

Special Economic Zones in China
Initiative for Inclusive Growth and Economic Development

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JEL codes of Economic fields of Interest: F13,F14, F15, F23, O1

JEL codes of Paper: F14, O1, O4, O53

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Abstract

Establishment of Special Economic Zones (SEZs) in China has been a focus of study for many developing countries. It was initiated with a notion of experiment that foreign capital is an important instrument to put the country on a growth path of economic development and modernization while simultaneously integrating the inner regions with the main economic activity and development of the country. The Chinese experience of SEZs turned out to be a success in some sense as it could fulfill the desired goal of the people and the Government. It is sometimes argued that SEZs have become a multiplier of economic activity which has supported the economy. It has become an instrument in empowering human resources and promoting inclusive growth.

The paper makes an attempt to understand the concept behind this initiative; what political reforms were taken to set up SEZ; how it contributed to the growth of the Chinese economy; how FDI attracted by SEZ played a critical role in promoting exports, providing employment and overall creating an inclusive growth. The paper further tries to analyze if the SEZ model can be a vehicle for inclusive growth and what are the key challenges remaining for the firms and the government to address in making it sustainable model of growth. How key environmental and natural resources such as water, oil, electricity, land etc. are important for SEZs survival and long term growth. The paper provides policy recommendations for future establishment of SEZs in China and the lessons that other developing economies can learn from this Chinese venture.

Key words: SEZ, FDI, Inclusive Growth, Economic Development

JEL: F14, O1, O4, O53

Introduction

The importance of foreign capital was gradually recognized by many developing countries when they were exposed to the competition thrown open by globalization. Many of them in eighties and nineties visualized foreign capital as an effective instrument to secure their faster economic growth and successful transformation. They felt that the foreign capital has the necessary wherewithal in terms of providing monetary value, the required technology, the management practices and techniques and a sense of heightened competition essential for achieving higher economic growth. It is this essentiality which prompted many developing and transitional economies to consider that much needed foreign capital is important for speedy modernization as well as their access to industrialized markets.

Number of countries in Asia thus in the eighties were opened to the outside world fully realizing the fact that their initial adoption of import substitution strategy for industrialization proved inadequate in the wake of fierce market competition propelled by globalization and technological advancement. This opening up had largely resulted in the rise of acquiring foreign capital by these countries. Various studies observed that foreign capital inflows to Asiatic region witnessed a continuous rise. The Foreign Direct Investment (FDI) inflows to Asia rose from a meager US\$ 5280mn in 1983-85 to 15588mn in 1990 and finally reached 80299mn by 1998 (UNCTAD, 2000). Rapid growth of Asian tigers or Newly Industrialized Economies (NIEs) such as South Korea, Singapore, Taiwan and Hong Kong was made feasible because of their quick adoption of attracting this foreign capital and adopting in totality the policies that helped them to put this capital into the most effective use of their economic growth. Example of successful NIEs indicated that there is a positive correlation between openness and economic growth of a country. During this period, NIEs registered 2304mn in mid 1980s to reach 16667mn by 1998.

China's story wasn't very different. Embarking on an open door policy in 1978, it followed a cautious and gradualist approach to recover from the economic setback it had during the Cultural Revolution in 1960s, which continued till 1976. It had soon become aware of the significance of the foreign capital. Its initial modernization drive was accomplished due to the significant contribution of FDI. In a span of 15 odd years, China had become the second

largest host country for FDI in the 1990s, second only to the USA and by far the largest receiving country among developing countries.

However, developing countries including NIEs didn't garner huge amount of inflows of foreign capital in a vacuum. All countries used different methods or instruments to attract foreign investors. One such important instrument was setting up of special geographical regions, popularly known as Export Processing Zones (EPZs) in the world. EPZs were practiced by many countries in the world to register high growth, promote exports and to create employment. Statistics from International Labour Organization (ILO) suggest that in the eighties and nineties the experiment with EPZs experienced an upward trend, totaling them to more than 850 around the world in 1998. In 2003, about 116 countries across the world had established EPZs and the number further went up to reach 3000 mark (World Economic Processing Zones Association). In China, they were better known as Special Economic Zones (SEZs).

SEZ is a generic term that covers recent variants of the traditional commercial zones. The basic concept of a special economic zone includes several specific characteristics: (a) it is a geographically delimited area, usually physically secured; (b) it has a single management or administration; (c) it offers benefits based on physical location within the zone; and (d) it has a separate customs area (duty free benefits) and streamlined procedures (World Bank 2009). In addition, an SEZ normally operates under more liberal economic laws than those typically prevailing in the country. SEZ serves the economy in two major ways such as in 'direct' and 'indirect' ways. 'Direct' ways involves providing employment and securing foreign exchange and indirect ways includes skill up gradation, technology transfer, export diversification, efficiency gains for domestic firms.

Potential Benefits derived from SEZs

	Direct benefits	Indirect Benefits
Foreign exchange earnings	yes	
FDI	yes	
Employment generation	yes	
Government revenue	yes	
Export growth	yes	
Skill upgrading	-	yes

Technology transfer	-	yes
Export diversification	-	yes
Efficiency in domestic firms	-	yes

Source: world bank 2009

The paper broadly looks at the period between 1978-1997. It takes into account the above mentioned period as a matter of convenience and readymade data available to the author. It makes an attempt to understand the concept of SEZs. What were the political processes or attitudinal changes required to initiate the process. What were the specific reforms needed to establish SEZs and how FDI has contributed to the entire process? It will analyze in detail one major SEZ, which has helped promote exports and imports of the country and whether it had increased the prospects of employment. Lastly, it concludes with some policy recommendations.

Section-I

Concept

The idea of special zone didn't originate with the Chinese. In fact creation of a special zone to promote economic development or trade gains is not even a new idea. In modern times, open areas were transformed into free trade zones in 18th century such as Gibraltar in 1704, Singapore in 1819 and Hong Kong in 1842.¹ But, Chinese initiative of developing the SEZs in 1979 is a conscious and carefully planned effort. Sources suggest that the Chinese Government studied a number of existing zones before they created their own.² Besides, Chinese had their own share of experience with such concepts not drawn from the treaty port system which came into being during Opium War in 1842, but more recently from their own domestic affairs by creating special export commodity production bases steered under the leadership of Zhou Enlai following the Cultural Revolution. This programme was established as a state policy in 1971 by the Ministry of Foreign Trade.³

¹ Economist Intelligence Unit (1979): Investment: The Growing Role of Export Processing Zones, Special Report No. 64.

