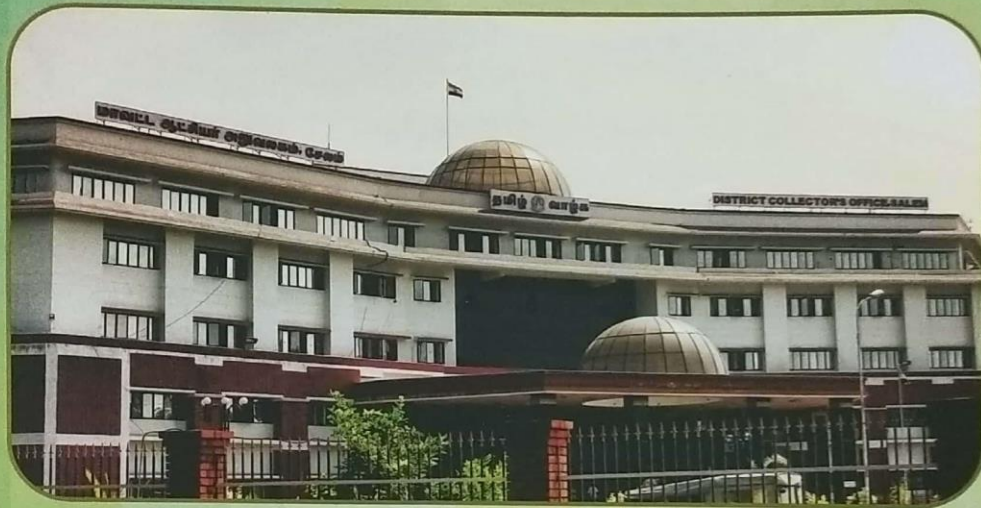
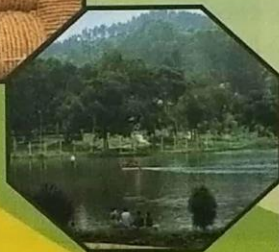




TAMILNADU RURAL TRANSFORMATION PROJECT SALEM DISTRICT



SALEM DISTRICT DIAGNOSTIC REPORT (DDR) 2019



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GLOSSARY

CBO	Community Based Organisation
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 Organisation Promoting Institutions
SHG	Self Help Group
SFAC	Small Farmers Agribusiness Consortium
TANSEDA	Tamilnadu State Seeds Development Agency
TNIAMP	Tamilnadu Irrigated Agriculture Modernization Project
TNAU	Tamilnadu Agricultural University
VPRC	Village Poverty Reduction Committee

A Guide to TNRTP:

The Tamil Nadu Rural Transformation Project (TNRTP) is an innovative World Bank assisted project that aims at rural transformation through strategies that focus beyond poverty alleviation by building sustainability and prosperity of rural communities through enterprise promotion, access to finance and employment opportunities.

Tamil Nadu Rural Transformation Project builds on existing institutional capital and investments made in the Pudhu Vaazhvu Project and Tamil Nadu State Rural Livelihoods Mission to harness the institutional and knowledge capital for promoting inclusive economic development and growth in rural areas through business promotion, value chain development, and skilling for youth for employment generation in Salem District

The **Objectives of Project** is to “To promote rural enterprises, access to finance and employment opportunities in selected blocks of Tamilnadu.

The **Project Beneficiaries** are SHG households, who have basic level of assets, resources and skills created by the previous projects: the focus will be on women, scheduled tribes, scheduled caste, differently abled, youth and aspiring entrepreneurs. The beneficiaries will be producer households, aggregated into producer groups/producer collectives and individual entrepreneurs across farm and non-farm sectors in the selected project blocks.

1.0 Executive Summary of District Diagnostic Study

The District Diagnostic Study makes to study and prioritize the commodities which focused on farm, off farm and non-farm sectors and based on their potentiality in Salem District. Further to the secondary data collected, template using criteria like number of producer’s involved,

comparative advantage etc. was created to finalize the commodity under farm and non-farm sector.

- (1) To assess the socio-economic challenges and opportunities for the identification of cross-cutting /binding constraints to inclusive growth at the district level, and
- (2) To identify and prioritize current and potential value chains.

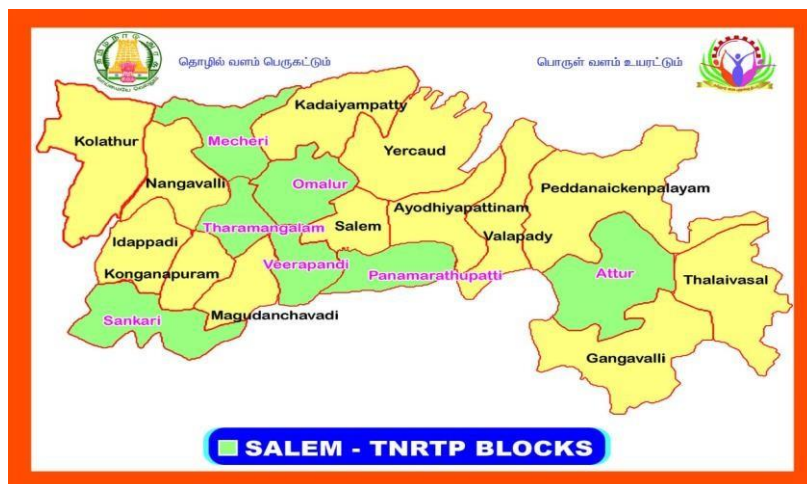
The study broadly analyses the indicators, such as social profile, rural profile, urbanization trends and labour mobility and the economic indicators; a sectorial analysis – agriculture, allied, non-farm including manufacturing and service sectors; the current status of existing industries and the growth trends; the potential economic growth centers within the districts and perceived gaps in the existing ecosystem for promoting and nurturing sustainable MSEs; sector-wise and block-wise presence and growth trends of MSE; existing and potential value chains in the sectors; and key private/public sector players currently operating in the district. The study tries to understand the factors contributing to rural economy through employment generation and high value economic activities thus resulting in increase in the household income.

Methodology

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

2.0 SALEM - At a glance

Salem is located at 11.67°N 78.14°E at an average elevation of 278 m (912 ft). The city is surrounded by hills: Nagaramalai on the north, Jarugumalai on the south, Kanjamalai on the west, Godumalai on the east and the Shevaroy Hills on the northeast.



The name 'Salem' has its roots in the Sanskrit word 'Sailam' Meaning Mountain, as the district has many mountain ranges of

the Eastern Ghats. The economy is mainly agrarian and industrialization in urban biased.

As per the 2011 Census, the district has a total population of 34.82 lakh comprising of 17.82 lakh males and 17.00 lakh females. **Salem district ranked 5th in population and 9th in density of population** among the districts of Tamil Nadu. *Source: Census 2011*

Salem District is surrounded by Dharmapuri district in the north, Erode and Namakkal districts in the south, Villupuram district in the east and the Western Ghats in the west. Salem is ranked as the ninth district in Tamil Nadu with regard to the area of the district.

The total geographical area of the district is 5205 Sq Km, which includes 4993 Sq Km in rural and 212 Sq Km in urban and comprising of four Revenue Divisions named Salem, Attur, Mettur and Sangakiri. Salem District has four Municipalities, 13 taluks, and 20 blocks including one tribal block, 33 Town Panchayats, 385 Village Panchayats and 640 Revenue Villages.

In Salem District, TNRTP Project will be operational in 7 blocks covering 154 village panchayat viz Omalur, Tharamangalam, Mecheri, Panamarathupatti, Veerapandi, Sankagiri and Attur blocks

3.0 Socio Demographic Profile of the District

3.1 Population:

The total population of this district 3482056 comprising 17,81,571 Men and 17,00,485 women as per 2011 census. The Population growth is 19%. The urban population is 17,74,122 constituting 51 % of the total Population, the remaining 49% ie. 17,07,934 is rural population. The density of the population is 665 per sq.km. The total literate among male are 1285107 and that of female are 1000455. The Average literacy is 72.86%. The details of population in Salem district as per 2011 census are furnished in Table 1

Table1. Demographical Details - Salem District

S.No	Particulars	Unit in ('000)	Percent
1	Total Population	3482056	
	Male	1781571	51
	Female	1700485	49
2	Rural Population	1707934	49
3	Urban Population	1774122	51
4	SC Population	580512	17
5	ST Population	119369	3

Source: Census 2011

From the above table, it could be noted that the total population of the district was 3482056 out of which male and female accounted 51% and 49% per cent respectively.

Decadal growth of the population

The district population is 3482056 in 2011 as against 3016346 in 2001. The decadal growth rate of the population in the district is 15.37 percent. The density of the population in the district is 665 persons per sq.km in 2011, as against 660 in 2001 which is due to the increased population as shown in Table (2)

The urban population is 1774122 constituting 51 % of the total Population, the remaining 49% ie.1707934 is rural population. It shows that the increase of urban population is comparatively at a faster rate than the rural population.

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

S.No.	Indicators	2001	2011
1	Population	3016346	3482056
2	Decennial growth(percent)	(+)10.87	(+)15.37
3	Density of population per sq.km	575	665
4	Urban population(percent)	51	49
5	Sex ratio	929	954
6	Percentage of 0-6 years old	11.95	11.06

Source: Census 2001, 2011 Salem District Statistical handbook 17 - 18

3.2 Sex Ratio

Salem district has the second lowest sex ratio of 954. However, it is significant to note that the Salem district was reported as lowest sex ratio (929) in 2001 has improved to 954 in 2011 given in Table 2. Also as per Census 2011, the Child Sex Ratio was 916 which is less than State Average of 943.

3.3 Literacy

The average literacy rate of the literacy rate of the district is 72.86% which is lower than state figure of 80.09%

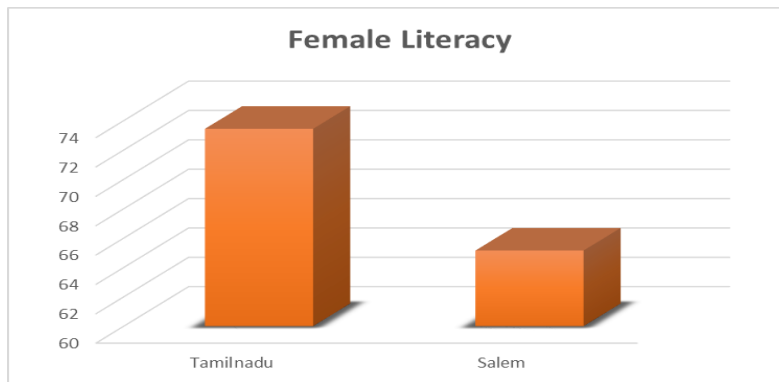


Figure 1 Source: Census 2011

The Total Literacy rate is 72.86%. The female literacy is 65.15 percent (2011) which is increased from 55.20% (2001) and also less than the state figure of 73.44% percent in 2011 and (Figure-1)

3.4 SC, ST Population

As per Census 2011, Scheduled Castes and Scheduled Tribes accounted for 16.67% and 3.43% of the population respectively which is lower than the state percentage of 20.01% and higher than state 1.10% respectively. The district has recorded the 4th highest Scheduled Tribes population of 3.4% among the district.

