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Feasibility Study For Special Economic Zone In Madurai District

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Abstract: ***Special Economic Zone provides special facilities to the industrialists like tax benefits. In India, the government has been proactive in the development of SEZs. The Tamilnadu state has the second place in India with 33 operating SEZs approved by SEZ Act, 2005 including various sectors like IT/ITES, Engineering, Food processing, Multi product and Electronic hardware etc., owned by both Government and Private players. The Madurai district in Tamilnadu is identified as study area which is the centre of 15 Southern districts of the state, well connected with roadways, railways and airways. The district is provided with all infrastructures and trading facilities that led to a study about the feasibility of a Multi Product SEZ in Madurai district. The Gross District Domestic Product (GDDP) of Madurai district is 2996.6 USD million in 2012 with a CAGR of 6%. In 2012, the tertiary sector contributed to about 71% of the GDP followed by the secondary sector which contributed to about 25% of the GDP. The IT industry in the district is the major contributor to the GDDP of the district. This study is an attempt to analyze the growth of specific sectored products for the past 10 years and the scope for development of SEZ in Madurai district. The growth of the major small scale units like food processing, hosiery and readymade, metal based industries, paper based and printing industries, wood based industries in the district has been projected for further twenty years. The forecasting analysis resulted in the feasibility for the planning of a Special Economic Zone which would increase the employment opportunities leading to economic development with minimum policy changes. This study presents with the scope, description of project study area, methodology, forecasting tool, benefits of SEZ, SWOT analysis of Madurai district.***

Keywords: Special Economic Zone, Feasibility, GDDP, Madurai district

I. INTRODUCTION

An effective utilization of human resources can boost the development of India. Hence, both Central Government and State Governments have prepared the number of plans for the economic development. Among the many plans, one of the plans is establishment of Special Economic Zone (SEZ). The very purpose of establishing SEZ is providing all infrastructural facilities, marketing assistance, financial assistance and incentives in all aspects. If all the facilities are provided, certainly, many entrepreneurs may come forward to establish their units in SEZ voluntarily; mainly labour intensive units are established in SEZ for the benefit of the local area people. Some of the existing Export Processing Zones are converted into Special Economic Zones. One of such Madras Export Processing Zone (MEPZ) is converted into Special Economic Zone. After such conversion, the research was carried on the impact of conversion of the Export Processing Zone units to the Special Economic Zones with fiscal tax benefits within the zone area. Many more multinational corporations have found interested to establish their sister concerns and branches in India. Hence, it is need of the hour to know the functioning of units in Special Economic Zones.

A Special Economic Zone is a trade capacity development tool to widen the goal to promote rapid economic growth by using tax and business incentives, to attract foreign investment and technology. Special Economic Zones (SEZs) have been recognized as an important mechanism for trade and investment promotion, creation of infrastructure, employment generation, promotion of regional development, increase in foreign exchange earnings, improving export competitiveness and transfer of skills and technology. The SEZs have been in existence for decades, but have attracted renewed attention world-wide in recent years due to globalization of trade and

financial markets. Now, it is a well recognized fact that the SEZs are instrumental in developing local and regional infrastructure facilities, which in turn are necessary for overall economic development of a country.

SEZ is a fenced-in industrial estate that offers firms, free trade conditions and a liberal regulatory environment and specializes in manufacturing for export. As per the Ministry of Commerce and Industry, *"Special Economic Zone (SEZ) is a specifically delineated duty free enclave and is a deemed foreign territory for the purpose of trade operations, duties and tariffs."*

According to the Exim (Export-Import) Policy (2004-09), SEZ is a geographically distributed area or zone where the economic laws are more liberal as compared to other parts of the country. They are self-contained and integrated, having their own infrastructure and support services. Goods and services flows from DTA (Domestic Tariff Area) to SEZ are to be treated as exports and goods coming from SEZ into DTA are to be treated as imports.