² For example, the government officials were sent to Sri Lanka in 1979 and Bataan export processing zone in Philippines in 1981. James R. Stepanek, "China's SEZs," *The China Business Review* 9:2 (March-April 1982), p. 38.

³ Joseph E. Pattison, "Special Economic Zones in the People's Republic of China," *China Law Reporter* 1:3 (Spring 1981), p. 144.

During early seventies China was still following the principles of “self reliance.” This policy meant to make her stand on her own feet without any foreign loans or assistance. As the Cultural Revolution continued for a decade, its economy faced severe setback and China was plunged into a major economic crisis. The then leaders led by Deng Xiao Ping purged that the principle of self reliance was revised in its external economic policy. The then Chinese government put up a new slogan of “four modernizations” which was designed to help China to catch up with the western world in four different areas, namely agriculture, industry, science and technology and industry. The urge for modernization made her realize the vital necessity of attracting enormous amount of foreign capital and advanced technology. All this prompted her to seek and explore increased amount of economic and trade cooperation with capitalistic countries. It soon started with the processing of imported materials and established linkages in various pattern of foreign trade and went even further for applying foreign governmental and non governmental loans. This external reliance motivated China in a significant way to frame a joint venture law for the first time which the Chinese government realized would permit the overseas enterprise to undertake joint venture with Chinese domestic industries and Chinese individual. The law was finally adopted in the fifth National People’s Congress on July 1 1979 as an epoch making event.⁴

The establishment of this joint venture law complemented to already launching of economic reforms and open door policy began in 1978. The Chinese leaders understood that the readjustment of economy would be faster only with large number of inflows of foreign capital. As with the foreign capital came the advanced technology and management expertise, foreign investors were keen that a fundamental restructuring in the management practices of employment scenario in China should be done so that a sense of meritocracy is established. The economic policy of such special interest was formulated by the government to attract potential foreign investors. Secondly, to remove the irritation and delay at the bureaucratic level for speedy transfer of capital from the central Government to local authorities, the expansion of local autonomy was initiated. In this regard, the Central Government provided Guangdong and Fujian province with external economic

⁴ Sonoko Nishitatenno, “ China’s Special Economic Zones: Experimental Units for Economic Reform,” *The International and Comparative Law Quarterly*, Vol. 32 (1) (January, 1983), p.175.

autonomy including the competence to establish and regulate SEZs.⁵ Soon after the regulation on SEZs in Guangdong province was adopted in August 1980.⁶

SEZs were thus set up in China with the purpose that they would largely complement the modernization process which was conceived in the concept of four modernization. SEZs in a country are established when a country delimits certain areas where through exemption of custom duties it formulates and grants various preferential conditions and provides different public facilities so as to attract foreign investors to set up factories whose finished products are meant for exports.⁷ During these activities it creates a cadre of skilled labourers and generates employment opportunities for the local people.

The process of setting up SEZs in China had initially sparked off the debate such westernized concepts of building up specific enclaves would lead to further disparity existing in the social system. The Local Government along with the Central Government had to convince the millions of Chinese that the initiative is only to assist the country in the development of larger modernization programme that China had thought of working towards. Investments of foreign capital would not be administered on a system which would create inequality and hamper sovereignty of the state. SEZs would observe the Chinese Government's laws, rules and regulations, pay business and income taxes and abide by Chinese labour laws. Thus overall it was accepted that preferential treatment extended to the foreign business men in SEZs is in the general good of the economic situation prevailing at home and also in line with the interests of the China's socialist economy. Interestingly, unlike India and other developing countries the ownership of the land lies with the Chinese Government.

Within such theoretical framework, SEZs were established to have several specific functions. SEZs were to serve as the bridges for introducing foreign capital, advanced technology and equipment and to act as a training ground for personnel capable of using that advanced technology; to promote competition between regions, between trades and within a certain trade, all to the larger end of developing the national economy and expediting China's enterprise production and management; to absorb foreign exchange and

⁵ The decision was announced at the Second Session of the Fifth National People's Congress in June 1979.

⁶ The decision was taken at the 15th Session of the Standing Committee of the Fifth National People's Congress of 26 August 1980.

⁷ Xu Dixin, "China's Special Economic Zones", *Beijing Review*, 24:50, 14 December 1981, p-14.

allow part of technology, capital, equipments and management practices to other regions; to perform as an experimental unit in the economic structural reform and regulation of production in line with the market demands; to contribute directly to the export drive of the economy; and finally to give employment to many young people.

The implementation of China's SEZs began with the State Council's directive of July 1979 authorizing Guangdong and Fujian provinces to take extraordinary measures to develop manufacturing base, tourism, foreign trade and investment. Special status was thus granted to these two coastal provinces to experiment with an alternative form of economic development apart from the mainstream policies of socialism on the basis capitalist enterprise and foreign capital subject to the approval of municipal planning.

Four SEZs were thus created in Shenzhen, Zuhai, Shantou in the province of Guangdong and Xiamen in Fujian province.

Section II

Political process in China

Historically speaking whenever any country or economy has attempted to change from a planned economy to a market one, the country has undergone serious transformation. Transformation in the course of this change basically referred to fundamental and far-reaching restructuring of the system. The political reforms or the process which took place in China during this period were centred on the decision making powers for the Government and how the Government can facilitate the reform process to achieve its desired goal.

In China, the Government in the wake of establishing SEZs had faced its share of difficulties. New policies became the complicated result of the bargaining processes between the major players. These major players were the institutions of the Chinese Communist Party (CCP) which includes the Politburo, Central Committee and Central Commissions on the one hand and the governmental organization like National People's Congress, State council, Ministries, Local governments on the other.

The party institutions are main political agents, especially the Politburo having the General Secretary at the heart of political mobilization. It is always logically proved that in any socialist system there always existed a government, but fact is that it is always also controlled by the Party. In China the same thing persisted. All the major and specific

government policies and clarifications concerning the government's work must first be submitted to the central authorities for examination and approval given by the central authorities. Only after relevant discussions are taken place and relevant decisions are approved by the central authorities, major policies can be implemented.⁸

It is further observed that party leaders are also not independent in their decision making. Although the party leaders appoint the officials in party, government and military, these are again the members of the Central committee of the party which has the authority to choose the party leaders.

It is important to understand that decision making process in China does not follow a pure top-down approach. Instead it passes through a complicated process finally leading to an agreement between different institutions. During the establishment of SEZ in China similar situation was faced by the government under the leadership of Deng Xiaoping. Deng with his political astuteness and manoeuvring capacity could side the local officials to support the case for creation of SEZs in the southern part of China. Setting up SEZs in the coastal region has triggered off social discontentment among the locals and local officials in other parts of China as they felt their resources were utilized by the Government for export purposes and developing the coastal region without really improving the living standards of the entire Chinese society.

