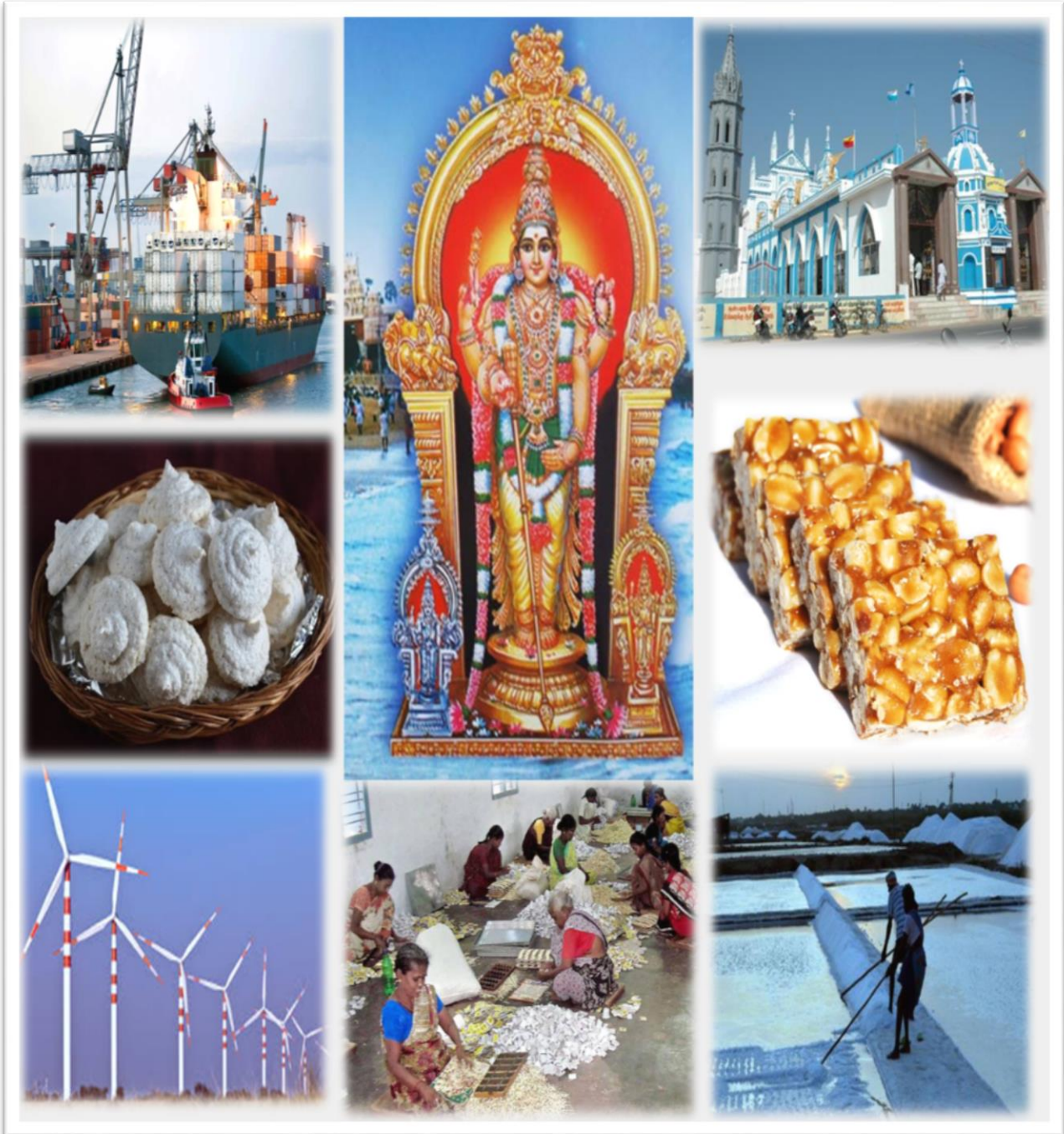




# DISTRICT DIAGNOSTIC REPORT

## THOOTHUKUDI DISTRICT





**Thiru. Sandeep Nanduri, I.A.S.,**  
**District Collector/**  
**Chairman – TNRTP**  
**Thoothukudi**



## **FOREWORD**

*The Tamil Nadu Rural Transformation Project (TNRTP) with its mandate of promoting rural enterprises, creating accesses to finance and creation of opportunities for job and employment will be one of its significant and a crucial initiative of Government of Tamil Nadu, Rural Development & Panchayat Raj assisted by the World Bank for demonstrating sustainable rural enterprise opportunity for Domestic, National and Global marketing by building upon Self Help Groups members and their families.*

*As it is always said, “Knowledge is Wealth”, This TNRTP project through its enterprise ecosystem and inclusive strategic planning platform will strengthens both the existing rural enterprises and the promotion of potential new enterprises by building on partnership and convergence with various line departments and players for leveraging, scalability and sustainability of the rural enterprise in creating meaningful job employment in farm with allied and non-farm sectors at the villages.*

*I place my appreciation to TNSRLM and TNRTP team for this commendable documentation of the Thoothukudi District Diagnostic Study across various line departments which is a robust effort for identifying, prioritizing and selecting farming sectors, non-farming sectors commodities for promoting rural enterprise along with capacitating and nurturing rural youths and entrepreneurs. I am sure that these secondary data's will serve and contribute as tool for planning identifying potential commodities and its value chain to both TNRTP as well as other line departments as a District Diagnostic Report in promoting sustainable rural enterprises.*

*Best Wishes*

**Date: 28.01.2020**

  
**District Collector**  
**Thoothukudi**

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## **Executive Summary:**

Tamil Nadu Rural Transformation Project (TNRTP) is an innovative project with an objective to promote rural enterprise access to finance and skill and employment opportunities in selected blocks of Tamilnadu. The project strategies and investments will be made in the institutions created by the previous and existing poverty reduction projects such as **Pudhu Vaazhvu** Project and **TNSRLM**.

District Diagnostic Study of the Thoothukudi was conducted with a focus to Identify prioritized commodities and subsectors on farm, off farm and non-farm sectors and based on their potentiality in the District. The methodology adopted was through collection of secondary data from Various line departments, SHGs, Farm and Non-Farm Associations, Resource Institutions, NABARD, LEAD Banks. The secondary data was validated with line department officials and consultations with stakeholders such as entrepreneurs, industrial association, farmer producer companies and Practioners. The prioritization was done through a template using the approved criteria such as number of producer's involved, comparative advantage, growth trends, market linkages etc.

## 1. District Context

The first wooden Jetty of this port was commissioned in 1864. This port was being used for export of salt, cotton yarn, senna leaves, palmyrah stalks, palmyrah fibers, dry, dry fish, Country drugs etc. to neighboring countries and for import of coal, cotton, copra, pulses and grains. The minor port of the Thoothukudi hand the distinction of being intermediate port handling the highest traffic tonnage of over 1million per annum. Traditionally known as **“Pearl City”** on account of the prevailing



Thoothukudi district was carved out of the erstwhile Tirunelveli district on October 20, 1986. Thoothukudi was a major natural pearl fishing center till last century. Thoothukudi was established as a Municipality in 1866 and on August 5, 2008 attained the status of Corporation after 142years.

Thoothukudi district has 163.5 km of coast line. Fishing and salt making are predominant activities in the district. Salt pans are quite prevalent in the coastal region. The district produces 70% of the total salt production of Tamil Nadu and with 30% of the National salt production, ranks second next to Gujarat. Coast sand is rich in mineral deposits of garnet, titanium, ilmenite, rutile, zircon etc. Thoothukudi Harbor is one of the major harbors in Southern India, the first to get ISO 9002 certification and it is the Southern Gateway of India.

The unique feature of the district is that three blocks of the district viz., Alwarthirunagari, Karungulam and Srivaikuntam are in the River Tamirabarani basin and irrigation-intensive crops like paddy and banana are being cultivated. The other nine blocks are totally rain fed and dry land crops like pulses, oilseeds and millets are being cultivated.

## 2. Socio Demographic Profile of the District

- ❖ Thoothukudi is one of the Freedom Fitters Lived Cities in the Indian State of Tamil Nadu.
- ❖ It is the administrative headquarters of Thoothukudi District is located in the Second Largest Port Trust in Tamilnadu.
- ❖ The Thoothukudi District consists of
  - Revenue Division - 3
  - Taluk - 10
  - Revenue Villages - 480
  - Corporation - 1
  - Municipalities - 2
  - Panchayat Union - 12
  - Town Panchayat - 19
  - Village Panchayats - 403 under its administrative control.
- ❖ Thoothukudi District is located in extreme Southern Parts of Tamil Nadu and it was carved out of Tirunelveli District on 20th October 1986. The district is located lies between 0.8 and 45 of the northern latitude and 78 and 11 of the eastern longitudes. The district is roughly triangular in shape and is bounded by Virudhunagar and Ramanathapuram districts in the north, Gulf of Mannar in the east and Tirunelveli District in south and west. The total geographical area of the district is 4707 sq. kms. and Constituting about 3.5 percent of the state. It has coastal line of 163.5 kms. River Thamirabarani passes through the district. The major basin is Thamirabarani.



## Thoothukudi district Block Details

S.No	Name of the Block	No. of Village Panchayats
1	Alwarthirunagari	30
2	Karungulam	31
3	Kayathar	45
4	Kovilpatti	38
5	Ottapidaram	61
6	Pudur	44
7	Sathankulam	24
8	Srivaikundam	31
9	Thoothukudi	20
10	Tiruchendur	11
11	Udangudi	17
12	Vilathikulam	51
	<b>Total</b>	<b>403</b>



## 2.1 Population

The total population of this district 1750176 comprising 865021 Men and 885155 women as per 2011 census. The household number in this district is 462010. The urban population is 876802 constituting 50.10% of the total Population, the remaining 49.90% ie.873374 is rural population. The density of the population is 369 per sq.km. The total literate among male are 703106 and that of female are 646597.

Table1. Population and Occupation details of Thoothukudi District

S.No	Particulars	Unit in ('000)	Percentage
1	<b>Total Population</b>	<b>1750176</b>	
	Male	865021	<b>49.42%</b>
	Female	885155	<b>50.58%</b>
<b>Population Growth (2011) = 11.32%</b>			
2	<b>Occupation</b>		
	<b>Total workers</b>	<b>7,48,095</b>	
	Main workers(Agriculture)	6,57,447	<b>77.94</b>
	Marginal workers(Allied sectors)	90,648	<b>22.06</b>

From the above table, it could be noted that the total population of the district was 1750176 out of which male and female accounted 49.42 and 50.58 percent respectively. Further it could be seen that most of the workers were dependent on agriculture (77.94 per cent). The marginal workers were found to be in allied sectors only.

### Decadal growth of the population

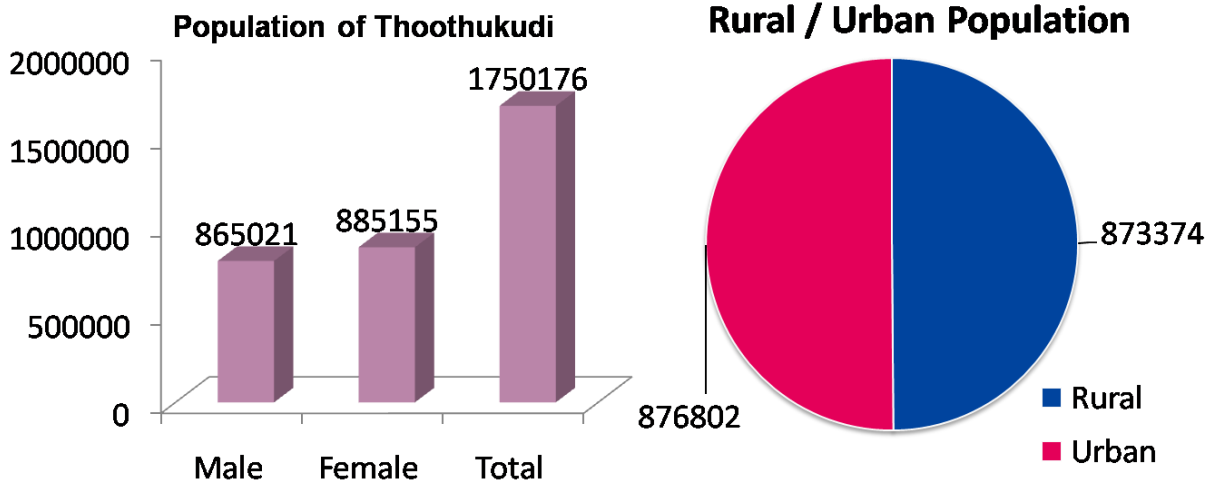
The district population is 1750176 in 2011 as against 1572273 in 2001. The decadal growth rate of the population in the district is 11.32 percent. The density of the population in the district is 369 persons per sq.km in 2011, as against 347 in 2001 which is due to the increased population as shown in Table (2). The urban population is 876802 constituting 50.10 % of the total Population, the remaining 40.90% ie.873374 is rural population. SC population is 347895, ST Population is 4911.

Table 2: Thoothukudi District Decade of Changes/Growth in demographic profile

S.I No.	Indicators	2001	2011
1	Population	1572273	1750176
2	Decennial growth(percent)	7.92	11.32
3	Density of population per sq.km	347	369
4	Urban population(percent)	42.28	50.10
5	Sex ratio	1050	1023
6	Percentage of 0-6 years old	11.72	10.49

## Population of Thoothukudi district

Figure 1. Population



YEAR	MALE	FEMALE	TOTAL
2011	865021	885155	1750176

Rural / Urban	Population
Rural	873374
Urban	876802

- Thoothukudi district ranked 20th place in terms of the highest population size among the districts.
- The district urban population share is 50.1% to the total district population.
- The district density of population per square km is 369.
- The district sex ratio is 1023, higher than the State sex ratio of 996.
- The district has recorded 11.32% of the decadal population growth in 2001- 2011.
- The district has recorded 3rd highest in the literacy rate (86.2%) among the districts.

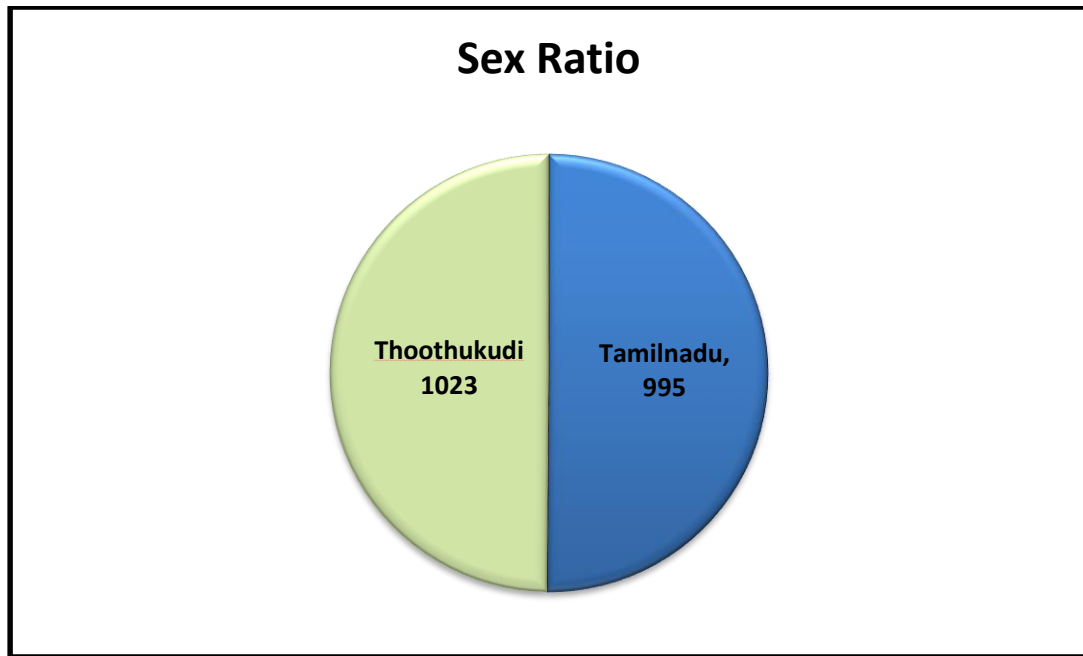
## SC, ST Population

The district has a SC population of 3,47,895 (19.88 %) and ST Population 4911 (0.28) of the total population. The percentage of SC Population to the total population of Kayathar Block is 41.5%. The Block has highest concentration of SC population when compared to all the blocks. The district has ST population of 4911 (0.28%) of the total population and Srivaikundam block is the notified place for the highest concentration of ST population with 0.95%.