The SC population is higher than the district percentage in blocks of Omalur 23.46%, Ayothiyapattinam 22.11%, Thalaivasal 28.36%, Kadayampatti 18.18%, The ST population is higher than the district population in Pethanaickenpalayam block and Yercaud block 7.25%

There is a positive change observed with regard to increase of SC and ST population. But overall in the district the ST population has increased by 2.1 percent in 2011. There is a possibility of migration of ST population to the plains in the district, which needs to be studied.

3.5 Occupation Profile

Table 3.Total Workers and Non workers

Category	2001	percent	2011	percent
Population	3016346	100.00	3482056	100.00
Workers	2176294	72.15	2676656	76.87
Main	1433960	65.89	1969484	73.58
Marginal	742334	34.11	707173	26.42
Non-workers	840052	27.85	805400	23.13

Source: Census 2001 and 2011.

The percentage of total workers in Salem has increased from 72.15 percent to 76.87 percent during 2001-2011. This reflects a positive trend in employment in the district, which is due to the increase in proportion of main workers from 65.89 percent to 73.58 percent and reduction of marginal workers from 34.11 percent to 26.42 percent and comparing with non-worker decreases from 27.85 to 23.13% shows increase in employment

3.6 Social Capital :

Social Capital created through 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 SHGs federation is functioning in the district and they are supporting and monitor the SHGs financial performance. The status of CBOs in the district are

- 13009 SHGs with 169117 members
- 444 VPRCs
- 385 PLFs and
- 252 CLGs

The average membership is highest in Vazhapadi block which is 18 member per SHG and the lowest of 12 members were found widely in all blocks. A majority of the community based organizations in Salem district focus on poverty reduction and development and a few organizations recently emerged like Farmers Producer Organizations (FPOs), cluster and commodity groups were also functioning with the focus on enterprise promotion.

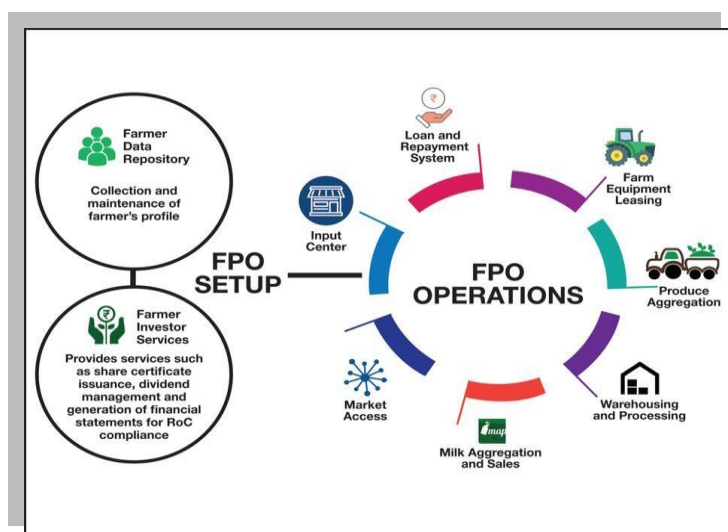
3.7 Farmer Producer Organisations (FPOs)

Bringing '*corporate culture*' into the farmer owned and managed FPOs

There are **15 Farmer's Producers Companies** in Salem district, of which 7 have been promoted by NABARD through the Producer Organisation Promoting Institutions (POPIs), 5 by SFAC, and 3 by the Departments of Agriculture and Horticulture under Collective Farming. These FPCs will be ready to borrow from banks. Under the Collective Farming Scheme, the Departments of Agriculture and Horticulture will be promoting and nurturing about 3 Farmers' Producers Companies in the district and NABARD is also providing support for capacity building of four more FPCs through POPIs, which will also be ready to absorb credit.

Some of the FPOs are nascent in nature with membership of 500 to 1000 members. They have been involved in provision of Kisan Credit

Card, Insurance and credit for purchase of milch animals. Most of the FPOs are working on Cholan, Pulses, Maize, Groundnut, Black Gram, Minor millet, and Paddy and few of them have installed Value added Units.



Doubling farmers income by 2022

A FPO named Vasishta in ethapur, Kalanjiyam in Veerapandi and Vallalar in Vanavasi which has more than 3 years old have mobilized more equity, increased their turnover and seen profits. Some FPOs found recently incurred loss due to commodity purchase. The FPOs need logistical support as mostly the commodities are transported by two wheeler and buses. NABFINS and NABKISAN are the major lending agencies through POPIs and along with NABARD. There are seven FPOs promoted by NABARD with the support of these POPIs in the Ethapur, Vazhapadi, Vanavasi, Inam bairoji, Thalaivasal, Kanjamalai and Mettur.

Organising them into FPOs will benefit them from economies of scale in purchase of inputs, processing and marketing of their produce.

The FPOs are also involved in Agriculture trading in Paddy, Pulses and Groundnut. Taking up food processing as an activity through Farmers' Producer Organisation would fetch additional income. Other than these the FPOs have been formed out FIGs by the department of agriculture in Salem District. NABARD has also promoted a Powerloom Weavers Producers Organisation in Kanjamalai Textile Powerloom Weavers Producers Company Ltd at Elampillai covering more than 350 weavers.

Organising them into FPOs will benefit them from economies of scale in purchase of inputs, processing and marketing of their produce,

TNRTP also aims in organising the farmers into collectives for the benefits of

- Cost of production can be reduced by procuring all necessary inputs in bulk at wholesale rates
- Aggregation of produce and bulk transport reduces marketing cost, thus enhancing net income of the producer
- Building the scale through produce aggregation attracts traders to collect produce at farm gate and Price fluctuations can be managed
- Access to modern technologies and capacity building
- Access to financial resources against the stock, without collaterals by sources and improving bargaining power

4.1 Country Side

Salem is located at 11.67°N 78.14°E at an average elevation of 278 m (912 ft). The city is surrounded by hills: Nagaramalai on the north, Jarugumalai on the south, Kanjamalai on the west, Godumalai on the east and the Shevaroy Hills on the northeast. Kariyaperumal Hill is in southwestern Salem. The Thirumanimutharu River flows through the city, dividing it in two. The fort area is the oldest part of Salem. Salem lies in the foothills of Shevaroy hills which houses the famous hill Station Yercaud.

The district receives the rain under the influence of both

4.2 Climate and Rainfall

Southwest and Northeast monsoons. The Northeast monsoon chiefly contributes to 370.5 MM rainfall and South west monsoon contributes 440.6 MM in the district. Rainfall is minimum around Sankari (750 mm) in the western part of the district. It gradually increases towards north, north east and attains a maximum around Yercaud (1594.3mm) in the northern part. In January and February are generally pleasant; the hot summer begins in March, with the year's highest temperatures during April. Pre-monsoon thunderstorms occur during April and May. The Southwest monsoon season lasts from June to September. The northeast monsoon occurs from October to December

4.3 Geology

The Salem district is underlain by Archaean crystalline, metamorphic complex. The geology of the district is very complicated owing to recurring tectonic and magmatic activities in the pre-cambrian period. The minerals like magnesite, bauxite, iron-ore, limestone and chromite are the major contribution made to the state by the district. The socio economy of the Salem district is mainly based on the mining industry that has to be carried out in optimum utilization of natural resources for the sustainable development of mankind and environment

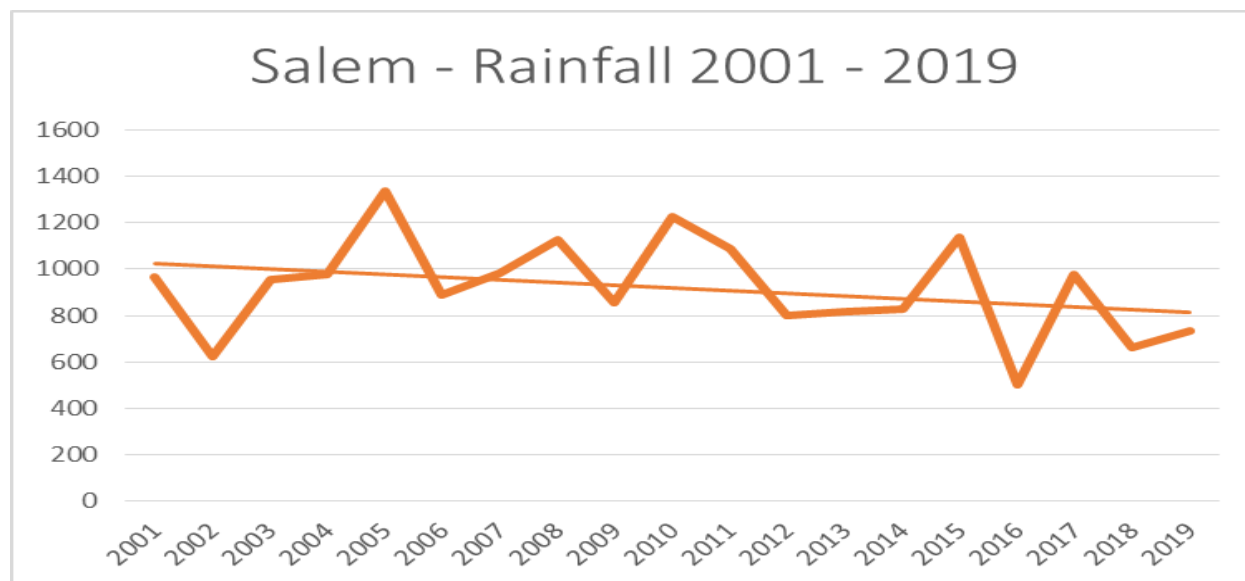
Table 4 Annual Rainfall during the last 19 years

Year	Winter	Summer	S.W Monsoon	N.E Monsoon	TOTAL
2001	4.7	194.0	523.7	244.8	967.2
2002	4.4	143.0	255.4	220.9	623.7
2003	1.8	172.1	410.7	368.4	953.0
2004	1.3	388.0	283.3	305.9	978.5
2005	5.9	254.9	408.7	665.0	1334.5
2006	4.0	148.9	363.2	372.1	888.2
2007	1.1	138.2	451.2	394.0	984.5
2008	12.8	271.3	455.3	388.1	1127.5
2009	2.4	190.3	418.8	243.2	854.7
2010	1.6	163.1	498.4	562.8	1225.9
2011	7.5	214.9	427.2	436.2	1085.8
2012	0.0	116.6	412.3	269.4	798.3
2013	17.6	74.7	470.5	252.3	815.1
2014	0.9	150.8	369.1	309.2	830.0
2015	27.8	309.1	354.1	448.6	1139.6
2016	0.0	123.0	292.0	88.0	503.0
2017	11.6	185.0	446.5	331.5	974.6
2018	13.8	160.4	299.9	189.1	663.2
2019	6.8	136.0	538.6	52.0	733.4

Source: Salem Agriculture Handbook 2017-18

The above table indicated that the normal annual rainfall over **Salem district for the last 19 years is about 997.9 mm.** The Average Precipitation is 40.1 MM. The Average of 34*c in high climate and 22.4*c in low climate in Salem.