Deng had succeeded in mobilizing more local officials for infusing a sense of decentralization into the party structure. He forged a policy change of a stronger decentralization of the decision-making power from the party to government institutions and from central to local levels. The policy managed to get a nod from the Central Committee, because it supported the interest of the majority of the people especially the local representatives.

Slowly the decentralization process was institutionalized. The decentralization included the permission to conduct experiments in any economic field on the local level. In fact sources suggest⁹ that this kind of experimental venture was already in vogue in China. Mao has used this instrument to support his ideas. For example, Dazhai was village which started all round irrigation project without taking any outside support, at least no

⁸ Zhou Yi 1987 cited from Shirk 1993, p-59.

⁹ Shirk, S (1993) *The Political Logic of Economic Reform in China*, Berkeley , USA, p-63.

government support officially. Mao used this as an example to justify and expand his policy and sphere of influence in the Chinese society. He had propagated it as a great strength of self reliance. Later on it was found that it was not an experiment but a part of the government venture where the Government had extended a lot of financial resources to guarantee the success of the scheme¹⁰ (Talas,1991 p-58). The same kind of mechanism was replicated in later years with SEZs. This scheme officially started as an experiment but later on received the local and state governments' patronage to become successful so that the experiment can continue and can be further extended to other parts of the country.

China also witnessed some amount of opposition from the Central Party while laying down the plans for establishing SEZs, because smooth functioning of SEZs had also required reforming the SOEs. The SOEs were not able to perform or compete with the private companies and were unable to maximize the returns. The Government could not directly bring in any change in the system that time as more than two third work force of the urban areas were dependent on it. Besides, the interests of these enterprises were represented by high officials of certain powerful ministries and central bureaucracy.

So the Central government resorted to the mechanism of decentralizing again the decision making powers and slowly passed them on to the local officials. The local governments were further encouraged to support the development of private and collective enterprises which increased competition and put indirect pressure on the SOEs to restructure.¹¹

Section III

Reforms needed to Establish SEZs

The SEZs were initially located in the southern region because some parts of the region were already exposed to the outward orientation of foreign trade and strategic advantages. Some of the major reforms that were introduced in the SEZs were as under.

Administrative Reforms

Less and less involvement of bureaucratic procedures were introduced to the economic structure of SEZs. Prices were introduced as the new co-ordination mechanism and taxes and interest rates were used by the government to influence the economic behaviour.

¹⁰ Talas, B (1991) Economic Reforms and Political Reforms in China 1979-1989, Berlin, p-58.

¹¹ Knoth, E and Konstanz, Marz (2000) *Special Economic Zones and Economic Transformation: The Case of People's Republic of China*, Ph.D. Dissertation submitted to University of Konstanz, Konstanz, Germany, p-58.

Entrepreneurship

The Government reduced direct interference with the private enterprises. They could independently decide about the products, prices, specifications and marketing and were not under the direct control of the government. An independent contract system was established to coordinate between the government and private enterprises.

Competition

Though the Government could not completely reform the SOEs because of strong social pressure, yet their access to state resources like access to loans, scarce goods were largely curtailed. They were introduced to competition. Many of them suffered from huge losses and rest of them found it difficult to compete with foreign funded enterprises in the newly goods and factor markets. Markets for labour, land, capital and foreign exchange were created.

Price Reform

A distorted price structure persisted till the reforms began. The Government continued with such a system to achieve political gains. To benefit from the establishment of SEZ and to interact with the world market system, restructuring of the distorted price system was needed. A three-price system, namely fixed, free and floating was introduced, keeping in view that it will help the consumers, the producers, the world market and the Chinese economy.

Employment

The earlier 'iron rice bowl' system of guaranteed employment scheme was abolished. In place of that a contract labour market scheme was introduced. Foreign invested enterprises were allowed to freely employ people and these employments were supported by the labour service based company to find the right kind of skilled workers for the employment in SEZs. Companies had the choice of employing the right people with varied wages and lots of benefits were given to those workers as incentives to be retained in the companies.

Banking reforms

Foreign banks were allowed to open their representative offices in China. Other functions of the financial systems like stocks and bonds markets were reformed and floating rate of interest was also introduced for various users. Other institutions of financial sector like swap centres were first tested in the SEZs only.

With all these reforms and restructuring, China's experiment of establishing SEZs became successful and the experiments were allowed to be tested at different places in the country.

Role of FDI

The year 1978 marked a watershed in the history of Chinese economy. The development strategy underwent a new paradigm shift-from import substituting policies to export led growth. Though the initial motive was to have an all round development of Chinese society, yet the practicality of approach was such that it had to foster an unequal stages of development. To begin with, some regions with special and comparative advantages would be developed and later on rest of the regions can derive support from those regions. On the sixth National people's Congress meet the Prime Minister Mr. Zhao Ziyang formulated strategy which signified that the mid and large sized cities in the coastal and inner regions would be developed as growth centres and development of the less developed areas with less favourable conditions would be taken up later.¹²

Closer proximity to the sea coast and having access to free port system in Hong Kong the southern region became the favourite location for Chinese leaders to establish SEZs. These locations also had a long tradition of trading since the British days and Opium War in 1840. In spite of these advantages the opposition camp in the central party had also objected to the idea of creating SEZs there because they had expressed that these regions are also suffering from a low growth and implantation of such new policy may further jeopardize their social existence. In 1978, Fujian was one of the ten poorest provinces in China and Guangdong was having similar level of growth. The Government took this as a good opportunity to try out a new experimental policy as the growth level is already low and it won't bear the brunt of the people and affect the country much.

Irrespective of the arguments against the Government designed the policies which favoured the growth of international trade and economic development for the southern regions by giving special preferential treatment to foreigners and technology providers.

With the establishment of SEZs, China could invite large amount of FDI for its economic development and got an access to international trade to integrate its economy with the world. It happened at a time when major shift in the trade flows especially to developing countries was taking place. During the 1980s developing countries received about

¹² Ibid, p-26.