### 2.3 Sex Ratio

Sex Ratio in Thoothukudi, it stood at 1023 per 1000 male compared to 2001 census figure of 1050. The average State sex ratio in India is 940 as per latest reports of Census 2011 Directorate. In 2011 census, child sex ratio is 963 girls per 1000 boys compared to figure of 953 girls per 1000 boys of 2001 census data.

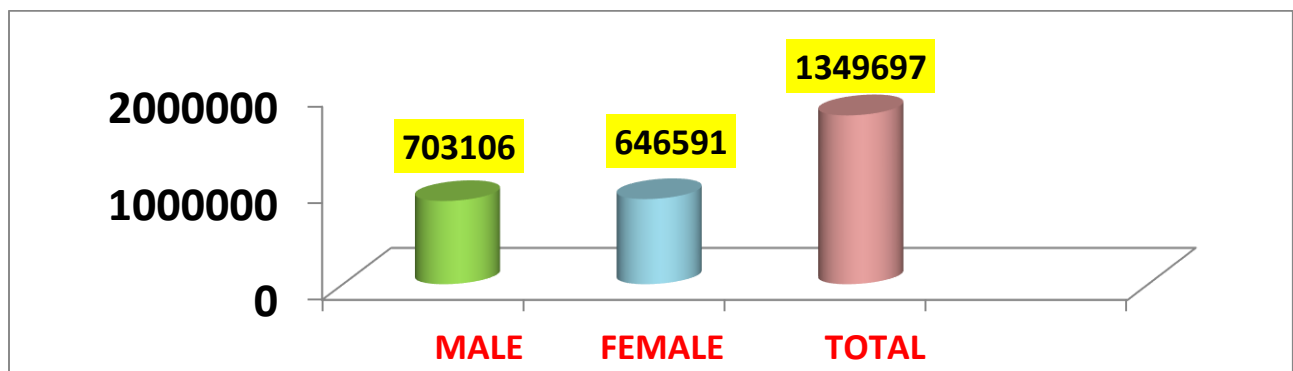
Figure 2. Sex Ratio



### 2.4 Literacy

The average literacy rate of the literacy rate of Thoothukudi in 2011 were 86.16 compared to 81.52 of 2001. If things are looked on at gender wise, male and female literacy were 91.14 and 81.33 respectively. Total literate in Thoothukudi District were 1349697 of which male and female were 703106 and 646591 respectively.

Figure 3. Literacy Details



## 2.5 Occupation Profile

Table 3. Total Workers and Non workers

S.No	Industrial Category	District		Tamilnadu	
		Persons	% to total	Persons	% to total
1	<b>Category of Workers (Main &amp; Marginal)</b>				
	A) Cultivators	48515	6%	4248457	13%
	B) Agricultural Labours	200644	27%	9606547	29%
	C) Workers Household Industry	22863	3%	1364893	4%
	D) Other Workers	476073	64%	17664784	54%
	<b>Total</b>	<b>748095</b>	<b>100%</b>	<b>32884681</b>	<b>100%</b>
	<b>Workers and Non Workers (Main &amp; Marginal)</b>				
2	E) Main Workers	657447	38%	27942181	39%
	F) Marginal Worker	90648	5%	4942500	7%
	G) Non-Workers	1002081	57%	39262349	54%
	<b>Total</b>	<b>1750176</b>	<b>100%</b>	<b>72147030</b>	<b>100%</b>

## 2.6 Community Based Organisations

Community Based Organizations (CBOs) such as Village Poverty Reduction Committees (VPRCs) and Panchayat Level Federations (PLFs) were promoted to provide services to poor. These CBOs leverages financial support from banks and provide support to the members for the livelihood activities. There is a significant number of NGOs promoted SHGs federation is functioning in the district and they do support functions and monitor the SHGs financial performance. The status of CBOs in the district are

- 7455 SHGs with 103017 members
- 377 VPRCs
- 383 PLFs (20 PLF IFAD)

### 2.6.1 Farmer Producer Organizations (FPOs)

Farmer Producer organisation aim to mobilize small and marginal formers into former producer groups to share knowledge on better practices. Cost effective agricultural technologist, aiming at increased productivity. If enable farmer access to credit facilities and to create a conducive environment for collective profitability and sustainability.

There are 10 FPOs promoted by Agri Dept, NABARD, TNSFAC and Resource Institutions. The FPOs are very nascent in nature with membership of 7766 members. Most of the FPOs are working on Seed Fertilizer, Pulses and Rain fed crops. 10 FBO's are currently active. The details are given below the table.

Table: 4 FPO details

S.No	Name of FPO	No.of Farmers	Support provided by State Govt.	Business Activities	Turn over 2018-19 or 2017-18
1	Vilathikulam Pudur Pulses Producer Company Ltd, Pudur	843	TNSFAC Funds	Seed Fertilizer and Petacycle Sales	2017-18 - 15.84 Lakhs Sales
2	Vilathikulam Farmers Producer Company, Vilathikulam	1000	NABARD	Produce Aggregation Commission and Projects	2018-19 60.00Lakhs
<b>3</b>	<b>PerunthalaivarVazhai Farmers Producer Company, Kootampuli</b>	<b>320</b>	<b>NABARD</b>	<b>Input Sales</b>	<b>2017- 18 3.00Lakhs</b>
4	Thoothukudi Pulses Producer Company Ltd, Vilathikulam	1000	SFAC	Input Sales	2017- 18 88.55Lakhs
5	Vaanmalai Ulavar Producer Company Ltd, Vilathikulam	400	NABARD	Produce Aggregation Commission	2017- 18 2.00Lakhs
<b>6</b>	<b>Kathirozhi Farmers Producer Company Ltd, Atthimarapatti, Thoothukudi</b>	<b>325</b>	<b>NABARD</b>	<b>Input Sales and Value-added Produces</b>	<b>2018 - 19 18.00Lakhs</b>
7	Vizhuthugal Agricultural Farmers Producer Company, Pudur	1468	NABARD	Input sales, Value addition and Produce Aggregation Commission	2018-19 5.61 Crores
8	Dryland Farmers Producer Company Ltd, Kovilpatti	1050	SFAC	Input sales and Produce Aggregation Commission	
9	Kayathar Kovilpatti Collective Farm Farmers Producer Company, Kovilpatti	800	TNSFAC Funds	Planned to run a Input shop	Yet to start business
10	Thoothukudi Agricultural Producer Company Ltd	560	Self-Promoted	Input sales and Value addition	2018-19 40.00Lakhs



## **3.0 Geographical Features**

### **3.1 Topography**

Thoothukudi district is bound by Virudhunagar District in the north, Tirunelveli district in the south and west, the Bay of Bengal in the East. The Total area of the district is 4707 sq. kilometer. The river Tamirabarani flows through this district. The area under the river basis with in the district is 78,698.8 hectares.

According to topography the district can be divided into three regions. The Northern part consisting of black soil, mostly dependent on seasonal rainfall for agriculture, the central part is irrigated by water flow from the western chats, and the southern part is red loan area.

The district is concerned by Black Cotton soil in the west with isolated red soil patches in high ground. The sandy soil is present in the costal tract.

### **3.2 Climate**

The district enjoys a hot tropical climate. The annual mean minimum and maximum temperature are 23°C and 29°C respectively. The climate is conducive for Agricultural and Horticultural crops. Average temperatures of January is 27°C, February is 27°C, March is 29°C, April is 31°C, may is 31°C.

#### **Rainfall: -**

Thoothukudi Depends mainly on North East monsoon rains, which are brought by the through of low pressure establishing in south Bay of Bengal. The average annual rain fall over the district varies from about 570 mm to 740 mm.

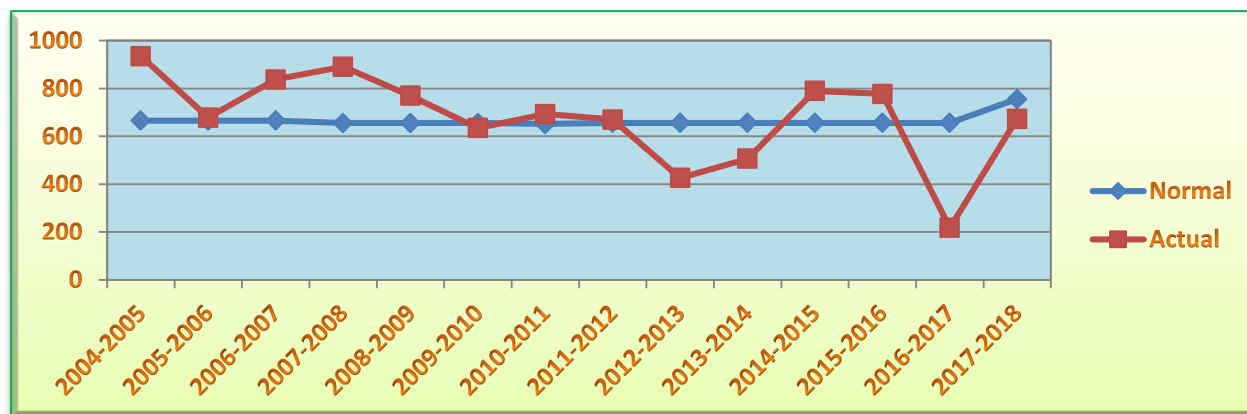
East monsoon is the main rainy season for the district. The district gets minimum rain fall during the South West monsoon. During 2017-2018 the annual rainfall in the district is 672.8 mm. In total rainfall, there was 10.96% shortage of rainfall has occurred during June 2017 to May 2018. In 2017-2018, 17.19 % shortage of rainfall occurred during north east monsoon. The lowest temperature is recorded in the month of January. The highest temperature is recorded in the month of July.

Table:5 Actual Annual Rainfall during the last Fourteen years

Time Series Data of Rainfall by Seasons (in mm)												
S. No	Year	South West Monsoon		North East Monsoon		Winter Season		Hot Weather		Total		% Deviation (+ or - or =) from Normal
		Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	
1	2004-2005	86.8	151.1	410.1	551.4	46.6	61.5	112.2	171.1	665.7	935.1	+42.6
2	2005-2006	86.8	48.4	410.1	453.6	46.6	36.1	112.2	139.9	665.7	678.0	+3.4
3	2006-2007	86.8	62.0	410.1	670.6	46.6	40.2	112.2	64.4	665.7	837.2	+27.7
4	2007-2008	86.8	101.7	410.1	370.4	46.6	94.9	112.2	323.9	655.7	890.9	+35.8
5	2008-2009	86.8	65.7	410.1	584.1	46.6	7.0	112.2	113.3	655.7	770.1	+17.45
6	2009-2010	86.8	54.5	410.1	490.5	46.6	23.3	112.2	66.4	655.7	634.7	-3.20
7	2010-2011	86.8	109.5	410.1	523.5	42.8	13.7	111.6	46.0	651.3	692.7	+64
8	2011-2012	74.9	30.3	427.0	550.9	42.8	16.2	111.6	72.8	656.3	670.2	2.1
9	2012-2013	74.9	0.4	427.0	330.4	42.8	45.5	111.6	49.9	656.3	426.2	-35
10	2013-2014	74.9	13.8	427.0	301.6	42.8	31.4	111.6	159.4	656.3	506.2	-22.9
11	2014-2015	74.9	51.9	427.0	585.6	42.8	9.6	111.6	143.1	656.3	790.2	20.4
12	2015-2016	74.9	60.0	427.0	664.3	42.8	3.4	111.6	49.5	656.3	777.2	18.4
13	2016-2017	74.9	18.0	427.0	152.6	42.8	14.7	111.6	32.2	656.3	217.4	-66.9
14	2017-2018	174.2	164.2	427.0	353.6	42.8	1.7	111.6	153.3	755.6	672.8	-10.96

Source: District Hand Book 2017-18

Figure 4: Annual Rainfall



Source District Statistical Handbook 2017-18

### 3.3 Land Use Pattern of the District

The total geographical area of Thoothukudi district is 4707Sq.Km. The total gross Cultivated area of the district was 213738 and net area sown was 208845 hectares in 2017-18. Further it could be seen that the forest area was 7121.94 Hector sand costal line 163.5km of the total geographical area. The net area sown is 208845 hectares (2017-18) which accounts to 33% of the total geographical area. The area sown more than once has increased from 199149 hectares (2016-17) to 208845 hectares (2017-18) which shows the potentials of a second crop dictated by the behavior of the monsoon and corresponding availability of water in surface / sub surface storages.

### 3.4 Soil

The general climate is Hot tropical. The predominant soil type is Alkaline soil. Red loam was found in all the taluks with more concentration in Udangudi, Kayathar, Sattankulam Taluk. Different types of soil like Block soil and Red sandy soil were seen extensively throughout the district and Sandy Coastal Alluvium was found in Coastal bed areas of Thiruchendur. The details of major soil types are furnished in Table 6.

Table: 6 Soil Type of Thoothukudi district

S.No	Type of soil	Places in District
1.	Red loam	Udangudi, Kayatar,Sattankulam
2.	Black soil	Kovilpatti, Kayatar, Vilathikulam, Thoothukudi and Ottapidaram
3.	Laterite soil	Srivaikuntam, Tiruchendur
4.	Sandy Coastal Alluvium	Tiruchendur
5.	Red Sandy Soil	Udangudi, Sattankulam, Srivaikuntam, Karungulam,

Source: District Statistical Handbook 2017 - 2018

### 3.5 Minerals in the district: The District has vast mineral resources.

- Gypsum, limestone, beach sand, kankar and shell limestone are the economic (major) minerals in the district.
- Rough stone, Jelly, Sand, Gravel, Clay, Earth and Granite are the minor minerals and leases are granted for quarrying of the said minerals in Thoothukudi district.
- High grade coral lime stones are found in the coastal area.
- Shell lime stones are found near Arasur in Thiruchendur Taluk.
- Dolomite which finds use in the manufacture of respiratory products, Magnesium, etc., occur in Kovilpatti Taluk. Alluvial gypsum occurs in Kovilpatti Taluk which is utilized mainly for cement manufacture.
- Sand available in Kuthiraimozhi Their village of Thiruchendur Taluk contains rich resource of Uranium and Titanium which are main ingredient for Atomic Energy.
- The coastal sand of Thiruchendur and Sattankulam contains the Granite, Silicon illuminate and Monazite which are used for Atomic Energy.

#### Natural Resource available in Taluk wise:

Table:7 Taluk wise details of Minerals

Name of the Minerals	Name of the Taluk
<b>Major</b>	
<b>Limestone</b>	Vilathikulam
<b>Minor</b>	
<b>Rough stone Jally, Gravel</b>	Thoothukudi, Kovilpatti, Srivaikundam, Ettayapuram, Satankulam, Ottapidaram, Vilathikulam
<b>Quartzite</b>	Ottapidaram
<b>Granite</b>	Ottapidaram, Kovilpatti, Ettayapuram

## Production and value of Major Minerals

Table:8 Minerals Production details

Name of the district	Name of the Minerals	2017-18		2016-17	
		Quantity in M.Tones	Royalty Value (Rs.)	Quantity in M.Tones	Royalty Value (Rs.)
<b>THOOTHUKUDI</b>	<b>Major Mineral</b> Lime Stone	602500	64475469	632860	69638043
	Beach Mineral Raw Sand	-	-	-	-
	Quartz	-	-	-	-
	<b>Minor Mineral</b>	<b>Quantity in cbm</b>	<b>Seigiorage fee value (inRs)</b>	<b>Quantity in cbm</b>	<b>Seigiorage fee value (inRs)</b>
	Rough Stone	251565	12826465	760351	32184700
	Gravel	58881	1235325	254418	5378290
	Earth/Slit	-	-	138249	-
	Quartz/ Gravel	1710	277500	1755	187500
	M.C.Granite	355	671695	2019	4117380
Source : 2017-18 District Hand Book					

### 3.6 Water Resources

#### Irrigation

The climate is hot and dry. Maximum Temperature of 38.5 Celsius prevails during June 2011 and minimum temperature of 20.4 Celsius prevails during January 2012. The district has a coastal line of 163.5Kms and territorial waters covering thousands of hectares. The different sources of irrigation are channels, tanks and wells, which covers 34527 hectares in the district. Out of this, 16662 hectares were covered by wells. The major irrigated crops in the district are **paddy, Cholan, Cumbu, Ragi and commercial crops like Cotton, Chilly, Pulses, Groundnut and Sugarcane**. Judicious use of water with modern water management techniques, yield of those crops can be boosted and thereby export potential can be explored. The productivity of food crops like paddy, groundnut and pulses can also be increased to the target levels by proper water management practices.