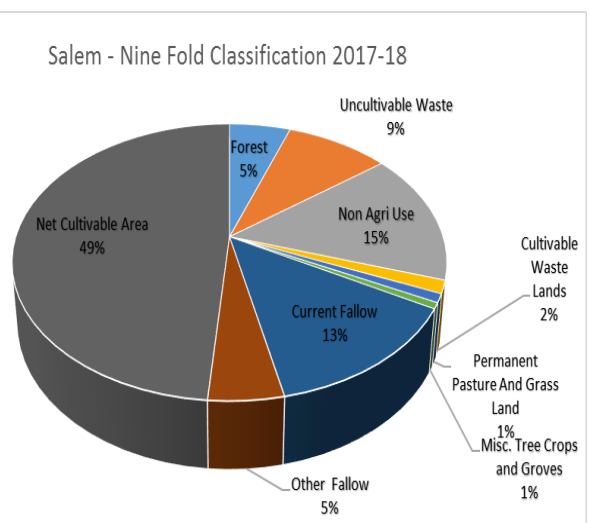
Figure 2 Trend in rainfall Source: Salem Agriculture Handbook 2017-18



In 2016, the total rainfall is 503 which is most below the average of 997.9. An analysis of the rainfall trend has been on decreasing for most of the years compared to State rainfall trend.

4.4 Nine Fold Classification 2017 -18 *Figure 3 - Land Utilization 2017 -18*

The total geographical area of Salem district is 4,17,426.48 hectares. The total gross cropped area of the district was 2,31,886 and net area sown was 2,03,115.21 hectares in 2017-18. Further it could be



seen that the forest area was 5.14 per cent of the total geographical area. The net area sown is 2,03,115.21 hectares which accounts to 49% of the total geographical area. The area sown more than once is 39752 hectares (2017-18) which shows the potentials of a second crop dictated

by the behavior of the monsoon and corresponding availability of water in surface / sub surface storages *Figure 3 Source: Salem - Agriculture handbook 2017-18.*

4.5 Soil

The predominant soil type in Salem is Red Calcareous contributing 247,391 area in ha. Red non Calcareous contributing 50,212 area in ha. Brown non calcareous contributing 38,267 area in ha. Mixed soil contributes 21776 area in ha. Red loam was found in all the taluks with more concentration in Attur Taluk. Red sand was also found in all the taluks, but predominantly in Mettur, Omalur and Sankagiri taluks. Different types of soil like Black Soils, Alluvial Calcareous ferruginous loamy and sandy loamy were seen extensively throughout the district and black loam was found.

Table 5 Soil Type of Salem district

S.No (1)	Type of Soil (2)	Places in District (3)
1	Red Calcareous	Parts of Salem, Athur, Sankagiri, Mettur and Omalur taluks
2	Brown Soil Calcareous	Parts of Salem, Mettur and Omalur taluks
3	Red Collurial Calcareous	Parts of Salem, Sankagiri, Mettur, Omalur taluks
4	Red Collurial Non Calcareous	Parts of Sankagiri and Mettur taluks
5	Black Soils	Parts of Salem, Athur, Sankagiri, Mettur and Omalur taluks
6	Alluvial Calcareous	Parts of Sankagiri and Mettur Taluks
7	Brown soil Non Calcareous	Yercaud Taluk

Source: District Statistical Handbook 17-18

4.6 Water Resources

4.6.1 Rivers

There are no major rivers in the district, Tirumanimuthar, Vasishta, Sarabanga, Upper Vellar and Suvethanadi are seasonal rivers. Cauveri is also flow some where in the district. There is no perennial river in the district.

4.6.2 Reservoirs The reservoirs are Mettur Dam, Anaimaduv and Kariyakoil Reservoir. Stanley Reservoir is one of the largest fishing reservoirs in South India. Its main source of water is the river Cauvery. Three main tributaries such as Palar, Chennar and Thoppar enter into the Cauvery on its course above Stanley Reservoir.

5.0 Status of groundwater

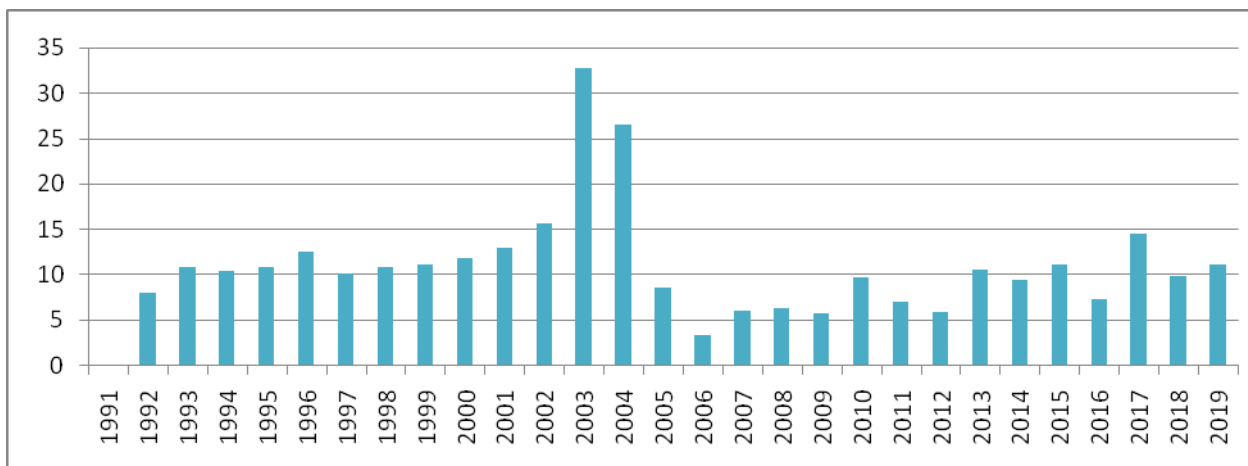
Table 6 Block Wise of details of Ground Water Potential of Salem District

Over Exploited (>100%)	Critical (90%-100%)	Semi Critical (70%-90%)	Safe (<70%)
1.Attur, 2.Edappadi, 3.Ernapuram, 4.Gangavalli, 5.Kadayampatti, 6.Karippatti, 7.Kattukkottai, 8.Konganapuram, 9.Malliyakarai, 10.Nangavalli, 11.Omalur, 12.Palamalai, 13.Panamarathuppatti, 14.Pethanaickanpalayam 15.SalemTown, 16.SankariEast, 17.SankariWest, 18.Semmandappatti, 19.Thalaiivasal, 20.Tharamangalam, 21.Thirumalaigiri, 22.Valasaiyur, 23.Vazhappadi, 24.Veerapandi, 25.Vembadithalam, 26.Yethapur. 27.Mecheri.	1.Poolampatti, 2.Suramangalam	1.Karupur, 2.Kolathur, 3.Belur, 4.Pottaneri, 5.Thevur, 6.Veeraganoor, 7.Mettur.	1.Arunoothumalai, 2.Kalrayanmalai, 3.Puthur(S), 4.Vellakkadai, 5.Yercaud, 6.Patchamalai

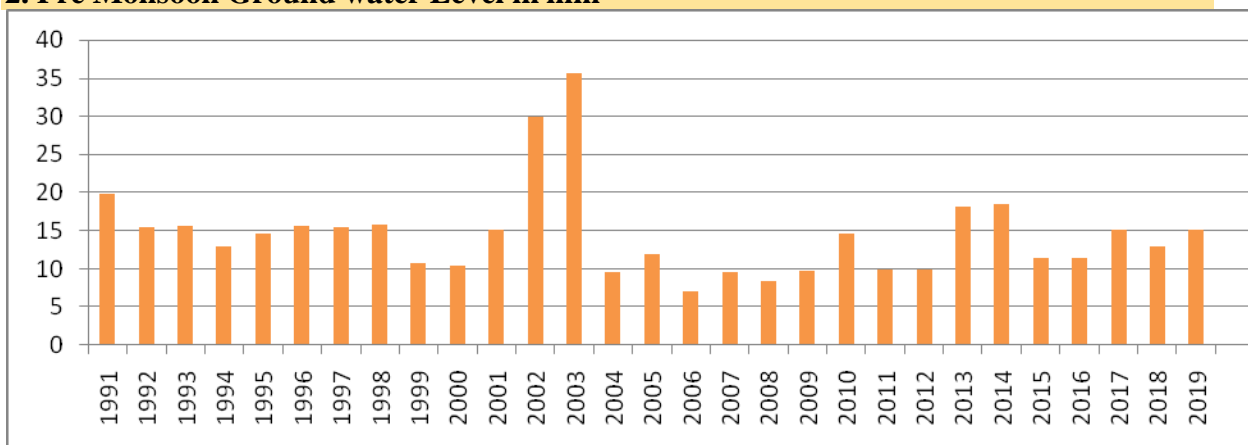
Source: Department of Water Supply And Drainage Board, TWAD Salem – **Bold refers TNRTP Blocks**

From the table, it could be seen that **29% ground water is over** exploited in the blocks of **Attur**, Ayothiyapattinam, Gangavalli, Edappadi, Kadaiyampatti, Kolathur, Konganapuram, Magudanchavadi, **Omalur**,

Figure 4 :
1. Post Monsoon Ground water Level in mm



2. Pre Monsoon Ground water Level in mm



The Average Pre Monsoon Ground water Level is 10.75 and average post Monsoon Ground water Level is 14.5 mm which is higher than state average 13.55 and the ground water irrigation is widely distributed covering all the blocks and major surface water source is restricted to only few pockets of the District. Hence, the emphasis is now on shifting to optimise the groundwater availability to avoid over exploitation of groundwater and protect the environment. Figure 4 reveals the trend in Pre and post Monsoon Ground water Level for irrigation

6.0 District Infrastructure

6.1 Power Supply

The Government of India had launched the Rajiv Gandhi Grameen Vidyutikaran yojana (RGGVY) - a centrally sponsored scheme with a goal to create electricity infrastructure to all un-electrified villages/un-electrified hamlets and to provide access to electricity to all households. Due to this scheme, Power supply is normal in all blocks of Salem. But in particularly hilly areas, low voltage problem is felt, especially in the hamlets in interior hilly areas. To minimize the current consumption charges in the Panchayat, efforts were taken to utilize solar power lights as an alternate and renewable source in Salem District.

