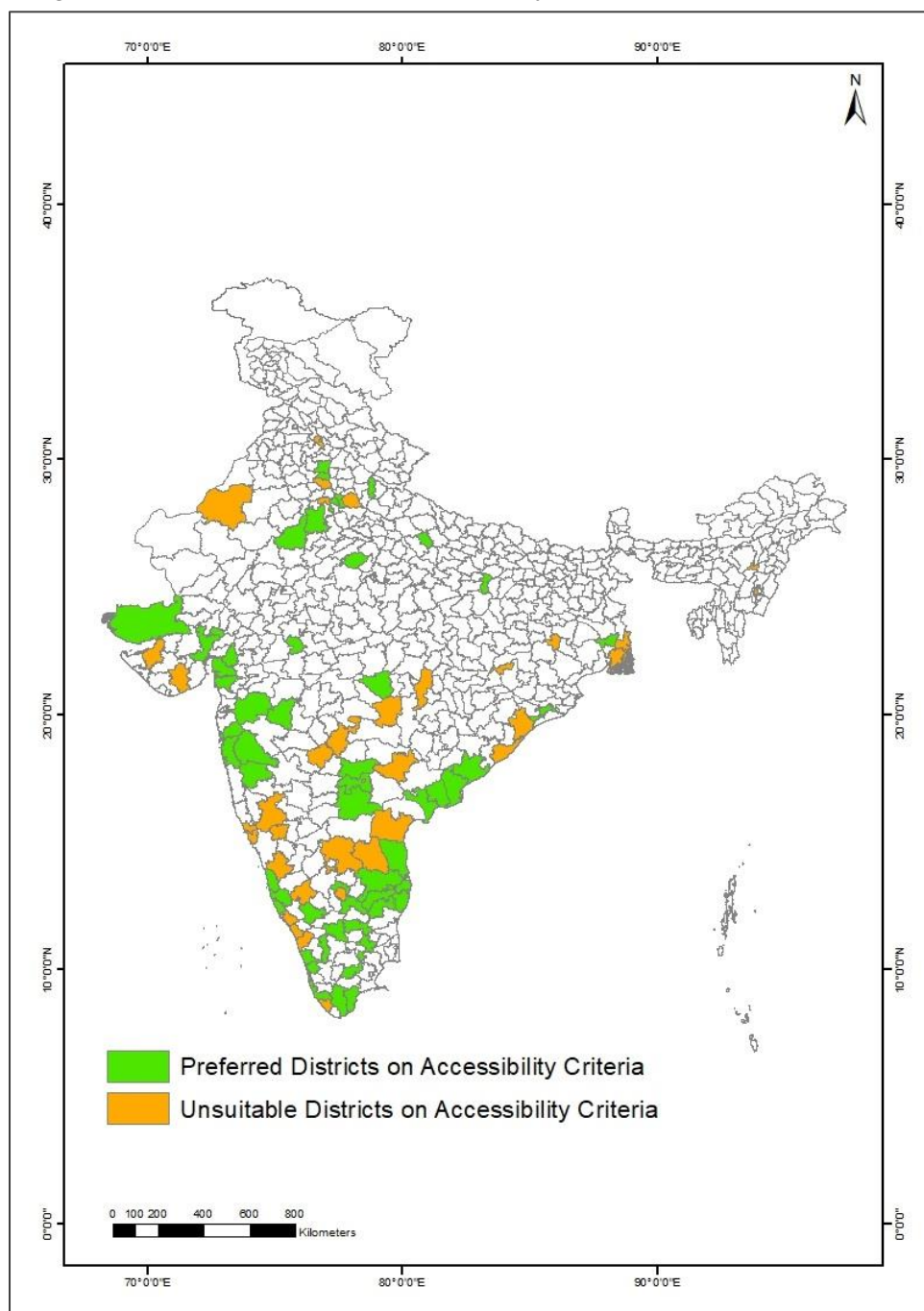
constraint as far as location is concerned. Table 8 records the number of such SEZs that are proximate to million-plus cities.