#### Rivers

There is no perennial river in the district. Tamirabarani river which rises in Agasthiyamalai of the western ghats, flows through Srivaikundam and Thiruchendur taluks and joins the sea at Punnakayl in Srivaikundam taluks. Pambayar and Manimuthar are the chief tributaries of Tamiraparani, which pass through the District. The Malattar and Uppodai flowing in Kovilpatti taluk are drainage courses. Tamirabarani and Manimutharu are the catchment areas of river basins, which have their place of origin in the Pothigaimalai. The former has a length of 120 km and the latter has a length of 98 km Pabanasam dam, Manimutharu dam and Eppodumvenran dam are built in the district.

## Reservoirs

The reservoirs viz., Papanasam Dam and major rivers Tamirabarani Chittar and Manimuthar Rivers are having silt deposits followed by Gravel. The Upper part of the river courses having black clayey earth with pale grey soil. Most of the water tanks and ponds in the District are having abundant quantity of earth and Gravel.

### 3.7 Status of Ground Water

In Thoothukudi District, during the pre-monsoon, the water level generally in declining trend ranges from G.L. to 15m. The depth of well below Ground Level 12.0m are become dry during hot season like May, June, July. In the post monsoon, the water level generally in upward trend due to rainfall and it may reach the Ground Level also.

Table:9 Ground water details

Block	Net Ground Water Availably (M.Cu.m)	Existing Gross Draft for Irrigating (M.Cu.)	Existing Gross Draft for Domestic and industrial water supply (M.Cu.)	Existing Gross Draft for all uses (M.Cu.)	Allocation for Domestic and Industrial Requirement supply up to next 25 years (2029) (M.Cu.m)	Net ground water Availability for future Irrigation Development (M.Cu.m)	Stage of Ground water Development (%)	Category of Block
Ettayapuram	26.04	31.76	2.04	33.80	2.09	Nil (-7,81)	130	Over Exploited
Kovilpatti	14.02	14.81	2.01	16.82	2.06	Nil (-2,85)	120	Over Exploited
Ottapidaram	20.03	27.48	0.81	28.29	0.83	Nil (-8,27)	141	Over Exploited
Pudur	7.58	6.49	0.71	7.20	0.72	0.37	95	Critical
Srivaikundam	35.44	4.88	1.80	6.69	1.85	28.70	19	Safe
Tiruchendur	16.73	10.21	1.65	11.86	1.69	4.83	71	Semi Critical
Udangudi	12.65	22.81	1.12	23.93	1.14	Nil (-11,30)	189	Over Exploited
Vilathikulam	4.15	5.74	0.82	6.56	0.84	Nil (-2,42)	158	Over Exploited
<b>TNRTP Blocks</b>								
<b>Alwarthirunagari</b>	33.64	-	2.19	2.19	2.24	31.4	7	<b>Safe</b>
<b>Karungulam</b>	28.7	22.9	1.35	24.25	1.38	4.42	84	<b>Semi Critical</b>
<b>Thoothukudi</b>	15.42	16.5	1.1	17.6	1.13	Nil (-2,21)	114	<b>Over Exploited</b>
<b>Sathankulam</b>	10.82	15.26	0.85	16.11	0.87	Nil (-5,32)	149	<b>Over Exploited</b>
<b>Total</b>	<b>225.23</b>	<b>178.86</b>	<b>16.45</b>	<b>195.30</b>	<b>16.85</b>	<b>29.52</b>	<b>87</b>	<b>Semi Critical</b>



## 4.0 District Infrastructure

### 4.1 Power Supply

The Thoothukudi Thermal Power Station is one of the biggest power stations in Tamil Nadu with three units, with an output of 5089.66 M.W. electricity. The first unit was commissioned in July, 1979, the second unit in December, 1980 and the third unit in March, 1982. Generally, power supply position in Thoothukudi District is normal. But in some areas, low voltage problem is felt, especially in the hamlets in Ghat section. To minimize the current consumption charges in the Panchayat, efforts were taken to utilize solar power lights as an alternate and renewable source in Thoothukudi District

### Generation of Electricity

S.N	Generation of Electricity	In million Unit
1	Thermal	5089.66
2	Wind mill Generation	339.82
3	Solar	55.86

### 4.2 Rural Electrification

Overall, 100 per cent of the hamlets are covered under rural electrification.

### 4.3 Road, Rail, Airport and Port Network

Thoothukudi has an extensive transport network and is well-connected to other major cities by road, rail and air. The corporation maintains a total length of 428.54 km (266.28 mi). The city has 37.665 km (23.404 mi) concrete roads, 329.041 km (204.457 mi) black topped surface roads, 56.592 km (35.165 mi) water bound macadam roads and 5.242 km (3.257 mi) earthen roads. The major roads within the city are NH 7A connecting Palayamkottai, Ettayapuram road (also called Madurai road) National Highway 45B (India), Ramanathapuram road or East Coast Road, Thiruchendur road or SH-176, West Cotton road and Victoria Extension Road.

Thoothukudi Railway Station is one of the oldest and popular railway stations in India. It is one of few stations in Southern Tamil Nadu to have Pit line facility for Cleaning and Maintenance of Rail Coaches facilitating the operation of Long Distance Trains from Thoothukudi

Thoothukudi Airport is at Vagaikulam, 14 km (9 mi) from the heart of the city. It has flights to Chennai Operated by Spice jet (Twice a day).

Thoothukudi Port Trust was renamed as V. O. Chidambaranar Port Trust is an artificial deep-sea harbor. It is one of the major in India. A luxury ferry liner, the Scotia Prince, was operating a ferry service to Colombo, Sri Lanka. Ferry services between the two countries have been revived after more than 20 years.

## 5.0 Farm and Allied Sector:

### 5.1 Land holding Pattern of the Farmers:

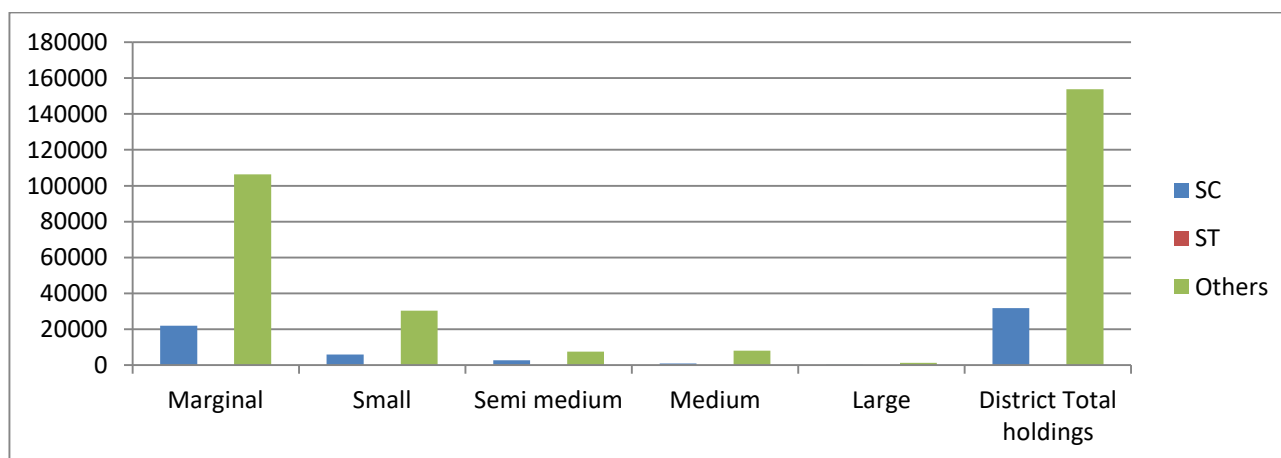
There are five categories of land holdings. They are marginal (below 1 ha), small (1-2 ha), semi-medium (2-4 ha), medium (4-10 ha), large (10ha and above). Majority of the farmers (95 per cent) in Thoothukudi district have less than one hectare occupying 13 percent of the land area. These details are presented in Table 8.

Table: 10 Number and area of operational land holdings

Size Class of holdings (Hectares)	Land Holders			Area (ha.)		
	S.C.	S.T.	Others	S.C.	S.T.	Others
Marginal	22043	-	106438	8972	-	42670
Small	6032	-	30311	8236	-	42820
Semi small	2798	-	17814	7594	-	49303
Medium	890	-	8162	4985	-	47239
Large	70	-	1318	1025	-	20999
<b>All sizes</b>	<b>31833</b>		<b>164043</b>	<b>30812</b>		<b>203031</b>

### Operational Land Holdings in No's

Figure 5: Landholding Details



(Source: 2017-18 District statistical Hand Book)

The distribution of land size holdings as shown in Table (10), indicates the fact that 128481 farmers were marginal i.e. holding less than 0.5 hectare and this scenario continues as the number of farmers gradually decrease with the operational holdings from marginal to small (0.5 to 2.0 hectares) and thereafter drastically reduced to very small number of farmers holding large area (10 & 20 hectares) and **16%** of the land holders belong to SC/ST community

## 5.2 Cropping Pattern and Major Crops

- Important crops grown in the district are Paddy, Groundnut, Ragi, Cumbu, Ragi, pulses (Green gram and Black gram), Maize, Chilies, Banana, Sugarcane, flowers.
- Paddy is mainly cultivated in Srivaikundam, Sattankulam, Eral, and Thiruchendur Taluks.
- Cumbu, Cholan, Maize and other Pulses are raised in the dry tracts of Kovilpatti, Vilathikulam, Ottapidaram, Kayathar, Srivaikundam and Thoothukudi Taluks.
- Cotton is being cultivated mainly in Kovilpatti, Ottapidaram and Thoothukudi Taluks.
- Kayathar, Thiruchendur and Sattankulam Taluks have Groundnut Cultivation.
- The groundnut cake is being used as manure and cattle feed.
- Palmyrah trees are grown mostly in Tiruchendur, Srivaikundam, Sattankulam and Vilathikulam Taluks.
- Jaggery is produced from Palmyrah juice and the production of Jaggery is the main occupation of Thiruchendur and Sattankulam Taluks
- Banana and other vegetables area raised in Srivaikundam and Thiruchendur Taluks.

## 5.3 Cropping pattern

The sequence of cropping season is from Khar/Kharif (April to July), Pishanam/ Thaladi (September to November). Black gram is one of the important pulses grown in both Kharif and Rabi seasons.

**The below details are representing Thoothukudi district Session wise cropping details**

- Mean annual rainfall (mm) -653.1
- Cold weather period (Jan.-Feb) -42.6
- Summer (March-May) -113.6
- South West monsoon season (June-Sept) -86.8
- North East monsoon season (Oct.-Dec.) -410.1

### ➤ **Tank fed areas: Heavy soils**

#### **Existing**

- Rice (Sep.-Jan.) - cotton (Feb.-Aug.)
- Rice (June-Sep.) - chilies (Oct.-Feb.)

#### **Normal year**

- Rice (Sep.-Jan.) - cotton (Feb.-Aug.)
- Rice (June-Sep.) - chilies (Oct.-Feb.)

#### **Moderate drought year**

- Chilies (Sep.-Feb.) Maize / cluster bean / lab/ bhendi / pulses (Sep.-Feb)

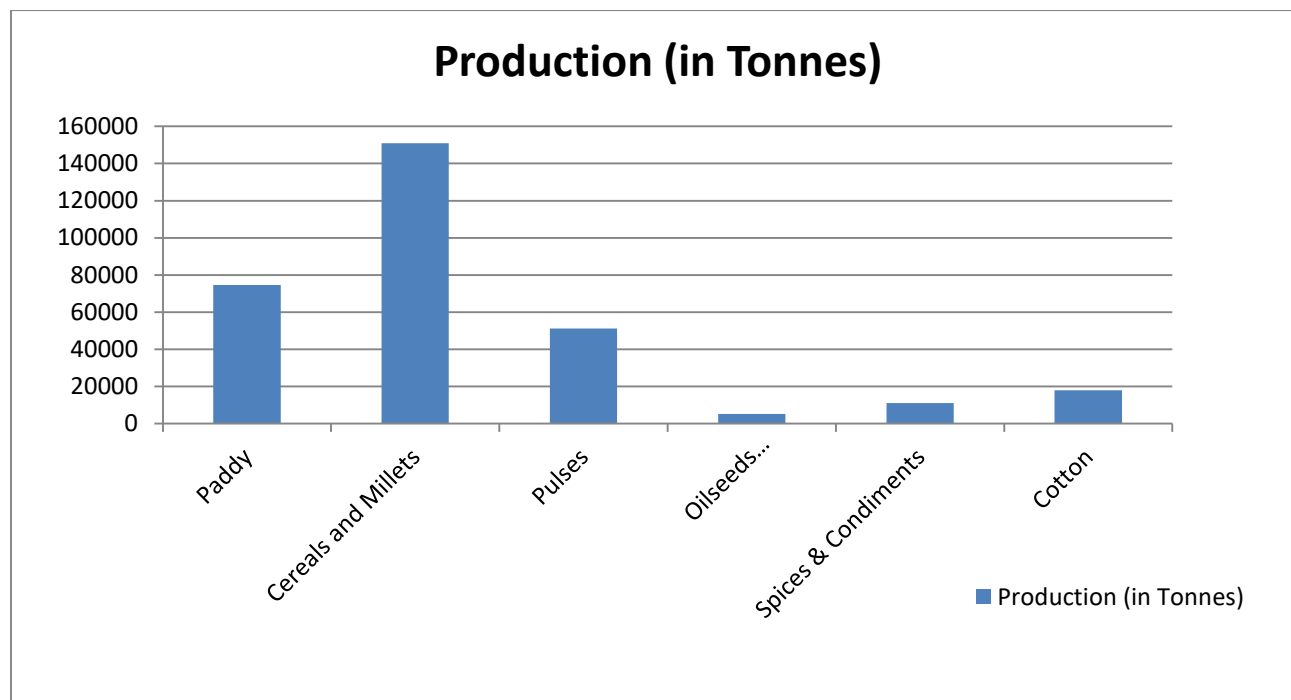
#### **Severe drought year**

- Pearl millet / gingelly/ fodder / Senna\* / minor millets / water melon / gourds (Sep.-Feb)

## 5.4 Area, Production and Productivity of Major Crops

The major crops in the district considering the area of cultivation major food crops are Paddy, Cereals and Millets, Cholan, Oilseeds and Pulses Are Banana, Green gram, Red gram, Ground Nut, and Black gram. Cash crops include Sugarcane, Coconut, Chilies and Cotton. Major horticulture crops cultivated in this district are fruits crops like Banana and Vegetables.

Figure:6 Major Crops Production (Production in Tonnes)



## 5.5 Horticulture crops

Major horticulture crops cultivated in this district are fruit crops like banana, mango and guava, vegetables like bhendi, tomato, brinjal, onion, tapioca, spices and condiments like chilies, tamarind and turmeric, plantation crops like betel vine and cashew, flower crops like jasmine, chrysanthemum, tube rose, marigold, rose and medicinal plants like senna, coleus and aloe vera. The red loamy soil suitable for horticulture crops available in Kayathar and Ottapidaram blocks provides good scope for vegetable cultivation. Betel vine cultivation is confined to Athur in Tiruchendur block and Eral in Srivaikundam block.