6.2 Rural Electrification

Overall, 99 percent of the hamlets in Salem are covered under rural electrification. 10203 habitations in Salem were rural electrified and 15 were not electrified due to power issues.

Source <https://www.tn.gov.in/deptst/electricity.pdf>

6.3 Road and Rail Network

The district has a good road and rail network connecting to major towns and cities. 814.28 Km of Broad gauge and 45.88 km of Meter Gauge are found in Salem district. The road network in the district was well developed with 182.600 Km of National Highways, 2441.163 Km of State Highways, 1181.884 Km of Corporation/Municipal roads, 7255.93 KM of panchayat roads, and 1134.205 KM of Town panchayat/township roads and 85.985 KM of forest roads. The district headquarters is linked with the State capital by marvelous rail and road. There is an upcoming road expressway from Salem to Chennai in vision.

Source: Salem District Statistical Handbook 2017-18

6.4 Airport

Salem Airport is located on the Salem-Bangalore Highway (NH 7) in Kaamalapuram about 15 KMs from the city that operates flights to the city from Chennai to Salem in the name of TruJet. Ample potential to export Textiles, Yarn, Granites, Tapioca products, and Agricultural Horticultural crops, Readymade Garments, Coir products & Steel fabrication could be tapped.

7.0 Potential Opportunities in Farm Sector

7.1 Land Holding Pattern of the farmers -

There are five categories of land holdings. They are marginal (below 1 ha), small (1-2 ha), semi-medium (2-4 ha), medium (4-10 ha), large (10ha and above). Majority of the farmers in Salem district have belongs to less than Below 0.5 ha & 0.5 to 1.00 ha in operational land holdings. *Source : Salem District Statistical Handbook 2017-18*

Table7 Number and area of operational land holdings

Category	Operation Holders				Holders Area			
	S.C.	S.T.	Others	Total	S.C.	S.T.	Others	Total
1	2	3	4	5	6	7	8	9
Marginal	14870	12276	206088	233234	6113	6014	84134	96260
Small	2422	4725	51786	58933	3218	6899	714157	724273
Semi Small	505	1644	19081	21230	1291	4428	50969	56688
Medium	80	328	3972	4380	427	1773	21515	23715
Large	4	24	348	376	47	396	7824	8267
Total all Size	17881	18997	281275	318153	11095	19510	878598	909203

Source : Salem District Statistical Handbook 2017-18

The distribution of operational land holdings as shown in Table (7), indicates the fact that SC/ST Operation Holders marginal farmers have 73% and small farmers have 18% and semi small have 7% and medium farmers have 1% and large farmers have 1% of operational land holdings in Salem District.

7.2 Irrigation

In land use pattern details, the total geographical area of 520530 Ha, cultivated area is 282310.41 ha and the net area sown is 204782.82 ha to the percent of 54% and 39% and Area Sown more than once is 77527.59 ha in the percent of 0.14% respectively. The main source of irrigation in the district is open wells and ground water which has a share of irrigation at 83.02 percent. Other supplemented by tanks 16.98%. The district had 832 major tanks and 1,739 small tanks There are 4,741 private bore wells, 242 dug-cum-bore wells and 1,72,493 open wells in the district. The wells dug under private sector with pump sets were seen in most places and private tube wells were the next source in utilizing the ground water potential. The Public Works Department and Panchayat union maintained tanks, ponds and supply channels also play an important role in the irrigation of Salem district.

There are several methods of irrigation. Surface irrigation, Micro-irrigation, Drip irrigation, Sprinkler irrigation. The Advantage of irrigation makes increase in food production, drought production, revenue generation, mixed cropping *Source: District Statistical Handbook 17-18*

The major irrigated crops in the district are Maize, Cholan, Tapioca, Cow Pea, Black gram, green gram, and flowers. Judicious use of water with modern water management techniques, yield of those crops can be boosted and thereby export potential can be explored. The productivity of food crops like paddy, maize, cumbu and pulses can also be increased to the target levels by proper water management practices. Table 8 - Source wise Area under Irrigation in Salem District – Triennium ending 2018-19

Source	2015 – 16		2016 – 17		2017 – 18		Triennium ending 2018-2019	
	NIA	GIA	NIA	GIA	NIA	GIA	NIA	GIA
Canal	795	855	2100	2205	2430	2587	1775 (1.90)	1882 (1.65)
Tank	236	236	1708	1803	1808	1980	1251 (1.34)	1340 (1.18)

Wells	79168	96663	94165	115672	97180	1192800	90171 (96.75)	110538 (97.17)
Total	80199	97754	97973	119680	101418	123847	93197	113760
Irrigation intensity (percent)	121.89		122.15		108.15		113.76	

Source: Salem - District Agricultural Plan 17-18

Sources of Irrigation

River	:	Cauvery, Sarabanga Nathi, Vasista Nathi , Suvetha Nathi
Tanks	:	Govindavadi tank, Ayyanar Koil tank, Mookaneri tank, Attur Pudu tank, Umayalpuram tank, Thedavoor tank, Aragaloor tank, Sendarapatty tank, Naduvalur tank, Sarvoy Periya tank, Vadaman tank

7.3 Cropping pattern and Major Crops

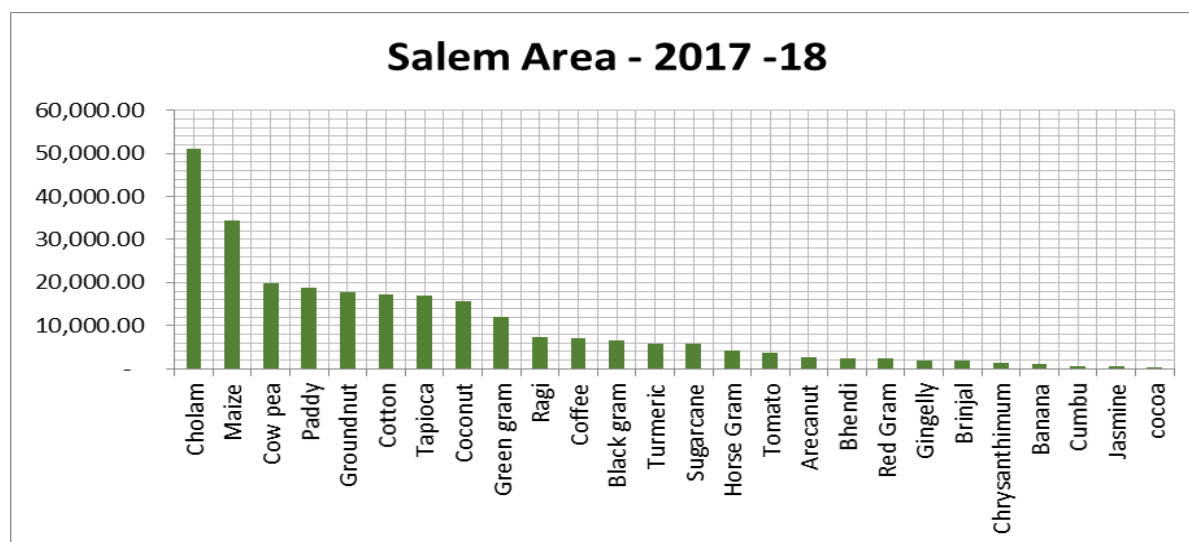
The Tamil Nadu Rural Transformation Project **Cholam, Tapioca, Maize, Cotton, Ragi, pulses (Cow Pea, Red gram and Black gram) sugarcane, Groundnut, Coconut, Turmeric, Arecanut, coffee and pepper** are major crops in this district. Mango, custard apple, Moringa and Sapota are the important fruit crops and turmeric and cotton are the major cash crops grown in the district. The area under Cholam and maize occupied nearly 22 percent of the total cultivated area of the district. Tapioca is the next most important crop of the District.

7.3.1 Cropping pattern and intensity

Cropping pattern and intensity result reveals that the highest cropping intensity found in Tharamangalam, Veerapandi, Panamarathupatty. The moderate cropping intensity found in Thalaivasal, Ayothiyapattinam, Yercaud, Omalur, Kadayampatty, Mecheri and Kolathur. The crop diversification indicates that Yercaud, Gangavalli and Thalaivasal shows lower crop diversification, other blocks in the study area have the index value more than 0.7 which indicates that the blocks have high diversification. The crop combination analysis also sight that oils seeds, Maize, Tapioca as first ranking crop in several blocks, similarly

oil seeds, paddy, Tapioca founds as second ranking crop and paddy is found as third ranking crop in the study area. The cropping pattern analysis will provide the agricultural and agro-climatologist to suggest better land use planning of an area.

