

2019

DISTRICT DEVELOPMENT PLAN - VISAKHAPATNAM



The city of Destiny

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Executive Summary

Visakhapatnam is one of the fastest growing districts and fourth cleanest city in the country. Population density is 384 persons per square km and population growth was 11.89% during 2001 and 2011. GDVA was growing at an impressive rate of 10.62 during last three years. Visakhapatnam is popularly known as “The jewel of the east coast” and has a coastal line of 132 kms. It has a natural port, airport, national highway and rail network connecting major cities. It has good number of both private and public sector organisations generating significant number of jobs which help in economic development at both state and central level. Visakhapatnam district receives annual normal rainfall of 1202 mm and is a zero deficient rainfall district. It has a geographical area of 11.16 lakh hectares of land of which 32.5% is cultivable area, 39.5% is forest area, barren and uncultivable land is 11.7% and non-agriculture use is around 10%. Suitable interventions have been taken to improve land use.

Agriculture sector has been growing at an average rate of 10.35% during last three years with similar growth in services sector. IT/ITES, fin-tech, health and tourism sectors are also growing with pace and have great potential for growth. Tourism sector has recorded a growth of four times during last seven years and is poised to grow in the similar way for next five to seven years mainly due to suitable improvements in quality infrastructure, better connectivity by air and skilled workforce. AP government is investing 15,269 crores for developing tourism in the state and Visakhapatnam is one of the major destinations.

Dairy industry is one of the fastest growing one. Visakha dairy is one of the prides of the district and has grown from Rs 11 crore to 12000 crores during last 40 years and milk products have been exported to countries like Singapore, Malaysia etc. This sector has a significant potential for further growth similar to that of Amul of Gujarat. Dairy industry needs to focus on high value products and exports. Visakhapatnam is becoming a hub for healthcare and education particularly. There are good numbers of both public and private institutions including IIM attracting high skilled talent and adding to the quality workforce. Similarly, in healthcare, city is attracting both domestic and overseas patients seeking healthcare. Medical tourism is one of the major areas that can drive the growth. Fisheries is another area which has significant growth potential both in domestic and export market due to quality of fish available in the region. Araku Valley can be developed as an integrated tourism cluster by providing suitable quality infrastructure and manpower. This can be integrated with tribal culture and handicrafts.

Pharma and apparel SEZ is one of the fast growing sectors and has generated direct employment for more than 20,000 people of which more than 80% are women. MSME sector is one of the oldest in the country and has been catering to the needs of industry sectors like petroleum, steel, ship building and pressure vessels and other allied industries. This is a special segment and has very good technical capability but it needs to diversify into modern areas like automobile, solar, defence etc. This segment can generate significant amount of employment to the tune of 5000 to 6000 people directly and similar numbers of indirect and economic growth with suitable interventions like cluster development etc.

Handicraft sector is another traditional area of economic development which is shrinking due to lack of financial access as well as market linkages and lack of entrepreneurial skills of the artisans. Ettikopaka wooden toys are very popular and GI certified but not able to scale up due to many reasons including migration of artisans to other emerging areas of businesses. This sector needs significant support in many areas. Another major area of development would include tribal tourism and products like coffee, tea, medicinal herbal products, particularly honey and other commercial horticulture products.

In education sector, specific programs like healthcare management, hotel and hospitality management, dairy management, agriculture management, textile and apparel, pharma etc. and strong research and development resources are highly necessary. Water and adventure sports are an upcoming area and it requires both infrastructure and skilled manpower. Suitable collaboration with established organisations from India and overseas can be adopted.

CII, HPCL and RINL can help in imparting industry specific skills through the existing infrastructure for skill development. In order to achieve the economic development of 2-3 % in the near future, suitable policy changes and financial access and other supporting policies are very important.

Chapter 1

Overview

1.1 Introduction

India has emerged as the fastest growing major economy in the world as per the Central Statistics Organization (CSO) and International Monetary Fund (IMF) and it is expected to be one of the top three economic powers of the world over the next 10-15 years, backed by its strong democracy and market development. India's GDP is estimated to have increased to 6.6 percent in 2017-18 and is expected to grow by 7.3 percent in 2018-19 and further to 7.6 percent as per latest estimates of Asian Development Bank.

India is on a high growth path and future forecasts are optimistic. However, in order to cater to its large population India needs a further push on the growth trajectory. Keeping in view, India's desired trajectory, the Department of Industrial Policy and Promotion (DIPP) is working towards creating a conducive environment to accelerate annual growth of industries to double digits, on a sustained basis; improving the share of manufacturing in GDP and India's global share of FDI; and making India a preferred location for foreign investment.

The Department of Industrial Policy and Promotion (DIPP) is working on formulating a strategy to enable Indian economy to reach USD 5 trillion mark. Achievement of this objective requires sustained high growth rates and a bottom up approach with district as the unit for planning and intervention. In this regard, it has been proposed to prepare district strategies/plans, which are to be rolled out soon. The plans are built around local strength and economic activities with the objective of achieving at least 2-3 per cent increase in annual growth rate.

1.2 Objectives

To prepare a district plan and strategy for higher growth in Visakhapatnam district with the objective to accelerate the growth of the Districts by 2-3%. The assignment aims:

- To study the available resources including sources of investment and skills in Visakhapatnam district and develop a baseline profile.
- To suggest interventions for the overall improvement in the business environment in terms of ease of doing business, access of credit and convergence of existing efforts.
- To work closely with district administration, state government, ministry and central Government to provide a Strategic Development Plan.

1.3 Scope of the study

The Strategic Development Plan for Visakhapatnam district and it includes the following:

- i. A baseline profile of the District
- ii. Parameters/metrics that are relevant for the strategy prepared, which will also enable tracking of progress
- iii. Investments, resources, strengths of the district including skills available
- iv. Sector wise interventions for Agriculture; industry, including MSMEs; and Services relevant for the District
- v. Interventions for skill development, based on demand in the District
- vi. Interventions to improve business environment in terms of ease of doing business, access to credit, convergence of existing efforts in public and private sectors etc.

This provides suitable indicators covering all three sectors for the review, mentoring and handholding exercises to be executed in phase two.

Approach and Methodology:

We have adopted a bottom up approach with adequate focus on micro planning through participatory approach ensuring involvement of different stakeholders in the development process. A standardized common framework was developed and used. Methodology undertaken for this study is explained below:

Step 1: We have studied the economic profile of the district with respect to the gross domestic product and the contribution of primary, secondary and tertiary sector in it.

Step 2: The secondary data available with District and State Authorities and other reliable sources has been collated and a field survey has been executed to develop a District Profile.

Step 3: Based on this SWOT, District Portfolio analysis was attempted using the **BCG Growth Share Analysis** given in figure 1.1.

Step 4: District Profile has been used to shortlist the key focus sectors for growth

Step 5: Porter's Five Forces Analysis (framework given in figure 1.2) has been done on the key focus areas.

Based on the analysis, measures for achieving 2-3% annual growth rate over a five-year period has been suggested.

Step 6: SWOT analysis on the selected key focus area has been done

Step 7: Suggesting intervention and action plan for growth based on the analysis done above.

The overall deliverables include a Comprehensive District Plan for District, outlining the investment required and strategies therein to achieve the desired growth rate of 2-3%.



Figure 1.1 - BCG Matrix

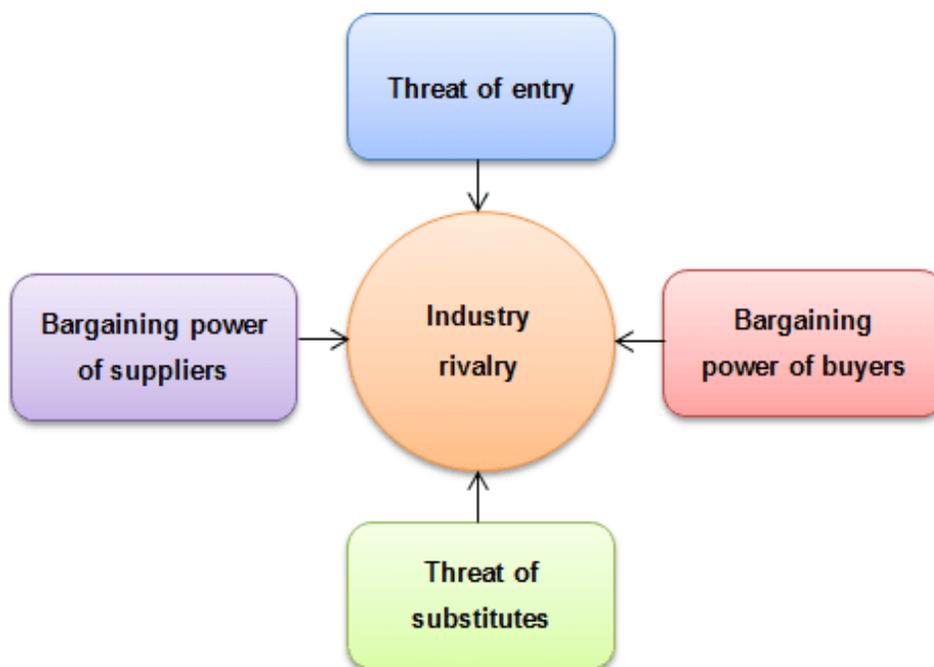


Figure 1.2 - Porter's Five Forces

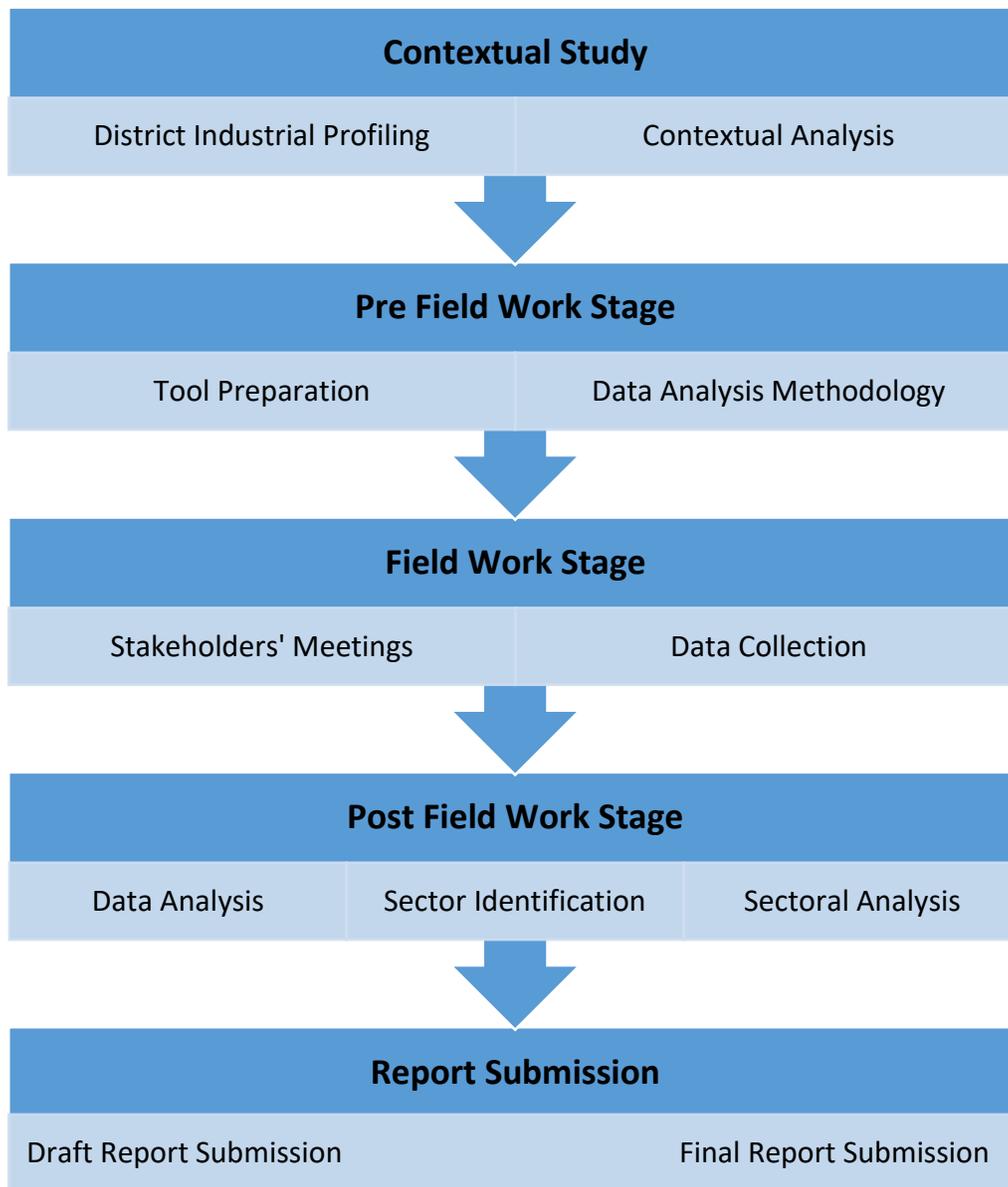


Figure 1.3 - Methodology of Study

Key Steps followed:

1. Studied about the industries from secondary sources
2. Conducted meetings with various stakeholders at district and state capital
3. Report Writing for further analysis

Pre-fieldwork Stage: After preparation of district industrial profile, we ideated the flow of our study based on the contextual analysis done. Following the kick off meeting at Varanasi, list of respondents was prepared for designing unstructured interview schedule. Further, the tools for data collection and method for data analysis were also prepared. The BCG Matrix for sector identification and Porter’s Five Forces Analysis model and SWOT Analysis tools for sectoral analysis were pre-decided. Format of data needed for these tools was also prepared for analysis.

Key Steps followed:

1. Analysis of the report prepared during contextual study phase
2. Collection of secondary data
3. Preparation of data collection and data analysis tools
4. Coordinated with district administration and district industries centre

Fieldwork Stage: Before the actual fieldwork phase started, we had sent the data collection tools to the district administration. The research staff were oriented about the data collection process by the concerned faculty involved in the project. During our field work, data was collected from relevant government functionaries, factory owners, chamber of commerce, farmers, traders, people representatives amongst others. The team visited different government offices for quantitative and qualitative data collection (Refer appendix for the list of stakeholders). Meeting with various private industry owners and knowing their views was part of this phase.

Key Steps followed:

- | | |
|-----------|----------------------------------------------------------------------------|
| Chapter 1 | Meeting with government departments and some entrepreneurs in the district |
| Chapter 2 | Qualitative and quantitative data collection |
| Chapter 3 | Comparative study of the existing industries in the district |
| Chapter 4 | Data collection from secondary sources |

Post Field Work Stage: Data analysis using pre-decided tools, identification of potential sectors/products based on data analyzed and in depth study of these sectors/products were part of the phase.

Key Steps followed:

1. Primary and secondary data analysis
2. Sector identification using BCG Matrix
3. Sectoral Analysis using Porter's Five Forces Analysis and SWOT Analysis tools
4. Report Preparation.

Caveat:

1. For secondary data author has relied on the various agencies/secondary sources providing the data.
2. This study was commissioned by DIPP though the report does not necessarily reflect the view of the sponsoring agency.
3. Authors are not responsible for misrepresentation of results contained in this report.

Chapter 2

Baseline Profile of Visakhapatnam District

2.1 Introduction

Andhra Pradesh is a state located in south of India. It has thirteen districts out of which Vishakhapatnam is one. It can also be called as the financial capital of Andhra Pradesh. Popularly known as “**The jewel of the East Coast**”. It is famous for its oldest shipyard in India and the longest seaport in the country. It has bright aspects for education and economic development activities as it provides numerous opportunities for the development of these sectors and many more other sectors like tourism, infrastructure, fishery, agriculture, oil refinery, steel plants etc. The city is among one of the most populous cities of the state and is among the top 10 cleanest cities of India. It has 43 sub district, 15 towns and 3,265 villages.

The coast line stretches to a full length of 132 Km on the coast of Bay of Bengal. The geographical conditions of Vishakhapatnam are said to be almost same as San Francisco and that has helped it in becoming a famous tourist attraction. It has an area of 550 km² that makes it the largest city in the state. It is primarily an industrial city, apart from being a port city. The city is also famous as steel city of Andhra Pradesh due to the presence of a large steel plant of Rashtriya Ispat Nigam Limited.

