



DISTRICT DIAGNOSTIC STUDY (DDS) MADURAI

TAMILNADU RURAL TRANSFORMATION PROJECT

Department of Rural Development & Panchayat Raj Government of Tamil Nadu

INDEX

1	SYNOPSIS	4
2	DISTRICT PROFILE	6
3	TOPOGRAPHY	7
4	DEMOGRAPHY CENSUS 2011	8
5	BLOCK WISE DATA	9
6	SOCIO DEMOGRAPHIC PROFILE OF THE DISTRICT	9
	Population Population and Demographic Transition Sex Ratio Literacy SC/ST Population Occupation Profile Gender Wise Worker Composition Community Based Organizations (CBOs)	
7	GEOGRAPHICAL FEATURES	18
	Topography Climate and Rainfall Madurai Rain Fall Land Use Pattern Soil Water Resources	
8	STATUS OF GROUNDWATER	22
9	DISTRICT INFRASTRUCTURE	23
	Connectivity Rail Transport Air Transport Power	

10	FARM AND ALLIED SECTORS	25
	Land holding and land use pattern of the Farmers	
	Land Operational Holding – Madurai District	
	Cropping Pattern and Major Crops	
4.4	Area, Production and the Yield of Major Crops	00
11	BLOCK WISE CROPPING DETAILS: (2018 - 19)	29
	Commodity Wise Productivity Chart	
	Horticultural Crops Jasmine Yield	
12	MARKETING AND STORAGE INFRASTRUCTURE	37
13	AGRIBUSINESS OPPORTUNITIES	38
14	RESOURCE INSTITUTIONS	42
15	FARMER PRODUCER ORGANIZATIONS (FPOS)	42
16	ALLIED SECTORS	44
	Animal Husbandry	
	Dairy Development	
	Poultry Development	
	Sericulture	
17	NON FARM SECTOR	47
18	TRADITIONAL SECTOR	52
	Madurai's Kitchen Still Rooted to Soil	
	Idols and Terracotta, Kollu Doll Making	
	Handlooms and Silk Weaving	
19	TOURISM	54
	Places of Interest - Madurai District	
	Excursion Centres Around Madurai	
20	HEALTH	68
21	SKILL GAP	69
22	IT HUB	70
23	BANKING PENETRATION IN THE DISTRICT	72
24	COMMODITY PRIORITIZATION	74
25	SWOT ANALYSIS OF MADURAI DISTRICT	76
26	CONCLUSION	77
27	GLOSSARY	79

SYNOPSIS

Tamil Nadu Rural Transformation Project (TNRTP) envisage to leverage the strategies and investments made in the projects Pudhu Vaazhvu Project to harness the institutional and knowledge capital for promoting inclusive economic development and growth for a transformative agenda in rural Tamil Nadu. This is envisaged through business promotion, value chain development, and skilling for youth for employment generation in the proposed 120 blocks from 26 districts of Tamil Nadu.

District diagnostic study was conducted in Madurai one of the district among the 26 TNRTP Districts of Tamil Nadu. DDS and District Diagnostic report has been prepared and based on that all the available secondary information and details collected and validations were made through field visits. The following report explains the observations made during the field visit and the details which were collected from the line departments Madurai district and about the commodity prioritization process.

The study majorly focused on farm, off farm and non-farm sectors and their potentiality in Madurai District. Further to the collected secondary data some criteria like number of farmers involved, comparative advantage state priority, trends etc. were set to finalize the commodity under farm and non-farm sector. Based on these criteria the commodities were prioritized further.



Objectives of the District Diagnostic Study

The objective of the diagnostics is:

- (1) To identify and prioritize major sectors, subsectors and commodities for enterprise promotion.
- (2) To identify and prioritize current and potential value chains.

The study broadly analyses the indicators, such as social profile, rural profile, urbanization trends and labor mobility and the economic indicators. Analysis was done on various sectors – agriculture, allied, non-farm including manufacturing and service sectors. Analytics was done on the current status of existing industries and the growth trends the potential for economic growth centers within Madurai District. The study was done gaps, challenges, opportunities in the existing ecosystem for promoting and nurturing sustainable MSMEs.

Detailing of sector-wise and block-wise presence and growth trends of MSME; existing and potential value chains in the sectors, the key private/public sector players currently operating in the district. The study analyzed the factors contributing to rural economy through employment generation and high value economic activities leading to enterprise development in the District.

Approach

A descriptive study method was adopted. Secondary Data was collected from various line departments, SHGs, Farm and Non-farm Associations, Resource Institutions, NABARD, LEAD Bank and in the study the officials belonging to various departments were consulted. Interactions were also made with the District and block units of TNSRLM. Site visits were also done to the resource institutions, FPOs, traders, weaving clusters and villages in the district. Focus Group discussion with the community was held to validate the secondary data.

DISTRICT PROFILE





Madurai is the second largest city by area in Tamil Nadu after Chennai. Madurai as it was then called as a huge District that comprising the present Districts of Dindigul, Theni, and Madurai. In order to make District Administration more effective and responsive, the Government have trifurcated this composite Madurai District into three Districts. Dindigul was carved out during the year 1984. Theni District was separated during the year 1997.

Madurai, is also called by different names like "City of Jasmine" (Malligaimaanagar), "Temple City" (Koilmaanagar), "City that never sleeps" (Thoonganagaram) and "City of four junctions" (Naanmadakoodal) is surrounded by several mountains. The Madurai city has 3 hills as its city boundary. Yanaimalai, Nagamalai, Pasumalai named after Elephant, Snake and Cow respectively. It is famous for Jasmine Flowers. Jasmine flowers are transported to other cities of India from Madurai. The city is closely associated with Tamil language as all the 3 primary congregation of Tamil scholars, the Tamil Sangam (3rd century BC to 3rd century CE), were held at Madurai.

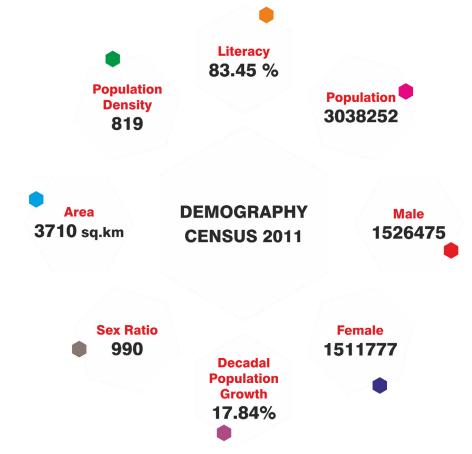
The District is situated in the South of Tamil Nadu state. It is bounded on the North by the districts of Dindigul, Thiruchirapalli and on the East by Sivagangai and on the West by Theni and South by Virudhunagar. The city has a number of historical monuments, with the Meenakshi Amman Temple and Tirumalai Nayakar Palace being the most prominent.

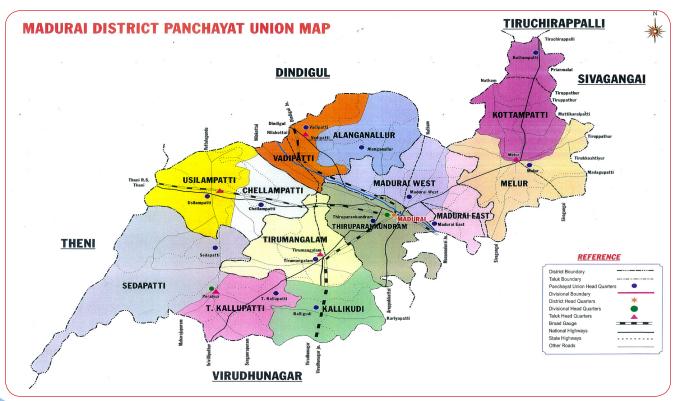
TOPOGRAPHY

Latitude	9 °58' N
Longitude	78 °10' E
Altitude	101 Meters
Area	3710 Sq.Km.
Summer Temperatures	40 °C to 26.3 °C.
Winter temperatures	29.6 °C to 18 °C.
Normal Rainfall	864.38 mm.



DEMOGRAPHY CENSUS 2011





BLOCK WISE DATA

SI.No	Name of the Block	No. of Panchayat	No. of Habitation	Population
1	Madurai East	36	246	137440
3	Thirupparankundram	38	139	169335
4	Melur	36	231	128717
5	Kottampatti	27	206	114339
	Total	137	822	549831

SOCIO DEMOGRAPHIC PROFILE OF THE DISTRICT

Madurai is one of the historical cities in the Indian State of Tamil Nadu. It is the administrative headquarters of Madurai District, the second largest city, located at the banks of River Vaigai. The total geographical area of Madurai is 3741.73 sq.km accounting for 2.88% of the geographical area of Tamil Nadu.

The Madurai District consists of 4 Revenue Division, One Corporation, Three Municipalities, Nine Town Panchayats, 13 Blocks and 420 Village Panchayats under its administrative control. It is situated on the North latitude between 9030 and 10030 and on the East Latitude between 77000 and 7830 and is bound on the North by Dindigul District, East by Sivagangai District, South by Virudhunagar District and West by Theni District. The city lies at an altitude of 330 feet or 101 meters above sea level.

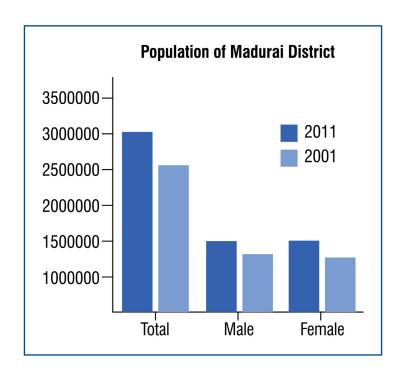
There are Four Revenue Divisions namely Madurai, Usilampatti, Melur and Thirumangalam. This District has Ten Taluks namely Thirupparankundram, Madurai East, Madurai West, Madurai North, Madurai South, Vadipatti, Melur, Peraiyur, Kallikudi and Thirumangalam also has 52 revenue Firkas and 670 Revenue Villages. Madurai District has 1 Corporation, 3 Municipalities, 9 Town Panchayats and 13 blocks, 420 Village Panchayats.

Table: 1 Socio Demographic Profile					
S.No Category Nos. (in La					
1	Total Population	30.38			
2	Male	15.26			
3	Female	15.12			
4	SC	4.09			
5	ST	0.11			
6	Literacy Rate	74.80%			

Population

The district population constituted 4.21 percent of total Tamil Nadu state population and in 2001 Census this was at 4.1 percent of state population. The district rural population is 11, 1,451 (39.22%) and the urban population is 18,46,801 (60.78%). Decadal growth of total population is 17.84 percent which is higher than the state decadal population growth 15.60 percent. The growth of urban population is due to the access and opportunities available to the nearest metropolitan and SIPCOT, SIDCO Clusters for employment.





Population growth rate in Rural/Urban context

Table: 2 Rural and Urban Population Growth Rate							
2001 2011 Growth rate							
Rural Population	1134025	1191451	5.06				
Urban Population	1444176	1846801	27.88				
Total	2578201	3038252	17.84				

The distribution of rural/urban population Madurai is 39.21% (rural) and 60.78% (urban) respectively. It shows the urbanization of the district is higher than that of State's 51.60% and 48.40% in rural and urban context respectively. The population growth rate of the district is 17.84%, however, the population growth rate in rural/urban context clearly exhibits that the district current trend in urbanization.

In urban context the growth rate is 27.88% which are more than the rural context of 5.06%. Among the 14 blocks rate of urbanization is more in Tirupparankunram (44.17%) followed by Madurai west (42.57%) and Vadipatti (40.22%), subsequently population growth rate is more in Madurai west (49.76%) and Tirupparankunram (36.17%) but in Vadipatti it remains 11.84% where migration might have happened. Population seems to be an increasing trend in all the blocks.

Reason for the migration is, vadipatti is in between dindigul and Madurai, so people have more chances to migrate to both the districts for many reasons like search of jobs, children's studies, wish to get settled in urban areas, for the hospital facilities etc. Therefore the growth rate of vadipatti is comparatively less when compared to other blocks.

Decadal Growth of the population

The decadal growth rate among the blocks shows that there is higher growth rate in Madurai west, secondly comes Tirupparankunram which has been recently included within the Corporation limit. This increase in growth rate may be due to employment opportunities and urban context prevailing in the particular block. Tirupparankunram is one of the pilgrimage centres in the district, which becomes urbanized now and where opportunities are more for vendors, Tiffin centres, hotels, etc. Madurai East and Madurai West being rural based. The other blocks which are having higher growth rate are Tirumangalam (18.97%), Melur (16.44%), Usilampatti (14.94%), Kottampatti (14.50%) and Kallikudi (13.36%). The other blocks range from 10 to 12%, except Chellampatti (2.84%) and T.Kallupatti (5.65%) which has a very low growth rate among the blocks.

Chellampatti has low female literacy and this block is backward in certain indicators of human development index also. District administration has to address this block for specific development. T.Kallupatti already a backward block in terms of poverty, health and education is quite natural for migration which might have affected the growth of population.

Certain group of people is dominant in the area of chellampatti and they possess a characteristic of getting their girl child married soon, and they also have a backward thought that girls should not be educated. Lack of education leads hinders from the growth factor.

	Table: 3 Madurai District Decades of Changes/ Growth in Demographic Profile				
S.No	Description	2001	2011		
1.	Total Population	2,578,201	3,038,252		
2.	Rural Population	11,34,025	11,91,451		
3.	Urban Population	14,44,176	18,46,801		
4.	Male	1,303,363	1,526,475		
5.	Female	1,274,838	1,511,777		
6.	Population Growth	7.41%	17.84%		
7.	Area Sq. Km	3,710	3,710		
8.	Density/km2	698	819		
9.	Proportion to Tamil Nadu Population	4.13%	4.21%		
10.	Sex Ratio (Per 1000)	978	990		
11.	Child Sex Ratio (0-6 Age)	926	932		
12.	Average Literacy	77.82	83.45		
13.	Male Literacy	86.17	89.72		
14.	Female Literacy	69.35	77.16		
15.	Total Child Population (0-6 Age)	295,276	313,978		
16.	Male Population (0-6 Age)	153,326	162,517		
17.	Female Population (0-6 Age)	141,950	151,461		
18.	Literates	1,776,654	2,273,430		
19.	Male Literates	991,010	1,223,810		
20.	Female Literates	785,644	1,049,620		
21.	Child Proportion (0-6 Age)	11.45%	10.33%		
22.	Boys Proportion (0-6 Age)	11.76%	10.65%		
23.	Girls Proportion (0-6 Age)	11.13%	10.02%		

Table: 3 shows the decadal growth of population in the blocks and district. There is an increase in population in all the blocks and the decadal population growth rate of the district is 17.84% in 2011.