US\$15bn, about one third of the total world trade flows. In the 1990s developing countries' share continued to rise, though developed countries were still receiving more.¹³

Contribution of Overseas Chinese

It is a well known factor that culture plays a dynamic role in influencing the business practices and economic development of various societies. Cultural affinity and patriotism sometimes have remained so strong among the native and overseas of a particular race that the overseas has always contributed significantly to the development of that country. Contribution of overseas Chinese settled in Asia to China in that context has been exemplary. With their special institutions and specific ways of organizing the flow of information and goods between the members of the group they are in a position to act successfully in environments which are even relatively unstable or difficult to change. The reform process in China is an example of how culture especially the common culture can influence the transitional growth of an economy and how the development of Chinese SEZs can not be evaluated without taking into account the role of the overseas Chinese.

Overseas Chinese settled in Asian region mainly in Hong Kong, Macao, Taiwan, Malaysia and Singapore has performed remarkably as an individual community. It is estimated that the overseas Chinese in Southeast Asia with less than 10 per cent of the population control up to two third of the retail trade and their investments are larger than the investments of the Japanese. The monetary influence these people enjoyed in this part is phenomenal as it is observed that 86 per cent of South east Asian billionaires belonged to this group.¹⁴

Most of the foreign capital which came into China came from the overseas Chinese. In 1987, 70 per cent of FDI came from Hong Kong and Macao, Taiwan, Malaysia and Singapore. This share, however, decreased over the years to 67 per cent in 1996 and 54 per cent in 1997. By 1995 it was also found that 96 per cent of Shenzhen's textile industry and 95 per cent of its garments industry were owned by Hong Kong investors (Lau, 2001). This indicates that the foreign flow from these countries to china is still controlled and decided by the overseas Chinese.

The relationship between Hong Kong and China even grew stronger during late seventies and eighties and even continued further. Most of the companies from Hong Kong had their

¹³ Li, F and J Li (1999) *Foreign Investment in China*, Palgrave, Houndmills, UK, p-32.

¹⁴ East Asian analytical unit (1995) *Overseas Chinese Business Networks in Asia*, Canberra, p-119.

production plants in China, about more than 90 per cent were in Shenzhen and Guangzhou area.¹⁵ The Chinese Government became fully aware of the importance of such a potent and powerful business community as a result formulated policies and strategies that would benefit them. On the other hand, these overseas Chinese business communities were keenly following the developments at home and were interested to expand their business plans in China. China being a huge country provided them a great opportunity to invest.

Table- 1: Regional distribution of FDI (million US-\$)

	1984	1985	1989	1990	1991	1992	1993	1994	1995	1996	1997
Hainan	18		95	101	176	452	734	918	1062	789	706
Guangdon	644	651	1323	1460	1823	3552	7498	9463	10260	11754	12635
g											
Fujian	62	119	348	290	403	1416	2867	3713	4044	4085	4197
Zhejiang	49	27	54	48	92	294	1033	1150	1258	1521	1503
Jiangsu	139	33	127	141	233	1403	3002	3763	5191	5210	5435
Shandong	16	36	163	151	180	973	1843	2552	2689	2634	2776
Shanghai	42	108	422	177	164	790	2318	2473	2893	3941	4225
Tianjin		56	31	83	94	116	233	1015	1521	2153	2511
Beijing		89	320	277	245	350	667	1372	1080	1553	1593
Liaoning	15	25	126	248	314	439	1227	1440	1425	1738	2366
Jilin	2	5	10	17	18	66	238	242	408	452	402
Coastal	987	1148	3020	2993	3740	9851	21660	28102	31830	35829	38349
Heilongjian	24	4	57	25	19	103	226	348	517	567	735
g											
Neimenggu		3	4	11	1	6	0	40	58	72	73
Hebei	5	8	44	39	44	174	357	523	547	830	1103
Shaanxi		16	97	42	32	46	234	239	324	326	628
Shanxi		1	10	3	4	54	70	32	64	138	269
Anhui		3	9	10	10	50	258	370	483	507	434
Hubei		8	29	29	46	203	534	602	625	681	849
Henan	7	8	46	10	38	52	435	387	479	524	692
Hunan	11	27	23	11	23	129	433	331	508	745	917
Jiangxi	2	10	9	6	19	97	208	262	289	301	481
Central	50	88	328	187	236	912	2756	3133	3892	4691	6181
Gansu		1	1	1	1	47	56	88	64	90	41
Guangxi		31	53	30	39	180	872	836	673	663	886
Guizhou	1	10	13	5	7	20	43	64	57	31	50
Ningxia		0	0	1	1	3	12	7	4	5	7

¹⁵ Knoth, E and Konstanz, Marz (2000) *Special Economic Zones and Economic Transformation: The Case of People's Republic of China*, Ph.D. Dissertation submitted to University of Konstanz, Konstanz, German, p-70.

Qinghai		0	0	0	0		4	2	2	1	2
Sichuan		29	13	16	24	184	578	922	542	441	248
Xinjiang	7	11	1	7	4	10	53	48	55	64	25
Yunnan	0	2	8	3	3	23	97	65	98	65	166
Western	7	83	89	62	79	468	1715	2032	1493	1360	1425

Source: China State Statistical Yearbook, various issues

Table-1 provides, around mid-1980s coastal region received US\$1 billion of foreign capital while the central and western regions to the tune of 50 and 7 million. Although in the next 13 years the FDI to central region increased to over 6 billion and to the western to almost 1.5 billion, this was still not enough compared to the absolute inflow of over 38 billion into the coastal region. A look at the Table-2 suggests, the coastal provinces were losing some of their of over 90 per cent which they got in mid 1980s and at the beginning of the 1990s in the total FDI inflow, which then decreased to 83 per cent in 1997.

Table-1 suggests another interesting aspect of the regional distribution where it says the areas like Guangdong and Fujian garnered more than 70 per cent of the foreign capital. This over concentration of capital came down substantially over the years, yet both secured a combined share of almost 44 per cent. As can be seen from Table-1, Hainan the fifth SEZ, was with less than 2 per cent of the overall investment in the coastal provinces, not a major destination for attracting FDI.

Table-2: Shares in FDI inflow by regions

	1984	1985	1989	1990	1991	1992	1993	1994	1995	1996	1997
Coastal	95%	87%	88%	92%	92%	88%	83%	84%	86%	86%	83%
Central	5%	7%	10%	6%	6%	8%	11%	9%	10%	11%	13%
Western	1%	6%	3%	2%	2%	4%	7%	6%	4%	3%	3%

Source: China State Statistical Yearbook, various issues

When China initiated its process of attracting foreign investment, it never meant it for SEZs only. Investments for the rest of the country were possible. That is why only part of the investments came to SEZs. Until mid 1980s the share of FDI in SEZs was 30 per cent of

the total foreign investments. And about 80 per cent of the FDI in SEZs only came from Hong Kong and Macao.