A. EVOLUTION OF SEZ IN INDIA

The journey from EPZs to SEZs in India has witnessed several developments and failures in terms of conception and expansion of EPZs across India, conversion of EPZs into SEZs with various inefficiencies, its reintroduction under the new SEZ Act, growth of SEZs establishment in India and further loosening its significance due to imposition of MAT and DDT. A great emphasis on revisiting the SEZs model and making it a catalyst for India's economic growth in coming times has been formulated.

Figure 1.1: Chronology of SEZ in India

B. TYPES OF SPECIAL ECONOMIC ZONES

The Special Economic Zones are classified based on their location and the nature of industries or sectors and the minimum land requirements which is effective from April 2013 are given below.

Type of SEZ	Minimum Area Requirements
Multi Sector SEZ	500 hectares
Sector Specific SEZ	50 hectares

SEZ LAYOUT AND SEZ KEY ENTITIES

The areas falling within the SEZs are demarcated by the Central Government or any authority specified by it as the Processing Area for setting up Units for activities, being the manufacture of goods or rendering services or the area exclusively for trading or warehousing operations. While, Non–Processing Area means an area of the special economic zone for activities other than those specified under export-oriented (processing) area. SEZs are initiated by developers, co-developers and SEZs units.

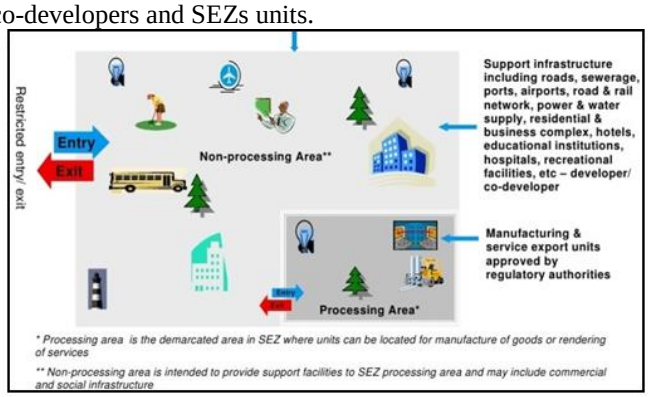


Figure 1.2: Processing and Non Processing Areas of SEZ

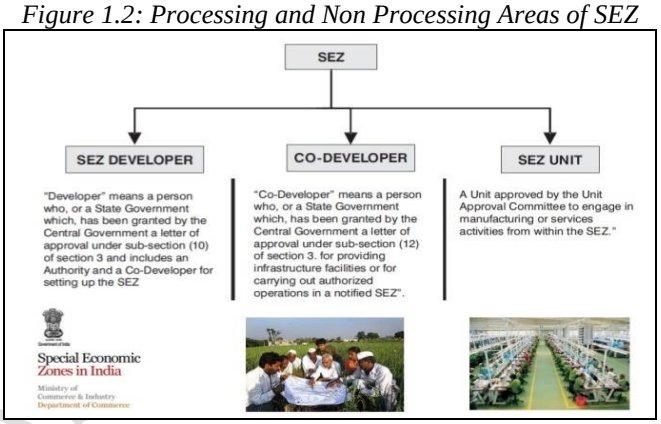


Figure 1.3: SEZ Key entities

C. PERFORMANCE OF SEZS

The three important objectives of the SEZs Act, 2005 are to generate employment opportunities, encourage investments and increase India's exports. Under this performance of SEZs in India is measured in terms of employment, investments and exports.