- ❖ **Fruit crops** = **Mango, Banana, Guava, and Sapota**
- ❖ **Vegetables** = **Bhendi, Tomato, Brinjal, Onion, Tapioca, Spices**
- ❖ **Condiments** = **Chilies, Tamarind and Turmeric,**
- ❖ **Flower crops** = **Jasmine, Chrysanthemum, Tube rose, Marigold.**

## Horticultural Other crops statistics:

Table:11 Horticulture Area Wise Production – Last three years

S.N	Type	Crop	2016-17		2017-18		2018-19		Productivity (MT/Ha)
			Area	Production	Area	Production	Area	Production	
1	Fruits	Banana	9451	340236	7558	288450	7937	302873	37.33
		Guava	207	4140	258	4652	272	4886	18.56
		Lime & Lemon	515	4249	595	5252.8	625	5515	8.66
		Mango	780	7800	713	7140	750	7497	10
2	Vegetables	Brinjal	126	2520	210	3952	223	4153	19.01
		Green chillies			765	5412	804	5684	7.07
		Onion	3024	15120	2853	14312	2998	23982	6.02
		Tomato			65	1705	70	1791	25.9
3	Flowers	Jasmine	116	812	156	928	159	795	5.88
		Other Flowers	148	740	151	752	153	705	4.99
4	Plantation Crops	Cashew nuts	562	225	592	255	600	258	0.42
		Coconuts	5886	651	6125	682	6200	47566	2.69
		Others	2845	56900	2821	58410	2964	61333	20.47
5	Spices	Betel vine	42	315	43	320	46	76	5.43
		Coriander Seed	2754	1928	2785	1950	2800	1961	0.7
		Red chilly	1192 4	11924	1238 4	12455	1250 0	12572	1
		Tamarind	313	782	318	1431	335	1508	3.85
6	Medicinal Plant	Aloe Vera			7	12	8	151	10.87
		Senna	106	79	110	215	118	226	1.56

Thoothukudi district is one of the major cultivators of banana in the state next to Trichy district. Major portion of this crop is marketed to other districts / neighboring state, leading to wastage / rejection and low price. If banana is processed and value added locally, it would reduce wastages and fetch good prices to farmers. Value added banana products such as banana fig, chips, powder, juice, wine, jam, sauce, sweet chutney, pickle, Thokku, biscuits, fruit bar, central core candy, ready to serve snacks etc., can be produced with technical support from NRCB, Trichy. At present very few units are engaged in the production of value added banana products. There is a large scope for these units with higher investment in this district.

The district is blessed with favorable climate for growing all kinds of horticultural crops except hills crops. The area covered by the horticultural crops is 20.79% of the net cultivated area. However, the growth of the horticulture sector is stagnant in the district.

## 5.6 Block wise Cropping Area:

Paddy, Green gram, Banana, Maize and Black Gram are among the top crops with respect to the area of cultivation against the blocks, **Cumbu, Tapioca, Gingelly and Chilies** are the other minor crops cultivated in the Blocks

### Production of Major Agricultural Products in Thoothukudi district

Table: 12 Average Agricultural Productivity of Major Crops

S.No	Crops	2017-2018		2016-2017	
		Area (In Hectares)	% of Total Area	Area (In Hectares)	% of Total Area
1	Paddy	13,685	6.68%	4,807	2.40%
2	Cumbu	9,510	4.69%	9,025	4.50%
3	Cholam	10,645	5.20%	8,429	4.21%
4	Maize	33,212	16.21%	33,211	16.57%
5	Black gram	49,737	24.28%	54,337	27.12%
6	Green gram	32,432	15.83%	34,360	17.15%
7	Groundnut	605	0.30%	788	0.39%
8	Gingelly	435	0.21%	396	0.20%
9	Sunflower	3,344	1.63%	2,630	1.31%
10	Chilies	12,497	6.10%	11,614	5.80%
11	Coriander	2,573	1.26%	2,694	1.34%
12	Onion	2,688	1.31%	2,873	1.43%
13	Banana	7,771	3.79%	9,515	4.75%
14	Cotton	6,540	3.19%	6,230	3.11%
15	Other Crops	19,054	9.30%	19,467	9.70%
	Total Crops	204,828	100%	200,376	100%

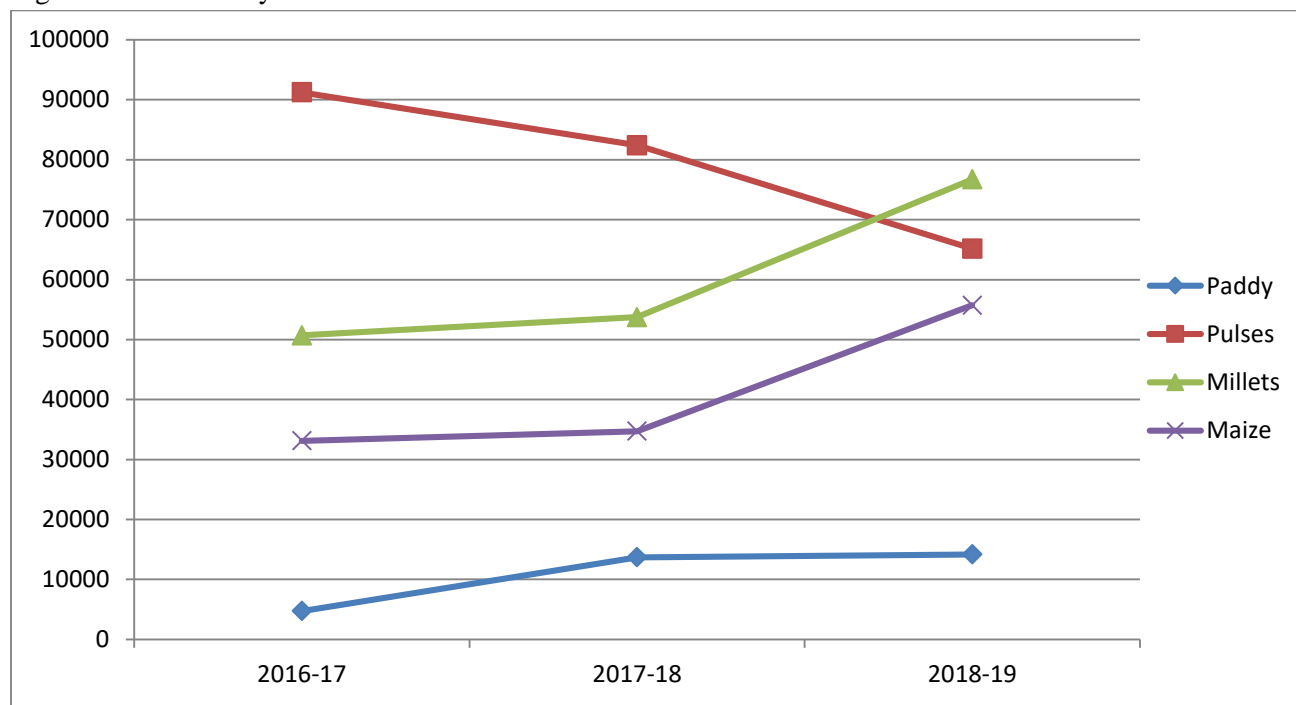
Source: District Handbook 2017-18



## Trend analysis

### District Major crops Production area Comparison Last three years

Figure 7 : Trend analysis



In 2016-17 Thoothukudi district rainfall Level Decreased so Pulses cultivated area decreased at the same time Maize cultivated area Increased.

**Table: 13 Major and Minor crops in TNRTP blocks of Thoothukudi**

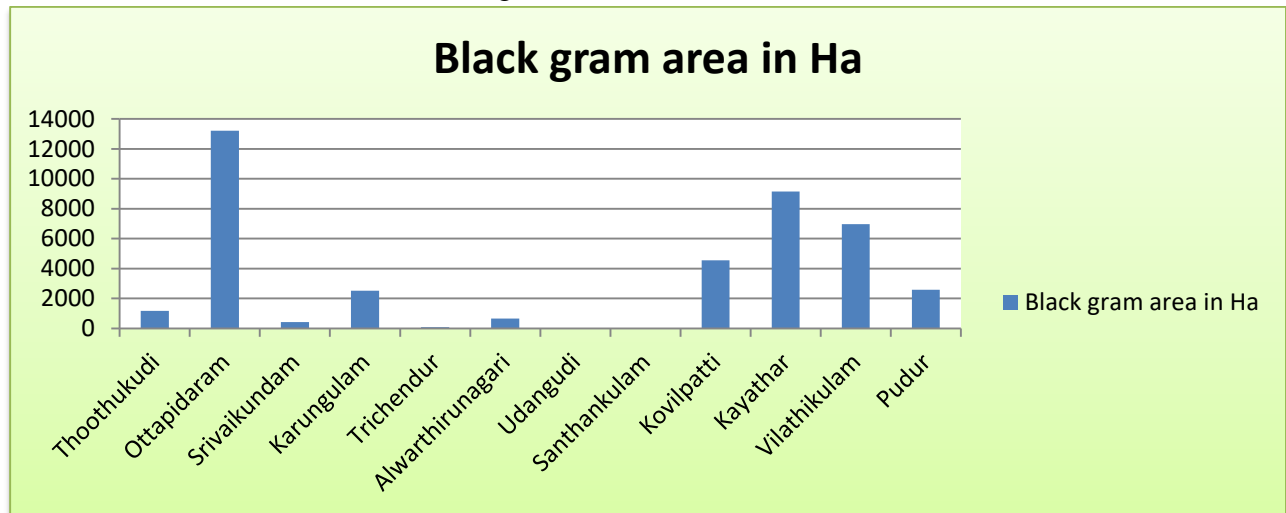
Block	Major crops	Minor crops
<b>Thoothukudi</b>	Millets, Jasmine, Cumbu, Banana, Paddy.	Black gram, Gingerly, Green gram
<b>Karungulam</b>	Paddy, Maize, Green gram	Banana, Jasmine, Groundnut
<b>Sattankulam</b>	Drumstick Groundnut, coconut, Paddy,	Cotton, Black gram
<b>Alwarthirunagari</b>	Paddy, Sugarcane, Groundnut	Black gram, Green gram

## 5.7 Crop wise discussion Selected crops:

### Black gram

**Black gram** is widely cultivated in Ottapidaram (13219 ha), Kayathar (9162 ha) Vilathikulam (6966.52 ha) and Kovilpatti (4542.95 ha) which contribute 32%, 22.17%, 16.9% and 11% respectively to the district respectively.

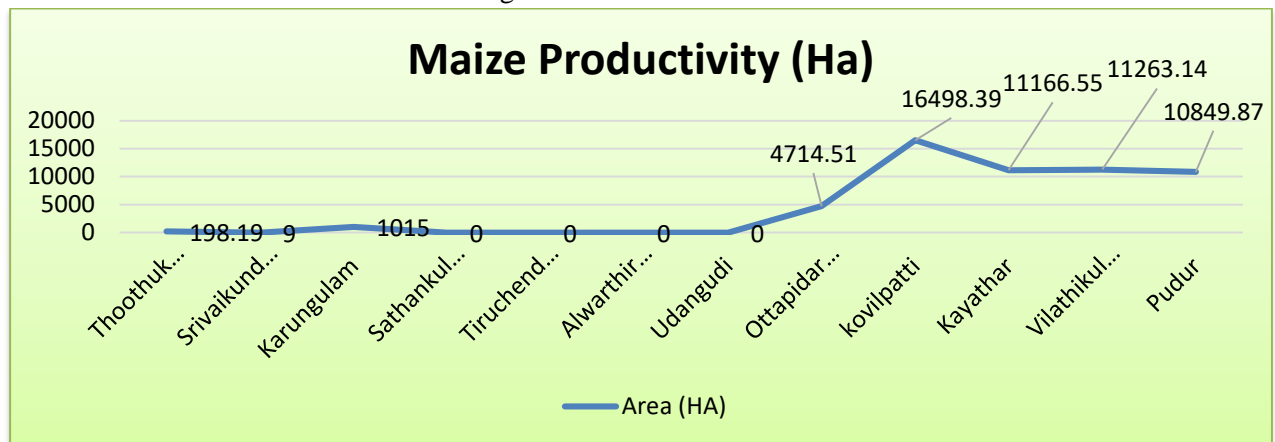
Figure 8. Black Gram Area in ha



### Maize

**Maize** is widely cultivated in Kovilpatti (16498 ha), Vilathikulam (11263 ha) Kayathar (11166 ha) and Pudur (10849 ha) which contribute 29.61%, 20.21%, 20.04% and 19.47% respectively to the district respectively.

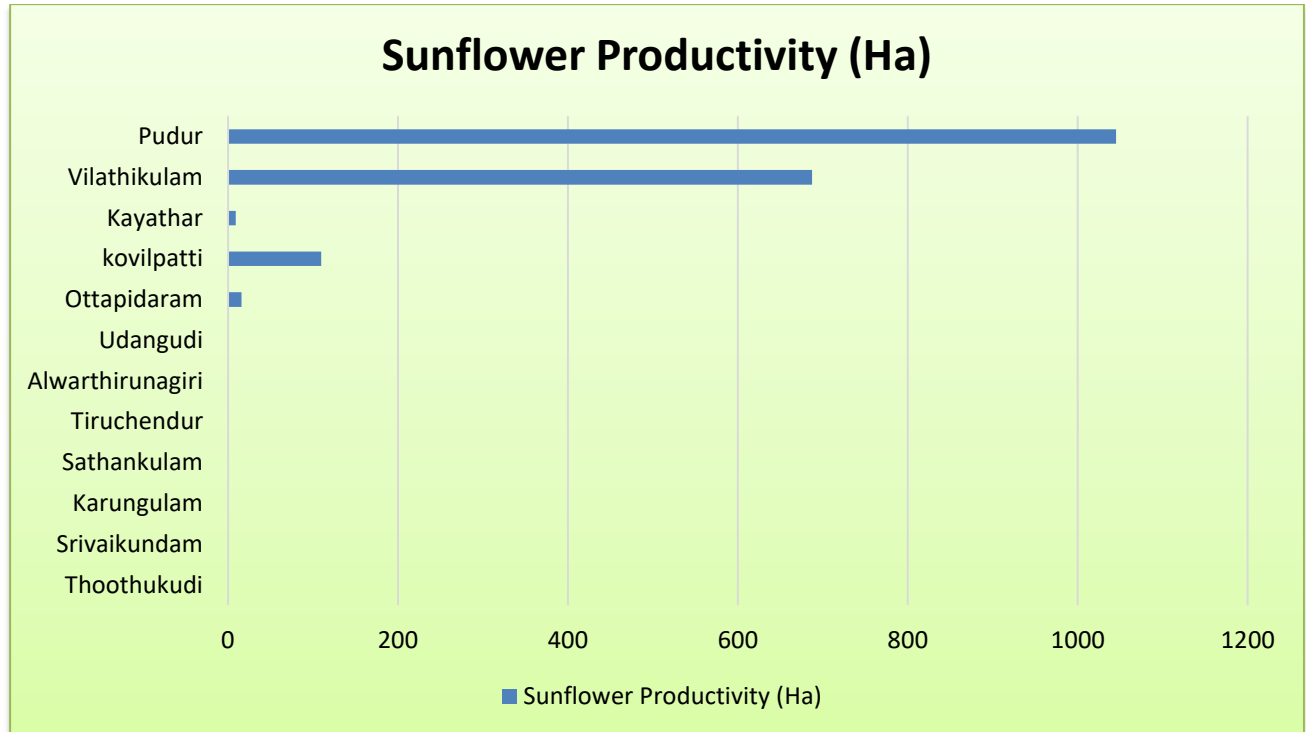
Figure 9: Maize Area in ha



## Sunflower

**Sunflower** is widely cultivated in Pudur (1045.33 ha), Vilathikulam (687.39 ha) and Kovilpatti (109.65 ha) which contribute 55.97%, 36.8%, and 5.87% respectively to the district respectively.