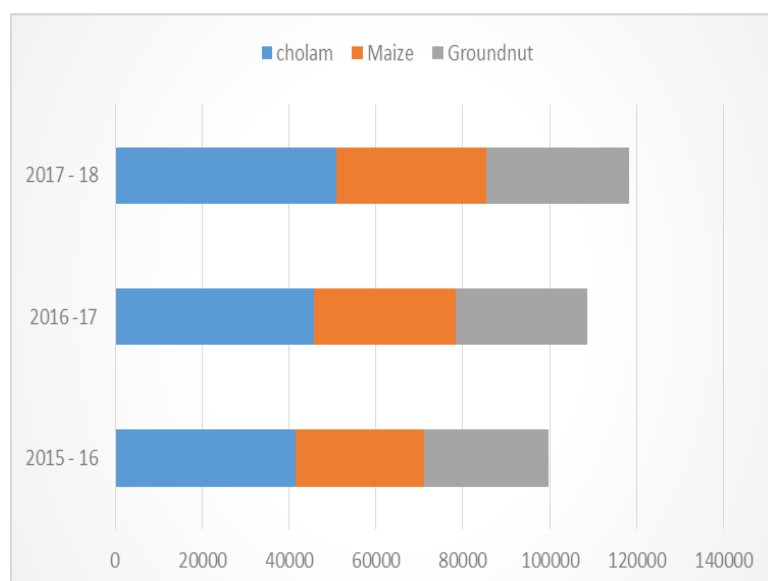
7.3.2 Area, Production and Productivity of Major Crops



The major crops in the district considering the area of cultivation are Cholam, Maize, Cow pea, Tapioca, Paddy, Groundnut, Cotton, Green gram, Paddy are the major crops in Salem in area of cultivation.

Figure 5: Cultivated area crop wise G Return 2017-18

a) Trend in area of cultivation



The trend of in area of cultivation of Cholam, Maize and Tapioca also has been increasing steadily from 2015 to 2018 as in growth curve shown

Figure 6. Trend in Area of Cultivation in ha of Cholam, Maize and Groundnut

Agriculture: A) Area and Production in Salem District

Table(9): Major and minor Agricultural Crops in Area (ha.)

S.No.	Principal Crops	Area (in Hec.)
1.	cholam	54084.88
2	Maize	34250.46
3	Tapiaco	32849.48
4	Vegetables	21340.71
5	Cow pea	19662.72
6	Paddy	19330.49
7	Ground Nut	17910.54
8	Cotton	15884.55
9	Green Gram	11964.87
10	Dry Fruits	8597.94
11	Fresh fruits	8338.76
12	Medicinal Crops	8239.49
13	Ragi	7248.65
14	Spices & condiments	6920
15	Black Gram	6627.63
16	Sugar crops	5755
17	Mochai	5053.95
18	Grove varities	4750.15
19	Fodder Crops	4613.26
20	Horse Gram	4125.15
21	Flowers	3737.93
22	Red Gram	2280.06
23	Gingelly	1979.97
24	Nari Payiru	1673.58
25	Beans	1397

Source : District Agricultural Hand book 2017 -18

b)Major Crops in Area (ha.) to State

Table(10): Major Crops in Area (ha.) to State (17-18)

Crop	State	Salem	Percentage to state
Tapioca	32429	17028	53
Cow Pea	59007	19662	33
Cholam	268391	54084	20
Ragi	61362	7248	12
Maize	355064	34250	10
Groundnut	346611	17910	5
Green Gram	238842	12027	5
Paddy	1442841	19330	1

Source: Salem Agricultural Handbook 2017 -18

The district contributes significantly to the state’s Area of production in Tapioca, Cow Pea and Cholam. The area of cultivation of Tapioca to the state is substantial (53%). This may be owing to the climate and soil of Salem. The cultivation of Green Gram and Black Gram is very highlighted and major cultivation in Salem.

c)Major crops to State Production (MT)

Table(11)-Major crops to State Production (MT)(17-18)

Crop	State	Salem	Percentage
Tapioca	276420	152569	55
Maize	953377	340577	36
Cholam	268391	60384	22
Ragi	114429	23609	21
Green Gram	56087	9069	16
Cow Pea	148596	14817	10
Groundnut	258769	48156	7
Paddy	3554113	102749	3

Source: Salem Agricultural Handbook 2017 -18

Indicative skilling areas in Agriculture and allied Services

- Organic farming
- Seed production and conservation
- Repair and maintenance of farm equipment and tractor
- Production of bio-control agents and
- Production of bio-pesticides and bio-fertilizers

- Vermi-composting
- Grading of Agricultural Produce for marketing and storage
- Storage and maintenance of food grains and other agricultural produce
- Installation and maintenance of food processing machinery
- Agricultural apprenticeship training under mechanization and technology
- Training on oil seed, Maize and oil palm development

7.3.3 Horticulture crops

Salem stands first in vegetable cultivation in area. The major horticultural crops are Mango, Banana, Tapioca, Tomato, Brinjal, Bhendi (Lady's finger), Onion, Turmeric, Pepper, Chilies, Coffee, Arecanut, Chrysanthimum (Samandhi), Arali are cultivated in this district to the area of 60000 ha. Danishpettai (Kadayampatti Block); Kamalapatti (Panamarathupatti Block); Abinavam (Pethanaickenpalayam Block); Vellar (Mecheri Block) and Thirumanur (Valapadi Block) have been identified as Model Horticulture Villages. The entire district has one cold storage of 100 MT capacity under government sector, at Mecheri which benefits the tomato growing farmers. Encouraging cultivation of horticultural crops by adopting Hi- Tech technologies, encouraging farm mechanization and improved Post Harvest Management paves the way for farmer's income.

Indicative skilling areas in horticulture

- Mushroom production techniques
- High-value floriculture
- Nursery management
- Protected cultivation of high-value vegetables
- Organic production of fruits & vegetables
- Post harvest processing and packaging of fruits and vegetables
- Cold chain management
- Production and processing of medicinal and aromatic plants
- IPM in vegetables and fruit crops

Table(12): Major Horticultural Crops in Area (ha.)

S.No.	Principal Crops	Area (in Hec.)
1	Tapioca	11468.54
2	Turmeric	2657.115
3	Tomato	3568.58
4	Vegetables	10628.25
5	Fruits (Custard Apple)	2598.22
6	Beans	8725.9
7	Flowers (Arali , Samandhi)	3248.19

7.3.4 Other Crops

The important medicinal plants grown are Kanvali kizhangu Medicinal Coleus, Kadukkai, Aswagandha, Shatavri, Neem, Thulsi, etc. Coleus sands first place among TN and most preferred medicinal crop cultivated in the district. These are promising crops with high medicinal values untapped.

7.4 Block wise Cropping Area distribution

Cholam, Maize, Cow pea, Turmeric, Tapioca are among the top three crops with respect to the area of cultivation against the blocks, Paddy, Black Gram, Green Gram, Red Gram Gingelly and Chilies are the other minor crops cultivated in the crops.

Table 13. Top three Major and Minor crops in TNRTP blocks of Salem (in terms of area of production 2017-18)

Block	Major Crops	Minor Crops
Omalur	Cholam, Cow pea gram, Groundnut, Bean, Sugarcane	Black Gram, Green Gram,
Tharamangalam	Cherry bean, Cotton, Cow pea, Green Gram, Groundnut, Ragi	Paddy, Maize, Black Gram, Green Gram, Red Gram
Mecheri	Cholam, Ragi, Cow pea, cumbu, Banana, Tomato, Custard apple, Groundnut,	Maize, Paddy, Black Gram, Green Gram, Red Gram
Panamarathupatti	Cholam, Flowers, Groundnut, Cotton, Black Gram	Ragi, Banana, Maize, Tapioca
Sankakri	Cholam, Paddy, Gingelly, Groundnut, Maize, Paddy, Tapioca, Mango, Banana	Green Gram, Maize Turmeric, Ragi, Black gram
Veerapandi	Cholam, Groundnut, Paddy, cotton, Red gram, Black gram	Ragi, Black Gram, Green Gram, Tapioca
Attur	Maize, Tapioca, Turmeric, Paddy, Cucumber, coconut, Cotton,	Black Gram, Green Gram, Cow Pea, Groundnut

Cholam

Cholam is most popular crop in this area and highly concentrated in Pethanaickenpalayam, Kadayampatty, Omalur, Salem, Tharamangalam and Sankagiri blocks.

Tapioca

Tapioca is cultivated as a commercial crop which gives prominent input to the sago industries of the District. Pethanaickenpalayam and Attur blocks stands highest contributor of Tapioca 5798.21 ha of land. The high tapioca concentration shows the following blocks they are Attur, Pethanaickenpalayam, Valapady, Ayothiyapattinam and Panamarathupatty. The moderate concentration present in Gangavalli,

Kadayampatty, Omalur, Veerapandi, Konganapuram, Sankagiri and Magudanchavadi The rest of the blocks Thalaivasal, Yercaud, Salem, Mecheri, Nangavalli Kolathur and Edappady represents low concentrations of Tapioca.

Sago can be processed and used as food products like kitchadi, Pappad, Vadai, Halwa, Puri, Kheer, Uppuma, Laddu, Pakoda, Chikki, Murukku, Vermicelli, Fry, Noodles, Sago rice, Sundal in domestic and international markets.

Ragi

Mecheri is the highest producer of Ragi comprises of 2783.85 ha of land is used to cultivate Ragi. Kadayampatty, Mecheri, Nangavalli, Tharamangalam blocks have the high concentration of Ragi. Salem, Yercaud and Kolathur show the moderate concentrations rest of the blocks have lowest concentration of Ragi

7.4.1 SWOT of the District

Salem district has the following Strength, Weaknesses, Opportunities, and Threats which are essential for the better understanding for improving the district future.

The major strengths are

- Progressive nature of the farming community, farmers, climate and rainfall favorable for cultivation of a wide range of commercial value crops such as spices, plantation crops, flowers, medicinal and aromatic plants, cut flower cultivation etc., high agricultural population, promising allied sectors such as seed industry, Dairy / Sheep and Goat / Poultry, and Sago industry functioning in this district plays a vital role in the economy of the district.

The major weaknesses are

- More number of resource poor farmers, fragmented holdings, dependence on monsoon rain, low soil productivity, problem soils such as saline and alkaline soils, over exploitation of ground water in almost 75-80 per cent of the blocks in the district. Majority of the area is under rainfed condition. Low adoption of plant population, non adoption of optimum seed rate, lack of awareness of latest technologies among the farmers is the other weaknesses.

The Opportunities are,

- immense scope for increasing area under hybrid vegetables (tomato, bhendi, cabbage), medicinal plants, establishing distillation units in Yercaud to extract oil from Palmarosa, Citronella, Lemon grass, fruit processing units and Jasmine Concentrate extraction units. Infrastructure facilities such as transport, communication, roads, location advantages such as national highway connecting to Chennai and Bangalore for easy transport of agricultural produce to the markets, development of seed industry, production of milk products and selling of packaged mutton and broiler meat, rearing of back yard poultry and Japanese quills are the other opportunities for development .

The threats identified are

- low productivity of crops, higher cost of cultivation, agricultural labour shortage, and uncertainty in market price for the produce and finally the gambling nature of agriculture.