Population and Demographic Transition

Demographic trends indicate broader changes that are happening in the population characteristics which have either positive or negative influence over human development. Usually the phase of the demographic transition witnessed in the district indicates the challenges to be met for ensuring human development and on the other hand the general well being of the population. The table given below focuses on demographic indicators which have significant influence on human development and on their relationship with health indicators.

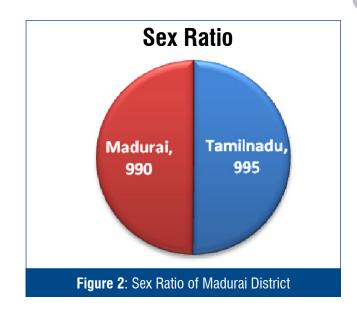
The percentage of increase in the district may be due to CBR, migration of population from nearby districts and this could be due to a variety of factors such as industrial and economic growth leading to more opportunities in the construction services and manufacturing sectors and availability of educational opportunities in the district.

Table 4: Population growth rate								
SI. No.	Block wise/District	Po	Growth Rate					
		2001	2011	2001 – 2011				
	District							
1	District	2578201	3038252	17.84				
		Corporation						
1	Madurai Corporation	928869	1017865	9.58				
		Blocks						
1	Alanganallur	101365	111627	10.12				
2	Chellampatti	84725	87132	2.84				
3	Kallikudi	64763	73413	13.36				
4	Kottampatti	99856	114339	14.50				
5	Madurai East	169172	224708	32.83				
6	Madurai west	180148	269787	49.76				
7	Melur	152063	177059	16.44				
8	Sedapatti	102993	111928	8.68				
9	T.Kallupatti	83846	88582	5.65				
10	Vadipatti	109833	122841	11.84				
11	Tirumangalam	131321	156232	18.97				
12	Tirupparangunram	274740	374115	36.17				
13	Usilampatti	94507	108624	14.94				
Source: Census 2001 and 2011								

Sex Ratio

With regards to Sex Ratio in Madurai, it stood at 990 per 1000 male compared to 2001 census figure of 978. The average State sex ratio in Tamilnadu is 995 as per latest reports of Census 2011 Directorate.

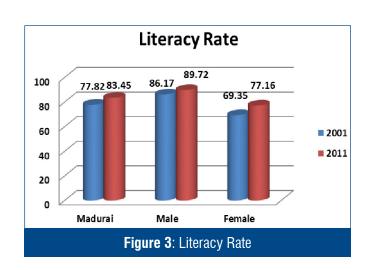
When compared to 2001 census, the female male sex ratio has increased considerably in 2011 census. It shows that increased awareness and government's strict policies have reduced the female infanticide, and thus paved way for the increase in the sex ratio.



Literacy

Average literacy rate of Madurai in 2011 were 83.45 compared to 77.82 of 2001. If things are looked out at gender wise, male and female literacy were 89.72 and 77.16 respectively. In 2001 census, same figures stood at 86.17 and 69.35 in Madurai District. Total literate in Madurai District were 2,273,430 of which male and female were 1,223,810 and 1,049,620 respectively. In 2001, Madurai District had 1,776,654 in its district.

The total literacy rate of Madurai has commendably increased from 77.82% to 83.45% in a decade. From this it can be understood that Madurai has grown as an educational hub, it has accommodated so many educational institutions inside.



SC/ST Population

Table 5: Blockwise SC Population						
SI.No	Name of the Block	Total SC				
1	Madurai East	33110				
2	Madurai West	23777				
3	Thirupparankundram	25632				
4	Melur	24477				
5	Kottampatti	17058				
6	Vadipatti	20440				
7	Alanganallur	19462				
8	Usilampatti	11919				
9	Chellampatti	15065				
10	Sedapatti	28270				
11	Thirumangalam	22112				
12	T.Kallupatti	17499				
13	Kallikudi	13673				

Ta	Table 6: Blockwise ST Population						
SI.No	Name of the Block Total						
1	Madurai East	58					
2	Madurai West	339					
3	Thirupparankundram	1447					
4	Melur	207					
5	Kottampatti	5					
6	Vadipatti	1136					
7	Alanganallur	1335					
8	Usilampatti	161					
9	Chellampatti	14					
10	Sedapatti	139					
11	Thirumangalam	2					
12	T.Kallupatti	1					
13	Kallikudi	51					

Table 5 & 6: Shows the Block wise SC/ST population in the blocks and district. There is an increase in SC population in Madurai East blocks and ST Population in Thiruparankundram Block in 2011.

Occupation Profile

Employment

Over the years there has been a drastic change in employment and its composition in the district.

	Table 7: Sex wise classification of Workers						
S. No Block Total worker Male Female						ale	
		2001	2011	2001	2011	2001	2011
1	Alanganallur	50679	57814	60.26	61.18	39.56	42.26
2	Chellampatti	49865	50633	60.29	60.28	57.26	55.83
3	Kallikudi	38703	41321	61.53	60.57	58.03	51.99
4	Kottampatti	50437	59564	58.60	60.21	42.65	43.93

5	Madurai East	72877	98837	56.82	59.17	28.84	28.45
6	Madurai west	69074	108919	54.16	57.17	22.11	23.54
7	Melur	72199	81522	57.33	57.47	37.51	34.40
8	Sedapatti	55188	64248	57.85	60.99	49.19	53.74
9	T.Kallupatti	42869	47396	57.05	59.87	45.21	47.23
10	Vadipatti	48404	60244	57.54	60.42	30.49	37.66
11	Tirumangalam	62509	75266	56.33	58.80	26.00	27.13
12	Tirupparankundram	113604	161145	56.22	59.47	37.89	44.11
13	Usilampatti	44682	56408	60.26	61.18	39.56	42.26
	Total	1088543	1354632	56.51	59.14	27.61	29.89
Source	Source : Madurai District Statistical Handbook						

Gender Wise Worker Composition

Participation of female agricultural workers was higher than that of male agricultural workers. In which, female agricultural labourers are nearly one fold higher than that of male agricultural labourers. In the context of other workers, male percentage is higher i.e. 71.02 than female of 44.39%. This shows that more men workers are working in factories, mining, and construction unit than female. The status of female workers in the district is socially and economically vulnerable. In case of non-agricultural sector, male other workers are more than that of female other workers.

Table 8: Gender wise Composition of workers								
Cultivators Agri. Labou			bourers	Other v	vorkers	Household workers		
Male	Female	Male	Female	Male	Female	Male	Female	
6.4	7.7	20.22	32.53	71.02	44.39	2.34	5.77	

Community Based Organizations (CBOs)

Community Based Organizations With the external assistance from Government of India and World Bank, the Tamil Nadu Pudhu Vaazhvu Project in 4 block room the year 2006 - 2017 and Tamil Nadu State Rural Livelihood Mission are implemented in 9 blocks from the year 2012. 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.

The statuses of CBOs in the Districts are:

- 5735 SHGs
- 420 VPRCs
- 396 PLFs/ 24 Sub Committees

S No	Block	Total SHG	Total SHG Member	Average
1	Alanganallur	530	6741	13
2	Chellampatti	411	5162	13
3	Kallikudi	367	4941	13
4	Kottampatti	476	6380	13
5	Madurai East	545	6874	13
6	Madurai West	420	5249	12
7	Melur	508	7111	14
8	Sedapatti	314	4059	13
9	T. Kallupatty	392	5233	13
10	Thirumangalam	592	7580	13
11	Thiruparankundram	566	8234	15
12	Usilampatti	257	3514	14
13	Vadipatti	357	4077	11
	Total	5735	75155	170

More number of SHGs and its members prevails in Thiurpparankundram Block (566 SHG/ 8234 member), Madurai East Block (545 SHGs/ 6874 members), Melur Block (508 SHGs/ 7111 members) and kottampatti Block (476 SHGs/ 6380 members) respectively.

GEOGRAPHICAL FEATURES

Topography

The total geographical area of the district is 3.74 lakh hectares. The area under forest during 2004-05 was 48473 hectares and it accounted for 13.0 and 2.3% of the total geographical area of the district and State respectively. About 18.6% of the total geographical area was under non agricultural uses.

The net area sown is 1.08 lakh hectares accounted for 37.0% of the geographical area, which is less than the State's average of 39.1%. Paddy, sugarcane, cotton grows in black soil, pulses, horticultural crops grows in red soil. The Net sown area is 1.08 lakh hectares.

It clearly indicates that the land available for cultivation is shrinking. It is due to the increasing urbanization witnessed in the present time.

Climate and Rainfall

Madurai is hot and dry for eight months of the year. The hottest months are from March to July. The district experiences a moderate climate from August to October, tempered by heavy rain and thundershowers, and a cool climate from November to February. Fog and dew are rare, occurring only during the winter season. Being equidistant from mountains and the sea, it experiences similar monsoon pattern with North east monsoon and Southwest monsoon with the former providing more rain during October to December.

Rainfall is irregular and intermittent, with an average of 85 cm per annum. The wind blows from Northeast direction during January – February, and from Southwest direction during May to July.

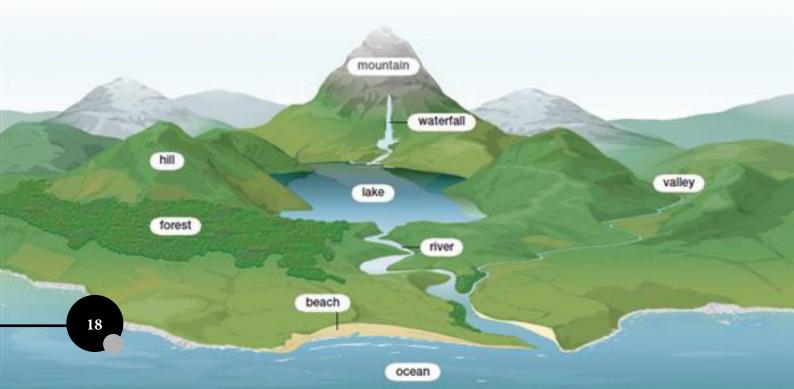


Table 11: Annual Rainfall during last 16 years

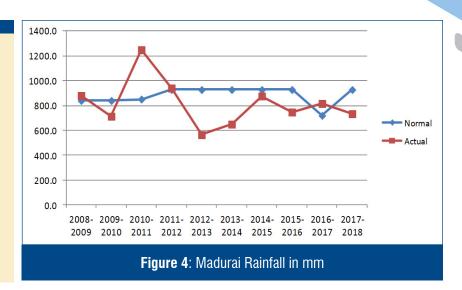
The above table indicates that annual rainfall received during the last sixteen years.

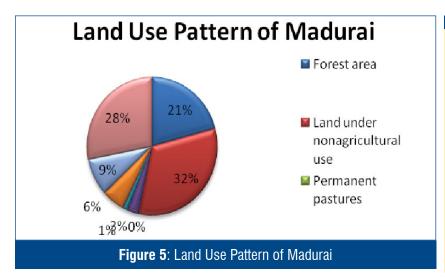
Time Series Data of Rainfall by Seasons in Madurai Dt 2002-2018 (In m.m) (16 Years Data)

S No	Year	South	west	North	East	Win	ter	Sum	mer	All Mo	nsoon	% O f
		Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Deviation
1	2002- 2003	270.1	171.5	397.05	349.3	33.4	0.8	138.8	153.1	839.0	674.7	-19.7
2	2003- 2004	270.1	280.4	397.05	289.6	33.4	1.9	138.8	164.8	839.8	736.7	-12.3
3	2004- 2005	305.4	343.7	373.0	347.7	29.8	5.7	131.8	313.6	840.0	1010.7	20.3
4	2005- 2006	305.4	250.4	373.0	689.4	29.8	8.0	131.8	230.0	840.0	1177.8	40.2
5	2006- 2007	305.4	144.2	373.0	432.5	29.8	10.1	131.8	81.2	840.0	668	-20.5
6	2007- 2008	305.4	228.9	373.0	473.3	29.8	16.0	131.8	270.6	840.0	988.8	17.7
7	2008- 2009	305.4	310.8	373.0	388.2	29.8	8.1	131.8	173.0	840.0	880.1	4.8
8	2009- 2010	305.4	259.1	373.0	302.1	29.8	2.7	131.8	149.4	840.0	713.3	-15.1
9	2010- 2011	305.4	301.6	373.0	756	28.1	38.8	144.8	151.7	851.3	1248.1	46.6
10	2011- 2012	335.9	190.5	419.1	609.8	28.1	10.8	144.8	129.2	927.9	940.3	1.3
11	2012- 2013	335.9	187.5	419.1	221.2	28.1	43.6	144.8	113.0	927.9	565.3	39.1
12	2013- 2014	335.9	189.9	419.1	266.5	28.1	6.1	144.8	187.4	927.9	649.9	30
13	2014- 2015	335.9	227.2	419.1	323.5	28.1	11.9	144.8	313.6	927.9	876.2	-5.6
14	2015- 2016	335.9	263.8	419.1	413.2	28.1	0.0	144.8	70.2	927.9	747.2	-19
15	2016- 2017	335.9	407.5	419.1	286.5	28.1	33.2	144.8	177.3	720	816.4	13
16	2017- 2018	335.9	273.7	419.1	278.4	28.1	6.5	144.8	175.5	927.9	734.1	-20.9
Sourc	e: Dept.	of Econo	mics & S	Statistics,	Chennai							

Madurai Rain Fall

The above graph shows the variation of rainfall in this District during 2008-2018. It reveals that 2010-11 is the highest rainfall year of 1248. 10mm whereas 2018 is the lowest of 734.2mm. It concluded that rainfall of this district is irregular on these years.





Land Use Pattern

The Land use pattern graph shows that Non-agriculture usage area is the highest of 32% followed by, 21% of Forest area, 28%, of current usage, 9%, Barren and uncultivable land, 6% of cultivable waste land, 3% of Land under Miscellaneous tree crops, and 1% of groves.