Figure 3: Districts with SEZs (as on December 01, 2017)



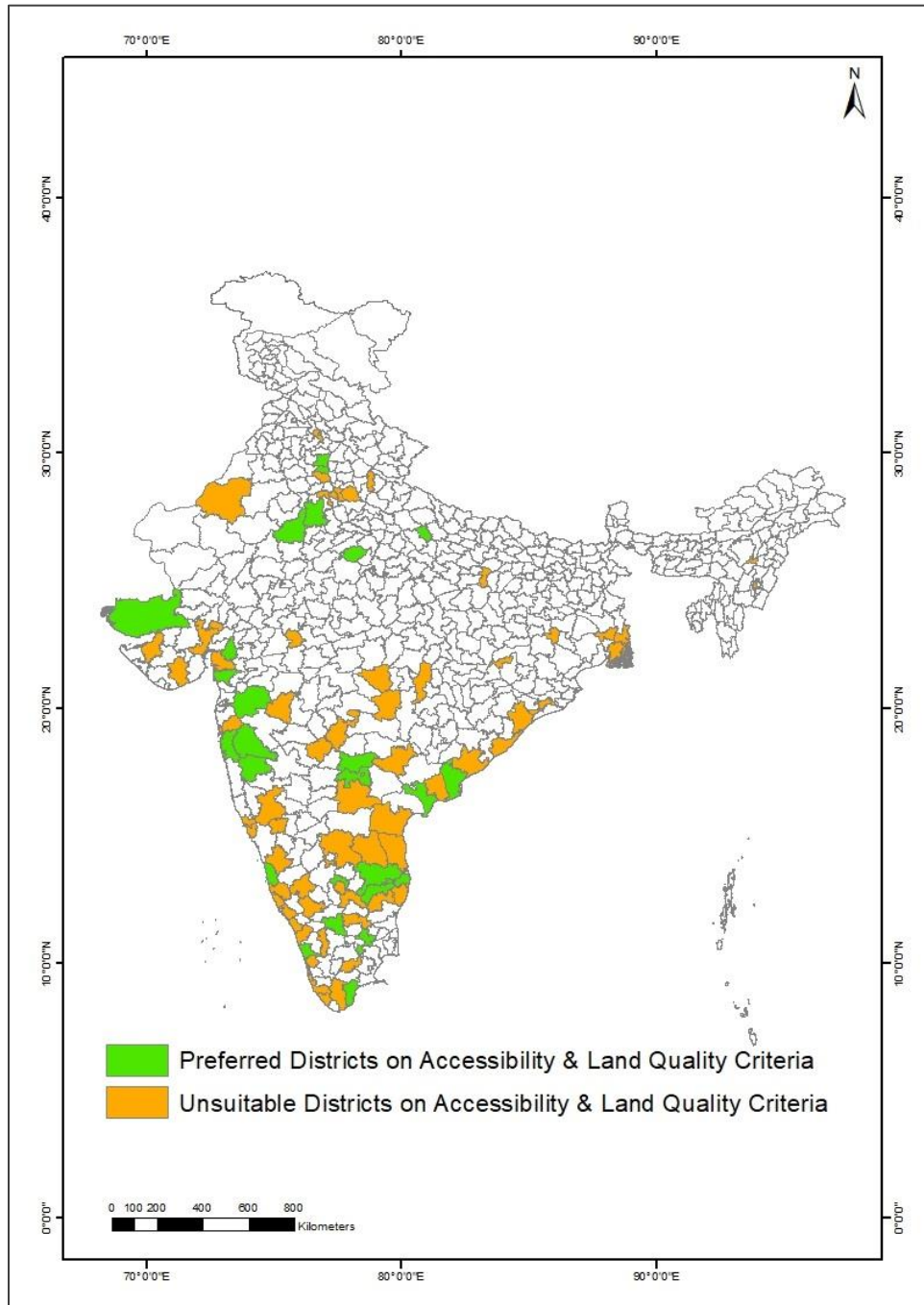
Source: Constructed by the author from the list of SEZs as on December 01, 2017(GOI, 2017a).

Figure 4: Location of SEZs based on Accessibility Criteria (as on December 01, 2017)



Source: Constructed by the author using accessibility map from the paper by Ramachandran and Biswas (2007), and the list of SEZs as on December 01, 2017(GOI, 2017a).