7.5 Prioritisation of crops

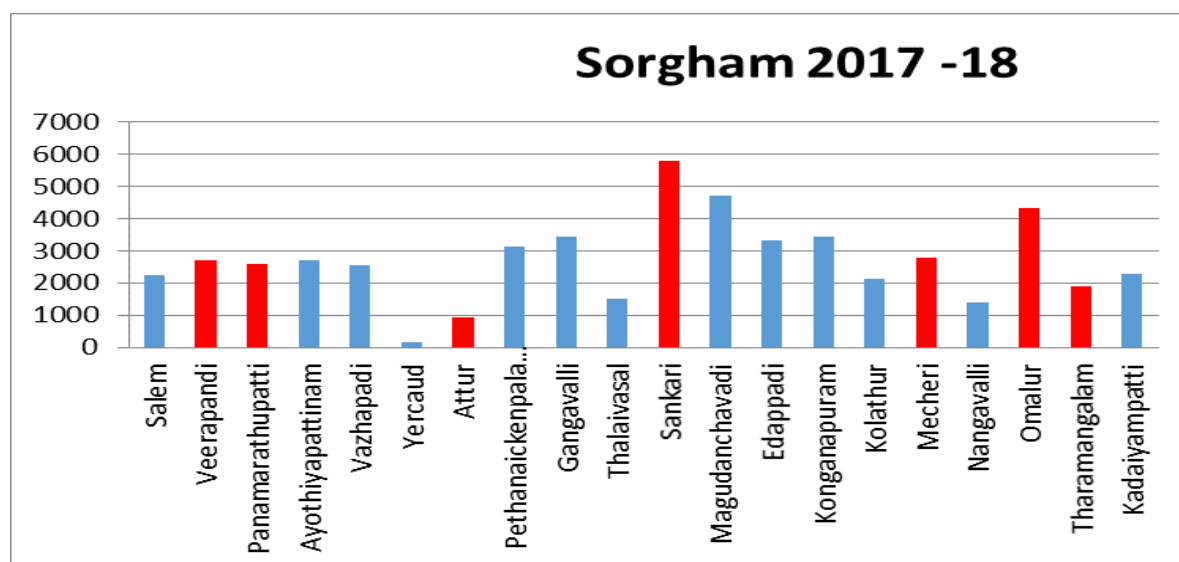
Maize, Cholan, Tapioca, Cow pea, Pulses, Groundnut, and Vegetables are the major crops in Salem in area of cultivation, and therefore stands prioritized crops. Under the eleventh Plan, areas identified for special attention in the agriculture sector prioritization are

- (i) increasing cropping intensity;
- (ii) strengthening of marketing, processing and value addition infrastructure;
- (iii) revamping and modernizing the extension systems and encouraging the private sector to provide extension services; and
- (iv) Bridging the gap between research and farmers' yields.

7.6 Block wise Crop discussion in TNRTP Focus :

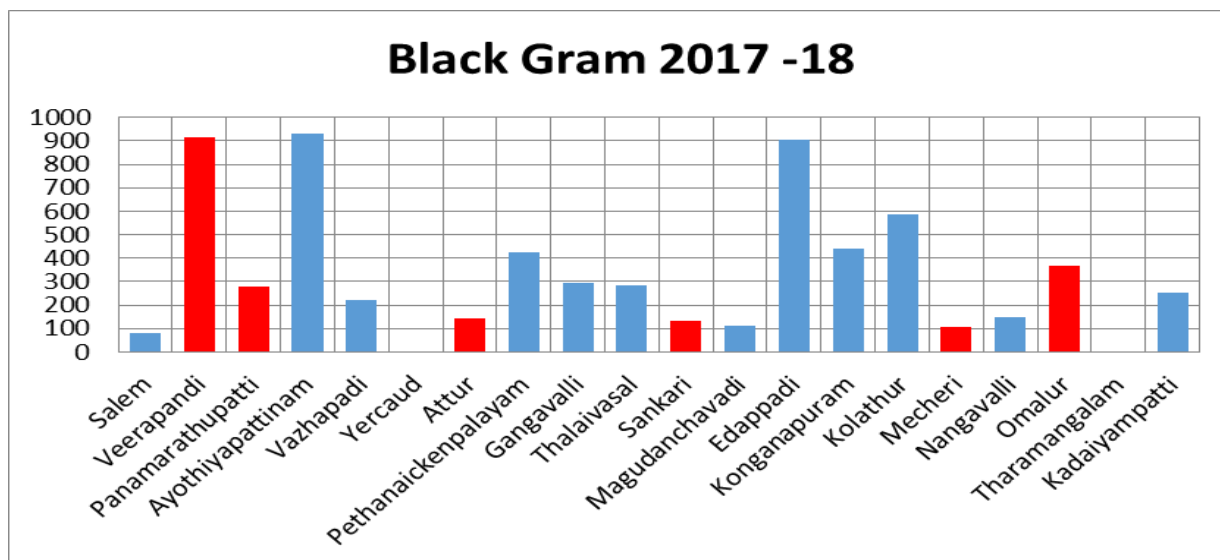
7.6.1 Cholan or Sorgham is majorly cultivated in **Sankari, Omalur, Pannamarathupatti and Veerapandi blocks** and minorly cultivated in Mecheri, Tharamangalam and Attur.

Figure 7. Trend in Area of Cultivation in ha of Cholan / Sorgham



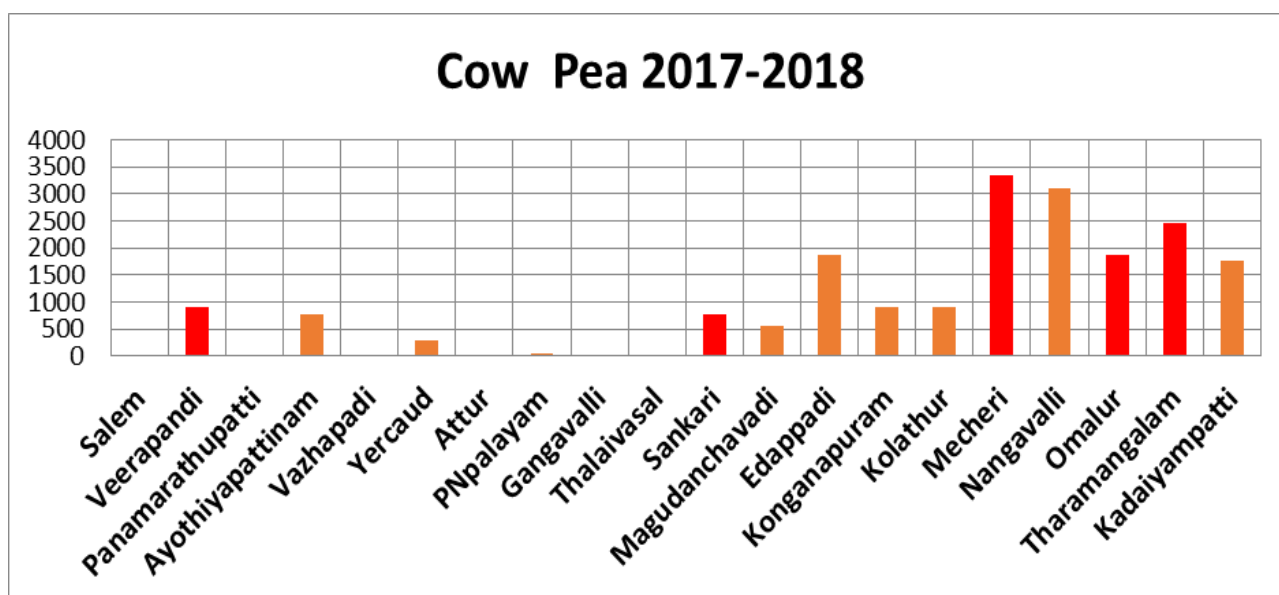
7.62 Black Gram is majorly cultivated in **Veerapandi, Pannamarathupatti and omlaur blocks** and minorly cultivated in Sankari, Mecheri, Tharamangalam and Attur blocks.

Figure 8. Trend in Area of Cultivation in ha of Black Gram



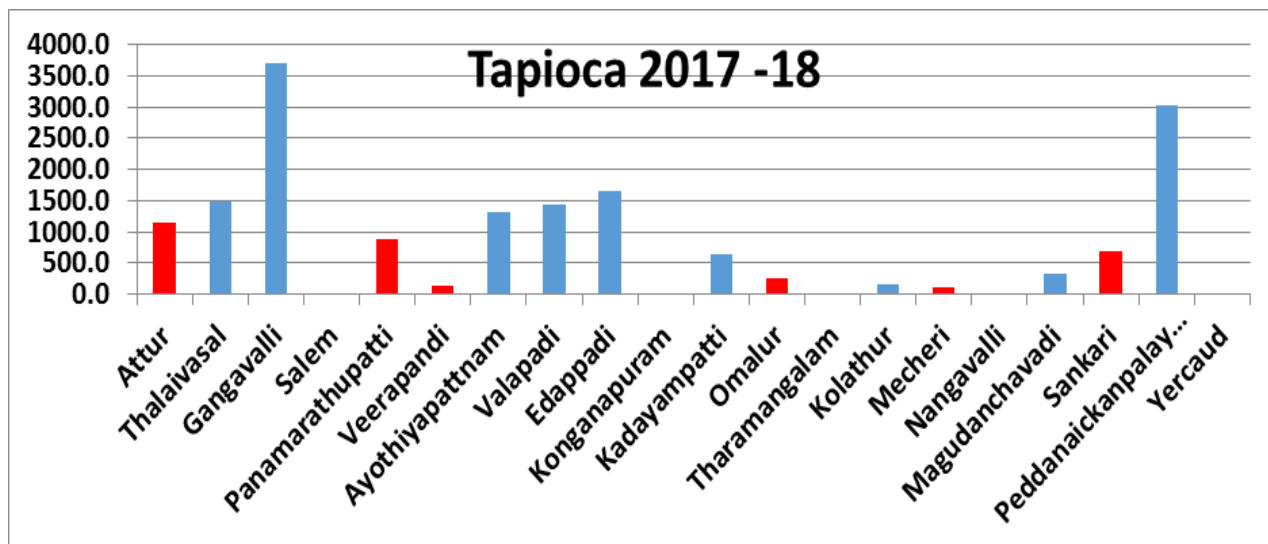
7.63 Cow pea is majorly cultivated in **Mecheri, Tharamangalam, Omalur, Sankakri** blocks and minorly cultivated in Veerapandi, Pannamarathupatti and Attur