Inflows of FDI also showed pattern of destinations. Some investors were attracted towards SEZs because of the preferential conditions while others located themselves in the major cities such as Beijing, Shanghai, Guangzhou, Dalian, etc. These investors were mostly interested in the manufacture of high-tech products as a result they were keen to have the skilled workers who can adapt and able to handle the technology application, plus demanded good infrastructure, wanted to remain closer to the political decision makers and invested larger volumes of capital in the individual projects.¹⁶ These investments came from developed countries like US and Japan who were interested in high tech products and wanted to have strong foothold in the Chinese market. Examples are Volkswagen and Schindler in Shanghai and Beijing.¹⁷

Asian investors other than Japan invested in SEZs because they were comfortable with labour intensive products, low end technology and low cost labour, and had smaller amount of capital to invest in individual projects.

An important aspect from the analysis was observed that the foreign investors who invested in SEZs lured by the preferential incentives were those who were not in a position to fulfil various obligations of the central government like technology transfer, building up of country wide infrastructure and upgrading of high skilled workers. Others were interested because of the large size of the domestic market.

Table-3: Import and Exports of Foreign-Funded Enterprises (billionUS-\$)

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Import	0	2.1	12	17	26	42	53	63	76	78
Export	0	3.0	12	25	17	25	35	47	62	75
Import GD*						19	25	27	30	33
Export GD*						14	20	26	31	37
Import China	20	42	53	64	81	104	116	132	139	142
Export China	18	27	62	72	85	92	121	149	151	183

¹⁶ Li, F and J Li (1999) *Foreign Investment in China*, Palgrave, Houndmills, UK, p-40.

¹⁷ Pearson, M. (1991) *Joint Ventures in the PR China*, Princeton, p-32.

Source: CFESY(China Foreign Economic Statistical Year Book)(1995:164), CSY (1996: 596), CSY (1998: 636)

- GD = Guangdong province

The Table-3 demonstrates the rapid movement of volumes of imports and exports of foreign funded enterprise in entire China and Guangdong province. Both imports and exports of enterprises with foreign capital had an annual growth rate between 1990 and 1997 of about 30 per cent. In the earlier years of reform in China until 1991 the trade balance of the foreign enterprises was positive, became negative soon after 1991. For the entire country the trade balance of all the enterprises was negative in the 1980s, but became positive in the 1990s.

Section IV

Shenzhen- A Successful Example

Shenzhen was the largest of all the four SEZs that initially started in 1978. With 316 sq km it covers an area of 2020 sq km.¹⁸ It was a small town having common border with Hong Kong and was also very close to the main business activity centre of Hong Kong. Compared to other places like Xiamen and Shantou, Shenzhen had no industrial base. Only advantage was that it was close to Hong Kong.

In the late seventies when the talk has already begun in terms of Hong Kong getting handed over to China and China is interested to spread its expansionist role in South east Asia as far as Taiwan is concerned, the establishment of SEZ in Shenzhen came quite handy for the Chinese Government. By late nineties almost around 1997 it had developed into modern city with advanced infrastructural facility and trying to be the real commercial hub for Chinese economy and becoming the international linkage point between China, Hong Kong and world market. It became one of the most important locations in China for foreign investment.

After the establishment of SEZ in Shenzhen, the small sleepy town developed rapidly with improved social and basic amenities infrastructural facilities. In less than twenty years the population rose to 4 million, of which 2.8 million had only temporary resident cards. In China the *hukou* or the household registration system was followed which controlled the

¹⁸ Shenzhen Statistical Year Book (1998), Peking, p-95.

migration of population moving from one city to another. With the reforms, the *hukou* was relaxed. As a result, developed region like Shenzhen experienced in 1980s and 1990s good number of migrant workers. Higher wages, access to modern social and educational facilities, better opportunities for employment, availability of quality goods and cleaner environment attracted and continued to lure a large population of Chinese to come to Shenzhen. Table 4 shows increase in population, temporary workers and employment scenario.

A minute observation at Table 4 suggests that in the first year of development only 45 per cent of the population was employed and in the mid 19980s the share of employment decreased. But in the 1990s the trend was reversed, an increase share of population was employed. This shows that a new trend has occurred in the employment structure which symbolizes that migrant workers from inner areas have come to Shenzhen for a limited period of time on a temporary residence card and never brought there families. This development demonstrates that employment share in Shenzhen was much higher than other parts of China.

In relation to investment at Shenzhen, it shows an interesting trend. In the initial years (1979-80) the major investors were the Central Government and the Provincial government, contributing to 66 per cent of infrastructural investment. The foreign capital during this period was to the tune of 13 per cent. Table 8 provides the investment pattern of various stakeholders in Shenzhen SEZ.

Foreign investment rose significantly in the year 1982, making it 50 per cent from 13 per cent in 1980. During early 1980s, share of the Governments started decreasing. During the same time the contribution of private companies increased to one-third in 1990, while the contribution of the government fell below five percent in 1985.

The contribution of Chinese SEZs to its GDP is well recognized. As China continued in the 1980 and 1990 to register a growth rate of 8 to 8.5, the real GDP of Shenzhen SEZ grew with an annual average of robust 28.5 per cent over these years. Until 1998, the

absolute level of the real GDP was not very high and did not reach 4 billion Yuan. But in the next eight years massive growth was noticed taking the amount to 17 billion Yuan.¹⁹ Looking at the three major sectors how they have performed in Shenzhen SEZ, the analysis suggests that the agricultural sector's contribution to GDP was 70 million Yuan. Interestingly, the tertiary industry contributed more than agriculture around 80 million Yuan and the secondary sector contributed with 40 million Yuan having the least contribution among the three sectors in the GDP. During the reform process this has changed fundamentally. Until the early 1990s, agriculture's GDP grew to 240-290 million Yuan and stayed in the range between 1979-1997.²⁰

The share of agriculture in the total GDP has decreased from 37 per cent in 1979 to just 1 per cent in 1997. While the share of tertiary industry remained between 42 per cent and 52 per cent, the share of the secondary industry increased from 21 per cent in 1979 to 49 per cent in 1997, with a maximum of 55 per cent in 1993 and 1994.