Soil

Most of the area of madurai contains red loam, black soil and clay loam. Which means crops like paddy, pulses, jowar, linseed, millet, potatoes, sugarcane, and fruits can be grown.

Table 12: Types of Soil				
Name of Blocks	Types of Soil			
Madurai East	Clay loam			
Madurai West	Clay loam			
Thirupparankundram	Red loam, Black cotton			
Melur	Red loam			
Kottampatti	Red loam			
Vadipatti	Red loam, clay loam			
Alanganallur	Red loam, clay loam			
Thirumangalam	Red loam & Black cotton			
Kallikudi	Red loam & Black cotton			
T.Kallupatti	Red loam & Black cotton			
Usilampatti	Red loam & Black cotton			
Chellampatti	Red loam & Black cotton			
Sedapatti	Red loam & Black cotton			

Water Resources

Table 13: Water Resources						
S.No	Water Bodies	Resources				
1	River	Vaigai				
2	Lakes	78 Nos				
3	Dams	a) Periyar Dam				
		b) Vaigai Dam				
		c) Periyar Aruvi Dam				
		d) Sathayar Dam				
4	Canals	80 Nos				
5	Tanks	2818 Nos				
6	Tube Wells	2126 Nos				
7	Open Wells	39109 Nos				

Rivers

The Main River that flow across the district is Vaigai. It passes through the towns of Theni, Andipatti and Madurai. It originates in Varusanadu Hills, the Periyar Plateau of the Western Ghats range, and flows northeast through the Kambam Valley, which lies between the Palani Hills to the north and the Varusanadu Hills to the south. The Vattaparai Falls are located on this river. As it rounds the eastern corner of the Varushanad Hills, the river turns southeast, running through the region of Madurai. The river empties into the Palk Strait near Uchipuli, close to Pamban bridge in Ramanad District.

Reservoirs

The Vaigai Reservoir, often known as the Virahanoor Dam, is a small dam on the River Vaigai. The dam is 10 km from Madurai city, between Madurai and Sivagangai on the Rameshwaram national highway 49. The dam is commonly referred to as Viraganoor Dam because is sited by the village of Viraganoor. The dam is under the maintenance of Tamil Nadu Public Works Department (PWD). A small park is also maintained near the dam. The main purpose of the dam is to use the water for irrigation purpose for the areas around the dam.



STATUS OF GROUNDWATER

Groundwater Potential as on March 2011 (as per CGWB)

Table 14: Groundwater Potential as on March 2011					
Net Groundwater Availability (In MCM) 658.68					
Existing Gross Groundwater draft for all users (in MCM)	380.27				
Stage of Groundwater development (in %)	58 %				
Categorization of District	Safe				

Ground Water Categorization of Firkas						
Category	Block		Firkas			
		No	Name			
Over-exploited (>100%)	Usilampatti	2	Usilampatti, Uthappanaickanur			
	Vadipatti	2	Muduvarpatti, Palamedu			
Critical (90-100%)		1	Sedapatti			
Saline		0	-			
Semi-Critical (70-90%)	Madurai South	3	Madurai East, Madurai West, Pudukottai			
	Melur	2	Kottampatti, Vellalur			
	Peraiyur	3	Athipatti, Elumalai, Peraiyur			
	Thirumangalam	3	Kokkulam, Sivarakkottai, Thirumangalam			
	Usilampatti	2	Karumathur, Sindhupatti			
		Safe				
(<70%)	Madurai North	12	Appan Thirupathi, Arumabanur, Chathrapatti, Kallandhiri, Koolapandi, Kulamangalam, Kunnathur, Othakkadai, Rajakkur, Sakkimangalam, Samayanallur, Sathamangalam			
	Madurai South	4	Avaniyapuram, Thirupparankundram, Valayankulam, Virathanur			
	Melur	6	A.Vellalapatti, Karungalakudi, Keelavalavu, Melavalavu, Melur, Thiruvathavur			
	Peraiyur	2	Mothagam, T.Kallupatti			
	Thirumangalam	3	Kalligudi, Kuraiyur, Pannikkundu			
	Usilampatti	1	Valanthur			
	Vadipatti	5	Alanganallur, Thanichiam, Neerathan,			
			Solavandhan, Thenkarai			
	Total	46				

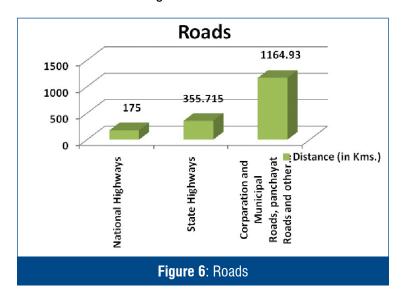
The above table shows that none of the TNRTP block falls under over exploited zone area in ground water level. Half of the villages in our blocks come under safe zone in the ground water level. The rest of the villages falls under critical and semi critical zone. This clearly states that with some water management techniques agriculture can be done in a better way these blocks.

DISTRICT INFRASTRUCTURE

Connectivity

This district is very well connected by Roads. The district has a network of National Highways converging as follows:

- NH49 Cochin to Rameshwaram
- NH 209 Madurai to Dindigul
- NH 230 Madurai to Tuticorin
- NH210 Madurai to Virudhunagar



These well connected roads made madural as one of the major center point for the down south districts, which in turn created many business enterprises and poured in lot of revenues.

Rail Transport

Madurai Railway Junction is one of the major railway junctions in south India and the headquarters of Madurai Railway Division. It is well connected with all major cities in India. Madurai division is the second largest by revenue in Southern Railway. It is one of the A1 graded stations in the Southern Railway.

As Madurai junction is the major connecting point to southern districts, many trains halt and start from Madurai junction, so there are many opportunities for women self groups:

- Rendering catering services and housekeeping services.
- A contract can be made with railways to sell the food pockets made by the SHG women, in the Madurai railway junction.
- Some group of women can be trained in housekeeping task as well.

Air Transport

Madurai airport is located about 12 km from the Madurai railway station. The airport was established in 1956. It is one of the important airports in Tamil Nadu. It offers domestic flight services to major cities in India and international services to Colombo, Sri Lanka (beginning 20 September 2012).

Madural airport has a strong Domestic network and handles 125,000 passengers per month on an average, this leads to Loads of business opportunities at the airport. Some of them are

- Setting up a coffee shop outside the terminal and in the public concourse.
- Women groups can be trained to setup a service centers for helping unaccompanied elders, sick
 and physically challenged people in immigration clearance and vehicle & hotel booking.
- Madurai sungudi sarees has proven to be a shopper's delight for generations of families.
 A showroom exclusively for sungudi sarees can be set up in the international and domestic departure.
- Madurai Malligai flowers, essential oils extracted from jasmine, perfumes made from malligai can be made available in a stall and that can be setup by the SHG's.

Power

Availability of Electricity/Power

Connections to residential houses, bungalows, clubs, hostels and hospitals run on non-commercial basis, charitable, educational and religious institutions are included in the domestic category.

Power Supply for domestic use: This category includes electricity used only for domestic consumption.

Power supply for agricultural use: This category includes all electricity connections given to the farmers for conducting various agricultural activities including irrigation.

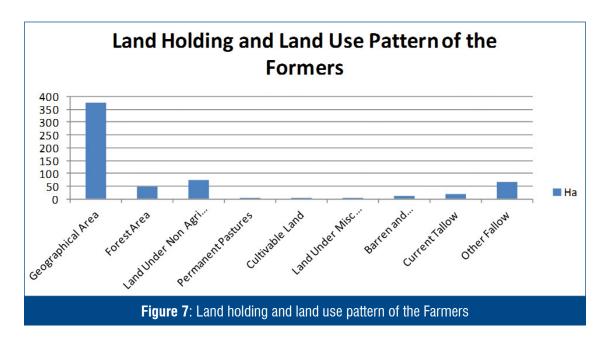
Power supply for commercial use: This category includes electricity connections given for workshops, industries etc. or for any commercial purposes.

Electricity (in M.U.)	2016-17	2014-15
Generation of Electricity		94128
a. Hydro		5185
b. Wind Mill Generation		8
c. Thermal & Gas		29375
d. Power Purchased		59559
Consumption of Electricity	(in lake of unit)	(in MU) 76828
a. Agriculture	98.57	12406
b. Industry	2037.38	28790
c. Commercial	613.02	8394
d. Domestic	3070	21990
e. Public Lighting and water works	614.76	2110
h. Miscellaneous	201.57	3138
Rural Electrification		2014-15
a. Number of pumpsets		NA
b. No of Village Pts electrified	420	15979
c. No of Hamlets electrified	100%	79259

FARM AND ALLIED SECTORS

Land holding and land use pattern of the Farmers

a) Geographical Area	- 374.2 Ha
b) Forest Area	- 48.5 Ha
c) Land under non-agriculture use	- 75.2 Ha
d) Permanent Pastures	- 0.2 Ha
e) Cultivable Land	- 6.5 Ha
f) Land under Misc tree crops and groves	- 3.0 Ha
g) Barren and uncultivable land	- 13.2 Ha
h) Current tallow	- 20.6 Ha
i) Other fallow	- 65.2 Ha



Land Operational Holding – Madurai District

Table 16: Land Operational Holding – Madurai District												
District	District Marginal Upto 0.99 acre			1.00 to acre			Medium 4.00 to 9.99 acre		Large 10.00 & above		Total	
	No of Holdings	Area operated	No of Holdings	Area operated	No of Holdings	Area operated	No of Holdings	Area operated	No of Holdings	Area operated	No of Holdings	Area operated
Madurai	2,19,092	72,999	29,448	40,524	9,624	25,538	2,448	13,544	256	4,285	2,60,868	1,56,891

In Madurai District where except marginal all other sector land holdings constitute in less numbers, but area operated is more than 100%.

Cropping Pattern and Major Crops

Table 17: Crops						
Crop	Area (in Ha)	% of Total area sown	Production (in Tonnes)			
Paddy	50986	33.87	203616			
Cholam	10038	6.67	11573			
Cumbu	5452	3.62	9872			
Ragi	50	0.03	92			
Maize	4553	-	14042			
Other cereals	1855	-	1153			
Total cereals	72934	-	240348			
Total Pulses	7586	-	2820			
Sugarcane	3837	2.55	260026			
Cotton	5839	3.88	8408			
Groundnut	3191	2.12	4900			
Gingelly	1148	0.76	403			
Source: Statistical Handbook of TamilNadu, 2011						

The major crop production in Madurai district is paddy and 203616 tones of paddy is produced around Madurai. Almost the entire paddy produced in the district is hulled locally. There are more scopes of starting the following Paddy based units in the blocks. Producers of paddy can form FPO's and carry out the following business. Apart from formation of FPO's, SHG's can be also promoted in the following.

- 1. **Rice bran oil**: Rice bran is rich in oil content. It contains around 15-20 % of oil. Rice bran oil is a perfect substitute to Palm Fatty Acid Distillate; Costly imported material diverts user industries to switch over to substitutes available locally. Hence, there is good market for the rice bran oil. The demand supply gap in the domestic market for oil seeds & edible oil would be between 12-15 lakh tones. To fill up the gap edible grade rice bran oil can also be promoted. Technology Source: CFTRI, Mysore.
- 2. **Household Detergents from Paddy Husk**: Paddy husk can be used for the manufacture of detergent powder. The main raw materials are paddy husk, soda ash, sodium Tripoly phosphate, borax and alkylaryl sulphonate. A unit can be set up by using this technology in this district. Technology **Source**: The National Research Development Corporation (NRDC), Delhi

3. **Rice Bran Wax**: Rice bran Wax finds application in paper, candle, moulds, electric insulation, polishes, cosmetics, printing ink, lubricants, adhesives, chewing gum, and pharmaceuticals.

Fine grade rice bran wax can be manufactured from crude rice bran wax. Technology Source: Indian Institute of Chemical Technology. Hyderabad

Area, Production and the Yield of Major Crops

Madural district has a good irrigational system and the farming operations have successfully increased the total agricultural' production in the district to a considerable extent. The introduction of high-yielding varieties has increased the yield and production of all the crops in the state of Tamil Nadu and this has happened in Madural district also. The area, production and the yield of the major crops in the Madural district are presented in Table below.

	The Major crops in the District are as follows:							
	Table 18: Crops Cultivation & Production District Level							
SNo.	Crop	Area under cultivation	2018-	19				
		(ha)	Production (Tonnes)	Productivity (Kg/Ha)				
1	Paddy*	48249	201150	4169				
2	Cholam	11016	24896	2260				
3	Maize	13909	63995	4601				
4	Other millets	3722	6700	1800				
5	Black gram	1264	739	585				
6	Green gram	3272	2428	742				
7	Groundnut	1713	3145	1836				
8	Red gram	2278	3572	1568				
9	Cotton \$	9388	14	1.5				
10	Sugarcane#	1441	101	70				
Source :	Source : Data given by Agriculture Department.							

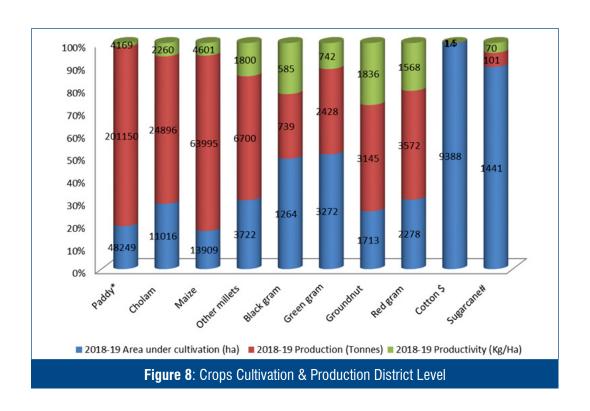


Table 19: TNRTP Block wise Crop cultivation				
S.No	Name of the Block	Crop Covered		
1	Madurai East	Paddy, Cholam, Maize, Pulses		
2	Thiruparankundram	Paddy, Cholam, Pulses and Groundnut		
3	Melur	Paddy, Sugarcane, Pulses, Groundnut and Gingelly		
4	Kottampatti	Paddy, Cholam, Pulses and Groundnut		

Besides the Major Crop, Jasmine cultivation is also be carried out by the farmers in Madurai East and Thirupparankundram blocks of TNRTP.