Figure 9 . Trend in Area of Cultivation in ha of Cow pea

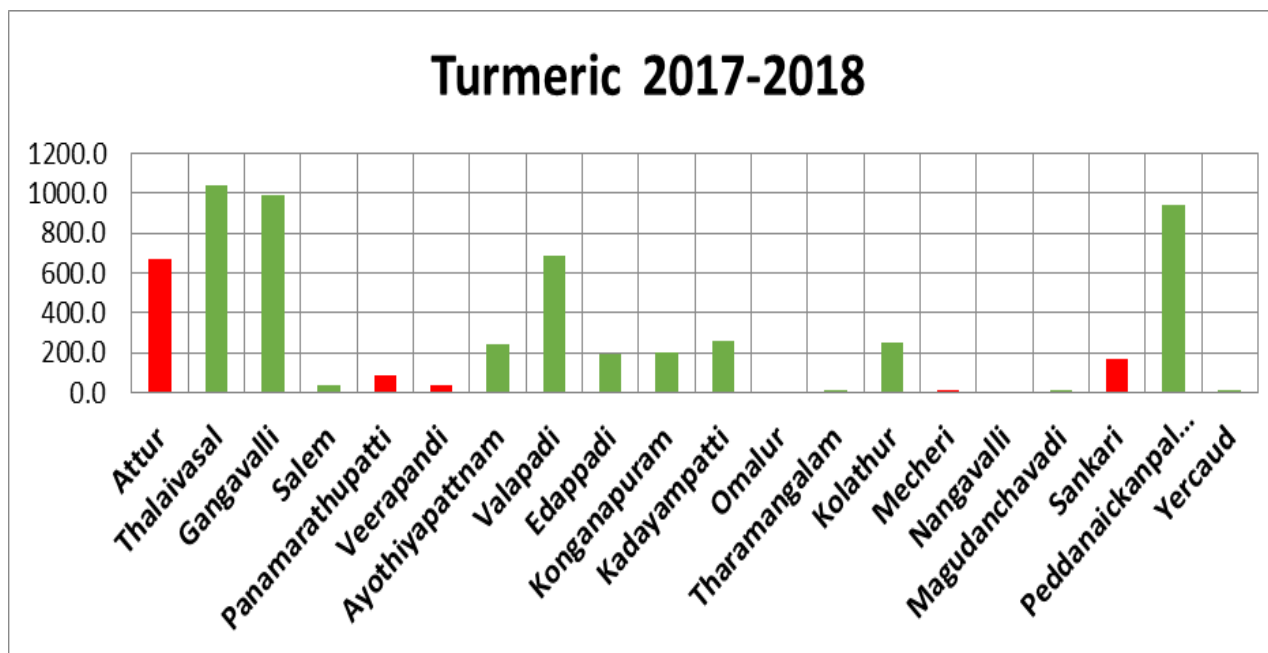


7.64 Tapioca is majorly cultivated in **Pannamarathupatti, Attur, mecheri, omalur, Sankakri**, and minorly cultivated in Tharamangalam.

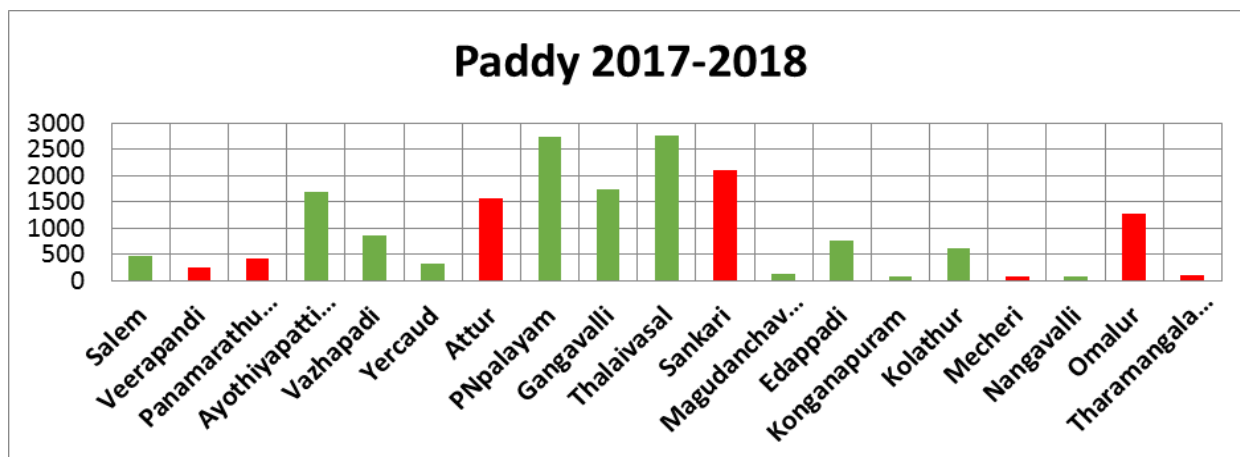
Figure 10 . Trend in Area of Cultivation in ha of Tapioca



7.65 Turmeric is Majorly cultivated in **Thalaivasal, Pethanaikanpalayam and Attur blocks** and minorly cultivated in Veerapandi and sankakri Figure 11 . Trend in Area of Cultivation in ha of Turmeric

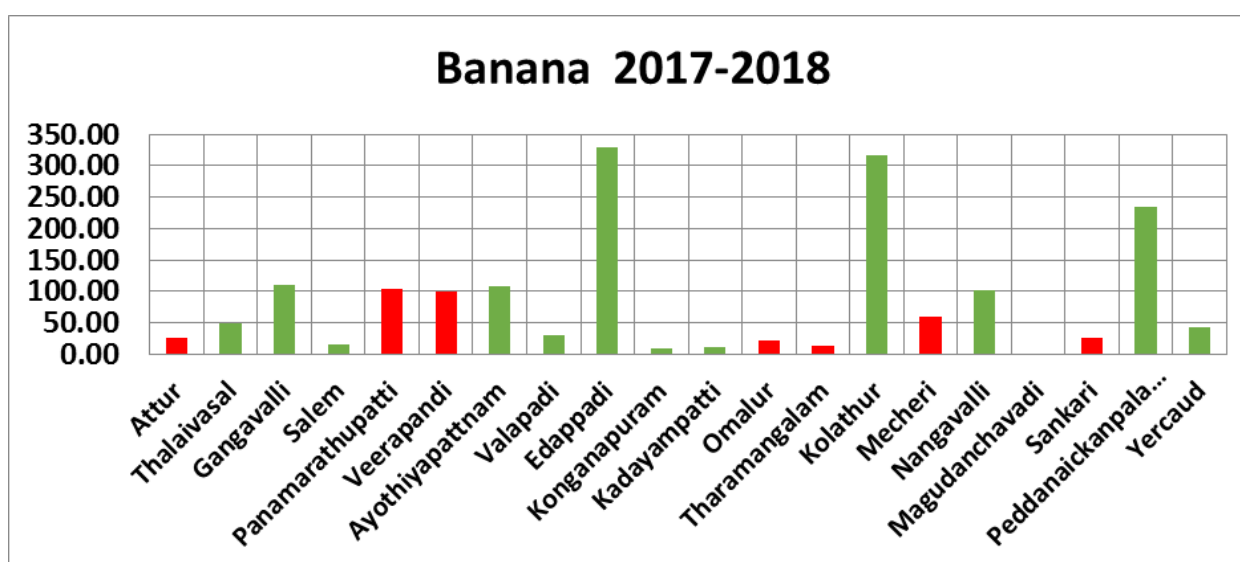


7.6.6 Paddy is Majorly cultivated in **Pethanaickanpalayam, Sankari and Ayothiyapattinam** blocks and minorly cultivated in mecheri, Tharamangalam and veerapandi blocks *Figure 12 . Trend in Area of Cultivation in ha of Paddy*

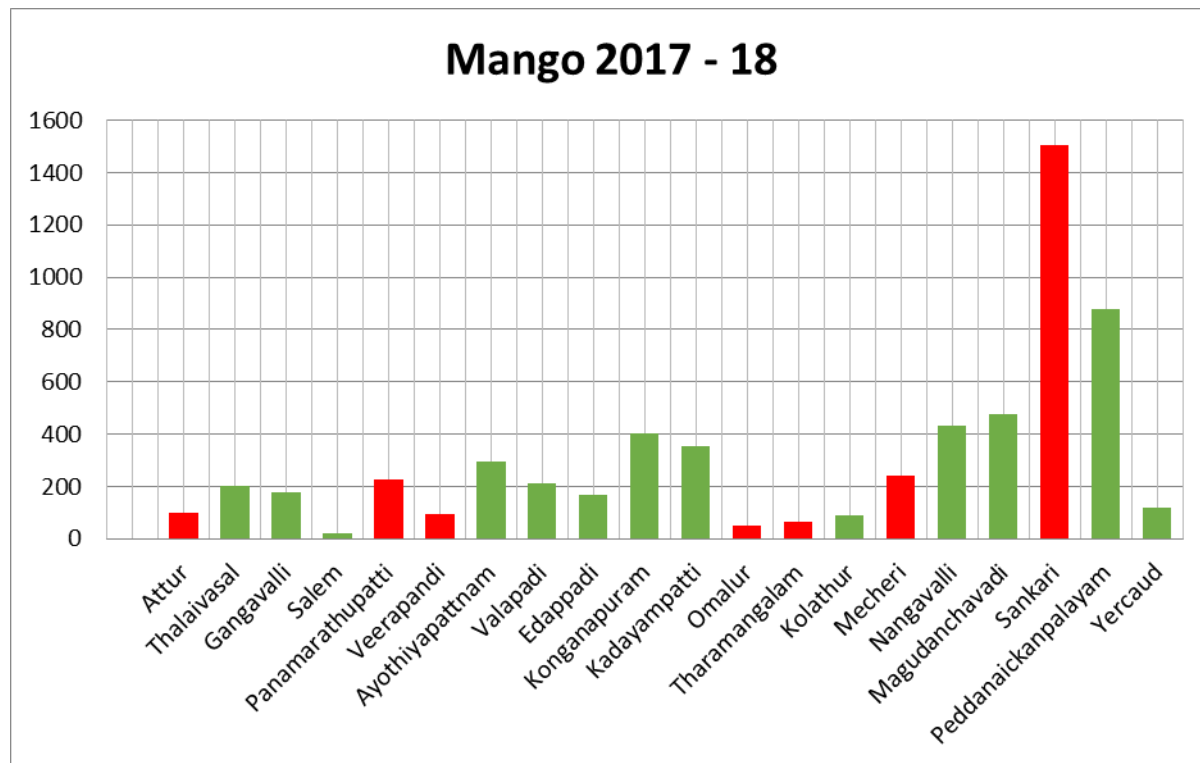


7.6.7 Banana is Majorly cultivated in **Pannamarathupatti, Veerapandi Mecheri,** and minorly cultivated in Attur Sankakri, Omalur and Tharamanagalam