Fact sheets of SEZs

	Approval (no.)	Notified (no.)	In principle approval (no.)	Operational (no.)	Land (hectare)	Units (no.)	Investment (cr)	Employment (no.)
As on July 17, 2012	589	389	48	153	71,502	3,400	3,80,284 (as on March 31, 2012)	8,44,916
As on Jan 21, 2015	491	352	32	196	56,067	3,864	2,01,875 (as on Sept 30, 2014)	13,50,071

Exports, investment & employment in SEZs

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Exports (₹ cr)	66,638	99,689	220,711	315,868	364,478	476,159	494,077	463,770
Investment (₹ cr)	78,028	1,18,207	148,489	202,810	201,875	236,717	296,663	338,794
Employment (Persons)	3,36,235	3,84,957	503,611	676,608	844,916	10,74,904	12,83,309	14,42,316

Source: Export Promotion Council for EOUs & SEZs

Figure 1.4: Performance and Fact sheets of SEZs

In nutshell, SEZs has witnessed four-fold generation of employment from around 3 lakh persons in FY2008 to around 12 lakh persons in FY2014. However, it could not generate expected rate of employment on account of several legal and market changes.

D. NEED FOR THE STUDY

Special Economic Zone is a specifically delineated duty free enclave and shall be foreign territory for the purposes of trade operations, duties and tariffs which lead to the economic development and to encourage export of various things and to take place in globalization. Today, there are approximately 3,000 SEZs operating in 120 countries.

The key challenges in SEZ functioning includes the poor regulatory and institutional framework, lack of effective strategic planning, weak governance and implementation capacity, inadequate infrastructure, access to land, regulatory barriers, resettlement to acquired land owners, coordination issues and lack of external infrastructure. The objective is to study the effects of various factors and to analyze the scope of development of a Multi Product Special Economic Zone for the developing Madurai district to increase the economic profile with available resources. The study focus on the trend analysis with the collection of past 10 years data and feasibility study of the growth of the District through secondary and tertiary sectors which forms the major part of District's GDP.

II. METHODOLOGY

The study methodology initiated with the detailed literature reviews, framing of objectives to analyze the data collected from the Madurai Statistics Department regarding population census, land utilization, industries, resource profile of Madurai and small scale industries to study the feasibility of establishing a Multi-product Special Economic Zone in Madurai district.

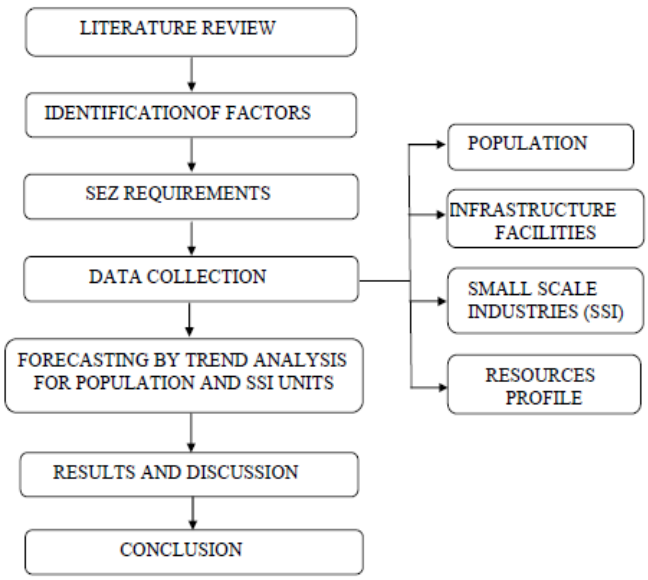


Figure 2.1: Methodology

III. STUDY AREA DESCRIPTION

The Madurai district has been taken as the study area, situated in the South of Tamil Nadu state. It is bounded on the North by the districts of Dindigul, Tiruchirapalli, on the East by Sivagangai, on the West by Theni and South by Virudhunagar. The Madurai district is the centre of 15 Southern districts of Tamil Nadu well connected with roadways, railways and airways. The district is provided with all infrastructures and trading facilities, which led to a study about the feasibility of a Multi Product SEZ in Madurai district. The district has reputed organizations in the private sector which are engaged in the production of variety of goods like tyres and tubes, machineries, textile, conveyor belts, etc., and also provide huge employment opportunities. The district also shows strong presence of the IT sector.