The data shows that in almost all the blocks the percentage of cultivators has drastically reduced. This shows the constraints of farmers in continuing their profession as a farmer. Poor rainfall, cost of cultivation, low productivity might be the reason for drastic reduction in cultivators. Chellampatti, Kottampatti, Sedapatti, T.Kallupatti and Kallikudi are the blocks where cultivators are drastically reduced. Out of these blocks, T.Kallupatti and Sedapatti are already identified as backward blocks in terms of poverty, health, education and industrial backwardness. In this situation, the decline in cultivators shows the lack of resources in cultivating crops in their lands or their cultivable lands remains as such or it may be converted to housing plots.

BLOCK WISE CROPPING DETAILS: (2018 - 19)

A. Madurai East:

Paddy (8187 Ha), Cholam (6 Ha), Maize (5 Ha) and Pulses (8 Ha) (Red Gram, Black Gram, Green Gram) are the major crops in terms of area of cultivation.

B. Thiruparankundram:

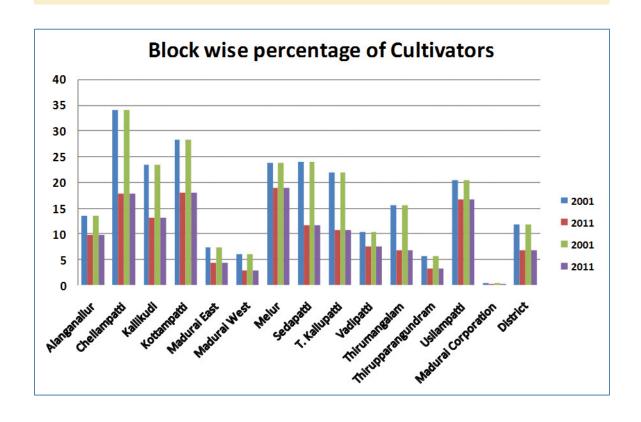
Paddy (1970 Ha), Cholam (77 Ha), Pulses (246 Ha) (Red Gram, Black Gram, Green Gram and Cowpea) and Groundnut (138 Ha) are the major crops in terms of area of cultivation.

C. Melur:

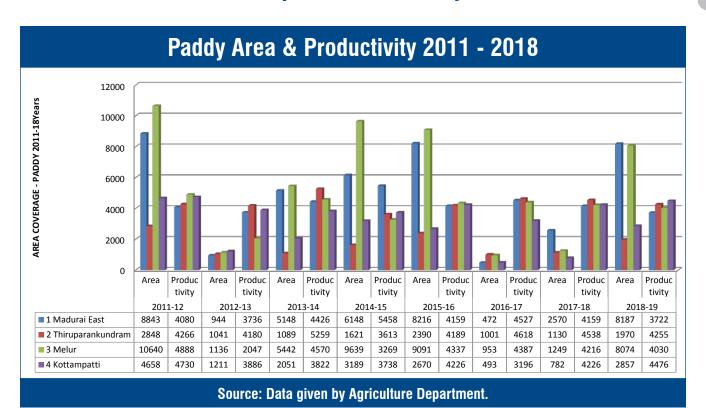
Paddy (8074 Ha), Sugarcane (100 Ha), Pulses (145 Ha) (Black Gram, Green Gram and Cowpea), Groundnut (26 Ha) and Gingelly (4 Ha)are the major crops in terms of area of cultivation.

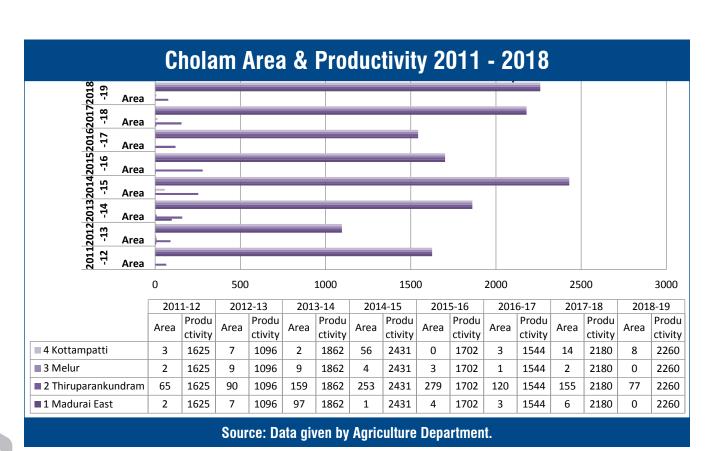
D. Kottampatty:

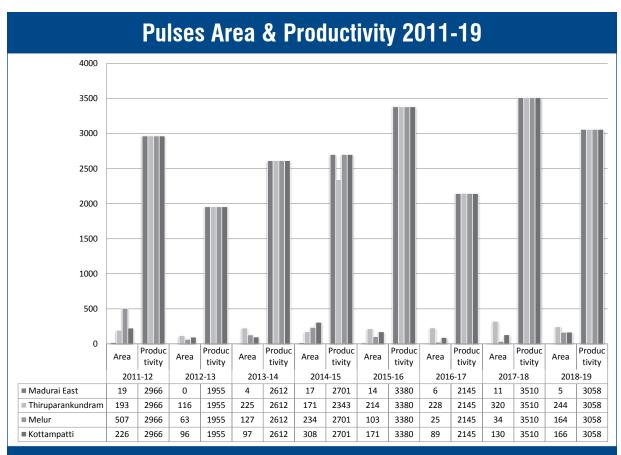
Paddy (2857 Ha), Sugarcane (45 Ha), Cholam(8 Ha), Pulses(165 Ha) (Black Gram, Green Gram and Cowpea) and Groundnut (642 Ha) are the major crops in terms of area of cultivation.



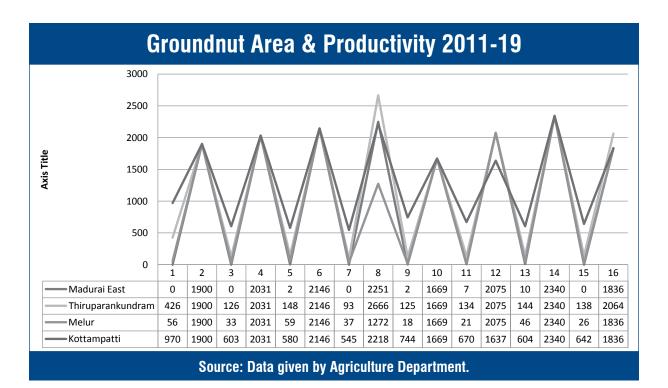
Commodity Wise Productivity Chart

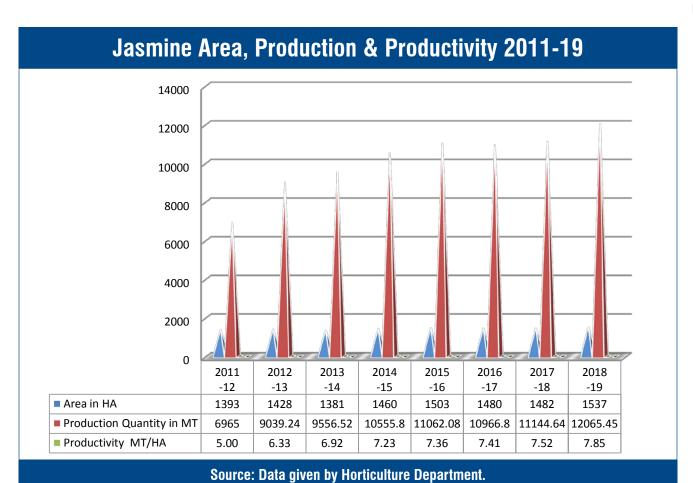






Source: Data given by Agriculture Department.







Horticultural Crops

State Horticulture Farms in Poonjuthi, Madurai is established in 2012, Horticulture is a supplementary source for agriculture sector and the way to attain self sufficiency in the district. The area produces fruits and vegetables in large amounts.

Following are the various horticultural crops cultivated. The below table shows the figures of 2018-19:

Table: 20 Crops				
Crop	Area in Ha	Production Quantity in MT (per year)		
Banana	2898	99256.5		
Mango	6253	53275.56		
Guava	1346	18547.88		
Source: Horticultural department.				

Jasmine yield

'Madurai Malli' is being grown on 2000 hectares by 4,000-odd farmers in the district. Flowering instigates after 6 months of planting. Madurai stands first in the production of jasmine flowers in Tamilnadu state.(Source: Statistical Handbook of Tamil Nadu, 2011)

Fully developed unopened flower buds should be picked in the early morning i.e. before sunrise. Flowering commences in March-April. Commercial yields are obtained after six months of planting. The yield depends upon the cultural practices pursued by the cultivator. During the first year, 750 kg of flowers could be obtained, and it increases to 2000 kg in second year, 2500 kg in third year and 3500 kg per acre from the fourth year onwards.

60000 Tones - Annual production of jasmine in the state. Although there are nearly 50 varieties of jasmine grown in India, the commercially cultivated ones in Tamil Nadu are: Jasminum sambac (Madurai malli) – In Madurai.

Major jasmine growing blocks in Madurai district are Thirupparankundram, Thirumangalam, Usilampatti and Chellampatti.

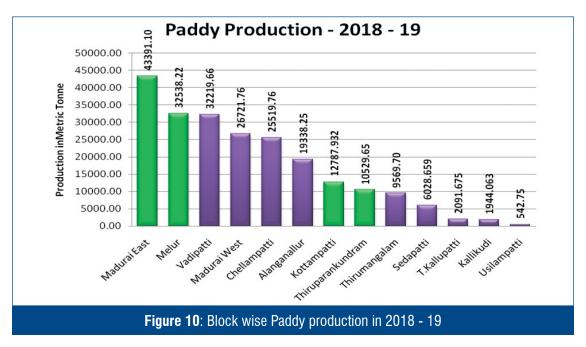
Scope:

The annual demand is estimated to be 10,500 tonnes while the district produces only 9,500 tonnes.

Major sources of demand are the large consumer retail markets at Bangalore, Chennai, Hyderabad, New Delhi and Mumbai. Jasmine flowers can be exported to these cities. All these cities can be well connected through air from Madurai airport.

Paddy

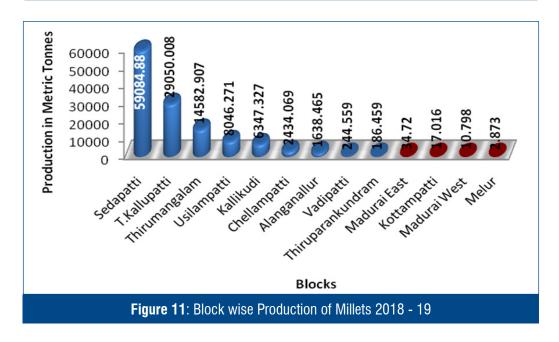
Table 21: Block wise Paddy production in 2018 - 19			
S.No	Blocks	Production in tonnes per year (2018-19)	
1	Madurai East	43391.10	
2	Melur	32538.22	
3	Vadipatti	32219.66	
4	Madurai West	26721.76	
5	Chellampatti	25519.76	
6	Alanganallur	19338.25	
7	Kottampatti	12787.932	
8	Thiruparankundram	10529.65	
9	Thirumangalam	9569.70	
10	Sedapatti	6028.659	
11	T.Kallupatti	2091.675	
12	Kallikudi	1944.063	
13	Usilampatti	542.75	
Source: Statistical Handbook of Madurai, 2011.			



Madurai East (43391.10 Metric Tonnes), Melur (32538.22 Metric Tonnes), Vadipatti (32219.66 Metric Tonnes) and Madurai West (26721.76 Metric Tonnes) lead in the area of cultivation of paddy production in Madurai District.

Millets

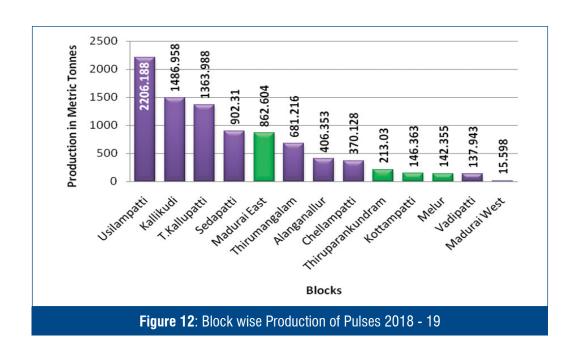
Table 22: Block wise Production of Millets			
S.No	Blocks	Production in tonnes per year (2018-19)	
1	Sedapatti	59084.88	
2	T.Kallupatti	29050.008	
3	Thirumangalam	14582.907	
4	Usilampatti	8046.271	
5	Kallikudi	6347.327	
6	Chellampatti	2434.069	
7	Alanganallur	1638.465	
8	Vadipatti	244.559	
9	Thiruparankundram	186.459	
10	Madurai East	34.72	
11	Kottampatti	17.016	
12	Madurai West	10.798	
13	Melur	2.873	
	Total	121680.352	



Millets are produced/ cultivated in high level in respective blocks Sedapatti (59084.88 Metric Tonnes), T.kallupatti (29050.008 Metric Tonnes), Thirumangalam (14582.907 Metric Tonnes) and Usilampatti (8046.271 Metric Tonnes).

Pulses

Table 23: Block wise Production of Pulses			
S.No	Blocks	Production in tonnes per year (2018-19)	
1	Usilampatti	2206.188	
2	Kallikudi	1486.958	
3	T.Kallupatti	1363.988	
4	Sedapatti	902.31	
5	Madurai East	862.604	
6	Thirumangalam	681.216	
7	Alanganallur	406.353	
8	Chellampatti	370.128	
9	Thiruparankundram	213.03	
10	Kottampatti	146.363	
11	Melur	142.355	
12	Vadipatti	137.943	
13	Madurai West	15.598	
	Total	8935.034	



Pulses is predominantly cultivated in Usilampatti (2206.188 Metri Tonnes), Kallikudi (1486.958 Metric Tonnes), T.Kallupatti (1363.988 Metric Tonnes) and Sedapatti (902.31 Metric Tonnes).