Employment

The employment scenario had undergone changes with the change in the economic structure of Shenzhen SEZ. Compared to earlier years the rate of employment increased very fast between 1979 and 1997. Establishment of Township and Village Enterprises (TVEs) had given a boost to the employment generation in China even at rural areas. The TVEs had dominated the labour markets in Shenzhen. In the initial stage of reforms and in the 1990s, TVEs were the largest employer in Shenzhen. Their labour force had increased from 90,000 in 1979 to 1.2 million employees in 1997. In the early 1980s the SOEs had increased its share of total employment as a result by mid 1980s it had acquired the largest share in the total employment with 52 per cent. By mid 1990s the trend had become reverse and TVEs had occupied the largest share again. In the 1990s the employment scenario remained almost the same. On the other hand, the collective enterprises had expanded its labour force from 7000 in 1979 to 87000 in 1997.²¹ Tables 5 and 6 give the detailed picture

¹⁹ Knoth, E and Konstanz, Marz (2000) *Special Economic Zones and Economic Transformation: The Case of People's Republic of China*, Ph.D. Dissertation submitted to University of Konstanz, Konstanz, Germany, p-99.

²⁰ Ibid, p-100.

²¹ Ibid, p-103.

about the above analysis. Other significant developments are the emergence of self employed groups and employees in other enterprises.

The self employment was a new concept which gathered momentum during the reforms era. Before the reforms it was the work unit or the *danwei* was the employer which provided all the social benefits like health care, pensions, kindergarten education and accommodation. Not belonging to any employer was basically left to yourselves where individuals themselves were responsible for all the social benefits. This group of self employment became much stronger during the mid 1990s when more and more individuals wanted to take more risk.

Table-5: Employment [‘000]

	1979	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
State-owned enterprises	34	40	170	340	390	390	410	390	400	410	410
Township enterprises	95	97	84	430	500	590	690	1,000	1,100	1,100	1,200
Collective enterprises	7	8	30	50	70	80	50	80	110	95	87
Self-employment	4	4	6	30	40	90	290	320	460	490	610
Others	-	-	30	160	190	240	310	350	380	390	420

Source: SZSYB(Shenzhen Statistical Year Book) (1998: 124)

Table-6: Shares in Total employment²²

	1979	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
State-owned enterprises	24%	27%	52%	31%	31%	26%	20%	17%	17%	16%	15%
Township enterprises	68%	65%	25%	39%	39%	40%	33%	45%	45%	43%	44%
Collective enterprises	5%	5%	9%	5%	6%	5%	2%	4%	4%	4%	3%
Self-employment	3%	3%	2%	3%	3%	6%	14%	14%	19%	19%	22%
Others	0%	0%	9%	15%	15%	16%	15%	16%	16%	15%	15%

Source: SZSYB (1998: 124),

On the whole the employment generation in Shenzhen SEZ has been impressive. Almost major sectors like agriculture, industry, construction, communications, banking and insurance experienced prospective employment opportunities and secured a significant rise in employment. The main loser in the 1990s has been hotel and real estate sector. Despite certain present and potential difficulties, the process of modern economic reform in China has been proceeding very well and the commitment to give a boost to the initiative of SEZ²³ as a major drive of societal inclusion is very much on the card.

²² Ibid, p-103.

²³ China has engaged in opening in all directions. China Is Open In All Directions, PEOPLE'S DAILY, Oct. 8, 1992, at I (overseas Chinese language ed.). Many formerly restricted areas are now also open. See James

Contributions of SEZs to China's Development

The SEZs have made crucial contributions to China's success. Some especially the first ones—successfully tested the market economy and new institutions and established role models for the rest of the country to follow. By 1992, the concept of openness had been extended to the entire coastal region and to all capital cities of provinces and autonomous regions in the interior, and various types of SEZs had begun to spring up throughout the country. When Deng Xiaoping made his famous southern tour in 1992, the mission that had started with the creation of the first five SEZs had in many respects been accomplished: the “special” economic zones.

Economically, SEZs have contributed significantly to national GDP, employment, exports, and attraction of foreign investment and new technologies, as well as adoption of modern management practices, among others. In 2006, the five initial SEZs accounted for 5 percent of China's total real GDP, 22 percent of total merchandise exports, and 9 percent of total FDI inflows. At the same time, the 54 national ETDZs accounted for 5 percent of total GDP, 15 percent of exports, and 22 percent of total FDI inflows (national statistical yearbook of China 2007).

The SEZs are also a major platform for attracting foreign investment. In 2007, the actual utilized FDI of the five initial SEZs was about US\$7.3 billion. The number for Shanghai Pudong and Tianjin Binhai was about US\$7.2 billion (Zhong et al. 2009), for the ETDZs about US\$17.3 billion (MOFCOM 2008b), and for the FTZs about US\$2.6 billion (Zhong et al. 2009).

The contribution of SEZs to national employment is also very significant. In 2006, the total employment of the initial five SEZs was about 15 million, accounting for 2 percent of national employment. In 2007–08, total employment was about 1.47 million in the Shanghai Pudon area (Shanghai Pudong Government 2008), accounting for about 17 percent of the total employment of the municipality of Shanghai.

McGregor, China to Open Oil Frontier to Foreigners, WALL ST. J., Feb. 18, 1993, at A13; James McGregor & John J. Keller, AT&T, China Set Broad Pact On Phones, Gear, WALL ST. J., Feb. 24, 1993, at A3; China Widens Door to Retailers, WALL ST. J., Jan. 28, 1993, at A10; Xu Ke Hong & Wang Yan Rong, China Will Permit Use Of Foreign Capital To Build Railroad, PEOPLE'S DAILY, July 16, 1992, at 1 (overseas Chinese language ed.)

The SEZs are also the hotbed of China's new and high-technology firms. In 2007, the 54 HIDZs hosted about half the national hightech firms and science and technology incubators. They registered some 50,000 invention patents in total, more than 70 percent of which were registered by domestic firms (Zhong et al. 2009). They also hosted 1.2 million R&D personnel (18.5 15 percent of HIDZ employees) and accounted for 33 percent of the national high-tech output (Qian 2008). Over the 15 years since the formation of HIDZs, they have accounted for half of China's high-tech gross industrial output and one-third of China's high-tech exports. In addition, the ETDZs are also responsible for another one-third of China's high-tech industrial output and exports (rising from 31.3 percent in 2004 to 35.5 percent in 2005). HIDZs are also quite R&D intensive: their expenditure on R&D in 2002 was RMB 31.4 billion and accounted for 24.4 percent of China's total R&D expenditure. Within the following four years, their R&D expenditure tripled to RMB 105.4 billion, and the share rose to 35.1 in 2006 (Fu and Gao 2007).

In spite of the success that emanated out of SEZ initiative, certain challenges remain for China to tackle. These challenges are mostly in the realm of environmental and resource constraints.