**Figure 5: Location of SEZs based on Accessibility and Land Quality Criteria
(as on December 01, 2017)**



Source: Constructed by the author using accessibility and land quality map from the paper by Ramachandran and Biswas (2007), and the list of SEZs as on December 01, 2017(GOI, 2017a).

**Table 7: State-wise Number of SEZs in Preferred and Unsuitable Districts
(as on December 01, 2017)**

<i>State</i>	<i>Based on Accessibility Criteria of Districts</i>		<i>Based on Accessibility & Land Quality Criteria of Districts</i>	
	<i>Preferred</i>	<i>Unsuitable</i>	<i>Preferred</i>	<i>Unsuitable</i>
Tamil Nadu	52		8	44
Telangana	51	6	50	7
Maharashtra	48	3	33	18
Gujarat	25	2	8	19
Andhra Pradesh	22	5	6	21
Uttar Pradesh	22	1	1	22
Kerala	16	10	1	25
Karnataka	11	40	2	49
Rajasthan	8	1	8	1
Madhya Pradesh	6		1	5
Haryana	4	16	2	18
Odisha	2	3		5
West Bengal	1	7		8
Goa		3		3
Punjab		3		3
Chhattisgarh		1		1
Nagaland		2		2
Manipur		1		1
Jharkhand		1		1
Chandigarh		2		2
Total	268	107	120	255

Source: List of SEZs as on December 01, 2017(GOI, 2017a), and Figures 4 and 5.

From Table 8, one can notice that the majority of the SEZs are in proximity to million-plus cities. From a total of 375 SEZs in the country, 283 are located in districts containing million-plus cities. In West Bengal and Madhya Pradesh, not a single SEZ is outside the district of location of million-plus cities. In Haryana and Uttar Pradesh, the SEZs are not located in proximity of respective million-plus cities of these states, but if one includes the districts of both contiguous to Delhi then these states would also have SEZs in proximity to million+ cities. Rajasthan also has the advantage of proximity to Delhi.

Table 8: SEZs Located in Proximity of Million-plus Cities/UA's (as on December 01, 2017)

<i>State/UT</i>	<i>No. of SEZs Proximatively Located</i>	<i>Others</i>	<i>Total</i>
States/UTs with Million+ Cities			
West Bengal	8		8
Madhya Pradesh	6		6
Chandigarh	2		2
Telangana	54	3	57
Maharashtra	46	5	51
Geographical Delhi-Haryana	18	2	20
Kerala	23	3	26
Geographical Delhi-Uttar Pradesh	18	5	23
Rajasthan	7	2	9
Tamil Nadu	38	14	52
Gujarat	18	9	27
Karnataka	34	17	51
Andhra Pradesh	11	16	27
Chhattisgarh		1	1
Jharkhand		1	1
Manipur		1	1
Punjab		3	3
States without Million+ Cities			
Odisha		5	5
Goa		3	3
Nagaland		2	2
Total	283	92	375

Source: SEZ data from list of SEZs as on December 01, 2017 (GOI, 2017a). Million Cities Data is from Census 2011 available from website. Districts of location of million cities are identified from Table A4, Census 2011 from website.

Note: The SEZs in Maharashtra in proximity to million+ cities also include SEZs in Navi Mumbai of Raigarh district (Tahsil Panvel). From the Administrative Atlas of Maharashtra (2011), Navi Mumbai in Raigarh district is found contiguous with Navi Mumbai in Thane district (Tahsil Thane). Navi Mumbai (Thane) is part of Greater Mumbai million city/UA.

Geographical Delhi-Haryana includes SEZs in Gurgaon, Faridabad and Sonipat districts as all three districts are contiguous with NCT Delhi.

Geographical Delhi-Uttar Pradesh includes Noida and Greater Noida (Gautam Budh Nagar District) contiguous with NCT Delhi.