MARKETING AND STORAGE INFRASTRUCTURE

Table 22: Average Daily Santhai Sales of the Vendors					
Particulars	Male)	Fema	le	
	Number of % respondents		Number of respondents	%	
0 – 500	11	20	12	21	
500 – 1000	12	23	13	23	
1000 –1500	20	37	18	32	
1500 – 2000	8	16	8	14	
Above 2000	2	4	6	10	
Total	53 100 57 100				
Source: Primary Data					

The sales of 1/5th of male and 1/5th of female vendors are Rs 500/- per day. The daily turnover between Rs 500 and 1000 he is enjoyed by nearly 1/4th of the vendors, be it either male or female. It is interesting to note nearly 60% of the vendors enjoy at turnover of more than Rs 1000/- per day. Naturally the vendors are induced to market their produce in Uzhavar Santhai.



AGRIBUSINESS OPPORTUNITIES



Paddy

Rice varieties like White Ponni, CO 43, ADT 36, ADT 37 are cultivated in the seasons of Samba, Thaladi and navarai have huge potential. Madurai got 14th Rank for paddy cultivation. One of the TNRTP Block Madurai East is high in Paddy Cultivation.



Flowers

At present Jasmine is exported from Madurai to Various districts and all over the world and also few Jasmine processing units exist in Madurai. Logistical support is required for the transport of Jasmine and there is a potential for establishing additional Jasmine processing units. There is an increasing trend of cultivating flowers due to increased market demand. Nearer to Mattuthavani Flower Market located.

Flowers							
S No	Particular	Total Area in HA	Production in Tonnes	Rank	Contribution to state %		
1	Rose	69	638	5	15%		
2	Jasmine	1503	15150	1	25%		
3 Tube Rose 218 3662 5 18%							
Source :	Source : Tamil Nadu Agri Cultural Statistical Report						



Groundnut

In Madurai, Ground nut is cultivated in 2,582 Ha and it is ranked 24 in the area of production in the Tamilnadu. Source: Tamil Nadu Agri Cultural Statistical Report

At present Ground nut is also marketed through regulated markets, 10% also goes to other districts. 90% is bought by traders. 10% is sold as seed and 80% is used for extraction for oil. And there is a lot of opportunity to market by extracting clean quality oil. 48 Mara chekku Oil Manufacturers in Madurai City,

Types:

- Edible Oil Manufacturers
- Oil Manufacturers



Vegetables

TNRTP Blocks Madurai East and Melur Block are the vegetable cluster's which need logistics support to boost up marketing.

Horticultural Crops - Vegetables						
S No	Particular	Area in HA	Production in Tonnes per year			
1	Ladies Finger	403	3655			
2	Brinjal	354	2708			
3	Onion	467	2572			
4	Tomato	240	3482			
5	Cucumber	21	213			
6	Drumstick	536	34776			
7	Greens	70	1412			
Caurac	Course - Tamil Nady Agri Cultural Statistical Depart					

Source : Tamil Nadu Agri Cultural Statistical Report





Cotton

Madurai is ranked at 10 for cotton cultivation. The District offers ample scope for the field of textiles, readymade garments. Thiyagarajar Mills is known for production of three distinct count groups - Fine Count Combed Cotton Yarn, Hosiery Yarn & Coarse Count Combed Cotton Yarn is in Madurai. One of Our TNRTP Block Thiruparankundram is having lot of textile and Readymade garments mills. There are lot of scope for tailoring units and embroidery and dying units.

Horticultural crops

Banana, Mango, Guava and Chilli are the important horticultural crops grown. Horticulture is a supplementary source for agriculture sector and the way to attain self sufficiency in the district. The area under fruit trees and vegetables is large in Madurai district.

The largest integrated fruit market in the southern state of Tamil Nadu is built in Madurai. Fruit market operates in areas including Yaanaikkal, Vadakkumasivithi, Simmakkal, Vakkiel Pudhutheru.



There are over 300 shops here. These stores sell a wide variety of fruits, from grapes, oranges, guava, apples, jackfruit and bananas, from Kashmir to Kanyakumari. Hybrid fruits come from overseas. Fruit dealers from all over Tamil Nadu buy fruits from here. So it is trading for crores of rupees daily. The Simmakkal, Yaanaikkal Market has a large business from Night & Day Shifts.

Horticultural Crops – Fruits						
S No	Particular	Area in HA	Production in Tonnes per year	Rank in area of production		
1	Banana	2512	126326	9		
2	Mango	6431	22431	7		
3 Guava 1157 1569 2						
Source : Tamil Nadu Agri Cultural Statistical Report						



Millets

Fortunately or Unfortunately, Millet Production in TNRTP Blocks is very less. There is a huge potential for seed production (labelled seeds) by entrepreneurs. There is a potential of earning of upto Rs10000/ per acre of millet seed production. The varieties are long duration (Irrigated) and short duration (Rainfed). There is need to improve the infrastructure facilities such as thrashing floor and also processing facilities like grading machines. Processed Millet food such as aval, ready to

cook, pop up, Flakes have huge potential in Market.

Inland Fishing

Fisheries in inland waters have long provided an important source of food for mankind. The global population now stands at 7.6 billion and is projected to rise to 9.7 billion people by 2050. Inland capture fisheries have an important role to play in the global challenge to sustainably feed this growing population, as they deliver quality nutrition to some of the world's most vulnerable populations in a manner that is both accessible and affordable. Inland fisheries are critical for a group of developing countries



in the world, providing an important source of nutrition, food security as well as micro nutrients. These nutritional and food security benefits are an integral part of the agricultural landscape of these countries, thus inland fisheries are closely linked to food production, water and land management, biodiversity and ecosystems. Potential Area for Inland Fishing: 1. Usilampatti 2. Thiruparankundram 3. Vaadipatti.

S No	Name and address of	Inland fish	No. of fisherman	
	Fishing centres	Catch (Tonnes)	Value in Lakh	engaged
1	Sathiar Dam, Shozhavandan, Vadiyur Kanmai, Panchayat Tanks & PWD Tanks	2060	2060	2710

Source: Assistant Director of Fisheries (Inland) Development, Madurai.



RESOURCE INSTITUTIONS

- 1. Krishi Vigyan Kendra (KVK) Madurai.
- 2. TANUVAS TCE, Avaniyapuram Road, Thriupparankundram.
- 3. Agricultural College and Research Institute Trichy Madurai Road, Madurai.
- 4. Community Science College and Research Institute, Madurai.
- 5. Tamil Nadu Chamber of Commece & Industries, Madurai.
- 6. Small Industries Product Promotion Organization (SIPPO), Mapalayam, Madurai.
- 7. Confederation of Indian Industry (CII), KK nagar, Madurai.

Farmer Producer Organizations (FPOs)

There has been 11 FPOs functioning in Madurai District which were promoted by NABARD through NGOs. The details are as below:

	Farmer Producer Organisation						
		Table: 1	O Existing FPO De	tails:			
S No	FPO Names	Major Crops	Place	CEO	Year	Scheme	
1	Madurai Mavatta Thennai Marttrum Ethara Payirgal Producer Company Ltd.,	Coconut	Madurai Chellampatti, 35	N.Muthukumara Sivasankaran 9790554242	2016- 17	NADP	
2	Alangai Jallikattu Agri Horti Crops Farmers Producer Company Ltd	Paddy, Sugarcane, Fruits, Vegetables, Coconut, Milk, Flowers, etc	Madurai, Alanganallur, 46	Mr. G. Madhanagopal & 9965679937	2016- 17	NADP	

3	Alagar malayaan millets and other crops producer company limited	Coconut, Groundnut, Sesame, Millets, Paddy, Pulses, Fruits and Vegetables	Madurai, Kottampatti, 10	S. Vasu \ 9659294641, 8778014413\	2018- 19	NABARD	
4	Thangabhoomi Millets and other Crops Producer Company Limited	Millets	Madurai, Kalligudi, 16	K.Raja \ Mobile Number: 93440 37984	2016- 17	NADP	
5	Kottampatti Farmers Producer Company Limited	Coconut, Groundnut, Paddy	Madurai, Kottampatti, 27	N.Saravanan, 7871653988	2016- 17	NABARD	
6	T.Kallupatti Farmers Producer company limited	Black gram, Green gram, Cotton, Maize, Barnyard millet, Sorghum	Madurai, T Kallupatti, 25	G.Elumalai, 7200452340	2016- 17	NABARD	
7	Sirumalai Vegetables Farmers Producer Company (SVFPC)	Sirumalai Banana, Pepper, Coffee, Chow Chow, Honey, Beans, Lab Lab	Madurai, Vadipatti, 12	V.Logalakshmi CEO Mobile: 9384137950	2016- 17	NABARD	
8	Kallikudi Farmers Producer Company Ltd	Cotton & Pulse	Madurai, Kalligudi, 13	Praveenkumar.J	2015- 16	NABARD	
9	Madurai traditional crop producer company limited	Millet, Paddy and Vegetables	Madurai, Thirumangalam, 30	Ammaiyappan	2016- 17	NABARD	
Source	Source : Department of Agricultural Marketing and Agri Business.						

ALLIED SECTORS

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

Animal Husbandry

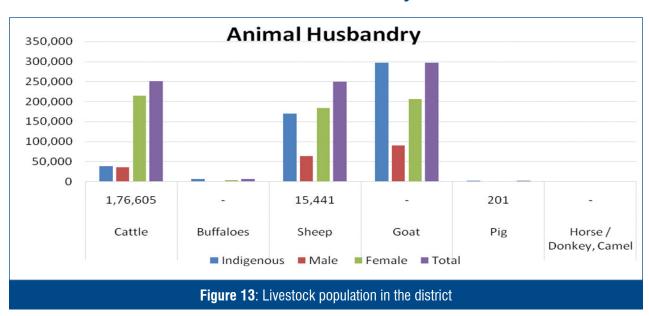


Table: 25 Animal Husbandry						
S.No	Cattles	Cross Breed	Indigenous	Male	Female	Total
1	Cattle	1,76,605	38,356	35910	2,14,961	2,50,871
2	Buffaloes	-	5301	972	4,329	5,301
3	Sheep	15,441	1,68,992	64443	1,84,433	2,48,876
4	Goat	-	2,97,052	91,138	2,05,914	2,97,052
5	Pig	201	1057	591	667	1,258
6	Horse/Donkey	-	249	206	43	248

Dairy Development

Madurai District is more of agriculture based area. Population of Cattle and Buffaloes are more in number. The milk chilling plant is available in Madurai City and Palamedu village. This District is getting 3.06 lakhs liters of milk from 603 nos of milk societies. Madurai Aavin is having chilling plant in Madurai City itself and Palamedu chilling plant is used for the benefit the rural people.

The Diary Development activities of Madurai District are as under:

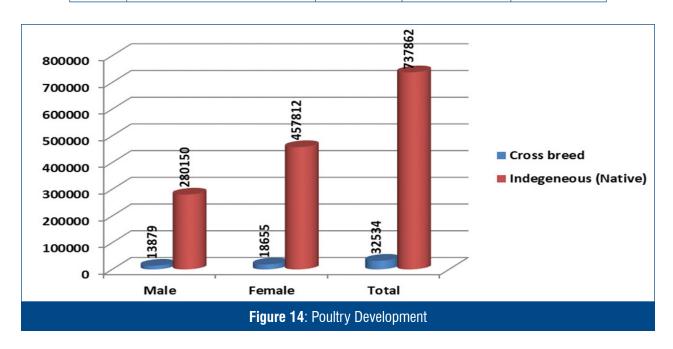
Table: 26 Dairy Developments				
S.No	.No Activities Nos.			
1	Dairy Unit	2 (Madurai District Co_ Operative Milk Producers Society, SNP milk)		
2	Milk Chilling Unit	3		
3	Milk Co-Operative Societies	603		
4	Quantity of Milk Producers	3.06 (Liters in Lakh)		

S No	Name of the Block / Mpty	No. of Milk societies	Quantity of milk produced (in litres) Flush Season	Quantity of milk produced (in litres) Lean Season	
1	Madurai East	16	1464	1261	
2	Madurai West	12	775	668	
3	Thirupparankundram	28	3790	3264	
4	Melur	53	20205	17418	
5	Kottampatti	18	8386	7230	
6	Vadipatti	25	5350	4612	
7	Alanganallur	42	8296	7152	
8	Thirumangalam	43	8500	7325	
9	Kalligudi	24	2905	2502	
10	Usilampatti	90	33835	29166	
11	Chellampatti	118	33730	29077	
12	Sedapatti	117	34930	30108	
13	T.Kallupatti	17	2820	2432	
	Total	603	164986	142215	
Source :	Source : Deputy Registrar (Dairying), Madurai.				

Poultry Development

Poultry rearing is one of the important activities of Animal Husbandry in the district. The district produced 32534 numbers of cross breed and 737862 numbers of Indigenous (Census 2011)

Poultry Developments					
Table: 27 Poultry Development					
S.No	Poultry Developments	Male	Female	Total	
1	Cross breed	13879	18655	32534	
2	Indigenous (Native)	280150	457812	737862	



Sericulture

Madurai District is having large no. of hand looms and power looms for weaving of silk and polyester sarees. More no. of Spinning Enterprises and few no of Dying Enterprises are functioning with permission of TNPCB in this District. Mulberry leaves are being cultivated in some of the areas for production of cocoons. Hence, there is scope for establishing Silk Reeling Center for manufacturing of Silk yarn, in this District.

Sericulture is an agro-based industry combining agriculture and industry. There are three main activities in Sericulture viz., mulberry cultivation, silkworm rearing and silk reeling. During 2009-10, the total area under mulberry cultivation as on 1.4.2010 was 132 hectares. The total production of reeling cocoons was 68.50 MTs, which was valued at Rs.107.19 lakhs. The production of raw silk in the same year was 9.89 MTs, valued at Rs.153.69 lakhs. There are around 1000 Micro tailoring and Readymade garments units in and around Madurai.

NON FARM SECTOR

Industrial Scenario

Having good connectivity in all respects, there is ample scope for all kinds of industries in Madurai Dist viz. Automobile, Chemical, Agro based, Textile, Logistics, Information Technology, Energy etc.

The District offers ample scope for the field of textiles, readymade garments, bakery units, and floriculture, dairy and cold storage units, Agro and Herbal products, Granite stones, Blue metal (jelly), Chamber bricks, Rubber and plastic based industries. Thiagarajar Mills is known for production of three distinct count groups - Fine Count Combed Cotton Yarn, Hosiery Yarn & Coarse Count Combed Cotton Yarn is in Madurai. There is also a very good scope for starting food processing and agro based industries.