2.2 Location and Geography

Vizag is situated in the Eastern Ghats on the coast of Bay of Bengal. Geographically, the district lies at 17°69'N latitude, 83°22'E longitude and 900 m Altitude. The area of the district is about 11,161 sq. km, its adjoining district in north is Vizianagaram, and Godavari district in the south. The hilly areas are covered by the Eastern Ghats which has an altitude varying between 900 meters to 1200 meters at several peaks.



Source:mapsofindia.com

Figure 2.1 Map of Andhra Pradesh after Bifurcation

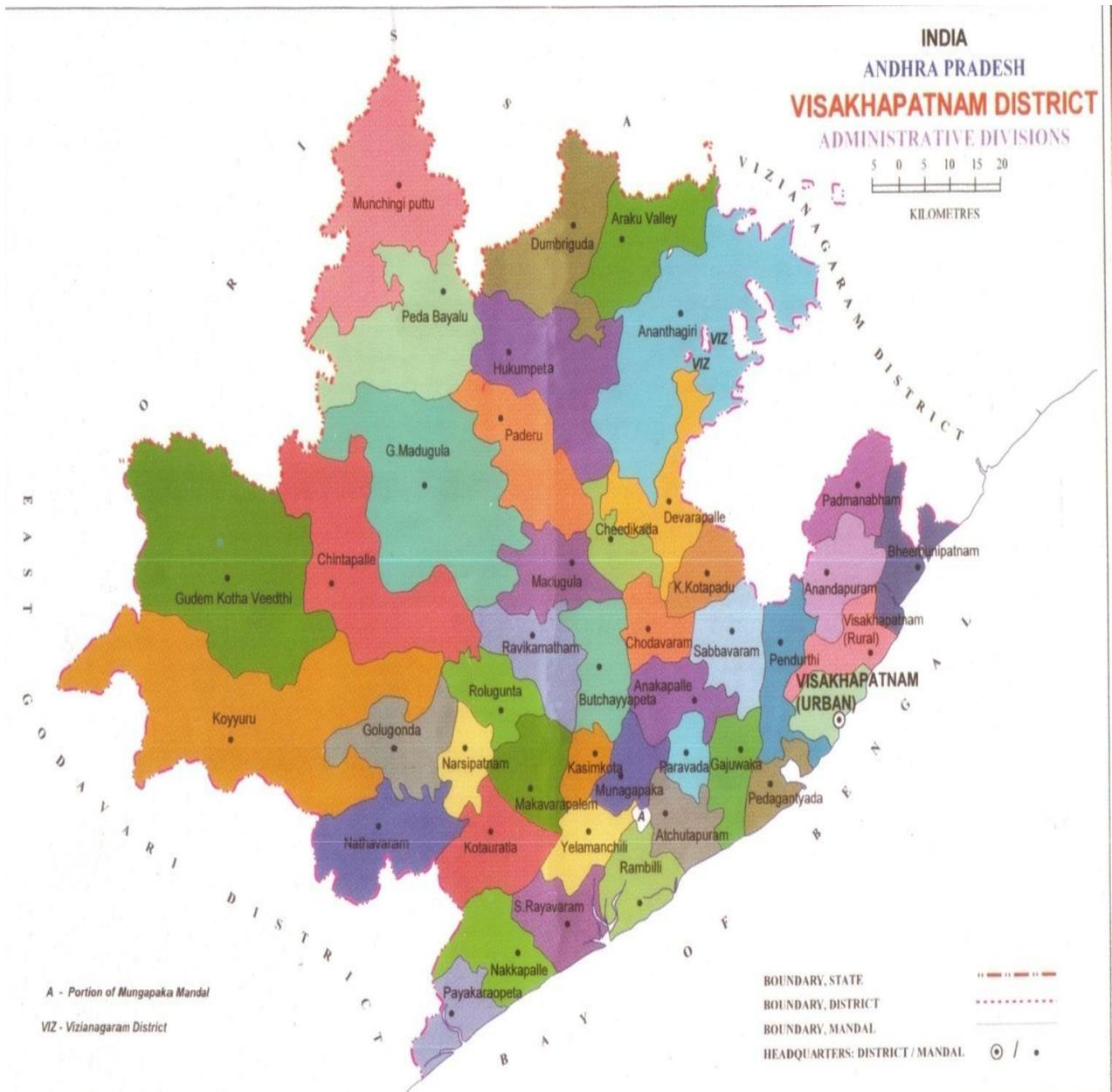


Figure 2.2: Map of Visakhapatnam District with Sub-districts

2.3 Climatic conditions

Here the characteristic of weather is warm summer and moderate winters. As the district is a coastal city, the weather remains almost same throughout the year. But, the humidity is high during summers, which is experienced from February to May; temperatures are on the higher side. The hottest month of the year is May, with temperatures reaching as high as 43° Celsius. During last few years, the maximum temperature has been increasing sharply. Coldest months are December and January, when the average temperature hovers around 30° Celsius. Thus, winter is the ideal time to visit Visakhapatnam, as it is a pleasant one.

Monsoon season brings in good rainfall and is influenced by north-east monsoon. In the months September, October and November, the area experiences a number of depressions and storms, which originate in the Bay of Bengal, overrun the city. Thus, Visakhapatnam is lashed by gales and heavy rains during this time. Annually, Visakhapatnam receives around 95 cm of rainfall.

2.4 Demographic Details

Total population of Visakhapatnam district according to census 2011 is 42,88,113 persons. Out of which 21,40,872 are male and 21,47,241 are female. This makes its ranking 4th in the state and 44th in India. The population density of Visakhapatnam district is of 384 inhabitants per square kilometre; its population growth rate over the decade 2001-2011 was 13.15%. The total number of households' present are 11, 26,166.

The administrative language of state and district is Telugu. Sex ratio of the district is 1006 (females for 1000 males). Literacy rate of the district is 67.70%, (75.47 % male and 60.00% female). The total population of Schedule Tribe is 6, 18,500 persons which is 10.3% in the total population, whereas the total population of Scheduled Caste is 3,29,486 persons, 2.7% of the total population.

2.5 Working Population

According to District statistical handbook of 2017, the total workers according to census 2011 is of 18.89 lakhs, which is further divided into agriculture workers which constitutes about 5.79 lakh and non –agriculture workers which are 13.10 lakhs.

Table 2.1: Population Statistics of India, Andhra Pradesh and Visakhapatnam

Residence	2001- Population			2011- Population			% Change		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
India	532,223,090	496,514,346	1,028,737,436	623,270,258	587,584,719	1,210,854,977	17.11	18.34	17.70
Andhra Pradesh	38,527,413	37,682,594	76,210,007	42,509,881	42,155,652	84,665,533	10.34	11.87	11.10
Visakhapatnam	1,903,894	1,885,929	3,789,823	2,140,872	2,147,241	4,288,113	12.45	13.86	13.15
Literacy Rate									
India	63.24%	45.15%	54.51%	71.22%	56.99%	64.32%	12.62	26.22	18.00
Andhra Pradesh	70.32%	50.43%	60.47%	75.56%	59.74%	67.66%	7.45	18.46	11.89
Visakhapatnam	69.68%	50.12%	59.96%	75.47%	60.00%	67.70%	8.31	19.71	12.91

Source: Census of India, 2001 and 2011

2.6 Administrative Profile

According to 2001 census, the then existing 14 taluks, they were reorganised into 43 mandals. Visakhapatnam has 43 mandals which are divided then into three revenue division which are as follows:

- 1) Paderu Division: Which consists of 11 mandals, namely Chintapalle, Koyyruru, Gudemkotha veedhi, Paderu, G. Madugula, Munchingi Puttu, Peda Bayalu, Hukumpeta, Araku Valley, Ananthagiri and Dumbriguda
- 2) Visakhapatnam Division: has 19 Mandals under it which are Chodavaram, Ravikamatham, Butchayyapeta, Cheedikada, Anakapalle, Munagapaka, Kasimkota, K.Kotapadu, K.Devarapalle, Sabbavaram, Paravada, Visakhapatnam (U), Pendurthi, Gajuwaka (U), Pedagantyada(U), Bheemunipatnam, Padmanabham, Anandapuram and Visakhapatnam(R).
- 3) Narsipatnam Division: (13 Mandal) Madugula, Narsipatnam, Golugonda, Rolugunta, Kotauratla, Makavarapalem, Nathavaram, Nakkapalle, Payakaraopeta, Yelamanchili, S. Rayavaram, Atchutapuram and Rambilli.

Changes made during 2011 Census

There are some changes which have been made, three villages such as Boddapadu, Tamarabba and Pallapukodabu of Devarapalle mandal were revenue villages till 1991 but were not shown as revenue village in 2001 Census and now they have been rectified and incorporated as revenue villages. Eight villages Chintapalle, Peda Boddepalle, Mulakuddu, Bowluvada, Chodavaram, Yelamanchili, Nakkapalle and Payakaraopeta are upgraded as 8 new census town. A total of 24 villages, Vepagunta (CT) and Gajuwaka (M) are merged with GVMC.

However, there are 3,265 villages in 2011 of which

- 193 uninhabited and 3072 habited)
- 43 Mandals (4 urban Mandals [Visakhapatnam (Urban), Visakhapatnam (Rural), Pedagantyada and Gajuwaka] and 39 Rural Mandals.
- Three revenue divisions, 15 Towns(3 statutory [1 Municipal Corporation and 2 Municipalities] and 12 Census towns) and one Urban Agglomeration, in addition to GVMC

2.7 Economic Profile of the District

Industry and Service sector play a major role in the economy of Visakhapatnam district. The agriculture sector contributes about 12.46% of the total GDP of the state. The net irrigated area is 1.22 Lakh out of the net area sown of 2.80 Lakh Hectares, out of which 43.57% is covered by tanks 21.55%, Canal irrigation is 36.58%, and 41.87% of area covered under other sources during the year 2016-17.

The total contribution from Agriculture & Allied sector to the total economy in terms of GVA is Rs.11, 845 Crores (14.45%) from Industry sector Rs.29, 713 Crores (36.24%) and from Services sector is Rs.40, 435 Crores (49.32%). Hence the contribution of industrial and service sector is more than agriculture sector. The GVA of Visakhapatnam holds 2nd place with Rs.81, 993 crores in the year 2017-18. The GVA Growth Rate of the district has shown tremendous growth of 9.27% during the year 2017-18 adding Rs.5, 640 crores to the economy of the state that makes it one of the fastest growing and developing district of the country. In the year 2017-18 per capita income has raised to Rs.1, 78,166 which was Rs.1, 56,203 in the year (2016-17) that all together records a growth of 14.06%.

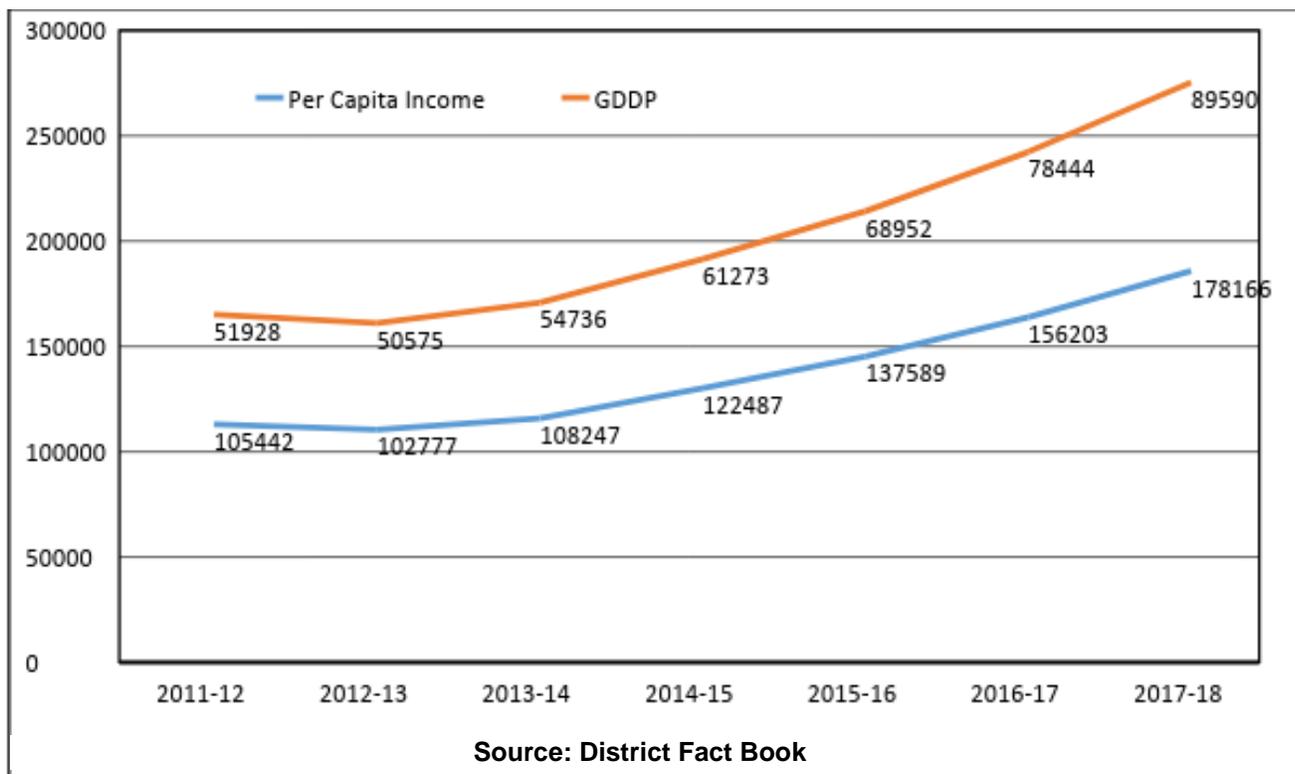


Figure 2.3: Per Capita Income and GDP of Visakhapatnam

Visakhapatnam Achievements-in-short

1. Some of the attributed names for Visakhapatnam are “The city of Destiny” and “The Jewel of East Coast”.
2. Ninth most populous metropolitan area with 5340000 census.
3. Ninth largest contributor to GDP in the country of 43.5 Billion US\$.
4. FY-2015-16-Per capita Income 283816, which is TOP in Andhra Pradesh (2016).
5. Awarded third Cleanest City in India in Swachh Bharat rankings.
6. One of the 100 fastest growing cities in World.

7. Fifth busiest cargo port in India (Oldest Shipyard since 1926, Natural harbor, livelihood to 50 000)
8. Export of seafood from Visakhapatnam port, Gangavaram port was of 1,27,000 tons for the year 2015, which is the highest in India.
9. Hindustan Shipyard- Builds and repairs Naval Fleet, future order of 2000 CR (290 M US\$)
10. IT sector has turnover of 5400 crores (2016-17), and 2013-14, was 1450 crore
11. Brand names as Mahindra, Satyam, Wipro, Kanexa, Infotech, IBM, Sutherland, HSBC are providing employment in the district.
12. Brandex India Apparel City- Largest Textile park with more than 18000 women employed at one location
13. Jawaharlal Nehru Pharma City (JNPC), Parawada, Vizag has 2400 acre, where Hospira, Mylan, Eisai, Reddy's Lab, Arbindo Pharma, Torrent Pharma are currently producing medicines and other chemicals.
14. Andhra Pradesh Medtech Zone Limited is India's First Ultra-Modern Medical Equipment Manufacturing and Testing Facility, which is open to manufacturers and innovators.

Chapter 3

Sectoral Analysis of Visakhapatnam District

3.1 Primary Sector:

The key economic activities in the descending order of their market share in the primary sector are described below:

Agriculture & Allied

i) Agriculture: Andhra Pradesh is also known as the 'Rice bowl of India'. But the GDP created by the Agriculture sector of Visakhapatnam district is not much when compared to Service and Industry sector of the district. The contribution of agriculture sector from the district is marginal. The cultivated area in Vizag is 3 lakh hectares. Out of the total geographical area of the district which is 111.16 lakh hectares, forest covers nearly 4.41 lakh hectares.

The farmers in the district have an average land holding size of 0.91 hectares. Nearly 70% of the Visakhapatnam population is depended on agriculture for its survival. Yet the sector is quite a neglected one and needs special attention for its improvement and growth. Agriculture is the main stay of nearly 70% of the households. Visakhapatnam city is developing industrially but the rural areas are still backward. One of the reasons is pure irrigation system. The staple food of the people in Vizag is rice followed by Ragi, Bajra and Jowar. Sugarcane, Groundnut, Sesame Niger and Chilies are the important cash crop of the district. Due to lack of major irrigation system, only 36% of the cropped area is irrigated. The remaining part of the cultivated area depends on the monsoon. It mainly constitutes the dry crops. Hence the production of the crop is low.