Environmental and Resource Constraints

Related to China's growth model based on low technology and labor- and resource intensive manufacturing, many SEZs and clusters face serious environmental and resource challenges. With the increasing emphasis on climate change problems, two aspects related to environmental challenges call for particular attention: one is the serious water, air, and land pollution and the huge amount of industrial waste; the other is the increasingly tough eco-standards set by industrial countries for products exported from developing countries. These include RoHS (Restriction of the Use of Certain Hazardous Substances), WEEE (Waste Electrical and Electronic Equipment), and EuP (energy-using products). These challenges are even more severe for clusters, where the technology capacity is much weaker, than for most SEZs. In addition, with the rapid industrial expansion, land, skilled labor, and energy resources such as oil, water, and electricity have all become more expensive and limited. In some cities, virtually no more land is available for heavily resource-based manufacturing activities, which require a lot of physical space. In many SEZs, the land cost now is several times higher than it was when they were established.

These problems have forced some firms to move inland or abroad; however, that is only a short-term solution. In the long run, the SEZs and clusters will need to focus more on growth quality than on quantity.

No doubt, China's success with SEZs is an example for many countries to emulate, but the institutional challenges that play a role in its success is still an exercise that even continues now and is a necessary condition. With the evolution and adoption of market economy, efficient and transparent institutions such as sound regulatory and legal system, including a well-functioning IPR regime; a participatory monitoring and supervisory system; a good evaluation mechanism, especially for public spending; and a sound social safety net need to be created and developed to sustain the long term growth in SEZ as well as integrating coastal region with the mainland China. The resources in the western part of China are immense; there is a need to create SEZs and clusters in those regions so that the country could develop horizontally and economic growth could touch the nook and corners of the country. As Bhagwati (2004) put it in discussing growth, "Growth was not a passive, trickle-down strategy for helping the poor. It was an active, pull-up strategy instead. It required a government that would energetically take steps to accelerate growth through a variety of policies including building infrastructure such as roads and ports and attracting foreign funds." In the success of the Chinese SEZs and clusters, government at various levels has played a very important role but one limited mostly to addressing market failures and externalities, that is, the public goods and quasi-public goods areas. These range from building better infrastructure—roads, water, electricity, gas, telephone, and so forth—to establishing special marketplaces, technology innovation platforms, R&D centers, and the like. In addition, the government has tried to use the special powers given to the SEZs to create an efficient regulatory system and a conducive business environment, which make SEZs more attractive for investors. As Chief Economist of World Bank, Justin Lin observes "In addition to an effective market mechanism, the government should play an active, facilitating role in the industrial diversification and upgrading process and in the improvement of infrastructure" (2010). These SEZs still have more to do in improving the business environment to maintain their competitive edge.

Lagging in social development will also put up a huge challenge for China's SEZ model of success. Though they have witnessed economic success yet they are away from social

integration. They are not commensurate with desirable social status and services. Although some SEZs and clusters enjoy a good living environment, many of them do not have sufficient health and education services or public transportation to accommodate their increasing population. Some SEZs are at a distance from their host cities, like an “isolated island” with few cultural and leisure activities (Li, Xiaoxi, R. Duan, and H. Zhang, 2009), and they worry that once they lose more of their “special” status and preferential treatment, they might not be able to attract more talent and investment. So the government needs to make more public investment in health and education and try to link these SEZs with large parts of economic activity and mainstream. The words of Amartya Sen finds quintessential meaning that human capital is essential for a country’s progress and this can be achieved only when the government invests in social sector and redistribution of income is extremely important for the country to make a progress.

Section V

Conclusions

SEZs played an important role in China’s initial economic growth. Its contribution in regional and national economic development has been significant despite all the fundamental and inherent problems surrounding the system. The success of SEZ was seen as an unprecedented experiment to improve its economy which remained almost stagnant in a self contained protective industrialized regime. It was virtually the most important instrument in propelling its growth, though its relative significance gradually declined as the economy entered into advanced stage of development.

The initial years of experimenting with SEZs have been quite problematic as the country was passing through significant political, economic and legal changes. Many of these policies came under severe criticism and scrutiny as they involved some amount of social cost. All these problems were attributable to the fact that China was then at the point of transition- from low income to middle income developing country and transition from planned economy to a market one.

It won’t be an exaggeration to say that establishment and success of SEZs have been a great learning experience for China. To think of SEZ as a policy instrument of economic growth, an important measure for attracting foreign direct investment and a viable alternative of employment generation especially at a time when the economy was virtually in shambles

with the death of Mao and long drawn Cultural Revolution requires huge amount of risk that a society can really take. From a self reliant, insulated planned economy to creating a market based economy, China has faced enormous challenges and during this time it had tried to establish the SEZs as a growth model for the country. It had confronted with many political battles and finally managed to hold its decision of creating SEZs. Opposition to creation of SEZs was very strong in China because by definition SEZs were promoting regional development and the some political establishment was convinced that such a policy would create strong regional inequality.

Having this fear in mind, China from the very beginning was gradually and tentatively moving towards establishing SEZs. Therefore, China took it basically as an experimental exercise.

As more and more studies established the pros and cons of SEZs, it came to the light that SEZs have seriously also contributed to the growing regional inequality in China. Because, the experience of all SEZs in China was not smooth and successful especially in Hainan²⁴. Any case to deal with the regional inequality was beyond the scope of this paper, hence, it would not focus on this issue. It would rather try to look at certain policy recommendations if possible to provide.

Policy Recommendations

In the gamut of international trade, the model ‘one size fits all’ does not hold true. All these countries wanting to benefit from the process of globalization and multilateral trading system are unable to do so because these countries are in different stages of development and seriously suffer from various constraints which one size fits all is unable to address or overlooks them. In that context, China’s SEZ experience can not be replicated in the case of other countries even if it is a phenomenal success. Establishment of SEZs in any country needs to be very carefully designed as it depends on a number of sensitive factors. Prominent among them is definitely a political decision making power which varies from country to country and can create a significantly high volatile situation. Besides, it also

²⁴ No rose is without a thorn. Since pursuing Open Door Policy and creating SEZs in Hainan the economic benefits have been advanced by leaps and bounds and success has been achieved, yet the effects and problems are coming along. Inadequacy of experience and unplanned execution and blindness in work have caused heavy losses for the state and lawlessness people took advantage of such openness of policies and were involved in crimes in An Chen *Understanding China : The Voice form China*, Springer, 2013 p-491.

critically rests on a number of economic and institutional factors. Policy recommendation mentioned here are equally important for China as well as other developing countries.