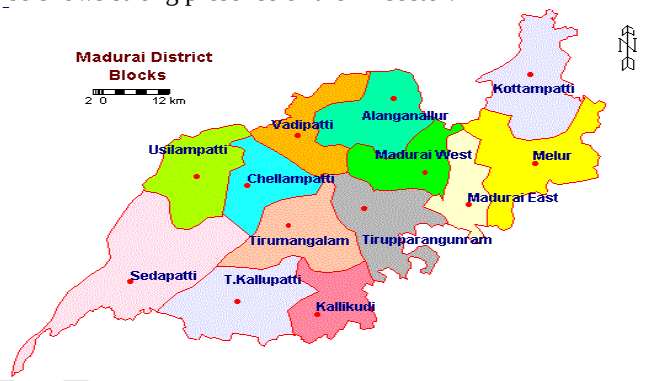


Figure 3.1: Madurai district map showing blocks

A. EXISTING IT SEZS IN THE DISTRICT

The Electronics Corporation of Tamil Nadu Limited (ELCOT) has set up two SEZs in Madurai district. One of the SEZ is located in 29 acres at Ilandaikulam village, Madurai North, 4kms from the city limit and the other in 213 acres at Vadapalanji village, opposite to Madurai Kamaraj University, out of 240 acres of Integrated Information Technology campus. 50 acres of the IT SEZ is to be promoted through Public Private Partnership (PPP) mode to create IT space with social infrastructure. Major IT companies such as Tessolve, HCL, Honeywell, Sutherland and Chella Software are present in the SEZ.

Name of SEZ	Total notified area (Area in hectares)	Total area utilized (Area in hectares)	Area lying vacant in processing area (Area in hectares)
ELCOT 1	11.69	6.03	5.66
ELCOT 2	86.43	69.61	16.82

Table 3.1: Industrial land usage in the SEZ

Madurai district has been chosen as the destination of choice by Honeywell for its software operations. Honeywell has found out an outstanding employee loyalty and very low attrition rate in their Madurai centre. The importance of bringing IT majors is felt among the entrepreneurs; they also stress the need for Madurai to look for alternative growth plans in the IT sector.

IV. RESULTS AND DISCUSSION

A. ROAD CONNECTIVITY

The system of transport plays a pivotal role in overall economic development of any area. Madurai District is located south of Tamil Nadu. It connects the southern districts to northern districts in the state. The floating population is much heavier in the city during the day time. Most of the people from southern districts visit for medical, educational, marketing, cargo, shopping, tourism or official purposes. It is the one of the important traffic circles in Tamil Nadu. Besides for achieving parity in industrial growth and for distributing economic activities evenly all over the District, there is a need for building up the infrastructure facilities uniformly.

Madurai District has well laid out roads and railways lines connecting all major towns within and outside the State. The Madurai district is connected with Tiruchy (142Kms), Coimbatore (228Kms), Bangalore (432Kms), Chennai (472Kms) and all major cities. The District has possessed a very good transport and communication network.

Highway	Connectivity
NH-7	NH-7 connects Madurai to Kanyakumari
NH-45B	NH-45B connects Madurai to Tiruchirapalli in the North and Tuticorin in the South
NH-49	NH-49 connects Madurai to Rameshwaram
NH – 230	NH - 230 connects Madurai to Thondi