In South India, Madurai is also one of the districts where rubber based industries operate on a scale in the district. These industries are involved in the production of gloves, sporting goods, mats, other utility products and automobile rubber components. TVS Srichakra (tyre manufacturing), Sundaram Industries (Rubber Division, Coach Division), Fenner India, Hi-Tech Arai Limited and Lanxess India are some of the rubber based industries in the city. The major consumers for the components in the city are automobile producers like General Motors, Ford, Toyoto and Honda. The city is home to one of the top motorcycle manufacturers in India, the TVS Group. There are many textile, granite and chemical industries operating in Madurai.

Madurai has been promoted as a second-tier city for IT. Software companies like Honeywell Technology Solutions operate their offices in Madurai. Software Technology Parks of India, an agency of the Government of India has authorized several such companies to receive benefits under its national information technology development program. The State Government proposed two IT-based Special Economic Zones (SEZ) in Madurai and these have been fully occupied by various IT companies.



Important Socio-economic Development in the District

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

The District offers ample scope in the field of textiles, ready-made garments, bakery units, and floriculture, dairy and cold storage units, Agro and Herbal products, Granite stones, Blue metal(jelly), Chamber bricks, Rubber and Plastic based industries. There is also a very good scope for starting food processing and agro based industries.

Existing Industrial Scenario

In Madurai District, industrial development is at a slow pace and there are vast disparities between different areas and taluks in terms of industrial growth.

Existing Industrial Estates in Madurai District

In Madurai District Three Industrial Estates are located at the following Places:

- 1. SIDCO Industrial Estate, K.Pudur, Madurai.
- 2. SIDCO Industrial Estate, Kappalur, Madurai
- 3. Hosiery Industrial Estate, Uranganpatti, Madurai.
- 4. Electrical & Electronic Industrial Estate, Kappalur
- 5. Automobile Co-operative Industrial Estate, Kappalur.

One Regional Testing Laboratory is functioning in the complex of SIDCO Indl. Estate, K.Pudur, Madurai. This assists the entrepreneurs in and around Madurai District by way of testing their raw materials and end products and issue Certificates. A separate Library is functioning within the Regional testing Laboratory, which helps the entrepreneurs to gain knowledge about the specific field of various SSI units and project reports.



Major Industries across Sectors

	Table 28: Major Industries across Sectors						
SI. No	Name & address of the unit	Product manufactured					
1	The National Co-op.Sugar Mills Ltd. B, Mettupatti PO Alanganallur	Sugar					
2	Kothari Pytochemicals International, Nagari	Calcium Sennoside Chlorpropamide Tolbutamide & Brucine					
3	Madurai Sugars Pandiarajapuram	Sugar					
4	TVS Sri Chakkara Ltd. Vellaripatti	Tyres & tubes					
5	E.I. Dupant Ltd. Therukkutheru	synthetic monofilament nylon & Indl. & Engg. finishes					
6	The Metal Powder Co. Ltd. Maravankulam	Non ferrous metal powder					
7	T.V.Sundaram Iyengar & Sons Ltd. Madurai.	Automobile works					
8	Fenner India Ltd. Kochadai	V & fan belt, Oil seals, Conveyer belt					
9	Madurai Dt. Co-op. Milk Producers Union Ltd. Madurai	Milk & milk products					

Major Large Scale Industries

- M/s. National Sugar Mills, Mettupatti, Allanganalur,
- M/s. Kothari Bio Chemicals Nagari, Madurai, (Calcium Sennocide)
- Sugar Factory at Panchayarapuram,
- M/s. TVS Chakra Ltd., at Vellaripatty (Manufacturing of Rubber Tyres)
- M/s. Hi-Tech Arai, M/S. Fenner India, Kotchadai(Manufacturing of V-Belts),
- M/s. TVS Sundaram Auto Components,
- M/s. Metal Powder Company (Manufacturing of Synthetic and Nylon Yarn. Teflon Liquid & refrigeration gas debulking.
- M/s. PRP Granites at Melur and M/s. R.K. Granites at Cholavandan.

Automobile Industries

Since Madurai is a business centre and having large Automobile component manufacturing industries, there is a need for setting up of large scale industry in this automobile sector at Kappalur. There are more than 300 nos of automobile spare parts dealers in Madurai District.

Auto Components Manufactures

Rubber Components: There are more than 65 nos of rubber components manufacture in and around Madurai.

Body Building Units: There are more than 40 body building units in Madurai for automobiles.

Auto Dealers: There are nearly 10 nos of car dealers in Madurai City itself.

Raw Material: Raw material such as Paint, Iron Steel, Tin sheets, Rubber sheets are available in Madurai.

Madurai Block wise Major Industries

	Table 2: 9 Block Wise List of Major Industries					
SI.No	Name of Block	Registered SSI units	Registered LMI units			
	Most Backward Blocks					
1.	Kottampatti	101	0			
2.	Sedapatti	147	0			
	Total	248	0			
	Backward Blocks					
1.	Alanganallur	139	01			
2.	Chellampatti	131	01			
3.	Kallikudi	128	0			
4.	Madurai (East)	590	0			
5.	T.Kallupatti	475	01			
6.	Usilampatti	365	0			
7.	Vadipatti	458	02			
8.	Madurai West	667	04			
9.	Melur	198	05			
10.	Tirumangalam	605	05			
11.	Tirupparankundram	1542	04			
	Madurai Corporation	12364	06			
	Melur Municipality	105	0			
	Silampatti Municipality	247	0			
	Tirumangalam Municipality	374	0			

Potential Areas for MSMEs

In Madurai district the following potential clusters are possible in future for the development of industry as well as for the up gradation of rural economy.

- Stainless Steels Utensils Stainless Steel Metal manufacturers, suppliers and exporters in Madurai
- Automobile Body Building Tata Ace Body Building & Bus Body Building Manufacturer in Madurai.
- General Engineering Madurai is a top company in the category Fabricators, also known for Shed Fabricators. Automobile Service Industries
- Appalam The Large Appalam Manufacturing Unit is located in Madurai.
- · Rubber Industries TVS Srichakra Ltd is one of India's leading two- and three
 - wheeler tyre manufacturer rolling out more than 26 million tyres annually,
- Plastic Industries.
- · Rice Mill, Dhall Mill and Oil Mill.
- Powerloom and Handloom

Table 30: Identified Industrial Clusters in Madurai district			
Name of the cluster	Location	Product	
Plastic	Madurai	Injection Moulding, Multi layer films, Packing	
Gold Jewellery	Madurai	Gold, Ornamental Jewellery	
Siddha / Ayurvedic Medicines	In and around Madurai	Indian System of Medicinal Products (Siddha, Ayurveda)	
Rubber	Madurai	V-Belts, Rubber Components	
Rice Mill	Madurai	Rice	
Rubber	Madurai	V Belts ,Rubber Components	
Plastic	Madurai	Injection molding	
Readymade Garments	Madurai	Garments	

Gold Jewellary Cluster, Madurai, has been approved for establishment of Common Facility Centre (CFC) under MSE-CDP scheme of Govt. of India/Govt. of Tamil Nadu. The CFC is under initial stage of installation of machineries.

Minerals

The Melur Taluk and Madurai North taluk in Madurai District are having enormous wealth of Granites. All over Madurai District, lot of minerals such as Sand, lime, Blue metal & quarts are available. More enterprises have come up in this district, using this mineral wealth and providing more employment. There are above 42 granite quarries in Madurai District.

TRADITIONAL SECTOR

Madurai's kitchen still rooted to soil

Pottery is one of the oldest industries which provide employment to rural people. Villagers around Madurai carry on the inherited skill with zeal as most of the southerners prefer to cook in earthenware, which gives the foods its authentic flavour.

In the era of cooking dominated by plastics and metals, pottery still finds its place in most kitchens of Madurai and its rural areas.

In the rural areas of Madurai, pottery is being carried on for ages and they are still being made with the same ardour. The potteries made in Madurai district have earned a reputation of its own because of the quality and the taste that it adds to the cuisine.

Pottery is selected based on two unique features. One is the light weight of the pottery. Compared to other potteries, Madurai's pottery is lighter in weight and is easier to use. Next character is the sound that emanates from the earthenware when it is knocked.

Many Villages in Madurai like Vilacheri, Lakshmipuram, Vadacheripatti, Melaanupanadi are involved in the production of potteries.

Embrace earthenware for health









Idols and Terracotta, Kollu Doll Making

Pottery has a rich tradition in Tamilnadu. This sector is characterized by low investment, operational flexibility, local resources and domestic and export opportunity.

A cottage industry where male and female, old and young artisans of madurai villages are involved in creating and shaping wide range of enthralling pottery idols and crafts. These artisans produce Kudil set for Christmas









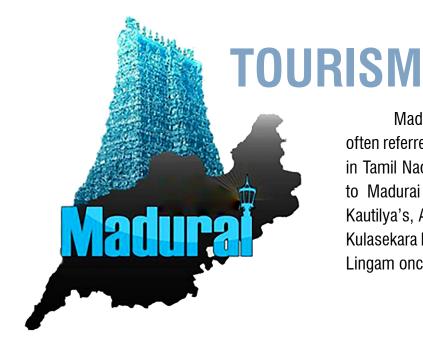
Handlooms and Silk Weaving

Madurai is a big commercial centre in the south. It is famous for its textile industry which is growing in stature with time. The city contributes immensely to the textile wealth of the county. The textile industry still uses its ancient techniques of weaving. The textile from the region is exported to all over the world. There is a vast variety offered by Madurai in both the textile material as well as the weaving techniques.

Spinning and weaving are widely practiced here. The city is known for its cotton textile industry, which also serves as the main occupation of its people. Cotton and silk threads are finely spun. The silk cloth is produced by tying knots on the ends. The muslin produced is very fine and carries floral designs of different colours. Embroidery and Dyeing is also done on the cloth, which serves to be an added attraction.

Earlier, apart from Silk and cotton, a fibre was made of wood which was called Sirai Maravuri and Naarmadi. Woollen goods are also sold in the markets of Madurai. Madurai specializes in fine gold-bordered veshtis and cotton sarees with fine Zari and fabric painting. These saris are popularly called the Madurai sungudi.





Madurai is two thousand six hundred years old and often referred to as the 'Athens of the East' is the oldest city in Tamil Nadu both historical and mythological. Reference to Madurai is made in the Indian epic Ramayana and Kautilya's, Arthasastra. Legend has it that the Pandya king Kulasekara built a great temple for Lord Shiva, a Swayambu Lingam once worshipped by Indra-king of Gods.

PLACES OF INTEREST - MADURAI DISTRICT

Sri Meenakshi Sundareswarar Temple

Synonymous with Madurai is the magnificent temple dedicated to Goddess Meenakshi. This is one of the famous Shakthi shrines in India. Drawing thousands of devotee every day. It has also been the center of Tamil culture, sponsoring literature, art, music and dance over the centuries. Legend has it that when the third and last Tamil Sangam (Academy of Tamil literature) met at Madurai, literary works were thrown into the temple tank, where a divine force caused works of merit to float and informs literature of sink.

The original temple was probable a modest structure built to gamin guidelines, However, it has grown with the grateful additions of pursuant dynasties and victorious monarchs into an enormous complex extending over an area of 65,000 sq. meters. Rectangular, in shape, the temple buildings are of lofty dimensions 847 feet in length and 793 feet in breadh. The central shrines are those of



Meenakshi and her spouse Lord Sundareswara. On the massive outer walls stand four majestic gopurams (towers). These rise gracefully, dominating the sky lines and are visible from quite some distance. The tower to the south is the tallest soaring to a height of 160 feet and was built in the 16th century. From the top of this tower one can get a panoramic view of Madurai and 11 other gopurams of the temple as well. The southern tower is beautified by over 1500 multi colors figures and images of the variety common to he South Indian temple towers. The oldest tower is the 13th century Eastern gopuram opposite to the Sundareswarar shrine, built by Jadavarman Sundara Pandiyan. Entry to the main temple is through a small door, while the Golden Lotus Tank is to its left. Further northwards, an exquisite brass-faced door gifted by Sivaganga Zaminder, forms the entrance to Sundareswara's shrine, surrounded by a large corridor lined with carved pillars-characteristic features of Madurai style.

A Striking feature of the temple is the astonishing structure known as Ayiramkal Madapam (Hall of Thousand Pillars) is the Outermost Corridor. The mandampam flaunts 985 Pillars, and each is an elaborate work of art. Each pillar features high ornate bold sculptures that come vibrantly alive. Viewed from an angle these 985 pillars appear in a straight line-an architectural master piece indeed. In the outer most corridor (Prakaram) are situated the matchless musical pillars carved of stone. When tapped, each pillar produces a different musical note.

Thirumalai Nayak Mahal

Another place of interest in Madurai is Thirumala Nayak Mahal is a graceful place built in Indo Saracenic style. The imposing edifice is famous for the stucco work on its domes and impressive arches. The Sorga Vilasam (Celestial pavilion) constructed entirely of brick and mortar without the support of a single rafter or girder is a marvel of architectural engineering. Among other striking features of the palace are the massive white pillars, several of which line the corridor that runs along the courtyard. Connected by high decorate arches, these pillars measure 20m in height and have a circumference of 4m. Elsewhere in the place, there polished black stone pillars of varying in hights. This palace was built in 1636.





Gandhi Museum

The museum contains a picture gallery of gandhian movement, a gallery of relics, khadi and village industries section and South Indian Handicrafts section.

Mariamman Teppakulam

Mariamman Teppakkulam is a beautiful square tank of huge size, 5km east of Madurai. This tank is the scence of a colorful float Festival held in January/ February to celebrate the birth anniversary of king. Thirumalai Kayak, who built this tank. The deities of Meenakshi and Sundareswara are placed in a gaily decorated float. Illuminated with hundreds of lights, this fascinating float is taken round the tank to the sound of traditional music . On the northern side of the tank is a temple dedicated to Mariamman (God of Rain), a famous village Deity of Tamilnadu.



Arulmigu Athi Chokkanathar Temple

Arulmigu Athi Chokkanathar Temple is located at the place called simmakkal 1 km from the Railways Junction and Periyar Bus Stand and near to Meenakshi Amman Temple. This temple is dedicated to Chokkanathar (Shiva) and Angayarkanni (Meenakshi).



Koodal Azhagar Temple

To the west of the city is this ancient Vaishnavite temple with beautiful sculptures situated ½ Km from the Railway Junction. The main God dedicated to Koodal Azhagar (Vishnu) and Godess Sridevi and Boomadevi. The main God dedicated in three postures – sitting, standing and reclining – each depicted one above the others.