Visakhapatnam is geographically divided into hilly regions and plain. Hilly regions are mainly the tribal zones of the state and the main source of their income is agriculture which is facing a lot of challenges. The challenges they are facing are:

- Land alienation.
- Poor access to institutional credit
- Lower levels of investment.
- Absence of efficient market environment for competitive price discovery.
- Lack of an effective extension system

The farmers should be given proper training and development. The Hills in Vizag run almost parallel to the sea coast from north-east to south-west of the district. The main sources of irrigation of the district are canal, tanks and wells.

Table 3.1 Land Utilization of Visakhapatnam

Area	2015-16	2016-17	% change
Gross Cropped Area (ha).	351000	335523	-4.41
Net Cropped Area (ha).	277000	279603	0.94
Gross Irrigated Area (ha).	148000	145516	-1.68
Net Irrigated Area (ha).	117000	122097	4.36
Source: District Statistical Handbook			

Table 3.2 shows major crops produced in Visakhapatnam district during 2015 and 2017. We can see that paddy is most produced crop of the district followed by Sugarcane which is also considered to be a cash crop and its production in the year 2017-18 is 1984483 metric tons. At overall level, the area sown has decreased by 4.74 % however the production was increased nearly 20%. From the figure 3.1 we can observe that only three crops have shown increase in both sown area and production. All other crops 11 out of 14 crops sown area has been reduced in the range of -1.5 % to -30.57% during 2015-2017.

The agriculture in district makes a share to the gross domestic product of about 10% during the year 2016-17, where in the GDP of the state and its share is 13.4%. There is a decline in the contribution of primary sector for the year of 2015-16 because the state was facing natural calamities like HUD-HUD and TITLI cyclone which devastated the whole district. The city is managing to fight and survive in these conditions and the government is planning on its part how to face the situation at its best.

The graph in figure 3.2 shows the share of primary sector in the district GDP at current prices which is considered to be very meagre in the district GDP. The fall in share of primary sector can be attributed from the effects of natural calamity in the year of 2015-16.

Table 3.2 Crop wise Area Sown and Production during 2015-2017

Sl. No.	Crop	2015-16			2016-17			2017-18			% Change btw 2015-17		
		Area (Ha.)	Metric Tons.	Kgs/Ha.	Area (Ha.)	Metric Tons.	Kgs/Ha.	Area (Ha.)	Metric Tons	Kgs/Ha.	Area Sown	Production	
1	Maize	6400	14675	2293	6624	21439	3236.6	6994	24612	3519	9.28	67.71	
2	Groundnut	2142	2902	1355	2514	3570	1420	2224	3214	1445	3.83	10.75	
3	Paddy	106785	360079	3372	109116	417966	3830	108836	375158	3447	1.92	4.19	
4	Redgram	1590	415	261	1786	855	479	1566	788	503	-1.51	89.88	
5	Greengram	4579	2180	476	4767	3175	666	4461	3315	743	-2.58	52.06	
6	Rajma	10759	8069	750	6659	4728	710	10383	7652	737	-3.49	-5.17	
7	Ragi	18100	15222	841	19429	24334	1252	17008	17552	1032	-6.03	15.31	
8	Sugarcane	35855	1613475	45000	32364	1958022	60500	32153	1984483	61720	-	10.32	22.99
9	Blackgram	8015	3134	391	6638	5211	785	6906	5704	826	-	13.84	82.00
10	Niger	6651	3326	500	5702	2937	515	5653	4098	725	-	15.01	23.21
11	Minor Millets	8298	5394	650	7036	4784	680	6501	4518	695	-	21.66	-16.24
12	Minor Millets	8299	4938	595	9733	6871	706	6501	4518	695	-	21.67	-8.51
13	Sesamum	6503	1405	216	5305	1273	240	4732	1041	220	-	27.23	-25.91
14	Cotton	2123	614	289	1652	332	201	1474	532	361	-	30.57	-13.36
	Total	226099.00	2035828.00	56989.00	219325.00	2455497.00	75220.60	215392.00	2437185.00	76668.00	-4.74	19.71	

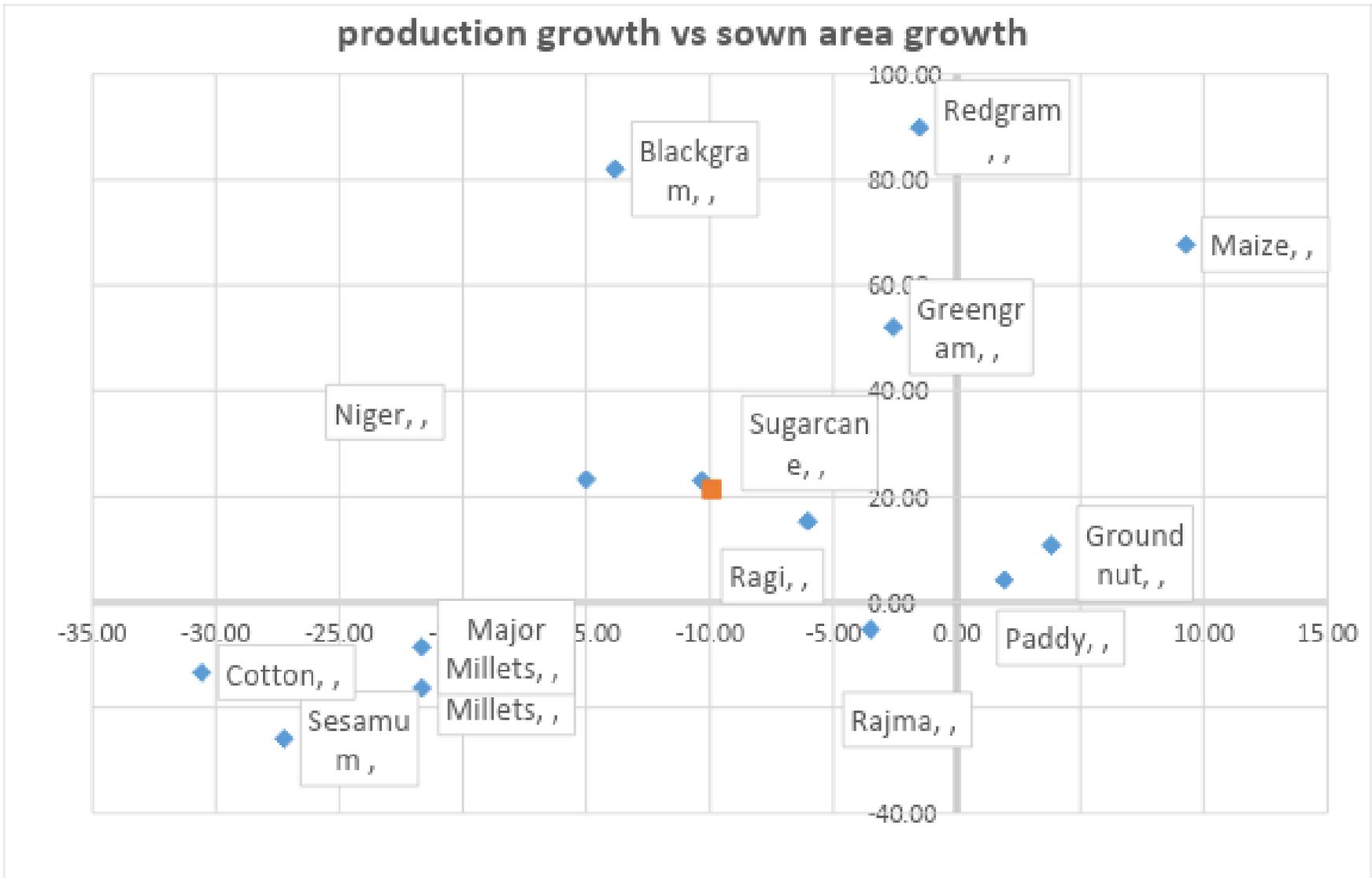


Figure 3.1: BCG Matrix for various agriculture crops

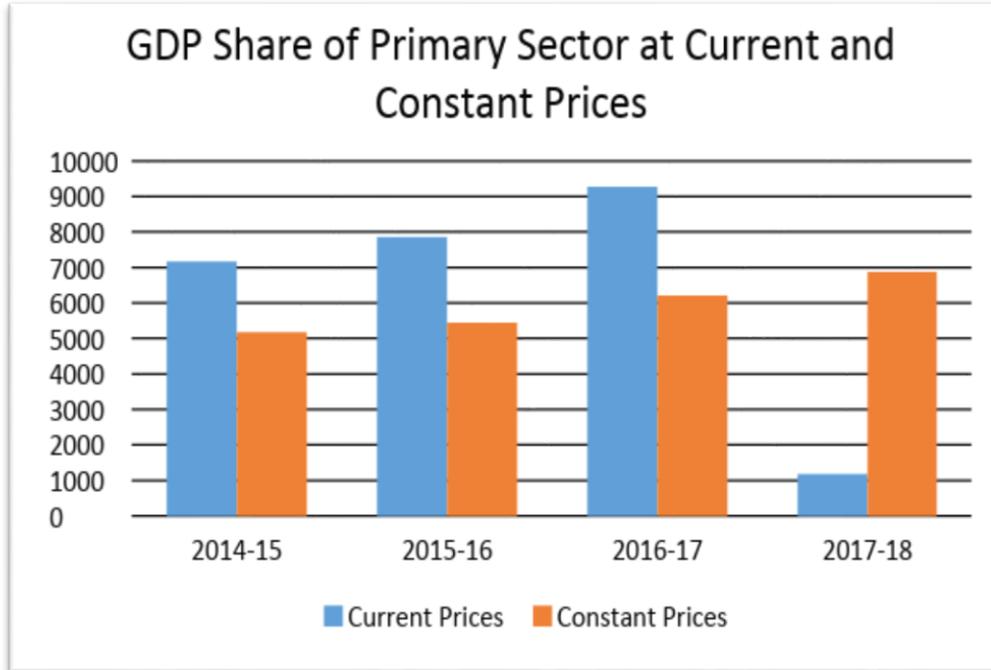


Figure 3.2 Primary Sector Contribution at Current and Constant Prices 2014-18
Source: Performance Appraisal APEDB

The table 3.3 shows the number of workers currently employed under agriculture and non-agriculture sector. We can see that the total agriculture population is of 5.79 lakh out of the total worker population of 18.89 lakh according to 2011 census.

Table 3.3 Total Workers in Visakhapatnam District

Total Workers	In Lakhs	18.89
Agriculture Workers	In Lakhs	5.79
Non-Agriculture Workers	In Lakhs	13.10
Source: Census of India, 2011		

The most important sector of the district is agriculture, but the GDP contribution is meagre. Sugarcane and paddy are most important crops for the growth of the district; Agriculture sector generates a GVA of Rs.944 crores. in which Sugarcane generates Rs.443 Crores. (46.96%), and Paddy generates Rs.336 Crores. (35.63%). Together they contribute about 82.95% in the agriculture sector.

(ii)Livestock:

The livestock sector has a GVA of Rs.2333 crores. This sector mainly includes milk, meat, egg etc. Milk contributes Rs.1346 crores which makes about 57.71 percent of this sector, followed by Meat which that adds 16.59 percent and Egg contributes about 8.7 percent to the Livestock sector of the district. The total of 97.72 percent of GVA is the contribution from this sector. Thus this sector is of great importance.

(iii)Fisheries:

One of the major occupation in Visakhapatnam is fishing. Visakhapatnam Port Trust is one of the biggest fishing port in the country. It exports seafood and its products. Dried fish is supplied on a great scale in the country and abroad. Hence the industry has great prospects of growth and employment. Dried items registered a growth of 40.98%, 20.14% & 79.05% in terms of quantity, rupee value and dollar terms, respectively.

Marine Cargo export from Indian ports clocked up to 37,870.90 Crore rupees for 1134948 tons in financial year 2016-17 as compared to 30,420.83 Crore rupees for 9,45,892 tons in 2015-16. Vizag port played important role in these exports of marine products and it improved too. From various reports it is noted that the marine cargo worth of 9249.31 Crore rupees for 1,59,973 tons was exported by Vizag Port in 2015-16, whereas in 2015-16, it was worth 7161 Crore rupees for 1,28,718 tons of marine products.

3.2Secondary Sector

Visakhapatnam has dragged attention of investors not only in the country but also investors from abroad. Visakhapatnam is most commonly known as the Steel City of Andhra Pradesh and provides one of the best production facilities in the country. The ease of doing business, government policies and availability of raw material and labor has made it the first choice among investors. There are Special Economic Zones (SEZs) and industrial corridors, Industrial Park, located in heart of the city. These Industrial Zones provide suitable environment for the growth of business. In Visakhapatnam between the years 2006 - 2013 the investments jumped to Rs. 30,000 crores, which was really appreciable.

- i) Jawaharlal Nehru Pharma City:** JNPC-(Ramky Pharma City (India) Limited)is one of the special of its kind, was built for production of drugs in bulk. It is an industrial town in India, spread over an extent of 2,400 acres (970 ha) with 102 companies and 8698 employees, presently in operational. PharmaZell of Germany and Eisai Pharma of Japan, French collaboration with SNF Ltd, joint US venture Aptuit Laurus Labs and US multinational company Hospira Healthcare Private Limited (a Pfizer Company) are major companies in the pharma city.

- ii) Hindustan shipyard:** Hindustan Shipyard Limited, built jala usha the first ship of India in 1948, it also built 167 various other ships. several large scale industries such as, GAIL,

RINL, HPCL, BHEL, Hindustan Zinc, Dredging Corporation of India, Coromandel Fertilizers, Reliance and Brandix are established in Vizag due to its port and shipyard.

- iii) **Steel plant:** RINL is the second largest state-run steel industry in Vishakhapatnam, It is the largest plant in a single location. The capacity of the plant has been upgraded to 6.3MT, and it covers an area of 20,000 acres (81 km²). It is planned to become a 20MT plant in the future. The plant has about 17,800 employees and revenues of ₹144,570 million (US\$2 billion) for 2011–2012.
- iv) **Mineral Resources:** Mineral deposits like quartzite, bauxite, graphite, manganese, titanium, silica are found in Visakhapatnam and its surrounding areas. Few minerals that are transported through rail and road to Visakhapatnam are iron and its ore. There is a rapid growth in aluminum refineries in the district due to presence of manganese and bauxite.
- v) **Petro Corridor:** Visakhapatnam is blessed with crude oil reserves. It has bottling units such as Hindustan Petroleum Corporation Refinery (HPCL), Indian Oil Corporation (IOC) and Bharat Petroleum Corporation Limited (BPCL). The Visakhapatnam–Kakinada Petroleum, Chemical and Petro-Chemical Investment Region (VK PCPIR) is joint project of Government of India and private participation with a cost to tune of 19000+INR Crore, which combines, ports, airports, special economic zones, industrial, IT parks etc with high potential of employment and investment to deliver high returns.
- vi) **Power plants:** National Thermal Corporation Limited established coal based four units of total 2000 mw Simhadri Super Thermal Power Plant. Hinduja also came up with a project for 1040 MW coal based thermal power plant in Visakhapatnam district

The Manufacturing sector contributes 75% in the GDDP, followed by Construction giving 17.90% and Electricity 4.89%. Gross value added by industry sector is 28663 INR Crores.

3.3 Tertiary Sector

Service sector has been contributing highest in term of revenue, among all three sectors, which is boon to Visakhapatnam. Rushikonda Hill area is being developed as hub for the IT and ITeS, with special economic zone and incubation center. Mahindra, Satyam, Wipro, IBM, HSBC, Kenexa, Sutherland and many other multinational establishments are regularly giving boost to the service sector. The software has been on an increase every year by 90%.

IT Sector export contribution is reaching to the tune of 2000 INR Crore in the State of Andhra Pradesh, with 80% coming from Visakhapatnam. After bifurcation, the state has faced problems in setting up infrastructure, and is not good enough to attract new entities to the city and state. The

internet speed and services, policy implementation, subsidies and reimbursements issues have been holding IT and ITeS at back foot. Power tariff has been an issue in IT sector, which needs attention. Visakhapatnam needs to house the major stakeholders, policy maker and offices for implementers.

Real estate and ownership of dwelling is on a steady rise since 2011, only to be hindered by the natural calamity. The development of Visakhapatnam in industrial and service sectors are pushing the real estate upwards too. The challenge here is to maintain the ecological system, while going for growth on this side, which goes to 10.27% as per estimations of APEDB-2018 Report. The previous 2 years has shown 5.37% and 6.77% growth in real estate & ownership. The limitation of land availability is to be compensated by the construction going upwards, while very few high-rise towers are present in the city. Here some examples can be drawn from some many international seaside cities, which have grown vertically, increasing the skyline and standards of the living and are most sought for, to live, work and leisure.