Table 4.1: Highway connectivity from Madurai district

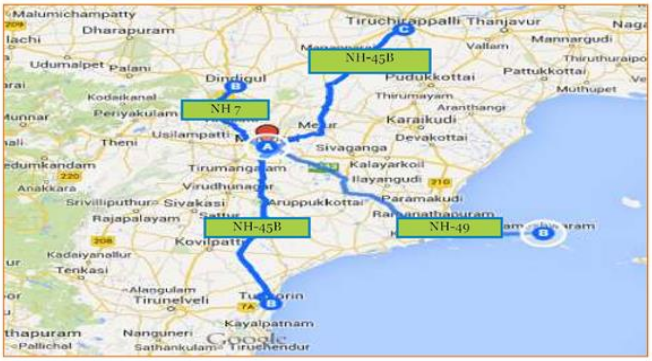


Figure 4.1: Highway connectivity from Madurai district

B. AIRPORT AND SEAPORT CLOSE TO THE DISTRICT

Madurai Airport is a primary airport serving Madurai and surrounding districts in the Indian state of Tamil Nadu. It is located about 11 km from the Madurai railway station and near State Highway 37; the airport was established in 1957. It is the fourth-busiest airport in the state of Tamil Nadu after Chennai, Tiruchirappalli and Coimbatore. Madurai Airport operates 126 flights per week by Indian Airlines, Air Deccan, Paramount Airways, Jet Airways to Chennai. The nearest seaport is the Tuticorin port at a distance of 150 Km from Madurai district.

Closest Airport/ Seaport	Distance from Madurai
Madurai Airport	11 Km
Tuticorin Seaport	150 Km

Table 4.2: Distance of Airport and Seaport from Madurai district

The port has handled 28.64 million Tonnes of cargo during the financial year 2013-14 of which the share of coal is 12.15 million Tonnes and containers 10.13 million Tonnes.

Figure 4.2: Map showing airport and seaport close to Madurai district

C. RAILWAY CONNECTIVITY

Madurai falls under the Madurai railway division of the Southern Railways. Madurai district has a total route length of 62.935 Km (BG) and 81.568 Km (MG) and a track length of 78.395Km (BG) and 95.928 Km (MG). The rail links leads to Chennai, Tiruchirapalli, Kollam, Kanyakumari and Rameshwaram by super fast express trains.

D. MADURAI DISTRICT – DEMOGRAPHICS

Madurai District is the 2nd highest district in terms of population size among the district. The district urban population share is 60.8%. The population density of the district is 819 persons per sq.km. In 2011, Madurai had population of 30,38,252 of which male and female were 15,26,475 and 15,11,777 respectively. The district has recorded sex ratio of 990, lower than the State sex ratio of 996. The district has recorded the literacy rate of 83.5%, higher than the State (80.1%). The population decadal growth of the district during 2001–2011 is 17.8%.

a. FORECASTING POPULATION GROWTH

The forecasting of the population growth of the Madurai district is taken in a linear trend to obtain the expected population till the year 2041.

Sl. No.	Year	Population (persons)	Forecasted Population (persons)
1	1971	1730047	
2	1981	2042667	
3	1991	2400339	
4	2001	2578201	
5	2011	3038252	

6	2021		3303484
7	2031		3618679
8	2041		3933873

Table 4.3: Forecasted population

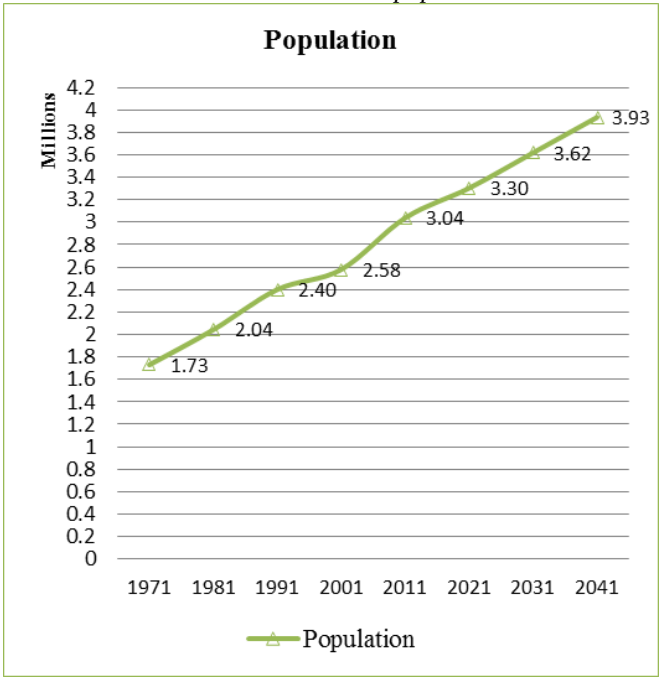


Figure 4.3: Forecasted Population growth

The major taluks of Madurai district are Madurai North, Madurai South, Melur, Vadipatti, Usilampatti, Peraiyur and Thirumangalam. The 2011 census shows the statistical result that Madurai South taluk has the highest population count and the non-workers are observed as 60% of the population which is very high among the seven taluks. The Census data was obtained from the Statistical Department of Madurai district and the linear trend is used to forecast for further three decades.