Figure 10: Sunflower Area in ha



## 6.0 Marketing and Storage Infrastructure

Marketing of agriculture is done through various regulated markets, co-operative marketing societies, Uzhavarsandhai (Fruits and Vegetables), Wholesale markets and Local Shanties. Apart from these Weekly markets and daily markets also exists in the district. The details of markets are as described as under.

Table: 14 Marketing Infrastructures Available

### (1) List of Agricultural and Non-Agricultural Storage Godowns

Sl. No.	Name of the Regulated Market	2017-2018	
		No. of Agricultural Godowns	No. of Non-Agricultural Godowns
1	Thoothukudi	2	Nil
2	Srivaikundam	2	Nil
3	Sattangulam	2	Nil
4	Kovilpatti	2	Nil
5	Ettayapuram	2	Nil
6	Kadambur	2	Nil
7	Kalugumalai	2	Nil
8	Vilathikulam	-	Nil
9	Pudur	1	Nil
	<b>Total</b>	<b>15</b>	

Source : District Handbook 2017-18

### (2) List of Cold Storage and Godowns

Sl. No.	Name of the Regulated Market	No. of cold Storages
		2017-2018
1	Thoothukudi	1
2	Srivaikundam	1
3	Sattangulam	1
4	Kovilpatti	1
5	Ettayapuram	1
6	Kalugumalai	1
7	Vilathikulam	1
8	Pudur	1
	<b>Total</b>	<b>8</b>

Source : District Handbook 2017-18

## Agricultural Marketing and Regulated Markets

Regulated market is wholesale market where buying and selling is regulated and controlled by the state government through the market committee. The primary object of regulating the market is to safeguard the interest of the producer sellers raise the standards of the local Markets where the first exchange of the goods takes place. It has 18 regulated markets through which the farmers sell their agriculture products directly to the government. The number of regulated markets and quantity and value of commodities transacted in those markets are given in Figure

Table: 15 Quantities and Value of Commodities Transacted in Regulated Markets of Thoothukudi District during 2017-18

### Regulated Markets 2017 – 2018

Sl. No.	No. of Regulated Markets	No. of Sub Regulated Markets	Quantity arrivals ('in M.T)	Receipts (Rs. in Lakhs)					
				Cotton	Chilies	Coriander	Black gram	Paddy	Ground Nut
1	2	3	4	5	6	7	8	9	10
1	Kovilpatti	-	6673.82	28.4		0.05	2.98		
2	Thoothukudi	-	12228.76	51.72	0.22	0.04	1.4	0.59	0.26
3	Pudur	-	3472.19	7.89	0.59	0.07	0.14		
4	Kadambur	-	2010	13.55			0.35	0.13	0.01
5	Kalugumalai	-	866.21	8.08			1.66	0.01	0.2
6	Sriivaikundam	-	3997.22	2.79				5.06	
7	Vilathikulam	-	2092	1.94	4.87	0.48	1.52	0.09	
8	Ettayapuram	-	1561.4	0.1			0.44		
9	Sathankulam	-	3104.45	2.72					
	<b>TOTAL</b>	<b>-</b>	<b>36006.05</b>	<b>117.19</b>	<b>5.68</b>	<b>0.64</b>	<b>8.49</b>	<b>5.88</b>	<b>0.47</b>

Source: Secretary, Marketing Committee, Tirunelveli

## **7.0 Agricultural Marketing and Agribusiness Development**

Agriculture, as a primary sector provides livelihood to 56 per cent of the population and contributes around 13 per cent of the State GDP. In value terms between 65 and 75 per cent of agricultural produce is transacted in markets, usually through long marketing chains, regulated markets and an emerging commercialized retail system in urban centers. Unorganized small players (handling less than 0.5 t/day) process more than 75 per cent of industry output. The Government is taking efforts to achieve targeted growth rate of 4 per cent in Agriculture during XI Plan period. Though fertile soil, good quality water and long period of sunlight, which are the basic requirements for agriculture available in abundance in Tamil Nadu, still the productivity has not yet been enhanced to its full potential level.

The Government is taking efforts to attain sustainable agricultural development by bringing agriculture as a commercial venture by switching over from the present method of cultivation through adoption of new scientific method of cultivation to increase the productivity to manifold, value addition, processing and utilization of marketing opportunities. To improve the marketing opportunities for agricultural produce, the Uzhavar Santhai, post - harvest management, cold storage facilities for perishables, food processing, establishment of export zones, terminal markets etc have been taken up. To reduce the loss of the food products, which are up to 30 per cent, necessary provisions are made in the Agricultural Industrial Policy to ensure remunerative price to the produce, encourage food processing sector and export to earn foreign exchange by increasing the food processing from the present level of one per cent to 10 per cent, out of the total production, increasing the value addition from seven percent to 30 per cent. Under this policy, all types of assistance which are provided to other industries will be extended to agro based industries, agricultural machineries and industries manufacturing micro irrigation equipment's.

## **8.0 Resource Institution**

- ✓ There are many central and state government research institutes/centers also situated inside and outskirts of Thoothukudi city
- ✓ Fisheries College and Research Institute (FCRI)
- ✓ Research Centre of The Central Marine Fisheries Research Institute (CMFRI)
- ✓ Suganthi Devadason Marine Research Institute (SDMRI)
- ✓ Outreach Centre of CSIR-Central Electrochemical Research Institute (CERI) area, The Marine Products Export Development Authority (MPEDA) in Millerpuram.
- ✓ TNAU in Killikulam, SCAD Krishi Vigyan Kendra Vagaikulam and TNAU Research Institute in Kovilpatti.

## 9.0 Livestock and Animal Husbandry

The livestock and poultry sector provide ample opportunity and have to be developed in this district as the agricultural laborers population can earn income from this sector during the off season or non-cropping periods.

### 9.1 Animal husbandry and Dairy development

A large number of farmers in this district depend on animal husbandry for their livelihood. In addition to supplying milk, meat, eggs, wool and hides, animals, mainly bullocks, are the major source of power for both farmers and dryer. Thus, animal husbandry plays an important role in the rural economy. Moreover, livestock sector provides supplementary employment and sustainable source of income to many small and marginal farmers. Veterinary Services are extended to livestock either by protecting them from various livestock diseases (i.e.) Prevention & Control and (or) by providing treatment and other health services like Artificial Insemination, deworming, castration, etc. The health services to the livestock are provided through the wide network of Veterinary Institutions such as Polyclinics, Clinician Centers, Veterinary Hospitals, Veterinary Dispensaries, Sub-Centers and Mobile Veterinary Units. The details of the veterinary institutions available in the district are as follows.

Table: 16 Veterinary institutions

S. N	Veterinary institutions	No's
1	Veterinary Hospital	2
2	Veterinary Dispensaries	67
3	Poly Clinic	1
4	Sub centers	37
5	Mobile Unit	1
6	Animal disease investigation Unit	1
7	Amma Ambulance	1
8	Cattle Breeding and Fodder development	1

## Livestock population in the district

According to 12<sup>th</sup> Livestock Census, the approximate population of the livestock in the district includes 1119729 numbers. Sheep and Goat rearing provides gainful self-employment, improved nutrition and additional income to poor farmers. Agro-climatic conditions in the district are conducive for these activities. In the district, the area under permanent pastures and other grazing lands stood at 5132 ha which facilitate development of this sector. Piggery is also an activity amongst the poor and is being practiced amongst the Scheduled Caste and Scheduled Tribe population of the district. This sector also provides additional income to the farmer, especially during drought condition. Most of the rural households have a pair of sheep / goat. Government also provides free goats, free milch cow, Rural backyard Poultry and Fodder development inputs to the eligible poor.

Table: 17 Livestock Populations

S.No	Classification	2017-2018	2016-2017
		Numbers	Numbers
I	<b>CATTLE</b>		
	<b>a) MALE:</b>		
1.	1. Under one year	2815	2622
	2. 1 to 2.5 Years	4627	4375
	3. Over 2.5 Years	9973	9424
	<b>Total</b>	<b>17415</b>	<b>16421</b>
	<b>b) FEMALE:</b>		
	1. Under one year	12907	12577
	2. 1 to 2.5 Years	20711	20052
	3. Over 2.5 Years	70542	76754
	<b>Total</b>	<b>104160</b>	<b>109383</b>
	<b>Cattle Total</b>	<b>121575</b>	<b>125804</b>
2.	Sheep	196493	188128
3.	Goats	321229	310297
4.	Horses and Ponies	10	7
5.	Pigs	2394	1068
6.	Mules	0	3120
7.	Camels	0	0
8.	Donkeys	3871	836
9.	Domestic Dogs	34849	33955
	<b>Total Livestock</b>	<b>680421</b>	<b>598189</b>
II	<b>POULTRY</b>		
1.	Fowls	437865	116621
2.	Ducks	1443	1340
	Total Poultry	439308	445712
	<b>Grand Total</b>	<b>1119729</b>	<b>1110186</b>

Source: District Hand Book - 2017-2018

The small ruminants are purchased and sold in the local markets as well as neighboring district. The district has one market at Ettayapuram. However, quality breeds of goats / bucks of good breeds are not adequately available in the district.

There is a good scope for promoting Livestock and Poultry activities as part of integrated farming system by the farmers as there is a huge demand for meat purposes in the district. All the blocks in the district are suitable for these activities.



## Dairy development

Dairy sector is important not only as the producer of highly nutritious food products, but also for the sustenance of poor farmers and over all prosperity of the farming community. The district holds about 219 milk societies at various blocks. Among the blocks, Kovilpatti block possess the highest number of 32 societies Udangudi have the least number of 6 milk societies in the block. From all the milk societies, the district collected about 151.2Lac liters of milk year for value of 3799.92 Lac rupees in a year. Kayathar block produced the largest quantity of milk (5203157liters). The least quantity of milk was produced at Pudur (13159 liters).

Table 18. Milk Production Details

S.N	Name of The block	2017-18		
		No of Milk Societies	Quantity of minor milk Produced (in Liters)	Value of Milk Produced (Rs.InLakhs)
1	Thoothukudi	24	607120	151.78
2	Srivaikundam	11	63789	15.95
3	Karungulam	31	1874729	468.68
4	Alwarthirunagari	21	607321	151.83
5	Thiruchendur	10	137801	34.45
6	Udangudi	6	135312	33.83
7	Sathankulam	17	1221815	305.45
8	Kovilpatti	32	3878112	969.53
9	Kayathar	23	5203157	1300.78
10	Vilathikulam	7	107259	26.81
11	Pudur	8	13159	3.29
12	Ottapidaram	29	1270186	317.54
	<b>TOTAL</b>	<b>219</b>	<b>15119760</b>	<b>3779.92</b>

There are 219 milk societies in operation in the district. The main reason for poor coverage under cooperative sector is that farmers do not get the price for the quality of milk being sold. There are 1 milk chilling plants and 6 bulk milk cooler in the district with total capacity of 45000 liters per day.

## 9.2 Poultry development

Poultry farming provides subsidiary income and gainful employment to farmers throughout the year. Among the various poultry rearing activities, Layer and Broiler farming are popular on commercial lines. The broiler farming is being taken up on contract farming, wherein the small farmers enter into contract arrangement with the larger poultry companies, who provide all the inputs and buy back the broiler birds. Focus by the Animal Husbandry Dept. in effective implementation of GOTN's subsidy linked Backyard Poultry scheme will further spur the growth of the sector. Among the various poultry rearing activities, Layer and Broiler farming are popular on commercial lines. As per the 19th Livestock census 2012, there are about 512427 birds in the district, the details of which are indicated as under:

Table 19 Poultry Details

Backyard						Farms/ Hatcheries				
Cocks & Hens	Duck	Turkeys	Quails	Others	Total	Layers	Broilers	Ducks	Others	Total
340446	2035	2529	490	2413	347913	1372	147886	6008	9248	164514

Of late, Broiler farming is picking up in the district, particularly around urban/semi-urban centers. Seventeen poultry centers from four block headquarters are functioning in the district. Despite having a huge potential for commercial broilers and layers, this activity is not picking up in a large scale. However, backyard poultry in desi variety of poultry birds is slowly being accepted, thanks to the better market support for the desi poultry meat and eggs. There is a huge demand for chicken meat and eggs, which is being met from other districts of the State.

The major problems facing poultry farming are the high cost of feed and outbreak of diseases, frequently, which result in heavy mortality. Maize, which is a major constituent accounting for 40% to 50% of the poultry feed, is cultivated only in a limited extent in the district. On account of the increasing cost of feed, contract farming is coming up on a large-scale replacing the traditional poultry farming by smaller units.

### 9.3 Fisheries

Thoothukudi district is one of the most potential districts for marine, inland and brackish water fishing. The recommended interventions for the development of fishing industry are outlined below.

The total inland fresh water spread area in the district is about 2000 ha and produced fish of about 63.155 tones with a value of 47.52 lakhs during the year 2017-18. (District Statistics Handbook 2017-18). The fisheries Development details given below.

- ✓ **Length of coastal line (km): 163.5**
- ✓ **No. of coastal blocks: 8**
- ✓ **No. of coastal center's: 24**

The fishermen of Thoothukudi are mostly using **gillnets and trawl nets** in the motorized country craft and trawl boats, respectively. The trawling method of fishing over the years has led to the depletion of the fishing resources and destruction of the sea bed. In Thoothukudi all FRP/wooden vallams and catamarans are motorized and totally there are about 4,200 traditional crafts altogether. The fishing methods followed is mostly gill netting only. Thoothukudi being a major export hub consists of one major port and fishing harbor. The fish landings consist of important fishes like seer fish, lobsters, prawns, snappers, groupers etc., which are considered to be export varieties.



Table: 20 Coastal and Fisheries details

S.N	Details	2018-2019	2017-2018	2016-2017
	<b>Area:</b>			
1	a) Total Coastal Line of the District (Vembar to Periathalai)	4707 Sq.Km 163.5 Km	4707 Sq.Km 163.5 Km	4707 Sq.Km 163.5 Km
	b) Total Inland Resource			
	1) Total Fresh Water Spread Area (in Hectares)	11926	11926	11926
	2) Estuaries and Brackish Water Area (in Hectares)	400	400	400
	3) Active Inland Fishermen (in Nos.)	730	680	
2	Marine Fish Production Quantity (Tones)	56374.2	55258.86	46219
	Value (Rs. in Lakhs)	135298.08	810.87	693.28
3	Marine Fisheries			
	1) Marine Fishing Village	23	23	23
	2) Total Marine Fisher Folk Population	44000	44000	42000
	3) Active Marine Fishermen	21646	21357	21107
	4) Mechanized Boat	436	334	293
	5) Fiber Vallam	2234	2234	2094
	6) Wooden Vallam	1939	1935	1948
	7) Wooden Catamaran	37	37	38
4	Fishing Processing and Storage			
	1) Private Sea Food Processing Unit	21	21	21
	2) Chilled Fish Handling Centre	1	1	1
	3) Dried Fish Handling Centre	8	8	8
	4) Peeling Shed	15	15	14
	5) Ice Plant	19	19	19
	Storage Facilities			
	1) Cold Storage	18	18	18
	2) Chilled Storage	2	2	2
	3) Dried Fish Storage	3	3	3
	4) Fish Curry Storage	1	1	1
	5) Fish Meal Storage	1	1	1
5	Fish and Fishery Products Export from Tuticorin Port			
	Quantity (Tones)			42026
	Value (Rs. in Crores)			2220.52
6	Capacity Building			
	Fisheries College and Research	1	1	1

Source: AD - Fisheries (Marine), Thoothukudi

## **Thrust by Government**

### **i) Coastal protection initiatives**

Islands of the Tuticorin region act as bio shields in this village along with the coral and seagrass beds. The impact of tsunami was comparatively less in this district. Moreover, manual protection by making sea walls has been done in several areas noticeably in Thirespuram.