The commencement of Fintech Valley in Visakhapatnam is opening new avenues for the growth to both financial and information technology sector. With the promised setup and policies is expected to give boost to banking and insurance sector to a double-digit growth. Banking & insurance has a vital role in all sectors for development, from agriculture and allied to industry and service.

Service Sector adds gross value of INR 30909 crores (i.e. 62.54% by the growth engines of the sector to GDDP) where trade, an important growth factor contribute 18.54%, and Ownership of Dwelling 13.73%, Real Estate contributes 6.74%, Education 6.46%, Health care 2.14 %, Hotels and Restaurants 1.90%, water transport contributes 0.67% and Air transport contributes 0.45 %.

3.4 Overall analysis of all sector using BCG Matrix

The tool applied here is BCG which was designed by Boston Consultancy group, this tool is applied to identify the sectors which have the growth potential and have enough market shares to achieve the target of 2-3 % annually. This tool uses relative market share and industry growth factor to evaluate the potential of business brand portfolio and provide suggestions for further investment strategies. The tool has 4 quadrants, each explaining the potential and market share of industries that are being analyzed and categorizes those industries under four quadrants. Each quadrant explains the potential and market share of industries under four different labels.

Table 3.4 Gross Domestic Product of Visakhapatnam at Constant Prices(2012-12) (Contd..)

(InCrores)											
Sl. No.	INDUSTRY	Estimates at Constant (2011-12)prices							% Growth Rate		
		2011-12	2012-13	2013-14	2014-15 TRE	2015-16 SRE	2016-17 FRE	2017-18 AE	2015-16 SRE	2016-17 FRE	2017-18 AE
1	2	3	4	5	6	7	8	9	11	12	13
1	Agriculture,Forestry&Fishing										
1.1 A	AgricultureProper	2008	1934	2262	2412	2273	2566	2738	-5.75	12.85	6.71
1.1B	Livestock	1592	1664	1692	1556	1784	2003	2333	14.62	12.29	16.49
1.2	Forestry&Logging	189	188	195	187	179	176	172	-4.32	-1.33	-2.11
1.3	Fishing	798	739	836	1004	1162	1461	1634	15.74	25.79	11.79
	AgricultureSector	4587	4524	4986	5159	5397	6206	6877	4.63	14.98	10.81
2	Mining&Quarrying	2451	2797	2080	497	560	577	613	12.62	2.93	6.38
3	Manufacturing(Org. & Un-Org.)	17302	12073	11949	15029	18227	19787	21518	21.28	8.56	8.75
4	Electricity, Gas&WaterSupply	878	585	695	688	1070	1191	1402	55.41	11.31	17.74
5	Construction	4179	4015	4185	4511	4563	4735	5130	1.16	3.78	8.34
	Industry Sector	24810	19470	18908	20725	24420	26290	28663	17.83	7.66	9.03
6	Trade, Hotel&Restaurants	3291	3644	4117	4577	5257	5921	6289	14.84	12.65	6.20

Table 3.4 Gross Domestic Product of Visakhapatnam at Constant Prices (2012-12)

(InCrores)											
Sl. No.	INDUSTRY	Estimates at Constant (2011-12)prices							% Growth Rate		
		2011-12	2012-13	2013-14	2014-15 TRE	2015-16 SRE	2016-17 FRE	2017-18 AE	2015-16 SRE	2016-17 FRE	2017-18 AE
1	2	3	4	5	6	7	8	9	11	12	13
7	Transport,Storage&Communications										
7.1	Railways	485	532	570	694	685	750	774	-1.31	9.54	3.20
7.2	TransportbyOthermeans&Storage	3495	3686	3677	3649	3928	4402	4902	7.64	12.07	11.35
7.3	Communications	475	565	712	856	1170	1314	1474	36.60	12.30	12.22
8	Financing,Insurance,Realestate&BusinessServices										
8.1	Banking&Insurance	2373	2518	2482	2814	3026	3065	3370	7.50	1.30	9.94
8.2	Realestate,Owner-shipofDwellings	3668	4293	4646	5033	5303	5662	6244	5.37	6.77	10.27
9	Community, Social&PersonalServices										
9.1	PublicAdministration	2323	2364	2502	2674	3121	3635	3940	16.69	16.47	8.41
9.2	OtherServices	2364	2448	2626	2887	3310	3565	3917	14.63	7.72	9.86
	ServicesSector	18473	20047	21331	23186	25799	28314	30909	11.27	9.75	9.17
	GDVA	47870	44042	45225	49070	55616	60809	66449	13.34	9.34	9.27
	NetProductTax&Subsidies	4058	3716	3797	4527	5670	6636	7142			
	GDDP	51928	47758	49022	53597	61286	67445	73592	14.35	10.05	9.11
	PerCapita Income (onNDDP)in Rupees	105442	96772	96228	106589	121373	133347	144425	13.87	9.87	8.31

Source: Performance Appraisal, APEDB

Figure 3.3 BCG Matrix Based on GDDP of Visakhapatnam at constant Prices 2011-12



The four quadrants based on BCG can be understood as:

Table 3.5 Division of BCG into Quadrant

Low growth % Low contribution	Low growth % High contribution	High growth % Low contribution	High growth % High contribution
Forest & Logging	Manufacturing	Other Services	None
Railways		Real Estate & Ownership	
Mining & Quarrying		Communication	
Agriculture Proper		Transport by Others & Storage	
Construction		Livestock	
Trade , Hotel & Restaurants		Electricity , Gas & Water Supply	
Public Admin		Fisheries	
		Banking & Insurance	

The above figure has been prepared based on the data provided by APEDB in Performance Appraisal Report-2017-18. The data is from table of Page 80 of Performance Appraisal and District Economic Scenarios 2017-18, where gross district domestic product of Visakhapatnam at constant price (2011-12) has been evaluated since 2011-12 and estimated for 2017-18., as per the available data and corresponding growth rate.

BCG Matrix has been considered to classify among the sectors and sub-sectors of Visakhapatnam, which contribute in its GDDP. The x-axis used is an advance estimate of 2017-18 at constant price (2011-12) and y-axis depicts the advance estimate percentage growth of the sector/ sub-sector in 2017-18 based on last year.

The four quadrants in which the sectors are presented after applying the tool are **Stars** which can be understood as, industries having high growth potential as well as high market share. The next quadrant is **Cash Cows**, which means the quadrant is representing those industries whose market share is high but relatively have low growth rate. The next quadrant is **Questions Marks**; this represents industries which have been growing handsomely but have not expanded its business keeping its market share relatively low. The last quadrant is of **Dogs**: which tells you the industries which have low market share and have not been able to grow significantly depicting a low growth rate.

The major contributor in GDDP has been manufacturing with a figure of 21000+ Cr. and a slight push will make it a star sector from being cash cow. This sector has advantage of engaging skilled and semi-skilled manpower on large scale too and thus is of our keen interest and focus. Here MSME is in focus,

Trade, Hotel & Restaurants have a major role in the tourism and business of the district and also engages high number of manpower. The scarcity of star hotels and standard restaurants supports our reason to choose this one too. This sub-sector takes up many service providers to establish the environment needed. The scope is big and benefits are multi-dimensional.

Fisheries, though growing well, but contribution to GDDP can still be explored further. A boost of favourable assistance in terms of government support, technological and logistic support can open bigger avenues to grow for all the stakeholders. The manufacturing sector can play a role in fisheries too.

Horticulture from Agri-Proper sub sector has huge scope of growth and contribution both, with proper support system, explained later. Tribal produce and products are specially focused here, to derive a balanced growth formula, so we have a social-economic angle too in the growth, and it has huge scope in the growth and contribution of GDDP.

There are possibilities of many long term interventions in some of the sectors and sub-sectors, which will take longer time and frame to develop.

3.5 Short listing of Key Sectors for GDP Growth

On the basis of our primary & secondary data and interviewing various stakeholders we have been able to finalize some sectors which can increase the GDDP of the district and can create employment opportunities for wide range of population. After looking at the BCG matrix and discussion with the district administration we have selected this sector as there are interventions which are required by the district administration. The reasons for selection for each sector have been provided below:

1. Tourism
2. Fisheries
3. Horticulture
4. Coffee & Handicraft (Tribal)
5. Manufacturing-MSME

- i) **Tourism** is one of the prominent sectors Visakhapatnam “Jewel of East Coast”. With the recent reports on Tourism Andhra Pradesh has a footfall of 165 million, 2.7 lakh domestic and international tourist respectively. The reports and field study have identified that this sector has been received huge investments. Our analysis has helped to understand the bottlenecks which can be rectified.
- ii) **Fisheries** The selection of this sector was determined after the discussion with major stakeholder involved in the production and sale of fishes with the secondary reports claiming that the Visakhapatnam port was identified as the largest exporter of sea food during the year 2017. The field study also substantiates the importance of understanding the loop holes in this sector.
- iii) **Horticulture** The major reason for selecting this sector is done after analyzing the secondary data collected and interaction with the related officers in this field. This segment also includes region from hilly region which comes under Integrated Tribal Development Authority.
- iv) **Coffee & Handicrafts** The selection of this sector is based after the analyzing the secondary data and interactions with leading officials in this sector. Tribal development is one of the most important and requested field for intervention by the district administration.
- v) **Manufacturing – MSME** AS we know that Visakhapatnam has been designed to be an Industrial and Manufacturing Hub of the state. And the recent development and interest of the state and district has derived us to intervene and study with more focus. The selection of this sector will be substantiated with the SWOT and Recommendation of the report which will help the administration.

Some major establishments / products / sectors have not been accounted here, as they contribute largely to national GDP. The focus of this study is to assist the district grow at a faster rate. The IIML TEAM has visited many stakeholders of GDDP in Visakhapatnam. Interventions are needed at all levels and at small and large scales, but the parameters for this study has limited our time, scope and approach.

The Sections will provide an overview of the department and recent developments followed by another important tool named “Porter’s Five Forces Analysis” which gives an understanding of the market dynamics of the sectors followed by understanding the Strengths, Weakness, Opportunities and Threat to the sector. After analysis of this the section, next is recommendation which can help in achieving the objective of this project.

Chapter 4

Detailed Analysis of Selected Sectors

4.1 Tourism

Recent Developments in Tourism Sector

Tourism is a priority sector for the Andhra Pradesh after the bifurcation and government is planning to make Visakhapatnam as one of the tourist destination. And expanding tourism on the coast line is one of major focus area. Recently Visakhapatnam conducted 34th Annual Convention of Indian Association of Tour Operators establishing the importance of tourism sector in the district.

According to reports by Auctus Advisor, AP has received the footfall of 165 Million domestic tourists which is the third largest in the country for the year 2017-18 and it is estimated to grow at 17%, and in relation to foreign tourist the count stands out to be of 2.71 lakh which is expected to touch 3 lakhs in 2018. Tourism minister of state Akhila Priya has announced investment of 15,269 crores for development of 196 projects in the state. Out of which 81 projects are expected to be over by October 2018. Some of the activities which have been undertaken by the state are:

- i) Complete renovation of all the state run properties
- ii) Improvement of amenities at top tourist destinations
- iii) Holistic development of beach front for close to 17 beaches across the coastline of the state
- iv) Wi-fi zones at top tourist destinations

Another important sector which is being focused is adventure sports tourism, there have been few developments in this regard which include facilitation of setup of a sucba diving school in Chintapalli and an adventure academy in Gandikota.

4.1.1 Hospitality

There has been significant development in this sector. Corporates are now coming up with Greenfield properties which include Club Mahindra in Srikakulam, Raddison in Vizag, and The Park Hotel in both Tirupathi and Vijaywada. Land allocation has already been allocated to them and construction of these has already begun.

4.1.2 Village Tourism

The concept of village tourism is also being promoted via Project Sanskriti or the rural Tourism project. In this villages famous for arts and crafts are selected and are being developed into tourist destinations offering an authentic village experience. 12 such villages have been selected which will be replicated to 20 more villages in the next phase.

Visakhapatnam district is a famous tourist destination for people from around the country and the world. Development of any district, state or country, largely depends on tourism, it helps to generate revenue which in turn improves the GDP of that country. Visakhapatnam is one of the major cities located at South East coast of Andhra Pradesh of India. Vizag has a lot of scope to become one of India's major tourist attractions as it enables people to explore its multiple beaches, pilgrimage centres, recreational parks, valleys, heritage sites etc.

Vizag is also called as the "Goa of the East Coast." Because of its beautiful beaches, laterite hillocks, and stunning landscape. It is also called as "City of Destiny". Vizag is well connected by air to almost all the capitals of country. Visakhapatnam has also opened its gate of tourism for international tourist like Colombo, Dubai, Singapore and Kuala Lumpur.

Vizag can undoubtedly be called as dream holiday destination for the entire family more than just an Industrial city. This dream city offers umpteen numbers of options for tourist like

1. Rama Krishna beach,
2. Rushikonda beach,
3. Gangavaram beach
4. Yarada beach,
5. Bheemili beach,
6. Borra Caves,
7. Kailasagiri,
8. Indira Gandhi Zoological Park
9. Simhachalam temple,
10. Submarine museum,
11. Erra Matti dibbalu, and
12. Araku valley being some of the most popular sightseeing places here.

Rama Krishna Beach is one of the favourite picnic spot for the tourists. The beaches are clean, and less crowded. Attractions around the beach are submarine museum, visakha museum, aquarium, kali temple and a number of food chains and Children Park.

The *INS Kursura* submarine museum gives a real life experience of life inside water. It is one of its kinds in India. The Visakha museum depicts a clear image of the time of war, weapons used by Indian Navy during wars which will ignite the spirit of nationalism in anybody's heart.

Rushikonda beach is also called as beach of golden sands and is one of cleanest beaches of Vizag.

The other beaches like Gangavaram beach, Yarada beach and Bheemili beach are also quite popular here.

Borra Caves is a famous tourist destination in Vizag. These are one of the largest and one of its kinds. These are huge caves with thousands of stairs and it takes hours to explore the full cave. The caves are lit by multicolour lights which add to its beauty.

Kailasagiri is another famous tourist spot on a hilltop park famous for the statues of Shiva and Parvathi. The ropeway offers spectacular view of the Bay of Bengal, and the toy train is a favourite ride for the kids visiting this place.

Another place that attracts kids is the Indira Gandhi Zoological Park. Built in an area of 620 acres, this zoo is known for housing a variety of species of birds and animals. Along with the Indian species such as Elephants, tigers and crocodiles, the coloured parrots from Australia are a major attraction of this zoo.

For lovers of hill stations, Araku valley is the place to be in Vizag. Elevated at around 1000 meters, this hill station is known for its scenic beauty and picturesque views. The beautiful waterfalls, gardens and valleys attract nature lovers to this place in a huge number.

4.1.3 Beaches

Vizag is known for its beaches. It boasts a number of beaches that are both scenic and uncrowded. Few beaches span along the eastern side of the city and stretch for miles. Due to strong sea currents, it is very strongly advised not go swimming in those beaches. A spectacular beach of which only the locals are aware of is called the "Yarada" beach. Unfortunately, except for the occasional RTC bus, there is no public transport available.

Ramakrishna Beach. Ramakrishna Beach which is more popularly known as, R.K. Beach is the most popular beach in the city in the sense that, you can find the locals hanging out during the hot summers. On weekends and holidays, one can experience the entire beach come alive.

Rushikonda. 11 km away from the main city, this has become a popular tourist spot that even the locals frequently visit. A lot safer to wade into than the R.K. Beach, cradled among hills, this used to be an excellent beach away from the madding crowds. AP Tourism Development Corporation is having its Beach Resort (Punnami) on the hillside overlooking the beach. Water sports activities are also conducted here.

Gangavaram 10 to 12 km away from city, this is one of the most beautiful beaches here, the most interesting thing here is a rock-like structure that's like a small island which attracts a lot of people.

Yarada Beach:Yarada is the village behind the Dolphin's Nose. To get to this beach, one could use the bus facility available or alternatively one could also hire a cab to get here. The view of the beach and Vizag city from the top of the Dolphin's Nose is memorable. The drive from Scindia to

the top of Dolphin's Nose, Dolphin's Nose to Yarada and from there to Gangavaram is really enjoyable.

Bhimili About 25 kms from the city, Bhimili used to be a small village which was also called *Bheemunipatnam*. Apart from the beach, the village has the remnants of a Portuguese church, Dutch and East India Company settlements and Buddhist sites.