7. Summing Up

The analysis of the all India SEZ level data reveals the following:

1. Special economic zones are mainly developed by the private sector- in some of the states, the SEZs have been entirely promoted by the private sector.
2. However, when it comes to utilisation of land, SEZs are able to utilize only 37 per cent of notified lands.
3. It is only in state government promoted SEZs in Gujarat and West Bengal that the utilisation is 100 per cent and 74 per cent respectively; in all others it is below 50 per cent. Half of the notified land is utilised only in case of ports (58 per cent) and mineral based SEZs (56 per cent).
4. No difference in proportion of land used is observed in the SEZs dominated by sectors requiring large quantum of land and whose land requirement is not so large.
5. Between the year 2014 and 2017, 49 new SEZs have been notified while 78 SEZs have probably been de-notified largely in Maharashtra and Haryana. The denotifications are mainly of private SEZs and that, too, of those in IT/ITES sector.
6. Most of the SEZs have locational advantage. From 94 districts with SEZs, 58 meet the accessibility criteria in terms of broad-gauge railways, highways, and level of urbanisation.
7. Furthermore, the SEZs are in close proximity to large cities. Out of 375 SEZs (as on December 01, 2017), 283 are located in the districts of location of million+ cities. In north India, the concentration of SEZs is basically near Delhi.

Concluding Observations

From the preceding analysis there is a clear case of substantial unutilised land with SEZs. Sizes of SEZ appear to have been arbitrarily defined. Had the size been scientifically determined, the reduction in specification of area would not have taken place. From 2006 to 2013, there was a 50 per cent reduction in area requirement of many of the sectors. The recent dispensation of area requirement with respect to biotechnology and health sector (excluding hospitals) further exacerbates lack of any principle in deciding the sizes. Unutilised land with SEZs is a result of the transfer of large areas of land from the government (in all those cases where government transfer or acquire land on the behalf of the private promoters).

Though no speculative use is expected in case of government SEZ, the large extent of vacant land can be taken as an indicator of inefficiency. In private SEZs, other than the indication of inefficiency, the vacant land also exhibits future use and land hoarding. Since the majority of the SEZs are located in proximity to million cities, the speculation cannot be missed. The proximity to urban areas and speculative use are well documented in the literature (Fisher, 1933; Madhab, 1969; Archer, 1973; Wadhwa, 1983; Ramachandran, 1989;

and, Goldman, 2011). The urban areas have tendencies to sprawl which make their fringes the preferred site for investment to gain from speculation

The Way Forward

There could be many alternative ways of dealing with unutilised land in approved SEZ. First, option may be setting up of more government promoted units in SEZs in the future as intra-state analysis of land utilisation shows significant difference in land utilisation between state SEZ and privately developed SEZ.

Second, option could be to de-notify the SEZs altogether where necessary and to use them for industrial purpose outside SEZ. But the question is: Would there be any kind of industrial development in the absence of incentives? Haryana has given one-time relief of developing industrial colonies to the denotified SEZs (*The Tribune*, April 24, 2016). Similarly, Maharashtra government approved of converting Navi Mumbai SEZ into an Integrated Industrial Area (*The Hindu*, 2018b). However, whether the use will be for industrial development or other commercial purpose would only be reflected in the times to come. The kind of possession (ownership or leasehold), government regulation with respect to land use in master plan, incentives/benefits outside SEZ would be worthwhile to be seen in all such cases. In such an environment of uncertainty what is required is critical review of incentives to SEZ.

The third alternative could be to return the unutilised and denotified land to the farmers. In fact, farmers have also raised this demand. Returning unutilised land is difficult, one of the questions is: How can compensation be recovered, and would it be possible to put the land to agricultural use if that was the case before acquisition/purchase? If changes have been made to the original structure of the land through construction, etc., then it would be difficult to restore the land to its original level. In case of Singur (Indian Kanoon, 2016), for example, the Supreme Court while deciding on the validity of acquisition and compensation quashed the entire proceedings of land acquisition and ordered for return of land to owners without recovering the compensation in lieu of damages caused to them during the prior 10 years. Such an order makes it clear that compensation paid may have to be relinquished by the government. Since the state government was on the same page with farmers, it made it a clear-cut policy to return the land to unwilling owners who do not accepted the compensation (Government of West Bengal, 2011). But whether land has been reverted to original use or not would be known only when it is returned. From the ground it is known that the return process has been completed except to those landholders whose names were there but could not be traced (benami landholders). Farmers are holding the land for future sale as cultivation is next to impossible on the plant site. The soil was dug so deep now it is impossible to excavate any further. The profile of the soil has changed completely. In fact, the areas surrounding the plant which were purchased by private entities in anticipation of development of area are also kept idle.