Thirupparankundram

This temple is eight Kilometers south of Madurai junction, and dedicated to God Subramanya and the Godess Deivanai in wedding posture and is one of the Six abodes of the Lord Subramanya and the first abode also. The main sanctum sanctorum is carved out of a solid rock.





Thirumalai Natha Swamy Temple, Thiruvadhavur

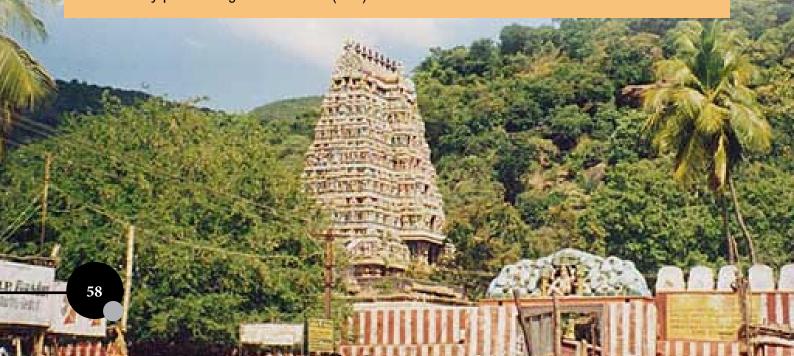
This temple is located 16 kms from Madurai city and Madurai Railway Junction and 10 kms from Melur in Madurai Tiruchirappalli Road. In this temple the main God is Vathapureeshwarar or Thirumarainathar and Godess Vedanayagi or Aaranavalli Thayar. Famous Saivait Poet Manickavasaagar wrote Thiruvasagam in this Temple.

Alagarkoil

About 21kms north east of Madurai stands the celebrated Vishnu temple dedicated to Kallalagar (brother of Godess Meenakshi) consort with Sridevi and Boomadevi. The temple is situated on a hill amidst panoramic surroundings. It's a small excursion centre also.

The Solaimalai (Pazhamudhirsolai) Murugan Temple is situated and it is one of the six abodes of Lord Subramaniya is in the same hill top about 4 Kms. In this temple the main God is Murugan (subramaniyan) consort with the Godess Valli and Deivanai.

These temples also contain some beautiful carvings, making a visit rewarding. It is also famous for the Lady poet who gave 'Nellikani' (fruit) to the God Subramania.





Yoga Narasingaperumal Temple - Y.Othakadai

Yoga Narasingaperumal temple is situated about 12 kms from Periyar Bus stand and 5 kms from the Central Integrated Mattuthavani Bus stand. The main God is Yoga Narasimhar and the Godess Narasinga Valli . The main sanctum sanctorum is carved out of a rock Yanai malai (Elephant Hills).

Kutladampatti Water Falls, Vadipatti

It is located 36 kms from Periyar bus stand on the way to Kodaikanal. An amusement park lies in a hill called "Sirumalai" with a natural beauty 7 kms. away from Kutladampati near Vadipatti Village. The height of the falls is 87feets. During holidays and festive days thousands of domestic tourist take bath and enjoy the natural beauty. Near this falls a 500 years old temple dedicated to Goddess Thadagai Nachiamman is there.





Edaganathaswamy Temple, Tiruvedagam

Near Solavandan

This temple is a Shiva Temple about 25 kms from Madurai near Solavandan at the River bank of Vaigai. This temple is dedicated to God Edaganathaswamy Temple, and Godess Elavar Kulali Amman.

Chithira Radha Vallaba Perumal Temple

Near Solavandan

(Vishnu Temple & Guru Bagayan Temple)

This temple is a Vishnu Temple about 38 Kms from Maduruai near Solavandan. The Main God here is Chithira RadhaVallalbha Perumal and Godess Sridevi, Boothevi and Shenbagavalli Thayar. Another famous Guru Bhagavan Temple

Kuruvithurai is also located here. This temple belongs to 12th Century AD during Pandiya King Vallabha Pandiya.



Kochadai Ayyanar Temple & Muthiah Temple

Village Deitie

It is located 5kms from Periyar Bus Stand. This temple village deity "Ayyanar" attract thousands of devotees from all over Madurai District. It is believed that those who proxy to this deity receive blessings of health and wealth.

JAIN TOURIST SPOT



Keelakuilkudi (Jain Tourist Spot)

The name of the hill itself explains its association with Jainism. This hill lies in the village Kilakuyilkudi, 15km west of Madurai near Nagamalai Pudukottai village. In this village three important Jain vestiges are found which speak about the existence and flourishing nature of Jainism during 9-10 BC. It is a picturesque place with a lotus pond at the foot of the hill Samanamalai.

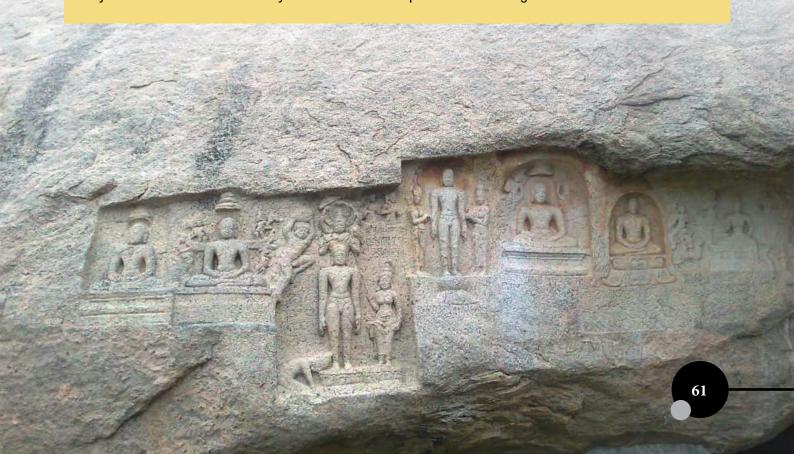
Arittapatti (Jain Tourist Spot)

This small village lies at a 25 km distance on Madurai Melur Main Road. The name itself reveals its association with Jain religion. There is a natural cavern in which numbers of rock beds were chiseled out for the convenient stay of Jain mendicants. On the forehead of this rock cave two early Tamil Brahmi inscriptions are engraved. On the other side of the hill Kalinja malai, an early Pandyan cave temple dedicated to Siva is found. The Shrine Sivalinga located in the central shrine is scooped from the natural rock itself.

Kongar Puliangulam

(Jain Tourist Spot)

This village lies at Madurai – Theni main road at 20km distance. Here on the western end of the Nagamalai range one natural cavern is found in which more than sixty rock beds are carved for the stay of Jain ascetics. Three early Tamil Brahmi inscriptions are also engraved on the base of the rock.





Tidiyan

(Village Tourist Spot)

Tidiyan is a village Tourist spot located about 35 Kms from Madurai toward Western side in Madurai to Theni Highways. It is famous for its natural beauty with a hill, Pond and the Kailasanathar Temple. During Full moon day local people used go for Girivalam around the Tidiyan Hill.

Sathuragiri Sundaramahalingam Temple

(Peraiyur - Shivan Temple) This temple is located around 80 kms, from Madurai city situated in Western Ghats. It is located in the Reserve Forest area. The Main God dedicate to Sindara Mahalingam (Shiva) and Many Tourist are coming during full moon day and weekends and lakhs of people are coming during "Aadi Amavasai." It is believed that 18 siddhars are living in this hills.

Perungamanallur

Perungamanallur is a place where 16 persons were shot dead during the year 1920 by the Britishers (under Criminal Tribes act 1911). This incident has been considered equal to Jalian Valabagh firing which occurred at Amrithsar in Punjab. Hence it is required to construct a Memorial Hall for the remembrance of the 16 martyrs at Perungamanallur in Madurai District under freedom fighters circuit.



Sathaiyar Dam

Picnic Spot

Sathaiyar Dam is located 27 Kms, from Madurai with natural beauty. It is located near to Alanganallur (8 Kms) where the world famous Jallikattu event will take place.

EXCURSION CENTRES AROUND MADURAL



Kodaikkanal

A popular hill station, 'Kodai' is located at an altitude of over 2,133 mts. (7,000 ft) in the Western Ghats. It is 120 kms. from Madurai and **80 kms** from Kodai Road Railway Station.

Vaigai Dam

This impressive dam is **69 kms.** From Madurai on the way to the Periyar Wildlife Sanctuary. It is a picnic spot.



Kadambavanam



Kadambavanam is set in an extremely picturesque scenic setting just twenty minutes from the city. Visit Kadambavanam and enjoy the highly evolved Tamil Classical arts. Feast your senses on Bharathanatyam, the divine dance form, with its graceful costumes and the soul stirring Carnatic music performed live at our auditorium. Treat yourself to a variety of colourful Tamil folk arts,

Karagam, Kavadi, Oyilattam, Thappattam, Poikal Kudhirai to name a few, in a picturesque open air setting and let 'the beat of different at Kadambavanam. With a wide variety art form, food choices, mythology and philosophies to be exposed, each day a varied selection is on offer. Kadambavanam works on a social entrepreneurship model involving local villages to run the show. Kadambavanam is dedicated to the cause of promoting the preserving our previous art forms and posterity and in the process providing dignity and livelihood to many an impoverished rural artist.

Megamalai

Located about **130 kms** from Madurai, it lies 150 meters above sea level. Megamalai is home to cardamom estates and tea plantations. It is also natural home to several animal species such as sambhar, elephant, tiger, cheetah gaur and spotted deer.

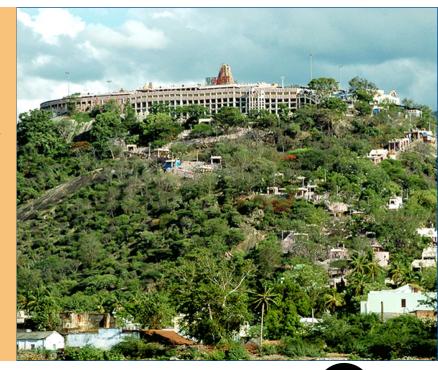


Suruli Waterfalls

Surely Waterfalls is **128 kms**. from Madurai on the way to Thekkadi (Periyar Wildlife Sanctuary) This is a also a good picnic spot.

Palani

The temple at Palani in one the six abodes of Lord Subramanya. Dedicated to Sri Dandayuthapani, the temple is built atop a 140m high hill and can be reached by either using the steps or the electrically operated winch. During the festivals of Penguin Utthiram (March – April) and Adi Krithikkai (July-August) Kavadi dancers dance and walk their way from far and near as they flock to the temple in hundreds, often in a state of trance. Winch available to go to the top of the hillock.





Srivilliputhur

The Vatapatrasayi temple at Srivailliputhur was constructed by the Nayak kings but its story goes a long way back to the Pandyan times when, moved by her devotion Lord Krishna married the poetess devotee, Andal. There are shrines dedicated to Vatapatrasayi (Krishna) and Sri Andal in this temple which has one of the most impressive gopurams in the South. Also noteworthy is the temple chariot which is decorated with carvings from the scriptures. The chariot festival attracts great crowd of devotees.

Kumbakkarai Falls

Kumbakkarai falls is located **105 kms** away from Madurai and 6 kms from periyakulam. This is also an important picnic spot.



Periyar Wildlife Sancutary (Thekkady)

Located in Kerala State, on the border of Tamil Nadu, it offers game-watchers an exciting prospect of viewing elephant, bison, sambhar, barking deer, wild boar, etc. in their natural habitat. It is **155 kms.** from Madurai.

Madurai Special Things to Purchase



Madurai Gundu Malligai (Jasmine Flowers)

Sungadi Sarees Cotton sarees with jari borders

Jigardhanda Ice cream

Vandiyur Tank

Picnic Spot

Vandiyur Kanmoi (Tank) is located within city 5kms from Railway Junction. It is an beautiful excursion centre in Madurai City/ District for the Domestic tourist to spend their weekends.

HEALTH

AIIMS (All India Institute of Medical Science) Hospital is to be established in Thoppur in Madurai. Apart from this, Meenakshi Mission, Apollo Hospitals, Vadamalayan multispecialty hospitals, Vikram multispecialty hospital, Velammal research institute are Located.

Potential in Health sector:

AllMS (All India Institute of Medical Science) Hospital – Madurai, Located in Tiruparankundram Block.

- By Using SHG Members, Food Enterprises focusing on diet food can be established inside and outside of the hospitals.
- New Enterprises can be created on House Keeping Activity.
- Higher secondary qualified women can be gathered into groups and can be given Lab technician training and labs can be established both inside the hospital campus and outside the hospital arena
- Personal care services can be given to the inpatients, who are unaccompanied by the relatives in the hospitals.

A group consisting of old age women who possess traditional knowledge of mother and baby care and middle aged women who can perform the care can be mobilized and a group of maternity care can be formed. The details of can be mobilized from the fertility centers and maternity hospitals and the services can be rendered.



SKILL GAP

The largest skill gap is at the semi skilled level at 67,000 in 2012-17 and 1.15 lakh in 2017-22. The estimation is to be an excess availability of human resources at the unskilled level. However, with an increasing number of youth opting for high level skills, and since the unskilled category includes those who enroll in short-term courses after Class 10,this gap is expected to increase by 2022. At the skilled level, the gap is estimated to be 35,000 in 2012-17 and 77,000 in 2017-22.

1. Lack of formalization of skills, especially at the lower skill levels

Unorganized growth of the services sector and the lack of formal skill training opportunities have led to the low availability of labour at the lower skill levels. While workers for jobs requiring higher level skills are sourced from different locations, retaining migrant workers at low-skilled jobs is seen to be a big challenge.

2. Incompetency of Students graduating from ITIs

The vocational education currently provided in the district does not equip the students with the necessary soft skills or the ability to handle new technology. Given the rapid pace of development, educational institutes, whether formal or vocational, should provide basic skills and foster the capacity to acquire new skills quickly. A practical component to the course will make student expectations with regard to their work more realistic, thereby leading to lower levels of attrition when they are employed.

3. Poor compensation for skills

The wages - differences for those who have completed school and ITI graduates are not significant, which prevents people from enrolling in such courses. This situation needs to be remedied too, with perhaps an extra focus on providing those enrolling in ITIs with tangible skills, which would enable them to capitalize on wage differential.