The beaches are lovely, though you would not find many beach cafes/restaurants/huts like the ones you have in Goa. Recently a water sports center started in Rishikonda. Vizag's beaches are idyllic and un-spoilt without the frills and fancies of an international beach resort.

Table 4.1 Data of Domestic & Foreign Tourist Arrivals to Visakhapatnam District for the year 2018 Until August

Sl.No.	Month	Domestic	Foreign	Total
01.	January	1925445	6187	1931632
02.	February	1467597	9092	1476689
03.	March	1554114	7606	1561720
04.	April	1401272	6263	1407535
05.	May	2602483	7220	2609703
06	June	1726223	7917	1731819
07	July	1771546	8471	1780017
08	August	1446868	5940	1452808
	Total	1,38,95,548	58,696	1,39,51,923

Source: Joint Director Tourism Department

Table 4.2 Footfall of Domestic & Foreign Tourist from 2011-17

YEAR	Domestic	Foreign	Total
2017	21299785	92958	21392728
2016	1745853	78266	17532119
2015	10416500	64178	10480678
2014	6782784	54272	6837056
2013	6700675	57476	6758151
2012	5273228	53859	5327087
2011	5139627	28677	5168304

Source: Joint Director Tourism Department

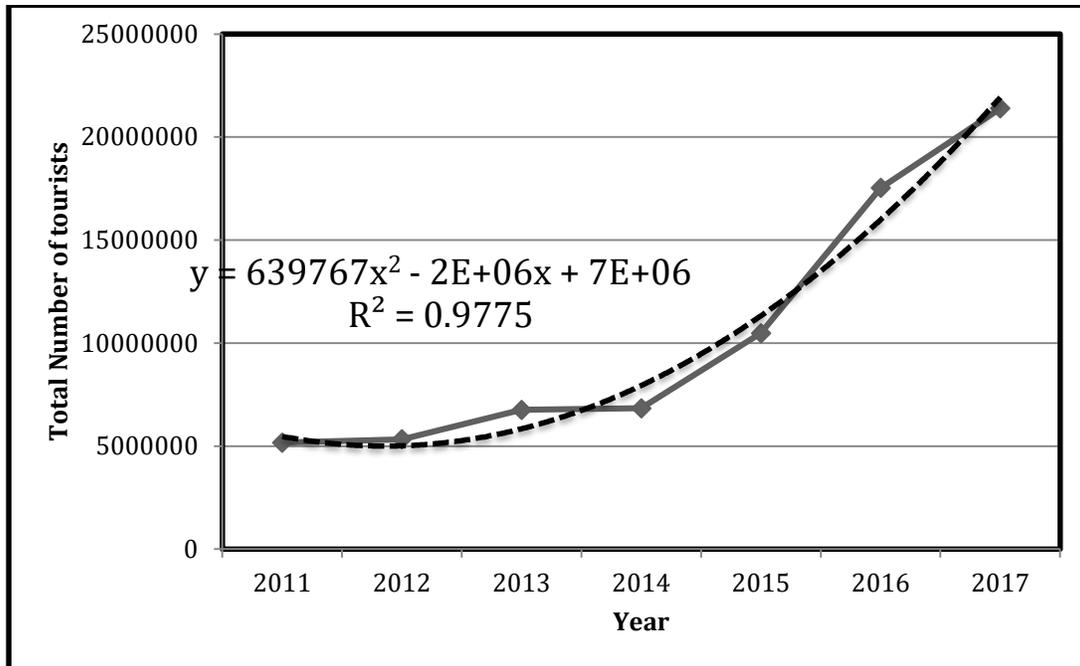


Figure 4.1: Footfall of Domestic & Foreign Tourist from 2011-17

The tables 4.1 and 4.2 (figure 4.1) explain the footfall of tourist visiting Vizag district. We can understand that there has been an increase in the number of domestic tourists, according to table the total population of domestic tourist is of 2129978 which has seen an increase when compared to 2016, the influx of foreign tourist has also increased over the years as there has been introduction of various events, quality and standard of living has also gone up of the district. The total number of foreign tourist for the year of 2017 is 92958.

The main months of tourism are from October to mid of February; the end of monsoon and starting of winter makes it a beautiful holiday season for the tourists. The month of October receives high number of tourists coming from West Bengal and Odisha that is why it is also known as “Bengali Month”.

The most talked feature of Vizag district is its cleanliness and good civil administration that works round the clock dedicating their time for tourist and local community.

The intention and plan to develop Visakhapatnam as top tourist destination will increase the number of foreign tourist, as it has a lot of scope. The natural blessing of hills and seashore is a great combination to boost tourism exponentially. The plan should be to enhance the facilities to an international level without disturbing the green cover and natural harmony to maintain the scenic beauty of the area. Adventure trips, water sports, designing and bringing the beaches alive with activities, festivals, restaurants and hotels can make these easy and fast in engaging people with livelihood and getting revenue to district.

Porters Five Forces Analysis of Tourism

Kerala and Goa are attracting a large number of international tourists to the western coast in comparison to Visakhapatnam which is getting much less share.

Air connectivity plays a major role in promoting tourism, but as Vishakhapatnam has a defense airport the operational capabilities are limited. A new civilian international airport is under construction, which will boost the connectivity and flow of passengers.

Competitive fares and connectivity affect the flow of tourists from domestic and international destinations. UAE, Thailand, Singapore and Malaysia are the international destinations on the card, which are both good and bad for Visakhapatnam. The competition is just growing bigger.

2017 saw domestic foot fall of 21299785 domestic and 92958 foreign visitors, taking the totals to 21392728 in Visakhapatnam as per Tourism Department.

Limited star rated hotels, good restaurants, beaches up gradation, tourist's attraction and activities need a boost to match the international tourist spots. Recent public outcry on beach road development plan proved to be barrier to this sector.

With increasing per capita and international flights in Visakhapatnam, people would be more attracted to eastern countries or Visakhapatnam tourism need a real boost to compete on world map, especially the eastern part.

SWOT Analysis of Tourism

Table 4.3 SWOT of Tourism

Strengths	Weakness	Opportunities	Threats
Natural Beauty, Coast line, Eastern Ghats	Advertisement of tourism activities	Can create skilled employment	Natural calamities
Good Rail and road connectivity to Vizag city	Lack of skilled work force	Eco, heritage tourism can be developed	Lack of proper visions and mission
Mix of various tourist destinations such as beaches, park, museums, hill station etc	No dedicated tourist guide at maximum tourist spots	District has been declared as smart city	Competing wildlife sanctuaries in the vicinity
Priority Sector	Lack of tourism activities	Increase private players with new sporting events	
	Lack of user-friendly accommodation	Increase number of local and traditional shops	

Conclusion

As mentioned in the introduction tourism is one of the major focus areas of the state and district administration. Visakhapatnam is one of the most visited tourist destination in the whole of Andhra Pradesh. Huge investment is being pumped in for the development of this sector. The major challenges faced by this sector are lack of advertising and less number of activities to engage the tourists for the whole day during their visits. The major problem with the hilly region is that of lack of tourist activities which will generate more employment and keep the tourist engaged the whole time. There are no major plans which have been suggested by departments. There is requirement of budget hotels which can also accommodate the various class of societies, this will help in increasing the competition in the market and bring more private players.

4.2 FISHERIES

Visakhapatnam is a port city, where fishing is one of the major activities and the total GVA of this sector is of 1634 crores. The growth engines identified under this sector are Prawn 64.18 percent, Marine Fish 30.78 percent, and Inland fishing 4.91 percent.

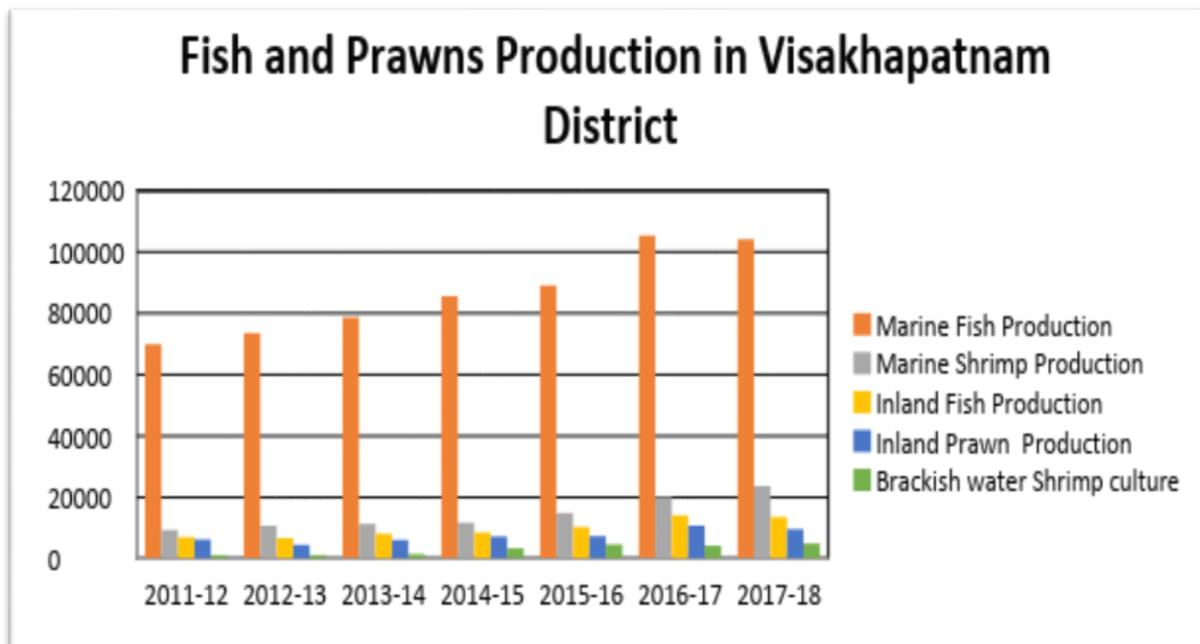


Figure 4.2 Fish and Prawns Production in Visakhapatnam for 2018
(Source: Assistant Director Department of Fisheries)

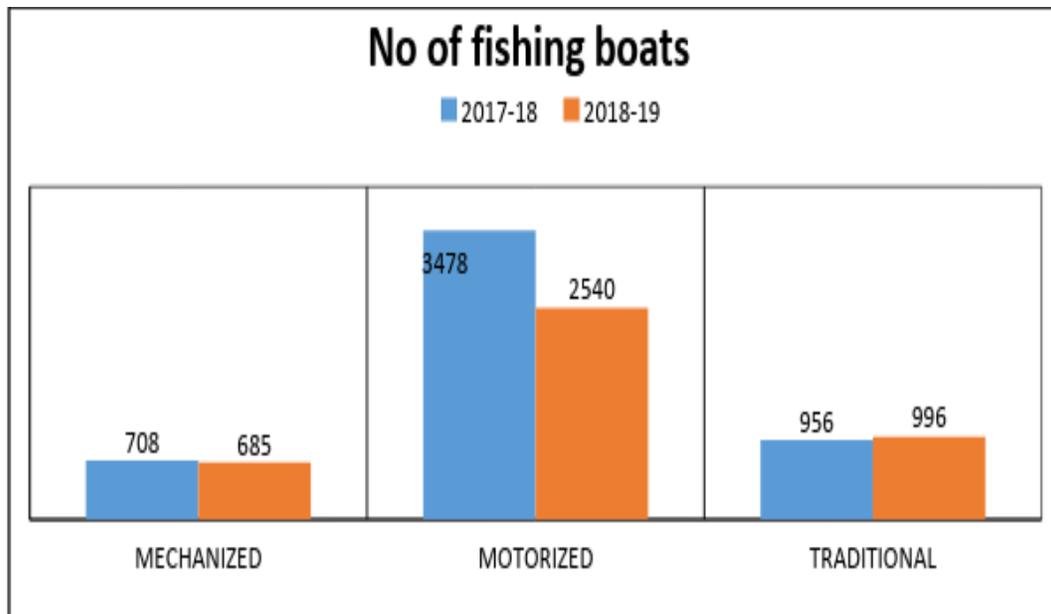


Figure 4.3 No. of Fishing Boats in Visakhapatnam
 (Source: Assistant Director Department of Fisheries)

Porters Five Forces Analysis of Fisheries

Kerala, Tamil Nadu, Maharashtra, Karnataka, Goa, Gujrat give tough competition to Andhra Pradesh as Visakhapatnam is leading in fish production and export in Andhra Pradesh. International competitors with higher technological support in same city is a big plus for fisheries export too.

Processing, Storage, transportation, fishing equipment limitations effects the flow of the fish to domestic and international market from Visakhapatnam. Owing to be in neighbour of many other fishing cities on eastern coastal line, raises the competition in international market, but local buyers are well catered by the catch of the city. Fishermen, due to weak business prospects and challenges tend to change the trade, if not supported well, with policies and technologies

SWOT Analysis of Fisheries

Table 4.4 SWOT of Fisheries

Strengths	Weakness	Opportunities	Threats
Best district for production of fish	Lack of dedicated storage units	Introduction of new varieties.	Natural Calamities
1.60 lakh fishermen engaged in various activities	Lack of research facility	Production of Tuna.	Increase in the pollution of water
Availability of dedicated ports for exports and imports.	Not tapping medicinal benefits from fisheries.	Storage can improve the quantity and quality of fish production	Denial from foreign market due to lack of processing
Less labour intensive	Lack of dedicated fishing research units/aqua labs	Deep Sea fishing, Sea weed culture	Lack of youth participation.
Priority sector for the government.	Lack of marketing/Youth participation is less	Create ready to eat fish products	Lack of awareness about fish related diseases
	Lack of technological infrastructure	Creation of self-help groups.	Lack of alternative income
	Lack in production of Aquarium fish.	Creation of aqua culture zones	
		Help in creation of women fish selling groups	

Certain species of fish, of which demand grows, but is less in production in Vizag, creates a new market, where popularity of Visakhapatnam is affected. This should be driven out with ability for deep sea fishing, so catch can cater to new and growing demands of international market.

Conclusion

It is very evident from the overview of the district that fisheries is one of the most important sector which plays major role in the economy and provides employment to very large population. The major concern which can be seen and which would have some immediate implications are of improving the storage quality and increasing the number of processing units. If Vizag has to be the largest exporter of sea food, then there is requirement of high quality of storage units and processing centre which will increase the export of fish. One of the major strengths of this sector is that it is well connected with the international market. This can be tapped extensively by introducing new varieties. There are plans which have been undertaken by the departments to increase the productivity of various fishes. Introduction of private players/entrepreneurs can aid in increasing the quality of processing units. The various public and private players play a major role in development of this sector.

4.3 HORTICULTURE

The other important growth engine for the district can be derived from Horticulture, the total GVA from this sector is Rs.1793 crores. Some potential growth engines which will play a vital role are Turmeric which contributes 20.61 percent, Mango contributes 14.68 percent, Cashew nut-11.90 percent, Banana-8.33 percent, Oil Palm- 4.30 percent, and tomato contributes 2.89 percent. The mentioned crops total contribution is around 62.71 percent to horticulture sector.

Horticulture is one of the focused areas for the overall development of the district. The aim is to achieve sustainable development of horticulture by increasing area and productivity and by encouraging post-harvest management. The major horticultural crops cultivated in the district are mango, sweet orange, sapota, cashew, papaya, chilly, tomato, flowers and vegetables.

Among the fruit and plantation crops, cashew occupies the largest area, followed by mango. Other important crops are coconut, banana and oil palm. The total area under vegetables in the district is 3524 ha. It is spread between kharif (1058 ha), rabi (1726 ha) and summer (740 ha). Turmeric and ginger are grown in substantial areas. Medicinal and aromatic plants and flower crops are also gaining areas in the district.

The major gaps identified under horticulture are

1. Less area under horticulture
2. Not using quality plant materials
3. Poor post-harvest management
4. Not using proper plant protection equipment
5. Improper IPM/INM
6. Gap in the extension services
7. In-efficient water management

4.3.1 Area Expansion It is very essential to expand the areas under fruits and cut flowers with the increased demand coming from higher population. At present, there is good demand for fruits, and cut flowers in the market as the health consciousness and fascinations of the consumers have increased with the increase in purchasing power of the average consumer. It is very essential to expand the areas under fruits and cut-flowers in order to meet the local demands and for exports. Spices have also noticed a good demand in the market with the increased taste and preferences of the human beings, as fruits and spices are rich sources of minerals, vitamins and proteins. The cultivation of fruits is quite profitable to the farmers and it gives good returns on investment they are making. Fruit crops give continuous and long term returns to the farmers and it is an extra enterprise to the farmers, besides agriculture.