Fourth alternative could be to develop new units in existing SEZs rather than developing new SEZs. Focus may also be laid on first time entrepreneurs or first-time exporters. However, this would require a lot more effort in terms of finding markets for them, establishing linkages with clients, helping them to innovate, and so on.

Fifth option could be to throw open the SEZs to meet domestic demands as well. In fact, the expert group appointed by the government also recommended the same. In 2018, the Government of India set up an expert group of industrialists to review the SEZ policy (PIB, 2018). The group in its recommendations recommended allowing the SEZ units to produce for domestic markets as well. This will not only stimulate economic growth and employment, but also leverage investments (GOI, 2018b). This may give life to all those units that are unable to function due to market slowdown or loss of clients, etc. As of now, units outside SEZs i.e., Domestic Tariff Area units/Export Oriented units/Electronic Hardware Technology Park unit/Software Technology Park unit/Biotechnology Park unit can subcontract work to SEZ units but only when it is meant for export. The SEZ units can also subcontract work of specific quantity to units within or outside the SEZ. But there is no allowance for getting job work/subcontracting from outside to meet the domestic demand so as to utilize the capacity of the units. Sale is however allowed on payment of custom duties. Unless one has a niche market for the product such a sale become unprofitable. In order to overcome this issue, expert group recommended reversal of duties on inputs when sold in the domestic market. To accommodate this change, the committee recommended renaming SEZs as Employment and Economic Enclaves (3Es), giving option to units to migrate to 3Es framework. However, instead of changing the character of SEZs as 3Es what is needed is linking incentives and conditions to quantum of exports, location of SEZs, etc. This would remove unnecessary duplication with other zonal schemes like Industrial Clusters, Investment and Manufacturing Zones.

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Appendix

Table A1: State-wise SEZs by Sectors (as on January 23, 2014)

<i>State/UT</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>I</i>	<i>J</i>	<i>K</i>	<i>L</i>	<i>M</i>	<i>N</i>	<i>O</i>	<i>P</i>	<i>Total</i>
Andhra Pradesh	10		7		2	4	1	3	2	1				1	2		33
Chandigarh	1	1															2
Chhattisgarh											1						1
DNH												1					1
Goa	1				1	1											3
Gujarat	9		6	3	1	4	2	3		1	1	1		2			33
Haryana	22	2			1		1	1		1			1				29
Jharkhand				1													1
Karnataka	28	4	1	3	1	1		1		1							40
Kerala	19		1	1						1	1					2	25
Madhya Pradesh	6		1						2	1							10
Maharashtra	27	3	5	4	8	4	6	3	1	2	1	2					66
Nagaland			1							1							2
Odisha	2								3								5
Punjab	1					1											2
Rajasthan	4	1		1				1				2	3				12
Tamil Nadu	28	10	2	7	1		2	2	3	1					2		58
Telangana	32	4		2	5	2						1					46
UP	15	4	1				2				1		1				24
Uttarakhand	1																1
West Bengal	7		1								3	1					12
Total	213	29	26	22	20	17	14	14	11	10	8	8	5	3	4	2	406

Note: A – IT/ITES; B – Electronic Hardware & Software Including ITES; C – Multiproduct; D – Engineering; E – Biotechnology; F – Pharmaceuticals; G –Service; H – Textile; I – Mineral; J – Agro & Food; K – Energy; L – Gems & Jewellery; M – Handicrafts; N – Chemicals; O – Footwear; and, P – Ports. The classification is as per the sectors name provided in the list of SEZs

Table A2: Level of Land Utilisation in State Government and Privately Developed SEZs

Paired t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
state	12	42.99583	7.395498	25.61876	26.71845	59.27322
private	12	28.51333	4.472906	15.4946	18.66853	38.35813
diff	12	14.4825	5.192938	17.98887	3.05292	25.91208

```

mean(diff) = mean(state - private)                                t = 2.7889
Ho: mean(diff) = 0                                                degrees of freedom = 11

Ha: mean(diff) < 0          Ha: mean(diff) != 0          Ha: mean(diff) > 0
Pr(T < t) = 0.9912          Pr(|T| > |t|) = 0.0176          Pr(T > t) = 0.0088

```

(All India average of State SEZs is 35.4 per cent and that of Private SEZs is 35.79 per cent)

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