E. ECONOMIC PROFILE

The Gross Domestic Product of the District is 2996.6 USD million in 2012. In 2012 the tertiary sector contributed to about 71% of the GDP followed by the secondary sector which contributed to about 25% of the GDP. The IT industry in the District is the major contributor to the GDDP of the District. The District Annual Credit Plan envisages implementation of good numbers of innovative and hi-tech projects in the field of agriculture, horticulture, farm forestry, wasteland development, dairy and small-scale industries.

The banks and other financial institutions in a district play a crucial role in promoting rapid industrial growth by the lending strategy based upon the viability of project reports and the focusing to be increased on developing backward and most backward areas of the District.

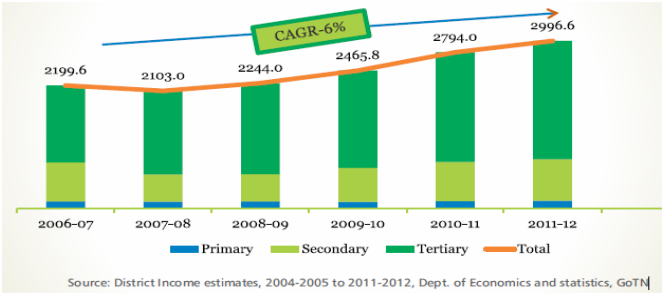


Figure 4.4: GDDP of Madurai District

The three sectors starts with the primary sector, which is the part of the economy generated by extracting raw materials directly from the earth for consumption or sale; the secondary sector, that transforms the raw materials into goods for sale or consumption and the tertiary sector that involves the sale or trade of services instead of goods.

F. RESOURCE PROFILE

a. LAND UTILISATION IN THE DISTRICT

The total area under vegetation is 374173 hectares. Major crops grown in the area are paddy, millets, pulses, cotton, oilseeds and sugarcane. Land classed under fallow has increased from 13.93 per cent to 18.90 per cent. This also is not a healthy trend for sustainable development.

Sl.no	Classification	Area in Hec.
1	Forest	48473
2	Barren and Uncultivable uses	13031
3	Land put to Non Agricultural uses	75536
4	Cultivable Waste	14446
5	Permanent pastures and grazing land	233
6	Land under other tree crops and groves	2737
7	Current Fallows	6354
8	Other fallow land	88867
9	Net area sown	124496
10	Geographical area	374173

Table 4.5: Land utilisation in the district

The land use shows the land under non-agricultural uses and the fallow lands of 30% and 36% of the total land available that could be used for the upcoming of industries as the available workforce could be observed from the census data of the district.

G. INDUSTRIAL SCENARIO

The district has reputed organizations in the private sector which are engaged in the production of variety of goods like tyres and tubes, machineries, textile, conveyor belts, etc., and also provide huge employment opportunities. The district also shows strong presence of the IT sector. The district has over 27 engineering colleges with an annual output of 10891 students and an IT/ITES SEZ.

The District has a very few reputed organizations in the private sector like T.V. Sundaram Iyengar and Sons, Madura Coats, Fenner (I) Ltd., George Oaks Ltd. etc. which are engaged in the production of variety of goods like tyres and tubes, machineries, textile, conveyor belts etc. and also provided employment opportunities.

The major concentration of industries found clustered in and around Madurai, Thirumangalam and Usilampatty. Chunk of Agricultural implements manufacturing industries are clustered in Melur. Food Products, Textile machinery, Garments, Chemical, Stove and Spares units are concentrated in Madurai. Knitted Garments industries are concentrated in Urangampatti.