4.3.2 Organic Farming After globalization, there is much demand for fruits and vegetables free of pesticide residues. Products of fruits and vegetables using organics without any fertilizer or pesticide have raised demand in the market. The consumer preference is changing according to the health benefits and they also go for products produced through organic farming. People are ready to purchase even at higher prices also because of high nutritive values and safety.

4.3.3 Horticulture Paderu

Coffee, Cashew nut, Turmeric, Pepper, Ginger, Pippalamudi(Medicinal Plant) ,Pineapple, Mango are the major products of the area.

Table 4.5 Horticulture Produce from Agency Area

S.NO	Name of the Crop	Expected/ Ac	Actual/ Ac	Area Under Production (Acres)	EST Output	Total	Actual Output
1	Turmeric	10,000	3500	7352	73520000		25732000
2	Cashew	900	700	25,841	23256900		18088700
3	Pippalamudi(Medicinal)	250	200	7300	1825000		1460000
4	Ginger	12000	3000	6580	78960000		19740000
5	Pineapple	NA	NA	840	0		0
6	Mango	NA	NA	10954	0		0
7	Coffee	400	120	156000	62400000		18720000
8	Black Pepper	500	100	18000	9000000		1800000
9	Flowers	NA	3000	100	0		300000
10	Vegetables	NA	3000	6500	0		19500000

Source Project Officer, Department of Horticulture , ITDA

From the table above we can see that there is huge difference in the productivity when we compare the actual yield produced per acre vs the expected yield per acre. If we take the example of Turmeric the actual yield per acre for the year of 2017 is 3500 kgs and the expected yield is estimated to be of 10,000 kg per acre.

Porter Five Forces Analysis of Horticulture

Krishna, East Godavari have better produce, processing units and number of FPO, as compared to Visakhapatnam. There is a need for Proper ripening chambers, Integrated pack houses, cold storage with high capacity and processing units.

For example, cashew is one of the major products which has been exported to Middle East, the problem here is the lack of processing unit, which makes the producer sell their produce at very cheap rates and the same product comes to India with a very high margin.

One Farmer Producing Organization LEAF has identified some farmers and they have been growing exotic vegetables in the state. All the seeds for the production are given by the FPO. The major exotic vegetables are, Broccoli, Carrot, Lettuce, Red cabbage etc. The area covered under this is 188 acres. The total GVA from Horticulture department was 1793 Cr, for the year of 2017. Helpful policies to promote this sector under implementations have been four:

- Rastriya Krishi Vikas Yogan (RKVY) (Central Funded)
- State Development Plan (State Funded)
- National Mission for Oil Palm and Oil Seeds Programs (Central Sponsored)
- Pradhan Mantri Sanchay Krishi Yogan (Drip Irrigation and Sprinklers)

13 rythu bazaars are dedicated for the daily sale and purchase of the produce. Export thru port, is high. Major are local traders supplying to neighbouring states. Supermarkets are prevalent, where the produce is required on daily basis.

Urbanization, real estate is a threat for available land, which decreases the plantation area and thus the yield. The no. of farmer registered are 176554 with estimate of 11559.61 hectares of land under cultivation according to 2016-17.

The major production area in flowers are of marigold of about 600 hectares which is mostly consumed within the state.

Credit Linked Back-end Subsidy: In this scheme entrepreneur are encouraged to set up their industry. Where the entrepreneur is required to take compulsory loan from a bank for a period of 7 years and department will release the subsidy after the payment of the loan taken. According to ADM this is one of the major factors because of which entrepreneur are not coming forward.

There are high fragmented lands which do not allow the proper implementation of drip irrigation system. Another important aspect to look at is the lack of borewell. The number of borewells in Visakhapatnam dist. is very less compared to neighbouring districts. The major reason being the AP Waltair Act where the tahsildars have to provide permission to the farmers to dig borewell. Revenue department is also responsible for giving such permissions. Another important aspect is related to agency area because of Maoist reasons, so the crop booking is not feasible. Maoist presence gives a heavy drawback to the sector's growth.

SWOT Analysis of Horticulture

Table 4.6 SWOT of Horticulture

Strengths	Weakness	Opportunities	Threats
Suitable climatic conditions	Lack of processing units	Processing can tap foreign market	Rapid urbanization
Easy access to airport and ship yards	Lack of entrepreneurship	Entrepreneur friendly policies	Natural calamities
Major producer of cashew nut	Lack of proper bore wells	Introduction of exotic fruits and vegetables seeds	Turning agriculture land in for real estate
Easy access to foreign markets	Small land holdings under horticulture	Proper research and implementation of new farming techniques	Increase in land rates
	Cost of Setting up processing units is high	Increase the no. Of FPO's	Lack of rainfall
	Fragmented land is high		

Conclusion

Horticulture is one of the important sectors as it engages large number of population and the major strength is the climatic conditions. Hilly region and plains are both considered for intervention here. One of the major issues faced by the plain region is that there is lack of processing units which forces them to sell their raw material at cheaper rates and lack of productivity per acre is very low in the hilly regions which is also known as agency area. The lack of Forward market linkage is another major reason because of which the correct benefits are not gained. Linkage to private players and various E-commerce platforms can help them provide extra margin of benefit. Inclusion of various departments such as, Department of Horticulture, ITDA, TRICOR, DWMA, Big Basket, Supermarkets and encouraging entrepreneurs can help the production and will add extra value to district GDP.

4.4 Tribal (Coffee & Handicrafts)

4.4.1 Tribal Development

The Paderu tribal Agency, which is now known as Integrated Tribal Development Agency consist of 11 fully scheduled mandal and 2 partially scheduled mandal of Visakhapatnam District. This mandal has been divided into three sub-divisions of i.e Paderu, Chintapalli and Araku valley for the administrative convenience.

Araku valley coffee is grown in the hilly regions of the agency mandal which are Paderu, Pedabayalu, Munchingput, G.Madugula, Hukumpeta, Araku, Dumbriguda, Ananthagiri, G.K Veedhi and Chintapalli Mandals. A region of Orrisa is being slowly being emerged into coffee production hub in the country. Arabica Araku valley is one of famous variety of coffee which is grown.

4.4.2 Basic Profile of ITDA Paderu

Table 4.7 Basic Profile of ITDA Paderu

Area of the ITDA	6,293 Sq. kms
% Agency area of the total district area	56.38%
District Population	42,90,589
Population of Paderu Division	604,047
Population of Scheduled Tribes	547,951
No. Of Tribal households	134,233
% of Agency population to the district population	14.08%
Population density in the district(per Sq. Km.)	384
Population density in the Agency Area (per Sq. Km)	96
PTGs Tribe	Khond, Gadaba, Poorja Bhagatha, valmiki, kondadora, Kotia, Kammara, Nookadora
Non PTGs Tribe	11 (full) + 2 (Partial)
No. Of Scheduled Mandals	244
Gram Panchayats	2,312
No. Of revenue villages	3,574
No. Of PTG Habitations	1,093
No. Of Non-PTG Habitations	2,481
Source: ITDA, Paderu	

Describing about the hamlets in the interior regions there are some major problems which they are facing, they lack basic health and drinking water sources. Due to lack of drinking water sources

the local villagers are forced to drink canal water, which creates more health related issues for them. There is literature to support the argument that there have been instances where the local population have appealed to the authorities but they have not been fruitful. Education and medical facilities are very minimal. Higher education facilities are lacking and there is a high need for providing better educational services.

4.4.3 Soil Condition

The soil condition for the production in Araku valley belongs to the red lateritic soil. There is a difference in the texture from sandy loam to clayey loam with colour varying from light Grey to deep red. The soil present in the region is rich in organic matter and acidic to neutral in reaction (pH). The presence of total soluble salts are considered to be below the sensitivity limits. There are soils which are poor in calcium and magnesium. They also respond well to liming , manuring and other soil management practices.

Porter's Five Forces Analysis of Tribal (Coffee & Handicrafts)

14.42% population of Vizag is tribal, giving high work force for the coffee, handicraft and horticulture produce in the forest area, which is still 35% of the district, providing huge scope for these items.

Chinese products are big threat to the traditional tribal produce, hindering their income.

Though after big coffee growers like Karnataka, Kerala and Tamil Nadu, these tribal have come up with small but noticeable amount of produce, which is supported here by Girijan Cooperatives (GCC). Silver Oak and vines offer a very suitable area for the coffee produce in the forest. Though the produce is small, but the market is huge.

Orissa, Assam, Manipur, Meghalaya, Mizoram, Tripura, Nagaland and Arunachal Pradesh are too growing coffee on same line, increasing the bench mark for Visakhapatnam's tribal produce. But Visakhapatnam has a benefit of port to export.

ITDA has been working for the upliftment of these tribes and products and need higher benchmark to increase the contribution in district growth. Branding, processing and market exposure is needed for these tribal produces. Coffee & chocolate makers have huge demand and upgrading these tribal produce from regional brand to national at least would mean a lot to Visakhapatnam.

SWOT of Tribal (Coffee & Handicrafts)

Table 4.8 SWOT of Tribal (Coffee & Handicrafts)

Strengths	Weakness	Opportunities	Threats
Coffee and horticulture production through organic farming	Lack of forward market linkage	Collaboration with existing online players	Interference/threat of entering village in
Abundance of farming land	Lack of dedicated transportation vehicle	Tapping of city market through organic certification	Rate of digital literacy is very low
Largest producer of coffee in the district	Lack in willingness of people to work earn extra	Creating processing units	Inclusion of Chinese products in tribal shops
Providing subsidy for all major activities	Lack of immediate post-harvest mechanism	Providing crop insurance	
Attractive tourist destination	Poor electronic connectivity of the area	Increase the land holding under coffee	
Close border with Orissa.	Inter-departmental communication is a hindrance.	Can increase the production.	
Biggest Botanical garden in Andhra Pradesh	Lack of education based jobs	Introduction of fisheries	
	No repair facilities for agriculture related machines	Linking of work with MNREGS	
	Lowest Mandal contributing to the GVA of the district	Increase the number of SHG	
		Creation of Food park	

Conclusion

Tribal is one of the important sectors which need intervention with immediate effect which can help in the increase of income levels of the local populations. Coffee and Handicrafts are selected sectors for intervention. Araku Coffee is the famous and major produce of the region which has engaged large section of the society. The selection of the sector has been done on the basis of primary and secondary data. The most critical intervention which is required here is of eliminating the showcase of Chinese products from the dedicated shops which sell traditional handicrafts. Porter's five forces analysis has been used to determine the market rivalries, buyer power and supplier power which is then used to determine the strengths, weakness and opportunities which can be worked upon. The last section of this segment includes the major intervention recommended and how the implementation can benefit the people related to this sector.

4.5 Manufacturing (MSMEs)

Table 4.10 shows that, Visakhapatnam has been preparing and implementing business environment during these years. As per DIC, in Visakhapatnam, 25 large and mega enterprises have been established of worth an investment of 11470.1 INR Crore, engaging 19807 personnel over a span of 2014-19, including the advance estimate for 2018-19. While 2527 units of MSME were established, counting an investment of 7950.45 INR Crores and generating an employment for 40118 personnel during the same period, including advance estimate for 2018-19.

Categories of MSME based on investment capital on machinery & plant, can be broadly categorized as follows (Table 4.9)

Table 4.9 Category for defining Micro, Small, Medium Industries

	Based on machinery & plant capital investment	
	Manufacturing	Services Enterprises
Micro	Till INR 25 Lakh	Till 10 Lakh
Small	INR 25 Lakh -5Crore	INR 10 Lakh -2 Crore
Medium	INR 5-10 Crore	INR 2-5 Crore

Source: Brief Industrial Profile of MSMEs

Table 4.10 Existing L&M and MSME Units from 2014-18

Type	Year	No. of units	Investment (in Rs. Crores)	Employment
L & M	2014-15	11	784.37	4375
	2015-16	5	780.5	4080
	2016-17	5	710.05	1298
	2017-18	9	1815.18	9122
	2018-19	5	7380	932
Total		35	11470.1	19807
MSME	2014-15	517	488.8	11378
	2015-16	520	342.91	7739
	2016-17	696	374.25	10005
	2017-18	602	312.49	9207
	2018-19	192	6432	1789
Total		2527	7950.45	40118
Source: DIC, Vizag				

While country is in industrialization phase, the small and large scale industries can be proved to be a strong support and thus found in almost all countries. India has been giving importance to both, since days of independence and has proven every time its importance for economic and social reasons.

The small and medium enterprises are dynamic and equally vital for our growth, but faces bottlenecks, since the planning. Visakhapatnam Administration and Andhra Government has been focusing on the planning and development of this sector. The schemes launched by Central Government also go a long way to support these enterprises.

Branch MSME-DI is engaged in the development and promotion of Micro, Small & Medium Enterprises in five north coastal districts of AP viz., Visakhapatnam, Srikakulam, Vizianagaram, East and West Godavari, assists existing and prospective entrepreneurs by providing techno managerial consultancy services and training in various fields. Besides, this institute having its own workshop is equipped with lathe, drilling and radial drilling machine, cylindrical grinder, surface grinder, common facility service to local small scale and PSUs by undertaking job works, besides imparting 6 months Advanced Skill Development Training in Machine shop practice for the benefit of unemployed youth.

Branch MSME-DI guides prospective and existing entrepreneurs in selection of product, process & machinery, Plant layout, Raw material selection, Modernization, Quality improvement, Product development, Energy conservation, Pollution control etc. (<http://msmehyd.ap.nic.in>)

Porter's Five Forces Analysis of MSME

Orissa, Madhya Pradesh, Gujarat, Maharashtra, Telangana and West Bengal compete on this sector. Establishments like APIIC, APSEZ, DIC have created good platform and environment to keep the business under control of the owner, giving everyone opportunity to grow and thus contributing well in GDDP of Vizag. Vizag houses some large-scale establishments and industries which look for ancillaries from the MSME sectors. Long term contract between small, medium and large entities calls for better and long-term orders. Earlier there were 350 vendors, which came down to 40, after Vizag Steel became operational. This sector engages large human capital and drives the GDDP of the city. Planning and execution at department levels with time bound action on proposals and grants can expedite the introduction and expansion of units and capture the full yield of various projects outlaid by district, state and country. Though the state has been doing well in ease of doing business, but the bottle necks do still exist.

The infrastructural development provided by city, state and Centre needs an upgrade to boost the MSME. Building mechanical and electrical industry will help them in collaborating and producing more finished products as they all can work in collaboration. High number of engineers graduating from the district i.e.15,000 every year gives lot of hopes for engaging more units and human capital.

SWOT of MSME

Table 4.11 SWOT of MSME

Strengths	Weakness	Opportunities	Threats
Best state in ease of doing business	Lack of inter departmental coordination	Collaborate with marketing units and Public sector units	Competition from different states.
All the application can be applied through online platform	Improper reasons for declining any proposal	Help in production of raw material	Rejection of material due to lack of processing
21 days' time period for clearing all the applications	Banks delay in application approval	Education about new technology coming up in the market	Fluctuations in the price of raw materials
Easy access to port and airport.	Lack in marketing of their products	Skill development of the people is necessary	Termination of contract in between
Dedicated 3500 acres of land for SME, MSME	High taxes levied on vehicle	Govt Guiding entrepreneur is major need.	
Provides employment for more than 1.5 lakh people	Improper designation of national and state highways	Collaboration with local/state mega players	
Upcoming various industrial projects, can create more than 50,000 jobs.	Insufficient communication mechanism in the industrial area	Can create institutions to study risk management of the industries.	
No of Engineer graduates are high	Lack of skilled workers to increase their activities	Audit of MSME should be done	
	Shortage of working capital.	Relaxation on tax policy of Central and State govt	
	Cost of machinery is high should be supported.	Building of Anchor manufacturing should be setup	
	Market profit was low after the introduction of GST.	Building of Mechanical and Electrical industry	
	Cost of labor is high.		

Conclusion

To conclude, MSME plays an important role in the development of Visakhapatnam district, the selection of this sector is supported with Porters five forces. We can see that there are many lacunae that this sector faces, where the strengths and weaknesses have been provided and what are the major opportunities with which there are chances that there can be an increase in the scale of production and employment. The creation of mechanical and Electronic manufacturing units, relaxation in the tax at central and state level and improving the role of Public sector units can help MSME flourish at a higher rate. Next section in this focuses on the major recommendations with the details that which department will play a key role in implementing.