Identified scopes on skill gaps:

- Uneducated youths can be trained in low skill level jobs like laundry works, tailoring etc.
- Women cab services are very rare in city like Madurai, which has large potentials. Group of Women
 can be trained in driving autos, cars and women cab services can be set up.



- Soft skill Training can be given to the ITI graduates to meet the company's expectations with the help of prominent educational institutions in Madurai especially the youth welfare department of Madurai Kamaraj University.
- New technology courses can be offered to them along with their course work. This can be done by making a collaboration with the technical institutions like TCE, Anna university etc.
- Technicians like electricians, masons, carpenters, fitters, plumbers can be grouped accordingly
 and can be exposed to ICT (Information and communication technology) enabled service providing
 by creating mobile applications.
- Educated youths can be trained to operate motels, coffee shops, vulcanising shops in the national high way, because Madurai is well connected by the roads like NH49, NH 209, NH230, NH210
- Madurai has almost all the corporate beauty salons but it is very costly that every one can't afford
 to. Our Women can be trained professionally like the corporate salon stylists and a highly equipped
 beauty salon can be established which can offer all types of spa services and makeup's.

IT HUB

Chances for Madurai to be IT hub:

Entrepreneurs point to the timing of formation of IT Parks as the main reason for Madurai missing the first bus. It came at a time when global recession was setting in. Bigger players shelved their expansion plans at this juncture and were keen on consolidation. The scam that hit the IT major, Satyam Computers, resulted in withdrawal of intent. Apart from global and national factors, local conditions also contributed to the retardation.

Foremost, according to industrialists, is the absence of entrepreneurship zeal among the youth. Portrayal of Madurai in popular cinema as a city of violence has had a psychological impact on investors shying away from south. The political climate prevalent in the region has not helped in getting any investment. But hopes of a second chance for Madurai to capitalize on the IT wave have been rekindled as the industry is confident of an economic turnaround soon. The question in the minds of small and medium IT entrepreneurs of the region is why Madurai could not capitalize on its strengths like Coimbatore. Has "negative branding" of Madurai by mass media led to missed opportunities? The issue has become complex in the last few years, says R. Sivarajah, member of Confederation of Indian Industry's IT panel.

In the intervening years since the State Government unveiled its policy of promoting tier II and III cities and towns as IT destinations, real estate prices have spiraled to compete with Coimbatore.

Consoling factor:

Madurai is placed in the 'challengers' category along with big cities like Ahmedabad, Chandigarh and Nagpur. International air connectivity has become a reality with the introduction of a direct flight to Colombo. Now, Madurai has a clear edge over other tier II cities, though flights to Singapore and Gulf countries will be an added advantage.

The immediate need of Madurai is activation of the Ilanthaikulam IT Park. ELCOT announced the formation of IT Parks at Ilanthaikulam (28.91 acres) and Vadapalanji (239.58 acres) in 2008, with Special Economic Zone notification coming on April 30, 2008. It also revealed a plan to house the State's Disaster Recovery Centre at Ilanthaikulam.

According to early estimates, the llanthaikulam IT Park was then expected to provide direct employment to 20, 000 people and indirect employment for 45, 000 others.

The Vadapalanji IT Park was estimated to have the potential to employ 40, 000 people and offer indirect employment to 1.2 lakh people.

Opportunities Identified

- SHG Food hubs can be established in the IT parks
- Housekeeping services
- Youth trained in driving can offer cab services to the employees of the IT companies.
- Child care centre run by the SHG's can be set up in the IT parks for the welfare of women employees of IT companies.
- Car services, two wheeler services, water wash service point can be set up by the identified youths from the particular blocks.

BANKING PENETRATION IN THE DISTRICT

In Madurai, there are 436 branches of commercial Banks, 18 branches of Regional Rural Bank, 46 Branches of District Central Co-op Bank and a Branch of TIIC as of June'19. The number of public sector banks operating in the District is 14 with 500 branches and the number of private sector banks is 10 with 159 branches. There are no unbanked villages in the district.

Banking		
Table 31: Banking Statistics		
Total Banks	45	
No. of Bank Branches	464	
Commercial Bank Branches (Inside & Outside Madurai)	360	
Source: General Manager, Lead Bank (Canara Bank), Madurai	1	

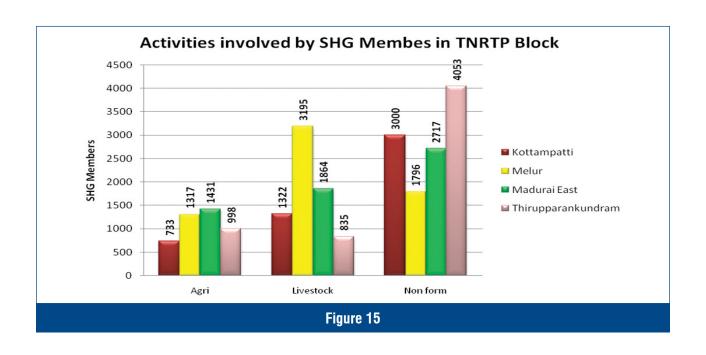
Annual Credit Highlights

The banks have projected Rs 5197.00 crores for 2019-20. Crop loan at Rs 3400.00 crores accounts for the major share of 65.42% followed by Investment credit under Agricultural sector at 14.91%, other Priority sector at 14.36% and Non-Farm sector at 5.31%.

SHG Bank linkage

Total credit linkage through SHG in the district in the year 2018-19 is 263.74 crore through 8552 SHGs. Financial literacy center is present in Madurai, INSETI (Indian Bank Self Employment Training Institute) is a RSETI model of training institute functioning in Madurai has completed six years of functioning.

	SHG – Livelihood Activities in TNRTP Blocks				
	Table: Activities involved by SHG Members in TNRTP Block				
SI.No	Name of the Block	Agri	Livestock	Non form	
1	Kottampatti	733	1322	3000	
2	Melur	1317	3195	1796	
3	Madurai East	1431	1864	2717	
4	Thirupparankundram	998	835	4053	
	Total	4479	7216	11566	



More number of SHG members involved in Agriculture activities in Madurai East Block. Major crops are Paddy, Sugarcane and Banana cultivation.

Huge numbers of SHG members are involved in Livestock activities in Melur Block especially milk animal and goat rearing.

Majority of the SHG members are doing Non-Farming activities in Thirupparankundram Block like Tailoring, Petty Shop, Appalam Making, Soft Toys, Artificial Jewellery etc.,

COMMODITY PRIORITIZATION

Commodity Prioritization

JASMINE	COTTON		
One of the oldest and best fragrant flowers grown.	Cotton is cultivated 6423 Ha in Madurai district		
 Jasmine is cultivated in 1537 Ha and yields about 12065 MT. First major producer of jasmine in Tamilnadu Madurai is a major production and trade hub Madurai malli bears a thick fragrance and bulky petals. Jasmine production is labour intensive Madurai malli is exported to Malaysia, Singapore, dubai and many western countries especially France. Small farmers are interested in cultivation of jasmine. A matured jasmine farm produces 3600 kg per acre in a season, 	 Cotton yield is about 2409 tonnes Rain fed farming, so partially preferred It is labour intensive, so small farmers prefer cotton farming Cotton has a constant demand throughout the nation. Rise in price is also significant. 		
CHOLAM	GREEN GRAM		
Cholam is cultivated 10649 Ha in Madurai district	Green gram is cultivated 2578 Ha in Madurai district		
Cholam yield is about 13854 tonnes	Cotton yield is about 1449 tonnes		
High demand for cholam in domestic market	Madurai is a large producer of green gram		
Overall Demand is high due to the health awareness among the public	Warm humid climates, red & black soil in Madurai are some of the promising factors for the good production of group grown		
 More chances for domestic export because consumption of cholam is high in other states due to its health benefits. 	 for the good production of green gram. It is a dry land crop, so suitable for production in and around Madurai. 		
Opportunities for making value added items in cholam in significantly good.	Green gram is a principal pulse of local population. So domestic demand is considerably high.		

GROUNDNUT READYMADE GARMENTS Groundnut is cultivated 1713 Ha in Madurai Tailoring jobs from home have always been popular with women, but it is taken to a district different level in madurai. Groundnut yield is about 1836 tonnes Many individual woman and women groups 70% of cultivation is rainfed and remaining are involved in this business 30% is under irrigated condition Since Madurai is an educational hub, many A dry land cultivated pulse trained women take orders from schools for High demand for groundnut in domestic stitching uniforms. market for oil extraction Madurai is a developing city and the Sandy loam, red soil and black silt lands of residents of Madurai are looking for Madurai are some of the promising factors fashioned apparels, which gives more scope

FOOD PROCESSING

for stitching modern outfits.

- Madural is the third largest city of Tamilnadu which gives more scope for food processing.
- Bakery foods are always in demand everywhere, there are modern bakery based MSME's in Madurai district processing biscuit, cookies etc.
- Madurai is the major milk processing cluster in the state, which gives scope for cattle rearing.
- Cultivating and value addition in mushrooms are growing in Madurai district.
- There are lot of scope for pickles, ready to eat, papad making.

for the good production of groundnut.

SWOT ANALYSIS OF MADURAI DISTRICT

SWOT (Strengths, weaknesses, opportunities, and threats) analysis is a framework used to evaluate a district's competitive position and to develop strategic planning. SWOT analysis assesses internal and external factors, as well as current and future potential

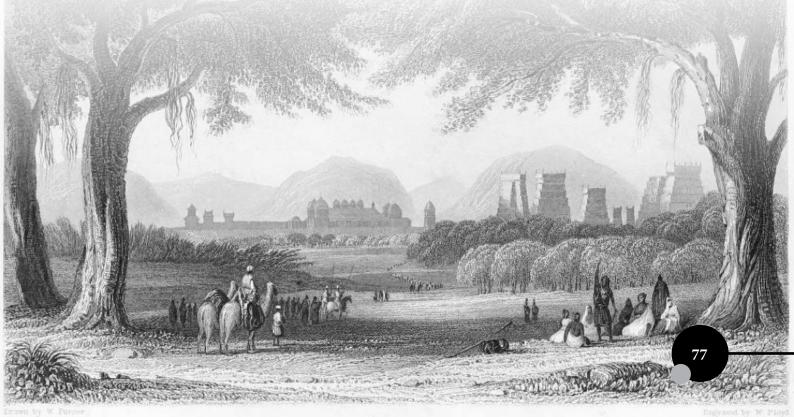
STRENGTHS	WEEKNESS		
Cultural Traditions	Lack of Heritage Measures		
Tourism	Lact of Tourist Aminities		
Educational Hub	Traffic		
Strategic Location	Congestion in Central Business Area		
Health Sector	Lack of Water Resource		
OPPRTUNITIES	THREATS		
Strong Tourism Destinations	Destruction of City's Image		
Good Urban Interaction	Digital Inadequacy in Water Management,		
Education Hub	Solid Waste Management		
Corridor Development For Investments	Encroachments		
Women Focused Employment and Business			
Developing Crafts And Weavers Village			

CONCLUSION

Madurai has significant potential to play a major role in the future development of Tamil Nadu. The city is growing rapidly, creating challenges in ensuring the provision of adequate infrastructure, housing, and basic services to meet the growing demands of its residents. Serving an extensive rural hinterland, Madurai is the most important trade and commerce centre in southern Tamil Nadu and has become the State's second largest city. The heritage assets which have made the city famous, and its role as a religious and pilgrimage centre and tourist gateway city to southern India generates an estimated 2,10,000 visitors to the city every day. Tamil Nadu State recognizes the important role that Madurai could play in helping it to realize the State's future growth potential and its objectives of boosting per capita income, enhancing levels of social development and providing high quality infrastructure comparable with the best in the world.

Madurai is an agrarian and industrially forward 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.

Under farm sector the commodities that could be prioritized are paddy and small millets (Cholam). Even though the farmers skip Paddy and prefer to cultivate millets, the highest cultivated crop remains paddy and cholam, maize, greengram, redgram, groundnut and blackgram comes in line respectively. Paddy is highly cultivated in Madurai east block and kottapatti block. Cotton is also widely cultivated in all blocks of Madurai district. It is cultivated under both irrigated and rain fed conditions and in all three seasons in a year. Cholam is highly cultivated in Madurai East and Melur blocks. Ground nuts are highly cultivated in tirupparankundram block.



Floriculture has good scope in Madurai. Jasmine has the good market potential. There is a high potential to improve the productivity in all the crops. In allied sectors dairy is very well established. Additional Feed mixtures unit is to be established which could supplement the dairy development. Stone carving is a major enterprise in Thirupparankundram block. Tourism is one major opportunity which could be promoted in Madurai district. The prospects for agro processing industries, small scale oil extraction units are high.

Table: 36 Details of Taluks, Blocks					
S.No	Taluks	S.No	Blocks	S.No	TNRTP Blocks
1	Madurai North	1	Madurai East	1	Madurai East
2	Madurai South	2	Thirupparankundram	2	Thirupparankundram
3	Madurai East	3	Melur	3	Melur
4	Madurai West	4	Kottampatti	4	Kottampatti
5	Melur	5	Usilampatti		
6	Peraiyur	6	Sedapatti		
7	Tirumangalam	7	Alanganallur		
8	Thirupparankundram	8	T. Kallupatti		
9	Usilampatti	9	Vadipatti		
10	Vadipatti	10	Chellampatti		
11	Kallikudi	11	Thirumangalam		
		12	Madurai West		
		13	Kallikudi		

Annexure: 1 Details of Taluks, Blocks



GLOSSARY

TNRTP Tamilnadu Rural Transformation Project

CLG Common Livelihood Group

FPO Farmer Producer Organization

ICAR Indian Council of Agricultural Research

KVK Krishi Vigyan Kendra

MSME Micro Small and Medium Enterprises

NABARD National Bank for Agriculture and Rural Development

NABFIN NABARD Financial services

NAF National Agro Foundation

NTFP Non Timber Forest Produce

PMKSY Pradhan Mantri Krishi Sinchayi Yojana

POPIs Producer Organization Promoting Institutions

SHG Self Help Group

SFAC Small Farmers Agribusiness Consortium

TANSEDA Tamil Nadu State Seeds Development Agency

TNIAMP TamilNadu Irrigated Agriculture Modernization Project

TNAU TamilNadu Agricultural University

VPRC Village Poverty Reduction Committee