### **ii) Awareness initiatives**

One day workshop was conducted on tsunami at Government Polytechnic on 19.07.06. Quality testing of various types of materials used in construction and practical sessions were conducted. Various awareness programs on coastal resources and conservation have been conducted by various government and private sectors. Coral miners stopped coral mining after 2004 Indian Ocean tsunami due to increased awareness.

### **iii) Bio diversity**

Successful coral restoration has been done by Suganthi Devadason Marine Research Institute around Tuticorin group of islands and in mainland Punnakayal patch reef. Very good results were obtained. Artificial reefs have also been deployed in various areas along Tuticorin coast. Initiatives have been taken to do the seagrass restoration also. Mangrove restoration has been done by the forest department near Punnakayal and Pazhayakayal areas.

### **Investment Opportunities:**

- Fish processing corridors
- Recreational fishing
- Building of Deep-Sea Fishing Vessels

### **Impact:**

- There is a fish landing center at Therespuram with area coverage of 17 acre, which has one auction hall, two toilet blocks and one high mask light. However, the existing auction platforms are highly congested and lack of hygiene. They require expansion and modernization.
- Tanks in the district needs desalting at regular intervals for taking up inland fisheries activities. Strengthening the embankments of the lakes/tanks, provision of shutters in the canals would also pave way for more intensive inland fisheries activities.
- Establishment of fish/prawn disease diagnostic labs is very much essential. Department has to formulate and adopt regulatory measures for conservation and management of available fishery resources.

### **Scope for Inland Fishing's:**

Thoothukudi district of 200 ha vast Inland resources comprising reservoirs, rivers and canals, lakes, ponds and tanks and other water bodies having immense scope for development of inland fisheries. However, poor and erratic rain fall, less retention of water in the water bodies, inadequate infrastructure for quality fish seed and feed, marketing are the factors responsible for limiting inland fish production. In order to overcome these limitations, the Fisheries Department is formulating different strategies including stocking of advanced fingerlings of fast-growing species, introduction of cage culture/pen culture and creation of more fish seed banks to ensure the availability of seeds round the year for increasing inland fish production and fish productivity.

## 9.4 Seaweed Cultivation

Seaweeds or marine macro algae constitute one of the commercially important renewable marine living resources. They are primary producers, shelter, nursery grounds and food sources for marine organisms. Seaweeds are not only of high ecological, but also of great economic importance. Dried thalli are directly used as human and animal food and also as fertilizer. Extracted seaweed substances are used as stabilizers and stiffeners in food industry, cosmetics, pharmaceutical industry, and biotechnology. Recent research has pointed to new opportunities, particularly in the field of medicine, associated with bioactive molecules extracted from seaweeds. Moreover, due to their habitats and biology, seaweeds are relatively easy to observe, manipulate and measure. Therefore, they have been widely used as model organisms for studying biogeographic patterns and testing various ecological theories, both in intertidal and sub tidal habitats.

Table 21. Sea weed details Thoothukudi district:

S.No	Particulars	Remarks
1	Note of present status of Sea weed	10 fishers are engaged in seaweed culture.
2	District aspecies cultured / Collected	Pepsi algae - kappaphycusalverezi
3	No of persons involved in collection	Nil
4	No of persons involved in collection culture	30 Nos
5	Places / Villages where culture is taken.	Puthiyathuraimugam fishing village
6	Total No. of rafts	50 Nos. (Line Culture)
7	Total Quantity cultured	30 Tones
8	Total Quantity collected by natural collection	Price / KG Nil
9	Particulars	Price / KG Nil
	Species	Dry
a	Kappaphycusalverezi	Nil
b	Natural	Nil
c	Gracillaria	Nil
d	Gelidiella	Nil
10	Main buyers in the District	Aqua agri
11	Issues	Nil
12	Price issues	Nil
13	Quality issues	Nil
14	Payment issues	Nil
15	with buyers for wet and dry products	dry products
16	Duration / Crop	One Year/crop
17	Quantity / Crop	3 Tones/crop
18	No of crops / Year	One /Year
19	Economics	Expenditure: 90000-35000=55000
20	Other issues faced by ADF's points for discussion by DOF during buyers meet.	Fishers are seeking subsidy assistance for sea weed culture
21	Total Quantity Seaweed sold per annum in district	30 Tones
22	Total revenue from Sea weed in district	9.0 lakhs

Sourcing: Department of Fisheries Thoothukudi – 2018-2019



## Scope

The fishermen of the coast from Thoothukudi to Manapad area get employment in seaweed collection in addition to their normal fishery activities. Later, whenever the conditions are unfavorable for fishing, they go for collection of seaweeds such as *Gelidiellaacerosa* and *Gracilariaedulis*. Each fisherman gets an income of Rs. 30 to 50 per day during the peak season. For the formalin treatment, drying, packing, etc., many persons are engaged as daily wage labor. The wage per day varies from Rs.10 to 12 for men and Rs.5 to 8 for women. Approximately 2000 persons get employment during the peak season (August-January).

### 9.5 Sericulture

The scope for improving sericulture further is bright in Thoothukudi as the demand for silk yarn has been growing every day. Self-help groups were best promoters of sericulture, which would generate rural employment on a large-scale. 102.00 acres of land is under mulberry cultivation in this District. Training in Mulberry farming, Rearing Silk Worms is done through a large network of Govt. Departmental Institutions of Sericulture such as Silk quality development farms, Govt. Sericulture training center, Govt. Sericulture Farm, Base seedlings (grain age) development farms, Govt. Bi-voltine grain age centers, govt. cocoon markets, silk reeling unit, silk twisting unit, technical support and service center for rearing silk worm, with the above maintained facilities sericulture industry has good scope in this district. In the 102.00 acres of mulberry cultivation, 29100 kg of cocoons is produced with a value of 10968000 rupees. Among the blocks, Kovilpatti block has contributed to the larger area of about 30 acres followed by 20 acres in Sattankulam block. (Source: District Statistics Handbook: 2017-18).

### Sericulture Marketing and regulated market:

Table: 22 Sericulture Productions

Sericulture							
Sl. NO.	Name of the Block	2017-2018			2016-2017		
		Area Under Mulberry (In Acres)	Production of Cocoons (in Kgs)	Value in Rupees	Area Under Mulberry (In Acres)	Production of Cocoons (in Kgs)	Value in Rupees
1	Pudur	2	600	228000	2.5	510	237500
2	Vilathikulam	10	3000	1200000	11	712	320410
3	Kayathar	10	3000	1200000	10	720	324000
4	Srivaikundam	15	4500	1575000	12	1510	712500
5	Kovilpatti	30	9000	3510000	30.5	7520	3562570
6	Sathankulam	20	6000	2280000	22	200	94500
7	Alwarthirunagari	5	1000	325000	4	1250	593750
8	Thoothukudi				2.5	510	216750
9	Ottapidaram	10	2000	650000	8.5	1440	684000
10	Tiruchendur				3	320	136000
	<b>TOTAL</b>	<b>102</b>	<b>29100</b>	<b>10968000</b>	<b>106</b>	<b>14692</b>	<b>6881980</b>

Source : Assistant Director of Sericulture, Thenkasi

## **SWOT Analysis of the District Agriculture and allied sector**

### **Strengths**

- The district has a coastal line of 163.5Kms and the famous Tuticorin port helps major export of all commodities and the main source of income for the district
- The hot and dry climate of the district is highly suitable for dryland crops
- The perennial nature of the river Thamirabarani helps cultivation of paddy year round in Thamirabarani belt
- The district has a good local market and interstate market for its agricultural commodities
- District has potential and favorable agro-climatic conditions for cultivation of Rice, Maize, Cotton, Pulses, Sunflower, Ground nut, sugarcane and all other dry land crops.
- The district has both surface and groundwater potential for cultivation of irrigated crops in some Taluks
- The land put to non-agricultural uses occupies considerable area (74468). This reflects that there is scope to increase the area under cultivation.

### **Weaknesses**

- Most of the area is covered with sandy soils since the district has a long coastal area of 163.5kms.
- Limited availability of surface and groundwater in some taluks is a major weakness for the agricultural development in the district.
- Majority of the lands are fragmented.
- Increasing scarcity of labour due to tremendous increase in migration from rural to urban areas.
- Owing to the rise in the agricultural labor wages, many of the farmers tend to shift from agricultural crops to perennial crops.
- The area under rain fed crops in the district has been increasing over the years due to increasing scarcity of labor and stagnation in yield and profitability of crops.
- Lack of water harvesting structures to harness the rain water is another threat for sustaining irrigated agriculture in the district.

### **Opportunities**

- There are opportunities to develop cold storage units to increase agricultural exports via Thoothukudi port.
- There are ample opportunities to promote new crop varieties and new technologies such as precision farming and System of Rice Intensification as the farmers are now educated on these aspects and willing to adapt the new varieties and technologies. .

### **Threats**

- Sea water intrusion in many parts of the district is a major threat.
- Industrial development and reduction in the area of agricultural lands is an alarming factor.
- Increasing scarcity of water and labour in many parts of the district is a major threat to expansion of irrigated agricultural production.
- The transformation of Agricultural lands into residential complexes will be in an alarming rate.
- Attractive urban employment opportunities not only absorb the agricultural labour population but also the farmers as well which poses a major threat to agricultural development.
- Disaster management – Like sea water intrusion and Tsunami and flood during monsoon season.



## 10 Non-Form Sector

### 10.1 Industrial Scenario

The district is also an industrial oriented district among the southernmost districts. There are labour intensive industries running in the district and significant population depends on these traditional industries.

- The district constitutes 70 % of the total salt production of the state and meets 30 % of salt requirement of our country.
- There are two Industrial Estates one at Kovilpatti with 11 units and the other at Thoothukudi with 20 units. The former is managed by SIDCO and the latter by SIPCOT.
- Small scale industries such as match industries, food-based and metal-based industries are generally concentrated in Kovilpatti and Thoothukudi taluks.
- Textile units and match industries crowded in the Kovilpatti belt.
- In Puthiamputhur village of Ottapidaram taluk and in Kovilpatti, the production of Readymade dresses are very much flourishing in recent times and the readymade dresses produced here are exported to Northern India and it earns a reputed name.
- They are engaged in the production of cotton and staple yarn, caustic soda, PVC resin, fertilizers, soda-ash, carbon dioxide gas in liquid form etc.,

#### The important major industries

- SPIC,
- TAC, Dharangadhara Chemical Works,
- Loyal Textiles Ltd., Madura coats Ltd.,
- Sterlite Copper Industries,
- Kilburn Chemicals,
- Ramesh Flowers,
- Nila sea foods,
- Deva and Co., and
- Trans world Granite Industries. Industries such as Sterlite, SPIC, TAC, HWP, DCW and Thermal Power Plant promises the district to be a prominent industrial district in our country's industrial map.
- The Central Government was established Zirconium Sponge Plant, which comes under the control of Dept. of Atomic Energy at Palayakayal village of Srivaikundam taluk.

**Table: 23 Overview of the Industrial scenario**

S.No	Type of Industrial units	No. of units	Investments(in Lacks)	Employment
1.	Large scale	10	58497.94	11920
2.	Micro	3064	46138	20472
3.	Small	145		
4.	Handicrafts	488		
5.	Cottage Industries	815		

Source: 2018-19 DIC Report

## 10.2 SMALL AND MEDIUM INDUSTRIES

Table: 20 Industries at Glance

### Industry at Glance

Sl. No.	Head	Unit	Particulars
1	REGISTERED INDUSTRIAL UNIT	NO.	10078
2	TOTAL INDUSTRIAL UNIT	NO.	10078
3	REGISTERED MEDIUM & LARGE UNIT	NO.	28
4	ESTIMATED AVG. NO. OF DAILY WORKER EMPLOYED IN SMALL SCALE INDUSTRIES	NO.	25640
5	EMPLOYMENT IN LARGE AND MEDIUM INDUSTRIES	NO.	40284
6	NO. OF INDUSTRIAL AREA	NO.	3
7	TURNOVER OF SMALL SCALE IND.	IN LACS	100 Crore
8	TURNOVER OF MEDIUM & LARGE SCALE INDUSTRIES	IN LACS	3000 crore

Source: District Handbook 2017-18

### Existing Status of Industrial Areas in the District Thoothukudi SIDCO

Table: 25 Existing Industrial Area

#### Existing Status of Industrial Areas in the District Thoothukudi SIDCO

Sl. No	Name of the Indl. Area	Land Acquired (in hectares)	Land Developed (in hectare)	Prevailing Rate per sqm. (in Rs.)	No. of		No. of allotted		No. of Vacant		No. of units in Production
					Plots	Sheds	Plots	Sheds	Plots	Sheds	
1	Tuticorin	24.18 acres	24.18 acres	3111000/acre (Land Cost for the year 2009-2010)	40	10	39	10	1		20
2	Kovilpatti	85.54 acres	85.54	3046005/acre (tentative Land cost for the Year 2011-12)	87	36	86	36	1		78

Source: MSME 2012-13

## Existing Status of Industrial Areas in the District Thoothukudi SIPCOT

Sl. NO.	Name of Land. Area	Land Acquired	Land Developed	Prevailing Rate (in Rs.)	Saleable Area	Extent of allotted Plots	Extent of Vacant Plots	No. of Units in Production
1	SIPCOT INDUSTRIAL COMPLEX, Tuticorin	Phase I, 1032.68 Acres	903.93 Acres	12.00 Lakhs / Acre	903.93 Acres	836.93 Acres (86 Nos.)	67 Acres	79 Nos.
		Phase II, 436.54 Acres (To be acquired 1179.74 Acres)		12.00 Lakhs / Acre	436.54 Acres	342.22 Acres / 1 No.	94.32 Acres	1 No.

Source: MSME 2012-13

### 10.3 MICRO SMALL AND MEDIUM ENTERPRISES (MSME) SECTOR

There are about 14 types and 1175 units of small enterprises in the district which provides employment to about 22501 employees with an investment of 11699 lakhs Agro based, Metal based, Readymade garments, Mineral based and engineering units form the most prominent ones.

Table: 26 Details of existing MSME and Artisan units in Thoothukudi district

Sl. NO.	Details of Classification	2017 - 2018	2016 - 2017
1	Manufacturing of food products and beverages	569	359
2	Tobacco and Tobacco Products		
3	Manufacturing of Textiles	68	79
4	Manufacturing of wearing apparel Dressing and Dying of fur	39	75
5	Manufacturing Wood and Wooden Products, Cork, articles of straw and plating material except Furniture	58	98
6	Chemicals Chemical Products	83	84
7	Manufacturing of Rubber and Plastic Product	34	58
8	Manufacturing of other non-metallic mineral Product	57	75
9	Manufacturing of Basic Metal	8	34
10	Manufacturing of Fabricated metal product except machinery and equipment	39	77
11	Manufacturing of Machinery and equipment N.E.C	22	18
12	Manufacturing of Electrical Machinery		15
13	Land Transport	11	33
14	Other Service activities	187	153

Source: 2017-18 DIC Report

## **10.4 MSME Clusters:**

### **Thoothukudi district divided four type of cluster.**

#### **1. Safety match cluster – Kalugumalai and Kovilpatti**

In this Area Kalugumalai and Kovilpatti surrounding 500 Families involved in Safety Match Works and 250 safety match units in Working.

#### **2.Salt cluster – Thoothukudi**

Thoothukudi is one of the best Salt Production in Tamilnadu.150000 manpower working in salt Production unit. The district constitutes 70 % of the total salt production of the state and meets 30 % of salt requirement of our country. Salt industry is the main backbone of economic development of the district. It is the cluster group of industry of Thoothukudi district and was extended in an area of 15700 Acres with production of 17.12 Lakhs M.T. In the district, 2208 Units are engaged in salt production. The total area found viable for salt cultivation is about 40,000 Acres. Further 126 permitted iodized salt plants and 4 refined free flow iodized manufacturing units are functioning and produce about 70,000 M.T per Annum. The concentration of salt unit is centered on Thoothukudi, Srivaikundam and Thiruchendur Taluks. Also a considerable number of salt units are clustered in Vilathikulam block. There are about 2000 small scale salt manufactures and traders in Thoothukudi district.