Chapter 5

Recommendations

This section will focus on possible recommendations and suggestions which can cater in making a difference in livelihoods of the people and increase the GDP of the district. All the suggestions and recommendations made are based on primary and secondary data. Recommendations and suggestion for the selected sector are as follows:

5.1 Tourism

This sector can be seen as an important driver of economy as tourism can create good impressions on people's heart and Visakhapatnam has a great potential to do so. Vizag has a great gift of natural beauty, beautiful beaches and lush green eastern Ghats. The major problems in this sector include lack of adequate promotion and advertisement of the existing activities is not being promoted efficiently which can increase the number of tourist. One of the suggested remedies which can be implemented is by creating calendar which can be published, posters and tourism outlets should be put up in airports and Railway stations which are the first impression about the city. The scenic beauty has been an amazing experience for the tourist and residents of the city, but this can be improved by increasing the number of activities which can keep the tourist engaged during their whole stay. This suggestion can be used and implemented in the Hilly regions where there is lot of good places which can be turned into Adventure zones. If there is an increase in the number of activities, it will generate more employment which should also focus on imparting local youth in such activities and there can be inclusion of tribal sports events where tourist can also take part and learn from them.

5.1.1 Hospitality:

One important and easy suggestion to provide is by building budget hotels which can cater to the middle class population of the tourist population. If we look at the hotels near Araku valley which is a popular tourist destination, we can find majority hotels which are under Tourism department and which are costly when compared to the budget of a middle class. So if the number of budget hotels increase there are more chances that the number of tourist staying back will increase, which can help them in exploring more opportunities to explore the area with the local community. Building of budget hotels can be worked out in collaboration of Public Private Partnership(PPP) which will help the increase competition in the area. The impact of such intervention would be that there will be increase in the tourist staying back which would force new players to come up in the vicinity can provide employment to many.

5.1.2 Livelihoods:

Another important thing which can be suggested here is providing education related to the market need or creating jobs according to their education. One of the major problems of the youth of this area is that with the lack of education and livelihood opportunities they tend to migrate from this place. The local present government and private institutions should focus on providing internships to students which can help them in getting first-hand experience on various works and make them ready for the actual job market.

5.1.3 Tourism Packages

This is another important concept which can be explored by the department, as there are very less packages available for the tourist to exploit. The ease of having a package is that the tourists do not have to worry about logistics and being in a new place. The benefit of having package is that it brings many private players together to serve the purpose of tourist which builds relations between parties and increase the income of people.

Visakhapatnam has the ability to capture tourist from various parts of the world, but it lacks in capturing the influx of foreign tourist. This can be improved by creating more activities and creating better accommodation.

To conclude this section, the major points to remember are that, this district has abundance of natural resources and beautiful landscape which can be explored by increasing the number of activities.

5.2 Fisheries

Fisheries is one of the priority sector for the state and district administration, Visakhapatnam has a long coast line and many dedicated fish producing zones which help in increasing the productivity making Visakhapatnam one of the largest producer of fish in the whole of Andhra Pradesh.

The major challenges in this segment is that, there is lack of production of various varieties of fish, one such being the aquarium fish. The increase in the production can be used for its sale to various parts of the country and world. This can be done in various places with smaller water resources. Fisheries department are providing seeds and technology for the production of aquarium fish. Foreign market should be targeted so that there can be more income and export quantity can increase.

5.2.1 Medicinal Implications

Idea of using medicinal benefits from various fish varieties can open new doors for the fishing community. But one important aspect to consider here is the development of proper **research labs** which can help in tracing of correct medicinal benefit. This will increase the production of such varieties which is beneficial for various medical companies, which can improve competition and prices of such fish varieties. There are activities such as deep sea fishing which will help in exploring more varieties and help in increasing the productivity of various varieties.

5.2.2 Processing

This segment is being given a priority by department but still there is lacking of processing units which can help in the value addition of the product and districts GDP. Processing is one of the major sectors on which the administration has to focus. Visakhapatnam has only 14 processing units in which some are about to expire, and there is a need for proper certification of such units as this has a higher potential and utility because it can provide the upper hand when exporting it to the foreign market.

Processing of fish can help in creation of ready to eat fish products which can be easily made available to the tourist and local population in various parts of the district. Ready to eat food packets can be sold by women groups which will help in creation of Self Help Groups, where women can take the main role of selling these products at various destinations.

There is also a need of financial support from banks and subsidies should be provided to people who are trying to set up processing units, as the cost of setting is high. Applications for setting up the processing units should be given higher priority.

The introduction of TUNA fish production is another major activity in which the department is interested as it has high capacity of capturing the market domestically and internationally which will also increase the income of the fishermen.

5.2.3 Cold storage

This is another important need for the department, as this will help in increasing the shelf life of the fish. Cold storage can be used after catching the fish and also after the processing is being completed. The volume of fish in the cold storage should also be increased as there are times when the fish catch is high, and lack of cold storage capacity can increase the amount of spoilage. There is requirement for building cold storage units which can also be undertaken under Public Private Partnership where private players can manage and the government agencies can produce fish. This should have support from banks and subsidies should be provided under this. The major department which can play a major role in this area is the Department of Fisheries, Department of Industries for providing approval, banking institutions to provide financial support, entrepreneurs etc.

5.3 Horticulture

This section includes recommendations for two regions which include Agency Area which lies in the hilly regions and plain region. The major challenges which both the regions face are almost similar. They are mentioned below.

5.3.1 Productivity

This remains to be a major problem for almost both the regions. If we look at the data on productivity of horticulture produce, there is a huge difference between the expected and actual yield, there is huge difference in most of the products. The major reason for lack of productivity can be the lack of water resource, lack of use of high yielding variety seeds. Lack of water resource can be due to lack of proper implementation of irrigation system and not creating proper water reserve system which can be utilized in water scarcity conditions. This can help in the increase of production of the produce and will increase the income of the farmers.

5.3.4 Drip Irrigation

Drip Irrigation is one of the effective ways of utilizing the available water resource which can help the farmers in increasing their yield. The increase in yield will help the farmers in earning better income. Soil Health cards is also one of the major intervention which can help the farmer in having a clear idea on what to produce and other local horticulture department can help them in suggesting what crop can be grown for the subsequent season. Soil cards are one of the priority and implemented intervention by the horticulture department. The problem is the implementation of such intervention, the problem being that farmers initially take the soil health card but fail to reach out the department after they have been registered. This possesses a major challenge for both farmers and the department. This can also be addressed by providing seeds at cheaper rates or offering of visiting their farm land for the check-up.

5.3.4 Processing Units

This plays an important role in value addition and immediate sale of the produce. There are very less processing units in the whole district which makes it difficult for the local produce to earn the higher price which are expected. The importance of having a processing unit is that it increases the shelf life of the produce and it is a standard procedure which is accepted by the wider population. Lack of processing unit can also increase the quantity of wastage of material.

If we take the example of Cashew nut, it is one of the majorly produced cash crop in the district, the cost of a raw cashew is 150 rupees per kg and it goes to middle east countries and European countries where the processing is undertaken and the same material is imported to India at cost of 700-900 per kg. This marketing can be stopped and utilized by the local players.

Creation of smaller processing units can benefit a lot to the population in the agency area, where the major production is of organic material. And there is also lack of promotion of these produce, where the current trend in the market is of organic fruits and vegetables and the price of organic material is higher than that of produce grown using fertilizers. Immediate processing can provide extra value to the produce, which can fetch huge amount of money and trust of the people. This intervention should be supported by Department of Industries where they can approve the proposals and banks can provide them subsidies in accordance to the schemes launched by state

and the central government. TRICOR (Tribal Corporation) can help the local interested entrepreneur by providing them guidance linking with banks which are providing loans.

There have been problems from both the government and personal end of the applicant. There are designated department for approving the proposals and banks have to check all the mandatory procedures before approving loans which delays the process.

5.3.4 Market Linkage

It is the most important section of horticulture production and promotion. If you see there is a market you can easily tap it by producing and distributing it to various players in the market. If there is a lack of market to sell your produce then you will not fetch the right price of the commodity. Forward market linkage is another linkage which can help the farmers to connect directly to the seller and can reduce the role of middle men and direct benefit can be given to the farmer. This can be improved by collaborating with the rythu bazaar which is the designated farmers' daily market. And also create government authorized rythu bazaar in the local vicinity which can bring all the sellers at a single place and can provide greater competition.

Linking the farmers to E-Commerce platforms will help the farmers to cater to a wider market. Platforms like Big Basket and supplying of produce to the recognized retailer such as MORE, Reliance Fresh, Spencer and Heritage can help the daily supply of the local and fresh produce to the market which keeps the farmers engaged in supplying their produce.

5.3.5 Transport

Transportation plays the most vital role in this segment. The major issue faced by the locals here is that they are not able to transport their produce to the market in an efficient manner. This means that there is a lack of dedicated freight service which can transport their produce to the markets. They use baskets which are locally produced and damage the produce. Dedicated transportation can help the produce reach the market on time and reduce the risk of damage. The major way of transporting their produce to the local market is by use of autos and bus which become the main reason for the damage. An important intervention here can be to provide smaller vehicle which can carry high volume of quantity safely, but this requires dedicated vehicle which can be provided to people under the schemes of ITDA and TRICOR. It can help in generating employment for the youth of the locality and local banks can support them with the financial support. This can also be considered under skill development where driving license becomes mandatory to apply. This can also improve the skill sets of the individual.

One major problem with the locals is that there are very less people trying to take on such huge investment, as the subsidy provided varies with the stream they are applying for. Banking sector have their own targets which they clear by providing it to the small projects.

5.3.6 Export Quantity

As discussed above the production is low, the quantity exported is also low, which can be improved by increasing the variety of produce and improving the seed quality. Visakhapatnam has a potential of exploring various countries because of its dedicated port for export. This can provide high income to the farmers and can build an efficient value chain where more people can be employed. For the production the horticulture department are providing high yielding variety seeds. This intervention has to be monitored at all the levels which is lacking because of lack of skilled workforce who can keep check on the activities. Processing units also play a major role in this, as foreign markets have standards before accepting their imports which can more easily tap the market. Another aspect which can be added to this is that of building research labs which can conduct research studies for implementing new techniques. There have been cases where farmers use new technology without proper study and they have failed in setting it up. There have to be exposure visits for departments and farmer where they can learn new technology and implement it in better way. Horticulture and ITDA departments should provide such environment for the farmers and increase the number of entrepreneurs.

Another important aspect of this can be providing **organic certification** to the lands where major production is taking place. Certification provides a trust for buyers though it may not be visible every time the produce is being sold but if someone raises an objection, one can be shown this. Certification helps the farmer get registered with government which in-turn has their benefits.

5.4 Tribal (Coffee & Handicrafts)

Tribal is one of the major sectors where we have been seeing a potential and scope for huge growth. Coffee and handicrafts is the main focus here as the major chunk of population here is employed into coffee industry or selling and making of handicrafts. The major challenge which remains for both of these products is that there is no proper marketing of their produce.

5.4.1 Marketing

Coffee is one of the important produce of the area and it is famous for its variety and is being grown organically. Now there have been establishment of GCC which are trying to promote Araku Coffee and they have created their own processing units and packing house where they collect all the local produce from the people, process and sell their produce.

Establishment of such cooperative will help them with having continuous supply of raw material and can also be catered as a daily employment. Araku Coffee should be given GI tag which will have better implications on the income level of the population. Another important problem which is prevalent in the region is the existence of high number of middle men who reap the greater benefits than the farmers.

5.4.2 Introduction of Foreign Items

The handicrafts of this area is not being promoted and showcased to their fullest extent. Araku being in the hilly region with very low connectivity, it becomes important for the concerned departments to showcase it to wider range of population. The other important problem which was observed during the primary visit was, in the shops which are meant for the sale of tribal handicrafts, have displayed items which are not from the local area and all the that are coming from China. And they have displayed their products at the end of their shops, where it becomes difficult for the customers to understand the difference between local and foreign made products. The supporting argument presented by the shopkeepers there was that “because of these Chinese products our sales are increasing and we earn majorly from that”. The lack of marketing and promotion of the local products are in jeopardy. Marketing institutions should provide guidance to shopkeepers and help them in increasing their market value.

5.4.3 Digital literacy

It is another major problem of the area. People here are lacking of digital money transaction. Every individual would not like to carry hard cash with them, so there has to be acceptance and more transactions should happen via digital interface. People are aware of Paytm, Phonepay, Tez etc but no shopkeeper accepts payments via this mode. There is also lack of swiping machines in these shops which are now the trend in the market. Another reason for the lack of such development is due to lack of network connectivity (internet facility) is lacking in these region.

5.4.4 Skill Development

One of the important aspects of any economy is the presence of skilled workforce, and if opportunities are created for them at their own region it becomes easier for the youth to get absorbed in the market easily. Another implication of these which can be understood from this is the literacy rate of this area. Higher the literacy levels higher the chances that the population will be skilled, and this becomes a major reason for the youth to migrate to other part of the cities and country.

There are cases of women who got trained for making tribal handicrafts but due to lack of opportunity, leaving the program have not helped them in becoming a successful entrepreneur. Providing skill set will not only serve the purpose, there should be market institutions where these skill sets can be absorbed.

Education driven work should also be taken into consideration. Most of the youth tend to migrate from their own base for better employment opportunities. Providing career guidance to students can be a great intervention as most of the youth do not understand the positive implication of doing which they have never thought about. Career guidance also helps them to know the areas in which they can try to find their potential and work accordingly. Another idea which can be suggested is of providing internships. Government and private organizations can play a major role as

internships can give a better picture of the current market trend and help them in preparing accordingly.

5.5 MSME

As we know that Andhra Pradesh is developing at a high growth rate, and Visakhapatnam is recognized as industrial district so it becomes important to look at the various challenges that this sector is facing regarding the development.

5.5.1 Banks

One of the major issues which can be seen and discussed with the higher authorities is that, banks play an important role in approval and sanctioning of projects. Lack of Communication and improper reasons to reject the applications was observed at our primary level field data. The reasons for not providing loans are very vague. For example, one of the applicant was rejected on the grounds that the area under which they have applied does not come under their jurisdiction, the map of the approval given plan is not correct, banks delay in going to the field and approve the plans. These are some of the major problem which investors have been facing.

The complaint from the banking sector is that the applicants are not available during their field visit and they lack in documentation which is why there are scenario of delay in the process.

5.5.2 Raw Material

Another important issue for the existing units is the high fluctuation of raw material which becomes a major barrier and in the production in high quantity the reason for high fluctuation is due to the competition from the neighbouring state where the production levels have gone down rapidly. This has also affected the growth level where they have seen steep decline. Regular market supply can reduce or maintain a standard rate of raw material. This can be managed by the SME Units, Department of Industries and private players who are involved in this.

5.5.3 Competition

Another important reason for the decline in growth is the competition and dependency on steel plant. The problem with dependency on steel plant has limited their scope of expanding and the benefits from them are not fruitful. The MSME sector has not grown extensively after the bifurcation as the major units are with Hyderabad in Telangana. Orrisa, West Bengal, Gujarat, Madhya Pradesh are some of the major competitors for the Visakhapatnam MSMSE, and the MSME cluster are not been provided regular orders from the Hindustan Shipyard, Dockyard. And there is a need for providing long term contracts which can benefit the supplier as the cost of machinery is high and it cannot be shut down with no orders.

5.5.4 Manpower

Another important problem which the units are facing is high cost of labour. When the return on investment is low for the units they have to invest more on the human labour which is also a major barrier. If the units have constant production it becomes easier for them to invest in various fields. The no. of engineers graduating from Vizag district is 15,000, manufacturing units can be a useful platform for getting hands on experience and can be a platform for the youth to explore and innovate new products.

If the Public sector units of the district functions well then there are high chances that the MSME will flourish in its production and sale. There is also requirement of marketing strategies for the existing units which will help in expanding their market to investors and manufacturing companies by presenting their business plan. There is also a need for building of mechanical and electrical industry to help the existing MSME which can be benefited as the cost of production will decrease and it can support both the industries.

Observation for Long Term Growth

a) Vizag-Chennai Industrial Corridor

Service sector has always played a major role in boosting the Indian economy, now there is a need for manufacturing sector to step-up and create employment. The report mainly focuses on the importance of Vizag-Chennai Industrial Corridor (VCIC). The major areas covered in the report are to help the government and other stakeholders in policy formulation and provide sufficient support for its acceleration.

“Make in India” initiative is a growth strategy based upon development of economic corridors, where there is a need for policy formulation to increase the manufacturing and overall growth by linking both developed and backward regions. The main aim of this corridor is to create a globally competitive manufacturing sector supported by world class infrastructure, logistics facilities, and a liberal policy regime.