First, the aim of the zone development should be clearly defined. Then only, it can be visualized whether SEZ can act as a best policy instrument to achieve those desired results. It is crucial to know whether the aim is short term or long term, because the main effects of SEZs are long term in nature. It involves planning, infrastructure development, huge investment, factor endowments and prospects of employment generation-all these are long term driven and require consensual political decision, which is hard to come by.

Secondly, the decision of a location is very important for which the political decision makers need to be convinced. In some countries SEZs were established in remote places in anticipation that FDI and an export sector would help prosper a particular region and create employment. But such attempts have ended in failure, because foreign investors were never interested to invest in a region which was underdeveloped and lacked serious infrastructural facilities, devoid of qualified personnel and any other valuable inputs. Further, it is important to consider that SEZs should have an easy and direct access to international trading as the place would largely be developing export products for the third country. Hence, a port or an international airport becomes a necessary condition for success of an SEZ or at least development of such infrastructure should be in the immediate sight. It will be constructive to think of a bigger area for an SEZ, not smaller enclaves like EPZ. Initial constraint of funding might be a cause for worry but a larger area can put in place a comprehensive development concept which can contribute more effectively to the growth of the country.

Thirdly, nature and control of investment needs to be monitored and utilized in the right perspective. FDI should be carefully chosen to have a strong backward linkage as a result the domestic industry will get a boost and the country on the whole can be on a development path. Domestic enterprises having the necessary wherewithal should be given a chance in the SEZ to have the preferential treatment to do better. The investment on domestic enterprise needs to be effectively managed so that SEZs do not create disproportional regional development. Domestic enterprises may try to relocate themselves in SEZ to earn preferential treatments.

Fourthly, the timing is very important. For the SEZ to be successful, a well planned early stage is essential. All the major development steps should be completed in a short time frame otherwise the investors will lose interest and the people will develop distrust in a system that promises to do a lot. The aims of the development should be clearly defined made public just to avoid any other major calamity like Nandigram in West Bengal.

Fifthly, development of state of the art infrastructure will hold the key to success of SEZs in any country. As one of the primary aims of the SEZs being to attract FDI and utilize it optimally to promote exports, it is therefore not only important that the produced goods, resources and intermediate inputs reach the production site at low cost, the foreign investors find the necessary infrastructure in place, including transportation, water and electricity, effective telecommunications systems, etc.

Sixthly, the labour market plays a crucial role in the success of SEZs. As SEZs are constantly attracting the foreign capital and desire to have the advanced technology for production of goods and services, the country therefore needs to have sophisticated skilled manpower base to handle and adapt such technologies in the production process. This may become a decisive investment decision for the investors. The country needs to give adequate attention to this segment of investment requirement. Even SEZs in China had also faced similar problem of skilled labour scarcity.

Seventhly, an effective transparent legal system is essential to secure foreign investment as foreign investors would be clear in their mind as to how their investment and technical know-how will be protected. Protection of foreign investors' interests and their property rights has forced China to reformulate legal laws to attract FDI. Besides, the role of legal system should not be confined to the SEZs only it should be rather applicable to the entire country as the whole country needs to be developed. So the country to have distribution of FDI, a secured legal system will remain a pre condition. China has used its SEZs to design new laws and to have new legal experience which are incorporated during the years of its WTO negotiations.

Eighthly, a simplified bureaucratic and legal framework is vital for smooth setting up of SEZs and foreign enterprises. Foreign investors mostly confront with many bureaucratic hassles before they set up their enterprises whether for export or import purposes. A single window clearance must be established by a single agency who will function more like a

company that a government agency. Clear cut aims and objectives of SEZs must be spelt out to this agency beforehand. This will also reduce the transaction cost immensely.

Ninethly, SEZs should have the basic objective and aim in mind to support the development of national unified market. Regional development in the initial phase is welcome, but the lateral perspective should be to link the prosperous enterprises in the developed region to other enterprises in different regions of the country.

One of the important functions of the SEZs would be to establish the backward and forward linkages with the economy. To achieve this, SEZs should help in transferring the information to other parts of the country. This hasn't happened in China. In a size of economy like China, SEZs are not able to foster such linkage as a result segmentation of markets also exists. It has rather created certain growth poles. It is important that countries with large domestic market should use the market access to foreigners as a source of bargain for development of a unified domestic market.

Lastly, zone development must be initiated according to the capacity of the Government to handle. Sometimes establishing too many SEZs in a country can jeopardize the prospect of the overall economy. Because regions would be in competition with each other to attract FDI by giving more tax benefits, extending tax holidays, lowering the land and utility costs and giving more subsidized inputs. Important gainer of this exercise would be the foreign investors. Therefore, a comprehensive zonal development plan is vital.

How to Make China's Growth Inclusive and Sustainable

Given so much complexity and challenges, China needs to develop an appropriate strategy by focusing on a more competitive and sustainable development paradigm. As world economy is moving towards an increased transactions of intensely technology driven and value added services, China has to carve out a comprehensive strategy to make it economy commensurate with such demands. With the resources and labour rising and emphasis of trade protectionism in place, China low-cost labour advantage and particularly its factor growth model may not prove useful in the long run. China needs to make its human and resources more innovation and technology driven. After all in a world economy which is significantly dominated by high end knowledge and services sector, developing competency in these areas becomes critical. China has to make public spending enormously in its technical education, English speaking initiative, adhering to western educated system,

developing software skills, etc so that human resources become productive and economy is able to participate effectively in world economy. In some of the SEZs, the level of higher education of the employee or college educated is very low; hence productivity sometimes is below the level of expectation. They are unable to attract skilled talent.

To make growth more inclusive, the Government also has a huge responsibility towards protection of environment and ecofriendly activities. In adoption of market economy, many of the SEZs face environmental and resource challenges. The growing emphasis on climate change has given rise to two related environmental challenges which merit particular attention. First is the serious water, air, and land pollution and the huge amount of industrial waste; the second is the increasingly tough eco-standards set by industrial countries for products exported from developing countries. These include RoHS (Restriction of the Use of Certain Hazardous Substances), WEEE (Waste Electrical and Electronic Equipment), and EuP (energy-using products). These challenges are even more severe for clusters, where the technology capacity is much weaker, than for most SEZs. With the rapid industrial expansion, land, labour and resources such as oil, water and electricity have become more expensive and limited. To continue with this manufacturing drive, certain cities have no land and in some places land has become extraordinarily expensive for the firms to look for foreign destination, however this is a short term strategy. In the long run SEZs have to focus on growth quality and not just on quantity. The Government has a huge challenge ahead.

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