#### **3. Readymade garments – Puthiamputhur**

There is a cluster in Puthiamputhur village near Thoothukudi, which has grown organically over the last two decades or so. It is reported that about 150 household units manufacture garments from synthetic materials. The industry is labor intensive and the direct and indirect employment provided by this industry in Puthiamputhur and surrounding areas estimated to be around 20,000. Puthiamputhur garment manufacturers, however, mainly do job work as they do not have sufficient marketing skills and lack adequate knowledge about markets. This industry has great potential to grow with the right kind of inputs on marketing, designs, development of certain infrastructure facilities, some concessions in power tariff, etc. With proper guidance in marketing through a cluster development program, the textile garment industry in Puthiamputhur could grow tremendously as the skills and momentum are already there.

#### **4.Fish Processing / Fish based products – Vembar, Thoothukudi, Manapad**

Thoothukudi district have 163.5km Coastal line. In this Thoothukudi district 23 Marine fishing village and 69806 Marine fishers in this district. so maximum no of people doing this type of work.

Table: 27 Details of Major Existing MSME Cluster

**Details of Identified cluster - Safety Match Cluster Kalugumalai**

1	Principal Products Manufactured in the Cluster	Safety Matches
2	Name of the SPV	Kazhugumalai Safety Match consortium pvt ltd.,
3	No. of functional units in the cluster	250
4	Turnover of the Clusters	10 crore
5	Value of Exports from the Clusters	25 lakhs
6	Employment in Cluster	5000 no's
7	Average investment in plant & Machinery	2.00 lakhs
8	Major issues / Requirement	Splints, integrated printing facility
9	Presence of capable institution	DIC, TIIC Universities /Eng. Colleges
10	Thrust Areas	Paper, Craft Paper, Board, Splint
11	Problems & constraints	Procurement of Wax, Potassium chloride, pollution

Source: 2012-13 MSME Report

**Details of Identified cluster –Safety Match Cluster Kovilpatti**

1	Principal Products Manufactured in the Cluster	Safety Matches
2	Name of the SPV	Kovilpatti Safety Match consortium pvt ltd.,
3	No. of functional units in the cluster	375
4	Turnover of the Clusters	300 crore
5	Value of Exports from the Clusters	Rs. 3- Crore
6	Employment in Cluster	7500 no's
7	Average investment in plant & Machinery	5.00 lakhs
8	Major issues / Requirement	Splints, integrated printing facility
9	Presence of capable institution	DIC, TIIC Universities /Eng. Colleges
10	Thrust Areas	Paper, Craft Paper, Board, Splint
11	Problems & constraints	Procurement of Wax, Potassium chloride, pollution

Source: 2012-13 MSME Report

### **Details of Identified cluster –Garment cluster Puthiamputhur**

1	Principal Products Manufactured in the Cluster	Readymade garments
2	Name of the SPV	Puthiamputhur Readymade garment consortium Pvt Ltd.,
3	No. of functional units in the cluster	360
4	Turnover of the Clusters	100 crore
5	Value of Exports from the Clusters	NIL
6	Employment in Cluster	10000 no's
7	Average investment in plant & Machinery	2.00 lakhs
8	Testing needs	NA
9	Thrust Area	Scoring, Cutting board, embroidery industrial washing, packaging, paper box, needles, servicing
10	Access to Export Market	NA

Source: 2012-13 MSME Report

### **Details of Identified cluster –Salt cluster – Thoothukudi**

1	Principal Products Manufactured in the Cluster	Common Salt
2	Name of the SPV	---
3	No. of functional units in the cluster	2250
4	Turnover of the Clusters	Rs.150 crore
5	Value of Exports from the Clusters	Rs.10.58 Crore
6	Employment in Cluster	150000 no's
7	Average investment in plant & Machinery	5.00 lakhs
8	Testing needs	NA
9	Thrust Area	Iodized Salt, testing industrial Chemical, Packaging.
10	Access to Export Market	15%.

Source: 2012-13 MSME Report

## 10.5 Small, Micro and Medium scale Industries

Table: 28 Details of Small-Scale Industries 2018-19

S. N	Industry Group Description (As per NIC 2008)	Industry group wise number of UAM		
		No of units registered	Investment of Plant & Machinery (Rs Lakh)	Total Employment Nos.
1	Agriculture, Forestry and fishing	60	694	295
2	Mining and quarrying	73	1550	607
3	Manufacture of foods product and Beverages	567	8102	3166
4	Manufacture of textiles	112	977	618
5	Manufacture of wearing apparel	77	821	501
6	Manufacture of leather and related products	8	52	33
7	Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	61	507	301
8	Manufacture of paper and paper products	37	581	233
9	Printing and reproduction of recorded media	19	734	108
10	Manufacture of coke , Refined petroleum products	4	18	13
11	Manufacture of chemicals and chemical products	78	3319	1143
12	Manufacture of pharmaceuticals, medicinal chemical and botanical products	19	630	148
13	Manufacture of rubber and plastics products	31	846	349
14	Manufacture of other non-metallic mineral products	53	719	396
15	Manufacture of basic metals	24	294	97
16	Manufacture of fabricated metal products, except machinery and equipment	26	205	145
17	Manufacture of computer, electronic and optical products	14	26	54
18	Manufacture of electrical equipment	22	156	100
19	Manufacture of machinery and equipment	25	422	573
20	Manufacture of motor vehicles, trailers and semi-trailers	12	122	97
21	Manufacture of other transport equipment	6	91	55
22	Manufacture of furniture	19	104	81
23	Other manufacturing	204	2108	1465
24	Repair and installation of machinery and equipment	55	369	265
25	Electricity, gas, steam and air conditioning supply	10	116	75
26	Water supply :Sewerage, waste management and	30	262	161
27	Construction	81	1410	635
28	Wholesale and retail trade and repair of motor vehicles and motorcycles	0	0	0
29	Transportation and storage	317	3952	1654

30	Accommodation and food service activities	332	2902	1392
31	Information and communication	179	2130	682
32	Financial and insurance activities	60	1148	290
33	Real estate activities	22	205	193
34	Professional scientific and technical activities	292	2545	1296
35	Administrative and support activities	332	2522	1584
36	Public administration and defense; compulsory social security	0	0	0
37	Education	35	756	521
38	Human health activities and social work activities	53	1653	243
39	Arts entertainment and recreation	28	457	140
40	Other service activities	221	2633	763
	<b>Grand Total</b>	<b>3598</b>	<b>46138</b>	<b>20472</b>

Source: District 2017-18 Handbook

### Khadi and Village Industries:

The main varieties involved in the khadi and village industries are the cotton and woolen. The value of total production is Rs.6.55 lakhs. There are 522 families are engaged in Handlooms in this district.

Table: 29 Khadi and Village industry details

Sl. No.	Industry	Production (Rs. in Lakhs)	Sales (Rupees in lakhs)	Employments (Lakhs of Persons)	Earnings (Rs. in Lakhs)
1	2	3	4	5	6
1	Khadi Production	28.38	48.67	12	6
2	Yarn Production	8.23	---	28	2.2

Source: Assistant Director, Khadi and Village Industries, Tirunelveli

### Handloom:

Thoothukudi district have 4 handloom focal centers and 286 Families engaged. They are given below.

Table: 30 No. of Handloom Focal centers and location Details:

Sl. No.	No. of Focal Centers	Name of the Taluk	Name / Location of the Focal Centers
1	4	Srivaikundam	Sawyerpuram
		Tiruchendur	Paramankurichi
		Kovilpatti	Ettayapuram
		Vilathikulam	Pudur

Source : 2017-18 District statistical Handbook



## Handicraft:

There are 6 Handicraft items Produced in Thoothukudi district and 1087 families engaged in this field. The details are given below

Table:31 Handicraft Details

Sl. No.	Name of the Items	No. of Handicrafts	No. of Families engaged
1	Sea shell items	16	38
2	Palm leaf	235	500
3	Pottery	20	275
4	Jute	2	4
5	Wood Carving	60	135
6	Stone Carving	20	135

Source : 2017-18 District statistical Handbook

## Selected Characteristics of Factories by Major Industry – Tamilnadu & Thoothukudi

Table:32 Major Industries comparison to State

S. No.	Item	Unit	Tamilnadu	Thoothukudi
1	No. of Factories	In Nos	39414	752
2	Factories in Operation	In Nos	28716	639
3	Fixed Capital	Rs. In Crores	287815.15	7055.97
4	Physical Working Capital	Rs. In Crores	121419.74	5146.9
5	Working Capital	Rs. In Crores	47878.01	55.2
6	Invested Capital	Rs. In Crores	409234.91	12202.87
7	Gross Value of Addition To Fixed Capital	Rs. In Crores	43050.26	1208.59
8	Rent Paid for Fixed Capital	Rs. In Crores	2267.27	23.88
9	Outstanding Loan	Rs. In Crores	100398.36	1616.59
10	Interest Paid	Rs. In Crores	16180.37	603.89
11	Rent Received	Rs. In Crores	227.56	6.72
12	Interest Received	Rs. In Crores	3237.18	342.44
13	Gross Value of Plant and Machinery	Rs. In Crores	216244.71	9209.21
14	Value of Products & By Products	Rs. In Crores	614084.05	25766.05
15	Total Value of Output	Rs. In Crores	702194.69	27591.53
16	Fuels Consumed	Rs. In Crores	29902.9	1562.84

17	Materials consumed	Rs. In Crores	4108025.83	19986.04
18	Total Input	Rs. In Crores	592486.43	24199.73
19	Gross Value Added	Rs. In Crores	109708.25	3391.81
20	Depreciation	Rs. In Crores	19368.6	575.63
21	Net Value Added	Rs. In Crores	90339.65	2816.18
22	Net Fixed Capital Formation (NFCF)	Rs. In Crores	15817.03	798.33
23	Gross Fixed Capital Formation (GFCF)	Rs. In Crores	35185.64	1373.96
24	Addition in Stock of	Rs. In Crores	7668.45	1903.48
	a) Materials, Fuels, Etc.,	Rs. In Crores	4019.4	1232.09
	b) Semi-Finished Goods	Rs. In Crores	152.04	495.52
	c) Finished Goods	Rs. In Crores	3497.01	175.87
25	Gross Capital Formation	Rs. In Crores	42854.09	3277.45
26	Net Income	Rs. In Crores	75356.76	2537.57
27	Profit	Rs. In Crores	29545.08	1796.17

Source: Department of Economics and Statistics, Chennai - 6.

## 10.6 Large Scale Industries

There are large scale industries in Tuticorin of which there are public sector units two are joint sector units two were joint sector units leaving the rest to private sector. The three public sector units are the Tuticorin; and the Port Trust, Tuticorin. The joint sector units are Southern Petro Chemical Industries Corporation Limited, and the Tuticorin; South India Carbonic Gas Industries Limited, Madura Coats Limited, Tuticorin, South India Carbonic Gas Industries Limited, Tuticorin and Travancore Chemicals Limited, Mullakadu.

Table:33 Large scale industries

LARGE SCALE INDUSTRIES		
Sl. No.	Large Scale Industries	Product Produced
1	Southern Petro Chemical Industries Corporation Limited, Tuticorin	Urea, DAP and Sulphuric Acid.
2	Tuticorin Alkali Chemical Limited, Tuticorin	Soda Ash and Ammonium Chloride
3	Travancore Chemicals Limited, Mullakadu	Sulphate of Ammonia, Ferric and Iron Free
4	Tuticorin Spinning Mill Limited, Tuticorin	Cotton Yarn
5	South India Carbonic Gas Industries, Tuticorin	Carbon - di - oxide Gas in liquid
6	Madura Coats Limited, Tuticorin	Cotton Yarn
7	Heavy Water Plant, Tuticorin	Heavy water for atomic purpose
8	Tuticorin Thermal Power Station, Tuticorin	Electricity

Source : District Handbook 2017-18

## Employment and Investment Pattern in Large Scale Industries

Sl.No	Name of the Units	Employment	Rank	Investment (in Rs.lakhs)	Rank
1	SICGIL	56	5	89.74	5
2	TSM Ltd.	1123	3	371.31	4
3	MC, Ltd.	2763	2	1,472.73	3
4	TC & MC Ltd,	36	6	26.36	6
5	TAC Ltd.,	764	4	9,472.67	2
6	SPIC, Ltd.	3112	1	39,428.16	1

Source: District Industries Centre(DIC), Tuticorin

### Major Exportable Items

The commodities which are exported from the district are

- ✓ Coco pith
- ✓ Senna Leaves
- ✓ Dry Flowers, Garnet
- ✓ Frozen Sea Food
- ✓ Salt
- ✓ Industrial Salts
- ✓ Titanium-di-oxide
- ✓ Safety Matches
- ✓ Illuminate sand
- ✓ Garnet Sand Copper Slag
- ✓ Copper Concentrate
- ✓ Phosphoric Acid
- ✓ Sulfuric Acid
- ✓ Cement
- ✓ Granite stone

### Dry flower exports:

There are a few dry flower export units near Thoothukudi, some like Ramesh Dry Flowers being large units. This industry offers two important benefits: foreign exchange earnings and high employment potential. Availability of land, climatic conditions, Port, skills, etc. in Thoothukudi bestow locational advantages to this industry there. Dry flower making is a unique industry in the district and M/S Ramesh Flowers Pvt. Ltd., is the front runner. They are specialized in manufacturing potpourri, dried flowers, bouquets, wreaths, topiaries, diffusers, etc., which are exported to more than 32 countries. There is further potential for export of dry flowers.

### 10.7 Upcoming infrastructure projects in Thoothukudi District

Thoothukudi is the end point of the proposed **Madurai-Thoothukudi Industrial Corridor**. The study for this Corridor was completed by the Government of Tamil Nadu recently. The Corridor would consist of four manufacturing regions, one agri-business region, two business investment regions, a special tourism zone, one rural tourism hub and one knowledge hub. The government estimates that this Corridor would attract 1,90,000 crore industrial investment over a period of 10 years. The State Government recently formed a Special Purpose Vehicle (SPV) for Speedy implementation of the Project. The upcoming new railway line from Madurai to Thoothukudi via Aruppukotai, Ettayapuram would serve as the backbone for the development of this corridor.

## 10.8 Service Sector - Service Enterprises

The services sector employs 2.3 lakh people in the district. The district houses a number of health care facilities ranging from 10 hospitals to 257 health sub centers. These sub centers are spread around the villages of the district, making it easily accessible for the villagers. However, these health care centers are staffed by only 234 doctors and 374 nurses, which might prove to be fairly inadequate for the district's inhabitants. Additionally, the district also has 128 Public sector bank branches, 63 private bank branches and 263 cooperative bank Branches. There are only three government banks though, which might lead to lower credit availability for the locals. The farming population in particular, might find it infeasible to further their vocations and set up independent agricultural enterprises. In the district there are no of authorized repair and service station catering to the automobile sector due to high number of penetration of automobiles in the district.

S. N	Name of the Sector	No's
1	Automobile service centers	30
2	Restaurants	159
3	Bakeries	402
4	Eateries, Cool drinks, Tea shop and Mess	171
5	Public sector bank branches	128
6	Private bank branches	63
7	Cooperative bank branches	263

Source: Statistical handbook of Thoothukudi 2017-18

### Potentials areas for service industry

- Repairing and Servicing of Boats
- Domestic Repairing services
- Industrial Laundry
- Safety disposal of hospital/medical waste.
- Auto / Two-wheeler service centers
- Recharging and reconditioning of batteries
- Hotels and hospitality services
- Boat repairing
- Logistics & Warehousing
- Printing and book binding

## 10.9 Tourism

Apart from being a commercial Center, this is an exotic tourist place for its sunny and pristine sandy beaches. There is lot of religious and historically important places around Thoothukudi.