The need for industrial development is to be built around industries that already exist in the country and account for growing proportion of national and global economic activities or represent frontier industries or niche sub-sectors that are expanding but have not yet established a foothold in India. Suggestion for industrial development;

1. Creation of economic zones and manufacturing clusters supported by efficient logistic services.
2. Need for acquisition of land, of sufficient scale and well connected to labour and other inputs.
3. Need for effective zone management to attract enterprise and support their growth.

4. A regulatory regime that facilitates the establishment of enterprise.
5. Uninterrupted operations which facilitates the development of the integrated national supply.
6. Including micro, small and medium enterprise and linking them with global production networks for the delivery of inputs and distribution of outputs in domestic and global markets.

Vizag-Chennai Industrial Corridor is a key part of the planned East Coast Economic Corridor and is India's first coastal corridor. VCIC is also aligned with Golden Quadrilateral and is intended to play a key role in driving India's new "Act East Policy". The Act Easy Policy is a proactive initiative with an aim of increasing the integration of Indian economy with the economies of Association of Southeast Asian Nations (ASEAN).

VCIC's long coastlines and ports located will provide an opportunity to create multiple international gateways to connect India with vibrant global production. Ports located alongside the corridor should be seen as source of value added to domestic and global supply chain. Major highlight of VCIC is a transport corridor that extends north-south over 800 kilometres along the coast connecting a set of economic nodes where industries will be located. This corridor includes NH 5, which is a part of golden quadrilateral, the Kolkata-Chennai rail route and seven non-captive operational ports.

One of the drawbacks faced by Andhra Pradesh in their development after the bifurcation is that it has been excluded from industrial activity including information technology activities which are more prominent in Hyderabad. Development of metallurgical, pharmaceutical and petrochemical industries in the north and continued expansion of industrial activity in the food processing sector, industrial development within Sri City will boost industrial development. Traffic usage via sea ports and generation of power capacity will facilitate economic development.

There is a need for investment from domestic industries and foreign direct Investment in existing and new Industrial activities. Domestic investment and FDI can be increased by the development of VCIC's major port and industrial cluster.

Regulatory Implications

There is an emphasis on the importance on regulatory reforms and institutional changes that

1. Improve the climate under which firms start and operate their business
2. Enable goods and services move seamlessly within and beyond the corridor
3. Allow more synchronized industrial and urban planning in and around industrial cluster and zones.

Sector and Node-Based Development

Following sectors and sub-sectors were identified as the drivers of Industrial growth

1. Food processing
2. Pharmaceuticals
3. Auto and auto components
4. Textiles
5. Metallurgy
6. Chemicals and petrochemicals
7. Electronics
8. Small and Medium size enterprise
9. Developing supply chains to integrate SMEs

The report has identified four geographic nodes which will drive the growth of these industries. The four nodes which are selected for the development are;

1. Northern Node: which is centred around Visakhapatnam and is in close proximity to the ports of Visakhapatnam and Gangavaram
2. Southern Node: is close to the urban centers of Tirupati and Nellore, the port cluster from the north of Chennai to Krishnapatnam,
3. The two nodes in the central region are considered to be green fields. Where one extends from Gangavaram to Kankipadu, with Vijaywada as the major urban cluster. The other node is around the port of Kakinada and the urban centres of Kakinada and Rajamundry.

The criteria for selecting are as follows:

1. Current level of industrial agglomeration
2. Availability of land for development of new industrial cluster
3. Proximity to urban centres and seaports
4. Rail and road connectivity
5. Availability of power and water

Infrastructure development and urbanization has been given importance to attain the core objective. There is a sense of understanding that all the nodes including the major urban and industrial cluster will face major challenges and these challenges can be overcome by putting in place a synchronized infrastructure and urbanization strategy. Urbanization is necessary for industrial development. There is emphasis on the making strategy for proactive urbanization which is more pragmatic approach to land assembly for industrial development.

The study conducted by Asian Development Bank recommends a two-fold approach:

1. Plan to upgrade and strengthen the spinal routes along the corridor to enable connectivity between industries and ports and strengthen the grid network from the gateways and the nodes to the hinterland
2. A policy of node-centric infrastructure development.

Policy and Regulatory Reforms

The report identifies three elements that hinges on any economic corridor;

1. Infrastructure
2. Institutions and regulations supporting the ease of doing business
3. Planning and management of clusters

Development of institutional capacities and facilitation of trade remains the greatest challenge for the corridor. Two types of regulatory issues have been identified which facilitate industrial development in the corridor, (i) regulatory issues specific to VCIC that improve investment climate and facilitate the establishment of single window system for start-up related approvals and (ii) regulatory issues which involve borders across the states or through ports.

Creation of single window system is critical to reducing the cost of doing business and integration of value chains. To achieve the first regulatory objective, each state in the corridor has to undertake critical policy, institutional reforms associated with regulatory compliance.

Development Authority proposed by the Department of Industrial policy and Promotion is envisaged to play a key role in facilitating the institutional mechanism in addressing regulatory issues. Regional development authority has been created and empowered to undertake planning and development including the use of land pooling. This is used for the two emerging models of planning and governance that are of private sector led Sri City in Andhra Pradesh and Special Investment region format in Gujarat.

Overall Conclusion

The economy of Visakhapatnam district is driven by the industrial growth and adequate utilization of natural resources where tourism is also taken into consideration. There are various bottlenecks in sectors which have been suggested for immediate intervention. There is lack of inter departmental communication which delays the process of approval. Monetary support and skill development to the government organizations have been presented as one of the major barriers. Entrepreneurship is another component which can be increased by improving the policies. Proper career guidance can help the youth have better opportunities for their future.

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3. List of Abbreviations

Abbreviations	Full Forms
BCG	Boston Consulting Group
DES	Directorate of Economics and Statistics
DIC	District Industries Centre
DIPP	Department of Industrial Policy and Promotion
DIPS	District Industrial Potential Survey
FDI	Foreign Direct Investment
GDDP	Gross District Domestic Product
GDP	Gross Domestic Product
GI	Geographical Indication
GoI	Government of India
IIP	Indian Institute of Packaging
KVIC	Khadi & Village Industries Commission
MSME – DI	Micro, Small and Medium Enterprise – Development Institute
MSME	Micro, Small and Medium Enterprise
MUDRA	Micro Units Development and Refinance Agency
SHG	Self Help Group
SWOT	Strength, Weakness, Opportunity, Threat
ITDA	Integrated Tribal Development Authority
NABARD	National Bank for Agriculture & Rural Development
VASSIWA	Visakhapatnam Autonagar Small Scale Industries Welfare Association
JNPC	Jawaharlal Nehru Pharmaceutical Cluster
PO	Project Officer
DRDA	District Rural Development Authority
APEDB	Andhra Pradesh Economic Development Board
APIIC	Andhra Pradesh Industrial Infrastructure Corporation
APSEZ	Andhra Pradesh Special Economic Zone
APSSDC	Andhra Pradesh State Skill Development Corporation

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Appendices

Appendix A

IIML Team visited the offices of following officers and officials for primary data, interviews and meetings: (alphabetical order)

1. Akshaya Patra Foundation
2. Andhra Bank -Paderu
3. Andhra Pradesh Economic Development Board-APEDB Hyderabad
4. Andhra Pradesh Industrial Infrastructure Corporation APIIC
5. Andhra Pradesh Special Economic Zone- APSEZ
6. Andhra Pradesh State Skill Development Corporation- APSSDC
7. Andhra Pradesh Tourism Development Corporation- APTDC
8. Brandix Apparel City
9. Chief Planning Officer-CPO Vizag
10. Chief Statistical Officer-CSO Vizag
11. Collector & District Magistrate
12. Department of Agriculture
13. Department of Animal Husbandry
14. Department of Fisheries
15. Department of Tourism
16. District Employment Office
17. District Rural Development Authority-DRDA
18. Ettikopakka Village
19. General Manager (Airport Authority of India-AAI Vizag)
20. General Manager (District Industries Centre)
21. Hindustan Petroleum Corporation Limited-HPCL
22. Integrated Tribal Development Authority-ITDA
23. Jawaharlal Nehru Pharmaceutical Cluster-JNPC
24. Khadi and Village Industries Commission-KVIC
25. National Bank for Agriculture & Rural Development (NABARD)
26. Non-conventional Energy Development Corporation of Andhra Pradesh Limited [NEDCAP]
27. Project Officer, Horticulture Department, Paderu
28. Railway Station Manager - Araku
29. State Bank of India- SBI
30. Tribal Museum
31. Visakhapatnam Autonagar Small Scale Industries Welfare Association-VASSIWA
32. VIZAG Steel

Appendix B

Recommendations: Key Thrust Area				
Areas	Interventions	Agencies concerned	Timeline	Impact sectors
Infrastructure	<ol style="list-style-type: none"> 1. Cold Chain Facility 2. Pack Houses 3. Warehouse 4. CFCs 5. Exclusive Showrooms for GI/ GCC products 6. Upgradation of Parks and Beaches 	<ol style="list-style-type: none"> A. District Authority B. APIIDC C. DIC D. APTDC, VUDA, ITDA 	ST ST MT/LT MT/LT	All Sectors
Marketing	<ol style="list-style-type: none"> 1. Linkages 2. Alternate Markets (E-commerce, Exclusive Showrooms) 3. APMCs 4. Branding of GI and Other Products 	<ol style="list-style-type: none"> A. Concerned Department B. District Authority 	MT MT MT	All Sectors
Credit Facility	<ol style="list-style-type: none"> 1. Micro loans like MUDRA 2. Group Financing through Self Help Groups 	<ol style="list-style-type: none"> A. District Admin. B. Financial Institutions C. SFC - AP 	Ongoing...	All Sectors (Fisheries, Tourism, Horticulture, Tribal, MSMEs)
Cooperatives/ Cluster Approach	<ol style="list-style-type: none"> 1. IEC 2. Capacity Building 	<ol style="list-style-type: none"> A. DCOs B. BDOs C. Sectoral Heads 	ST	All Sectors
Administrative	<ol style="list-style-type: none"> 1. Coordination Officer 2. Periodic Monitoring 	<ol style="list-style-type: none"> A. DIPP B. District Administration 	Ongoing...	All Sectors
Capacity Building	<ol style="list-style-type: none"> 1. Production, Process, Market, Packaging, Designing, Maintenance 	<ol style="list-style-type: none"> A. Concerned Depts. B. District Administration 	Ongoing...	All Sectors
Disaster Management	<ol style="list-style-type: none"> 1. Disaster Infrastructure and Manpower, Risk Mitigation 2. Insurance 	<ol style="list-style-type: none"> A. District Administration B. IMD, Insurance Companies 	Ongoing...	All Sectors

Sector-wise Recommendations

Area of Recommendation	Intervention	Departments Concern	Timeline
Tourism			
Infrastructure	<ol style="list-style-type: none"> 1. Adventure sports' 2. Infrastructure 3. Improvement of Beaches 4. Airport 5. Development of Buddhists Circuit 6. Hospitality & Roads 	<ol style="list-style-type: none"> A. Nodal department for sector B. DIC 	<ol style="list-style-type: none"> S M/L S
Credit Facility	<ol style="list-style-type: none"> 1. Micro Loans 2. MUDRA, SFCs 	<ol style="list-style-type: none"> A. Department B. FIs (SIDBI, NABARD, NBFCs) 	<ol style="list-style-type: none"> S S
Capacity Building	Skilled Manpower Development across all areas	<ol style="list-style-type: none"> A. Department of Tourism D. District Authority 	Ongoing...
Marketing	<ol style="list-style-type: none"> 1. Campaigns at National and International levels 2. Use of Social Networks 3. Tribal Tourism 4. International Conferences, Trade Fair 	<ol style="list-style-type: none"> A. APTDC B. ITDC C. Indian Railways D. Airlines E. NRI Bodies 	<ol style="list-style-type: none"> S M
Horticulture			
Infrastructure	<ol style="list-style-type: none"> 1. Cold Chain 2. Processing Zones 3. Warehousing 4. Transportation 	<ol style="list-style-type: none"> A. Nodal department for sector B. DIC 	<ol style="list-style-type: none"> S M/L S
Credit Facility	<ol style="list-style-type: none"> 1. Micro Loans 2. MUDRA, SFCs 	<ol style="list-style-type: none"> A. Department B. FIs (SIDBI, NABARD, NBFCs) 	<ol style="list-style-type: none"> S S
Capacity Building	<ol style="list-style-type: none"> 1. Pre and Post-Harvest Orchard Management Practices 2. Packaging and Marketing 3. CFCs 	<ol style="list-style-type: none"> A. Department of Horticulture B. ICAR-NRCL C. IIP Calcutta D. District Authority 	Ongoing...

Technology & Marketing	<ol style="list-style-type: none"> 1. Scientific Approach for shelf life improvement 2. Rytu Bazar 3. E- Commerce 	A. Department of Horticulture	S M
Beneficiary Database	1. Maintaining up to date records of beneficiaries	A. Concerned Dept.	S
Fisheries			
Infrastructure	<ol style="list-style-type: none"> 1. Cold Storage/Chains 2. Processing Units / Export Zone 3. Start-ups in fisheries 4. Disaster Management 5. Motor Boats 	A. Dept. of Fisheries B. District Administration C. Disaster Management	M/L M/L
Credit Facility	<ol style="list-style-type: none"> 1. Micro Loans like MUDRA 2. Insurance like crop ins. 3. Credit Card Facility (like KCC) 	A. Department B. FIs	S S
Capacity Building	<ol style="list-style-type: none"> 1. Production 2. Marketing 3. Training and Development of Tribal Youth on Entrepreneurship 	A. Department of Fisheries B. ITDA C. Dist. Administration D. DIPP	Ongoing...
Cooperative Culture	<ol style="list-style-type: none"> 1. Creating Small Cooperatives 2. Self Help Groups 3. Similar to GCC 	A. DCO B. Dept. of Fisheries C. District Admin.	M
Coffee and Handicrafts (Tribal)			
Infrastructure	<ol style="list-style-type: none"> 1. Warehouse and Retail Outlets at Airports and other places 2. IT Infrastructure 3. Processing Units / Export Zone 4. Start-ups 5. Disaster Management 	A. ITDA and Handicrafts B. DIC C. District Administration D. Disaster Management	S/M S/M
Credit Facility	<ol style="list-style-type: none"> 1. Micro Loans like MUDRA 2. Insurance like crop ins. 3. Credit Card Facility (like KCC) 	A. Department B. FIs	S S

Capacity Building	<ol style="list-style-type: none"> 1. Production Workforce 2. Training and Development of Tribal Youth 3. Develop Cooperative Culture (SHGs, Strengthening GCC) 	<ol style="list-style-type: none"> A. Department of ITDA B. ITDA C. Dist. Administration D. DIPP 	Ongoing...
Marketing	<ol style="list-style-type: none"> 1. Branding of GI accorded Organic Araku Coffee at National and Intl. level 2. Use of E-commerce 3. Awareness Workshops 	<ol style="list-style-type: none"> A. DCO B. Dept. of Horticulture C. District Admin. D. ITDA 	Ongoing...
MSMEs			
Infrastructure	<ol style="list-style-type: none"> 1. Roads, Transport and Warehouse 2. CFCs, STPs, Raw Material Bank 3. Testing & Packaging 4. Startups in emerging areas 5. Industrial Cluster Development Centre with Vocational Training 6. Disaster Management 	<ol style="list-style-type: none"> A. Dept. of MSME B. District Administration C. DIC, HPCL, VSP etc. D. Disaster Management 	M/L M/L
Credit Facility	<ol style="list-style-type: none"> 1. Micro Loans like MUDRA 2. Insurance 3. SFCs and CGS 	<ol style="list-style-type: none"> A. Department B. FIs 	S S
Capacity Building	<ol style="list-style-type: none"> 1. Form SPV for upgradation & Capacity Building 2. Production & Marketing 3. Skill Development 4. Collaboration with R&D Institutions 	<ol style="list-style-type: none"> A. Department of MSME, B. DIC, NSDC C. Dist. Administration 	Ongoing...
Marketing & Regulations	<ol style="list-style-type: none"> 1. Make in India 2. Intl. Branding 3. Use of digital platforms (GEMS) 4. Protection of MSME Act 	<ol style="list-style-type: none"> A. Dept. of MSME B. DIC, EPC C. District Administration 	M

S: Short Term (9 months to 1 year); M: Medium Term (2 – 3 Years); L: Long Term (5 years and more)