Sl No	Product	Indicative Investment	Suitable Blocks
1.	Coir Products	Rs. 5 lakhs/unit	Kottampatti, Vadipatti
2.	Confectionary items	Rs.5 lakhs/unit	Usilampatti, Alanganallur, Vadipatti
3.	Rice based	Rs.2 lakhs/unit	Usilampatti
4.	Milk Products	Rs.5 lakhs/unit	Alanganallur
5	Perfumery	Rs.25 lakhs/unit	Vadipatti
6	Oil Extraction	Rs.10 lakhs/unit	Tirumangalam
7.	Granite Products	Rs.25 lakhs/unit	Melur
8.	Blue Metal Jelly	Rs.20 lakhs/unit	T. Kallupatti
9.	Bricks	Rs.15 lakhs/unit	Madurai East
10.	Herbal Products	Rs.5 lakhs/unit	Usilampatti

Table 4.6: Top 10 Industries suitable for the district

H. MEDIUM, SMALL AND MICRO SCALE INDUSTRIES

The Madurai District offers ample scope for the field of textiles, readymade garments, bakery units, and floriculture, dairy and cold storage units, Agro and Herbal products, Granite stones, Blue metal jelly, Chamber bricks, Rubber and plastic based industries, food processing and agro based industries. The growth of Medium, Small and Micro Enterprises (MSME) Units in the District are analyzed from the given table over the years wherein the maximum focus was given to the sector with higher units.

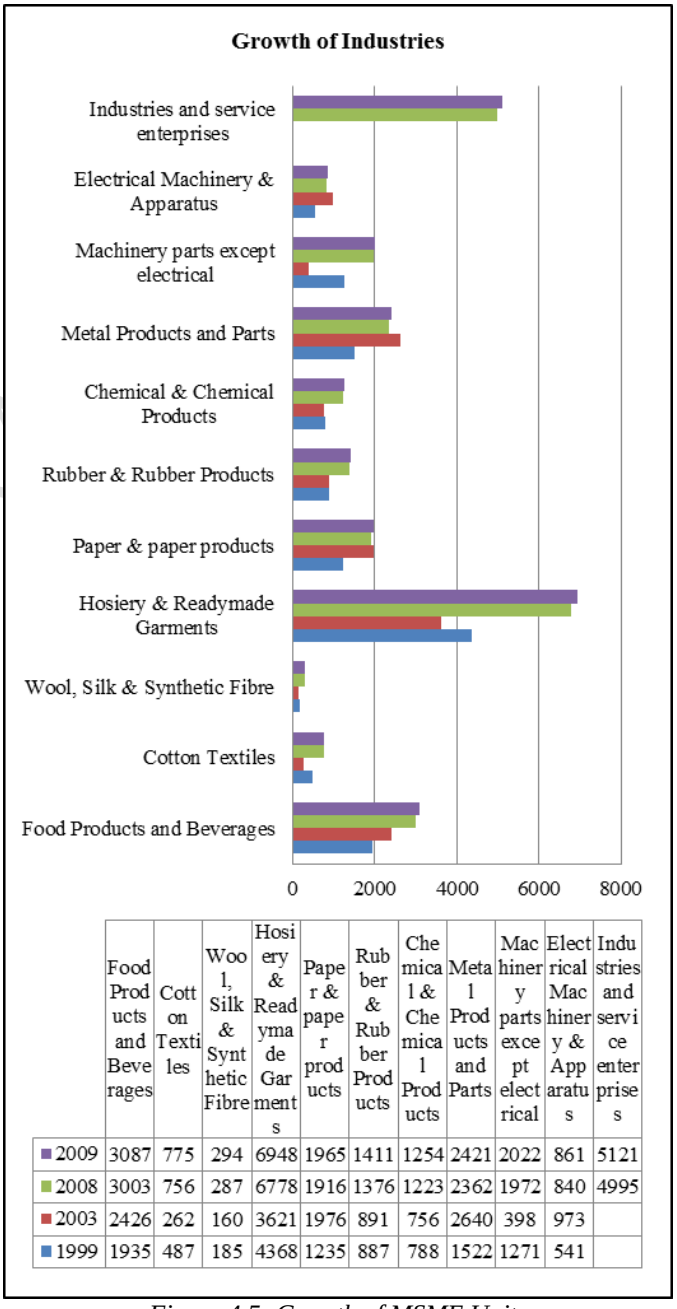
The most appropriate technique for fostering rapid, balanced and decentralized development of SSI is setting up of the Industrial Estates. In Madurai District, five industrial estates are functioning as follows.