- **Roche Park:** Festival Holidays and Weekends attract large number of tourists.
- **Manapadu:** Manapadu is a coastal village situated at a distance a distance of 70 km from Tirunelveli and 18 km south of Thiruchendur. This place was visited by St. Francis Xavier in 1542. The Holy Cross church built on a cliff attracts thousands of pilgrims throughout the year and during the month of festival (1<sup>st</sup> September to 14<sup>th</sup> September) number of tourists assemble here.
- **Kulasekarapattinam :** This village is famous for the Mutharamman temple, which is located on the shore of Bay of Bengal. This temple is nearly 150 years old. The Dhasara Festival is celebrated in a grand scale every year during October. Folk dance artists from throughout Tamil Nadu perform variety of programmes.
- **Kazhugumalai:** In this temple we can see the images of Adinatha, Neminatha Mahaveera Parvanatha, Bahubali. There is also a monolithic temple called Vettuvan Kovil. This is the only one of the monolithic Pandya temple that still survives.
- **Meignanapuram:.** The PariPauvlin church here was built in 1847. It is 110ft long, 55ft wide with steeple in the front soaring into the sky for a height of 192ft. This is one of the biggest churches with the tallest steeple in India.
- **Sinthalakkarai:** Sinthalakkarai is a pilgrim centre where Goddess Sri Vetkaliasman of 42 ft height blesses the devotees. It is situated on the road from the Thoothukudi to Madurai. The Statue of Mahavishnu of 72 ft. length with Rajasayanam on the snake in Thiruparkadal is also there.
- **Vanathirupathi: Vanathirupathi** This temple is about 45km from Tirunelveli and around 20 km from Tiruchendur. The nearest railway station is Kachanavilai on the Tiruchendur to Tirunelveli section.

**Kovilpatti: Matchbox and Spinning Mills** are found in large numbers in this town. Shenbagavalli Amman Temple. The temple is located in Kovilpatti town, near Ettayapuram on an elevated mound of earth. This place is called KovilMedu. The Lord and Lordess is PoovanaNathar and Shenbagavalli. Almost all the girl child born for families here are named as Shenbagavlli. AdiPooram Valaikaappu and Chithrai Theertham [New Year] attracts pilgrim in large number.

- **Kayathar:**

**The Statue of Veerapandiya Kattabomman - Kayathar:** He was a Popular King and Brave warrior who participated in the War of Indian Independence and fought very hard against the British. The State Government has installed Kattabomman's Statue under the Tamarind Tree from where he was hanged by the British.
- **Kattalankulam:** It is located near Kayathar. It is the birth place of Freedom Fighter **AzhaguMuthukon**. Local transports are available to this place.



- **V.O.C. Memorial - Ottapidaram:** The house he was born has been converted into a **Memorial** in honor of him. He was a strong freedom fighter and he was the first, to set sail his ship to **Colombo** against East India Company for which he was imprisoned. Because of this brave act, He was given the popular title called **Kappal OttiyaThamizhan**.
- **Vallanadu Deer Sanctuary:** This Sanctuary has been specially created for the protection of Blackbucks. The Blackbuck population grazing in the hilly area is a common sight to watch. Apart from Black Bucks; Spotted Deer, Macaques, Jungle cat, Mongoose and wild hares are some members of the Fauna population found in this Sanctuary. The Forest Department has fenced the entire area for the protection of these blackbucks.
- **Thiruchendur: Thiruchendur** is one of the major pilgrim centers of South India. This Temple is situated at a distance of 40 km from Thoothukkudi. The sea-shore temple dedicated to Lord Muruga is one of the six abodes of Lord Muruga. (Arupadi Vedu).The nine storied temple tower of 157 ft. belongs to 17th century AD. Visiting Valli Cave, taking sea-bath, and bathing in Nazhikkinaru are treated as holy ones. It is well connected by bus service from all over TamilNadu and train services are there from Tirunelveli and Chennai.

Table 34. Thiruchendur visitor's details

S.N	Month	Visitors
1	January	600000
2	February	120000
3	March	120000
4	April	400000
5	May	300000
6	June	700000
7	July	300000
8	August	800000
9	September (SASTI)	3000000
10	October	500000
11	November	1500000
12	December	700000
<b>Total</b>		<b>9040000</b>

## 11.0 Non-Conventional Energy Generation

Table: 35 No. of Solar Energy Generating Units in the District with Production Data

### 1.No.of Solar Energy Generating Units In The District With Production Data

Sl.No	Name and Place of Solar energy system exist	2017-2018		2016-2017	
		Install Capacity (in Mega Watts)	Generation (in MU)	Install Capacity (in Mega Watts)	Generation (in MU)
1	Ayanaroothu	0.015MW	Nil	0.015MW	Nil
2	Tuticorin District	41.000MW*	69.011478MU	41.000MW*	55.357113MU

Source: EE - Wind farm Project - TNEB - Tirunelveli.

\*Commissioning of solar power plant for 2016-2017 = 1.00 MW

Table: 36 No. of Wind Mills Generating Units with Production Data

### 2.No.of Wind Mills Generating Units with Production Data

Sl.No	Name and Place of Wind Mills Generation exist	2017-2018		2016-2017	
		Install Capacity (in MW)	Generation (in Mega Units)	Install Capacity (in MW)	Generation (in Mega Units)
1	Ayanaroothu & Kayathar Board WEG	8.43	2.318574MU	15.120MW	2.922794 MU
	Private WEG	518.685	95.835602MU	329.985 MW	326.4853 MU
2	Mullakadu (Board WEG)	1.100	-	1.100 MW	-
	Total	528.215	98.154176	346.205	329.408094

\*Commissioning of Private Wind farm during the year 2016-2017 = 84.015 MW

Source: Source: EE - Wind farm Project - TNEB - Tirunelveli.

## **12.0 Skill Gap Analysis of District**

District of Thoothukudi is witnessing increased industrialization with the Port and other Infrastructure related developments. These are affecting the incremental demand for skilled workforce in the district, where as per our methodology, Manufacturing, Construction, Trade with significant contributions from Port & Logistic and Tourism sectors are going to generate the maximum demand for skilled and semi-skilled workers.

### **Construction Sector:**

The percentage of total skill availability is still low. The gap is set to increase from 54,833 to 82,183 assuming present rates of growth of population and demand for skilled workforce, a jump of nearly 40 %

### **Logistics Sector:**

Less than 2000 skilled workers are available to meet the total requirement of skilled manpower of 40,000. These are very exacerbated by the limited options available of recognized trainings and certificates in the sector. However, the incremental requirement for workforce in the district is expected to increase the gap further by nearly half.

### **Manufacturing Sector:**

The manufacturing sector faces high skill gap owing to lack of sufficient training infrastructure in the district, with the gap exceeding 1 lakh.

### **Tourism and Hospitality:**

Given the present trends of increased formalization and requirement of skilled workers in the sector, the gap between the total requirement of skilled manpower and availability of workforce with recognized trainings is set to increase by a more than 70% by 2022. The requirement for initiating new trainings and recognizing prior learning in the sector is thus a priority

### **Lack of entrepreneurship**

Lack of skilled development opportunities coupled with the lack of incentive to foster entrepreneurship is a major problem in this district. Despite the enthusiasm among the district's inhabitants to start their own enterprises, currently there is not enough emphasis on grooming people to set up their own business or encourage entrepreneurship.



### **13.0 BANKING PENETRATION IN THE DISTRICT**

In Thoothukudi there are 197 branches of commercial Banks, 12 branches of Regional Rural Bank, 32 Branches of District Central Co-op Bank and a Branch of TIIC as of March'19. The number of public sector banks operating in the District is 14 with 128 branches and the number of private sector banks is 10 with 63 branches. There are no unbanked villages in the district.

#### **SHG Bank linkage**

Total credit linkage through SHG in the district in the year 2018-19 is **262.67 crore** through 7275 SHGs.

#### **MFI Presence:**

Tamil Nadu contributes to 16% of the total MFI portfolio in India (8048 crore). There are 25 institutions with 951 branches with a present outstanding of INR 3666 Crores with a member level average outstanding of 14301 INR. Small Banks are the new category of banks announced by RBI in July 2014. Around 10 companies have received this bank license across India. Thoothukudi District is moderately served by Microfinance institutions. **GramaVidyal, ASEBA, Sarvodaya, Aseervath, Muthoot Fincorp** have good presence in district. Equitas are the small finance banks operating in district.

## 14.0 COMMODITY PRIORITIZATION

Table 37. COMMODITY PRIORITIZATION TABLE

COMMODITY PRIORITIZATION TABLE						
S. N	CRITERIA	DESCRIPTION	COMMODITY			
			Paddy	Black Gram	Maize	Sunflower
1	Trend in number of producers involved in the commodity	For commodities which has large number of producers.	Water Intensive crop. Hence not prioritized	Positive	Positive	Positive
2	Community Interest	Economic viability, Staple food, Knowledge and technology availability, Extension services, Awareness about Market availability		Top most district in production, Ready markets production in all three seasons	Extensively cultivated and Prolonged to drought value for money	Top most district in production, Ready markets production in all three seasons.
3	State/National Priority (Thrust from government)	State/National Government Schemes and Investments		One of the chosen districts for seed production, MSDA scheme.	Subsidies to certificates seed production and distribution, high yielding varieties	One of the chosen districts for Oilseeds mission and seed production, MSDA scheme.
4	Comparative advantage	Production, Favorable climatic conditions, GI type characteristics, Uniqueness emerging out of Ethnicity and culture, A prevalent cluster.		Largest producer of Black gram, favorable climatic condition. 11.26% contribute state production	High demand, soil and climate favorable for production is in vitamin B12, folic acid iron reduces the risk of anemia. 10.2% Contribute state production Top most district in production, Ready markets production in all three seasons	49.5% Contribute state production Top most district in production, Ready markets production in all three seasons
5	Access to Market	Ability to sell the produce at a remunerative price- Local, National & International markets.		High demand for Block gram Arrivals in APMC high after Paddy	Steady increase in demand throughout the nation, rise in prices.	Steady increase in demand throughout the nation, rise in prices.
6	Opportunity for Value Chain Interventions	Productivity and value added products.		Productivity significantly lower than the State Average though largest producing state, Value added products	Scope for productivity enhancement ,promotion of summer pulses, delayed marketing facilities,	Scope for productivity enhancement ,promotion of summer pulses, delayed marketing facilities,

**Table 38 Major Commodities in TNRTP Block**

Name of the Block	Nature of the Product	Value Added Product
<b>KARUNGULAM</b>	Banana	Banana Chips, Banana Halwa, Alternative Products for Plastic Usage (Basket Making from Banana Fiber)
	Paddy	Rise Mill, Rise Shop,
	Jasmine	Sales & Export and Perfume
	Dairy Farm	Balcowa, Sweet, Butter, Farming Woman Milk Society,
<b>ALWAR THIRUNAGARI</b>	Paddy	Rise Mill, Rise Shop,
	Banana	Banana Chips, Banana Halwa, Alternative Products for Plastic Usage (Basket Making from Banana Fiber)
	Dairy Farm	Balcowa, Sweet, Butter, Farming Woman Milk Society,
	Millets	Refined flour, Health Mix, Millets Biscuits,
	Artificial Jewelry	Retail & Wholesales
	Pottery	Artificial Making, Lamp, Sculpture,
<b>SATHANKULAM</b>	Drumstick	Moringa Leaf Powder, Moringa Oil, Moringa flavored tea, Drumstick Powder, Moringa Dry Flowers
	Ground Nuts	Oil, Peanut candy, Fried Ground Nut,
	Palm	Alternative Products for Plastic Usage (Basket, mat, Different Types of Box) Fancy Articles, Palm Candy, Palm Fiber Mat, Palm Fiber Brush, Palm Neera, Palmyra Tuber, Palm Chocolate.
	Cocoanuts	Oil, Thatch Making, Fiber Bricks (Exports), Coir Making
	Mascot Halwa,	Sales & Exports
<b>THOOTHUKUDI</b>	Fish	Fish Pickle, Fish Kutlet, Fish Cake, Fish Oil, Sales & Exports, Dry Fish, MasiKaruvadu,
	Millets	Refined flour, Health Mix, Millets Biscuits,
	Jasmine	Sales & Export
	Banana	Banana Chips, Banana Halwa, Alternative Products for Plastic Usage (Basket Making from Banana Fiber)
	Dairy Farm	Balcowa, Sweet, Butter, Farming Woman Milk Society
	Paddy	Rise Mill, Rise Shop,
	Macron	Sales & Exports

## Conclusion:

Thoothukudi district is an industrial background District Though it has a few irrigated pockets majority of the area under cultivation is rain fed. The rainfall pattern of the district is erratic. During failure of monsoon producers generally skip the crop or go for cultivation of less water utilizing crops like millets and pulses. Majority of the landholdings are owned by marginal farmers. Women are engaged as agricultural laborers mostly in transplanting, processing and rearing of livestock. The major soil types found in the district include montmorillonitic, vertisols, alfisols, inceptisols and kaolintic. Deep fine, montmorillonitic and vertisols occupy a major area of 1, 14,817.11 ha. Agriculture is the main occupation and 70% of the people depend on it. Out of the total area of 470724 ha,178623 ha are under the cultivation of different crops which is nearly38% of total area of the district. The important food crops in the district are paddy, cholam, cumbu, ragi, varagu, samai and commercial crops like cotton, chilly, sugarcane and groundnut. Four of the 21 islands of Gulf of Mannar occur along Tuticorin coast. These islands are surrounded by athick coral and sea grass cover which act as a bio shield. Erosion has been severe in these islands because of coral mining activities which happened before 2004 Indian Ocean tsunami along with sea level rise. Tamirabarani, The only river of the district. It originates from rises in Agasthiyamalai of the Western Ghats, flows through Srivaikundam and Thiruchendur taluks and joins the sea at Punnakayl in Srivaikundam taluk. The district has a wide coastal length of 163.5 km The Gulf of Mannar Marine National Park area of Thoothukudi district includes estuaries, mudflats, beach sand forests of the near shore environment. Coral restoration, sea grass restoration and mangrove restoration activities are carried out successfully in this district.

## Annexure:1

### Details of Taluks, Blocks and TNRTP blocks in Thoothukudi district

S.No	Taluks	S.No	Blocks	Panchayats	S.No	TNRTP Blocks	Panchayats
1	Thoothukudi	1	Alwarthirunagari	30	1	<b>Thoothukudi</b>	<b>20</b>
2	Srivaikundam	2	Karungulam	31	2	<b>Karungulam</b>	<b>31</b>
3	Thiruchendur	3	Kayathar	45	3	<b>Alwarthirunagari</b>	<b>30</b>
4	Sattankulam	4	Kovilpatti	38	4	<b>Sathankulam</b>	<b>24</b>
5	Eral	5	Ottapidaram	61			
6	Kovilpatti,	6	Pudur	44			
7	Ettayapuram	7	Sathankulam	24			
8	Vilathikulam	8	Srivaikundam	31			
9	Ottapidaram	9	Thoothukudi	20			
10	Kayathar	10	Thiruchendur	11			
		11	Udangudi	17			
		12	Vilathikulam	51			

## **Annexure:2**

### **Reference Books**

1. District Statistical Handbook, 2017-08(Thoothukudi)
2. Census of India, 2011
3. Seasons and crop Report (16-17)
4. DIC, Industrial Profile
5. District Irrigation Report
6. Tamil Nadu Skill gap report - NSDC
7. Reports & Documents of below given District Level department.

### **List of Departments met in Thoothukudi District**

1. District Collector, Thoothukudi District.
2. Deputy Director of Statistics (JD) Statistics Department
3. Deputy Director, (JD) Agriculture Department, Thoothukudi District.
4. Joint Director, Horticulture Department, Thoothukudi District.
5. Assistant Director, (AD) Animal Husbandry
6. Deputy Director, (DD) Agri Marketing & Agri Business
7. Chief Engineer (CE), Agri Engineering
8. Deputy Register (DR), Dairy
9. Regional Assistant Direct (RJC) Fisheries
10. Lead District Manager, Indian overseas Bank, Thoothukudi District.
11. General Manager District Industries Center (DIC)
12. District Manage (DM), THADCO
13. District Employment Office, Department of Employment
14. Deputy Director, Handlooms and Textiles
15. District Development Manager (DDM), NABARD