- ✓ Small Industries Development Corporation (SIDCO) Industrial Estate, K.Pudur, Madurai.
- ✓ SIDCO Industrial Estate, Kappalur, Madurai.
- ✓ Hosiery Industrial Estate, Uranganpatti, Madurai.
- ✓ Electrical and Electronic Industrial Estate, Kappalur
- ✓ Automobile Co-operative Industrial Estate, Kappalur.

I. ANALYSIS OF MSME UNITS

An analysis of the growth of small scale sector reveals that the significant change in structure and pattern of the industrial development have taken place within the small scale sector in the district. Promising changes in structure and pattern of industries have made a noticeable impact on the production front. However, the expansion of industrial activities has not brought any significant and desirable changes in the composition and cluster of industries in this district.

Some old industrial groups like Agriculture implements, Ironwares units are still fighting for retaining their position in the competitive environment. Electronic and software industries are the recently emerging sectors in Madurai district. After 2005, the MSE enterprises in Madurai district had gone through transition under group initiatives. Cluster Movement has encouraged MSE players to create common assets and supported them to scale up their operation under innovative drive.



	Food Products and Beverages	Cotton Textiles	Wool, Silk & Synthetic Fibre	Hosiery & Readymade Garments	Paper & paper products	Rubber & Rubber Products	Chemical & Chemical Products	Metal Products and Parts	Machinery parts except electrical	Electrical Machinery & Apparatus	Industries and service enterprises
2009	3087	775	294	6948	1965	1411	1254	2421	2022	861	5121
2008	3003	756	287	6778	1916	1376	1223	2362	1972	840	4995
2003	2426	262	160	3621	1976	891	756	2640	398	973	
1999	1935	487	185	4368	1235	887	788	1522	1271	541	

Figure 4.5: Growth of MSME Units

V. CONCLUSION

The SEZs could drastically improve the economic activity in the country, make the country's export competitive and globally noticeable, the net foreign exchange earner and provide immense employment opportunity. An economically viable SEZs should be approved over a particular land area (greater than 1000 acres) for rapid economic growth in the area and for it to be profitable and self sustainable. Relaxed Tax norms, Labor laws and DTA regulations will surely attract foreign investment and major industries to setup units in the SEZ's making it profitable and meeting its desired results. The small-scale units can be assisted with more financial support to make their export performance at higher level.

The various socio economic factors that would increase the district GDP are trades, textiles, tourism, culture and heritage driven activities, approximately 2 lakhs people of floating population from nearby districts and fast urbanization of the city forms the major factors. The district has a Per Capita Income with AAGR of 10.34% which is above many districts of the state. The primary and secondary sectors have faced a downfall in their percent share of Sectoral Income, which is overtaken by the tertiary sector from 67% to 71% of the total income of the District. The Annual Growth rate projected for the tertiary sector assumed to be 11.10% for the next 10 years.

Thus with ample resources of workforce, availability of uncultivable land, the heritage of Madurai, favoured destination for Investment, the district's high literacy growth, the interconnecting of all infrastructure facilities and the increased export productivity from MSME units are the factors observed in the feasibility study. A Multi product Special Economic Zone could be effectively planned through the expansion of efficiently functioning Industrial Estate for better economic development of the Madurai District.

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