Figure 13 Trend in Area of Cultivation in ha of Banana

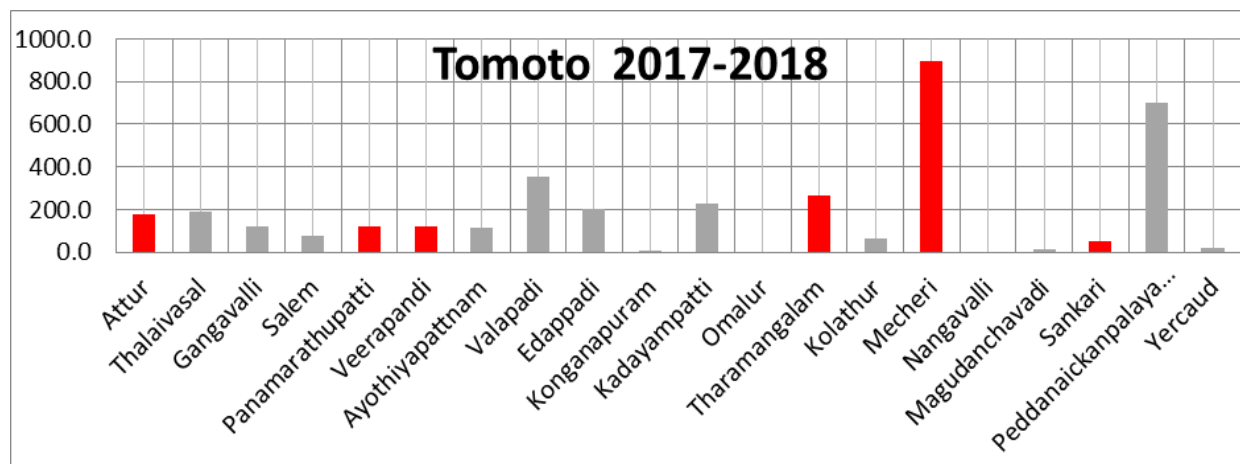


7.6.8 **Mango** is majorly cultivated in **Sankakri and Mecheri** and minorly cultivated in Omalur, Tharamangalam, Veerpandi, Pannamarathupati, *Figure 14* Trend in Area of Cultivation in ha of Mango



7.6.9 **Tomato** is majorly cultivated in **Mecheri, Tharamangalam and Veerapandi** and minorly cultivated in Attur, Sankakri, Pannamarathupati and Omalur

Figure 15 Trend in Area of Cultivation in ha of Tomato



8.0 Marketing and Storage Infrastructure

Marketing of agriculture is done through various regulated markets, co-operative marketing societies, Uzhavarsandhai (Fruits and Vegetables), Wholesale markets and Local Shandies. Apart from these Weekly markets and daily markets also exists in the district. Contract farming in maize covering of more than 5000 ha is in progress. The details of markets are as described as under.

Table (14) Marketing Infrastructure Available

S.No.	Type	Total nos
1.	Regulated market	14
2	Wholesale markets (Traders)	182
3	Co-op marketing societies	101
4	Local Shandies	21
5	Uzhavar sandais	11
6	Cold storage Godown	7
7	Godown	16
8	Drying land	17
9	Rural Business Hub	1

8.0 Agricultural Marketing and Regulated Markets

Regulated markets play a crucial role in facilitating buying and selling of agricultural produce for the benefit of the farming community. A regulated market aims at elimination of the unhealthy and unscrupulous practices, reducing marketing charges and providing facilities to producer-sellers in the market. To create awareness among the farmers about the benefits of storing, grading, marketing, value addition and processing their produce by taking up training, publicity and propaganda. To promote Food Processing Industries to minimize wastage of agricultural products, to increase employment opportunities and to enhance foreign exchange. Salem has 14 regulated markets and 5 cold storage through which the farmers store and sell their

products at favorable price and to help consumers to get quality food products.

Table 15 Quantity and Value of Commodities Transacted in Regulated Markets of Salem District during 2017-18

Number of Regulated Markets	Quantity arrivals („in M.T.“) (Product wise)		Receipts (Product wise) Rs.in Lakhs
	Product	Quantity	
1.Salem	Sugarcane Jaggary	10749	43.66
2.Valappady	Cotton	1819	12.47
3.Attur	Turmeric	2944	25.24
4.Thalaivasal	Cotton	1107	3.89
5.Gangavalli	Groundnut	5	0.05
6.Thammampatti	Paddy	359	0.56
7.Karumandurai	Coconut	1217	2.62
8.Sankagiri	Gingelly	173	1.20
9.Konganapuram	Cotton	15028	79.61
10.Kolathur	Groundnut	62	0.33
11.Mecheri	Coconut	20883	49.29
12.Omalur	Sugarcane jaggary	154	0.22
13.Kadayampatti	Coconut	4323	5.84
14.Edapadi	--	847	1.74
	Total	59670	2226.72

Source: Secretrary, Salem Market Committee,
Soolaimedu, Uthamacholapuram, Salem District

Therefore, the reasons for the poor market arrivals to the regulated markets should be identified and more facilities need to be created in

the regulated markets to attract larger arrivals. Marketing tie up and value creation is much needed for this commodities.

There is a well-established unique wholesale procurement and marketing of above private agriculture commodities market called '**Leigh Bazaar**', particularly for commercial crops like Rice, Turmeric, Pulses and cereals chilly, onion, groundnut, turmeric etc. **Sevapettai Market** is pioneer for Grocessories. **VOC Market** is unique in marketing of vegetables and flowers. **Thalaivasal market** is for vegetables and fruits transporting daily to Chennai Koyambedu market. Ayothiyapattinam for rice and Thammapatty for tamarind market is functioning vibrantly in Salem District.

9.0 Agribusiness Opportunities

1. Maize-

Maize is a coarse grain and it is now being accepted as staple diet and its demand is increasing year by year. In Tamilnadu, maize is the third important cereal crop after rice and wheat in terms of area. Currently, 49 percent of maize output is used as poultry feed, 12 percent as animal feed, 25 percent as food, 13 percent in starch and other industries, and 1 percent as seed. There is demand for maize from the poultry industry and the crop, when grown under irrigated conditions gives better yield. Currently, maize rules around Rs 1,480 per quintal. The products from maize are value added products which include maize starch, liquid glucose, dextrose monohydrate, anhydrous dextrose, sorbitol, corn gluten.

2. Vegetables

The main vegetables grown in Salem are Tapioca, Onion, Tomato, Brinjal & Ladies finger. These account for over 60% of total area as well as the production of vegetables. Hybrid vegetable cultivation is promoted by providing assistance to cultivation. The hybrid vegetable portray

seedlings are being raised in State Horticulture Farms and distributed to farmers at subsidized cost to increase the area and production under vegetable cultivation.

3. Flowers

At present Oleander Flower (Arali Poo) and Camomile (Samandhi) Essence is exported from salem to Bangalore and also few Jasmine cultivation and processing units exist in other parts of Salem District. Logistical support is required for the transport of Oleander Flower and Camomile (Samandhi) there is a potential for establishing additional flower essence processing units. There is an increasing trend of cultivating flowers due to increased market demand.

4. Sorgham:

The major landraces and varieties are manjal cholam, Vellai cholam, Kari cholam, Karareddu cholam. The area has fallen drastically in the past decade due mostly to low demand and price. Yet farmers are advised to take to aadipattam sowing as demand is expected to pick up if maize prices reign high. The price is expected to rule around Rs 18–19 a kg at harvest.

5. Millets.

Breeder seeds are available with the centre for excellence of millets in parts of Arunuthumalai, Jarugu mallei, Karumandurai and pachamalai. There is a huge potential for seed production (labelled seeds) by entrepreneurs. There is a potential of earning of up to 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.

10.0 Resource Institution

The **Mecheri Sheep Research Station** (MSRS) of TANUVAS is located at Mecheri; the **Tapioca and Castor Research Station** (TCRS) of TNAU is at Yethapur and the Horticulture Research Station (HRS) of TNAU at Yercaud. **Krishi Vigyan Kendra** (KVK) of ICAR is located at Sandhiyur and the Veterinary University Training and Research Centre (**VUTRC**) is located at Salem. The State Goat Farm, Chinnasalem is situated at V Koottu Road, Talaivasal Block.

11.0 National and State Schemes

The GoI schemes in the district are National Agricultural Development Programme (NADP) for Paddy, Millets, Pulses, Oilseeds, Sugarcane and Enriching Soil Fertility through Green Manure, National Food Security Mission (NFSM) Pulses, Coarse Cereals and Commercial Crops, National Mission on Sustainable Agriculture (NMSA), Integrated Farming System. Tamilnadu state schemes are Pradhan Mantri Fasal Bima Yojana, National Agricultural Development Programme, Mission on Sustainable Dry land Agriculture (MSDA)- Rainfed Millet, Pulses, Oilseeds and Cotton, Tamil Nadu Cotton Cultivation Mission (TNCCM) Micro Irrigation, Fund Seed procurement under TANSEDA, National Horticulture Mission, Rainfed area development programme and micro irrigation schemes benefited the farmers. FPOs are covered under the Collective farming scheme, Nabard and SFAC scheme.

12.0 Potential Opportunities in Allied Sectors:

The livestock and poultry plays an important role in the economy of farmers. The farmers in Salem maintain mixed farming system i.e. a combination of crop and livestock where the output of one enterprise becomes the input of another enterprise thereby realize the resource efficiency. The livestock serve the farmers in getting incremental income, Employment, Food, Social security and dung.

12.1 Animal husbandry and Dairy development

A large number of farmers in this district depend on animal husbandry for their livelihood. In addition to supplying milk, meat, eggs, wool and hides, animals, mainly bullocks, are the major source of power for both farmers and dryer. Thus, animal husbandry plays an important role in the rural economy. Moreover, livestock sector provides supplementary employment and sustainable source of income to many small and marginal farmers.

Livestock population in the district

Salem District has milch animal population of about 3.54 lakhs and breedable population of **Cattle (558223 Nos.); Buffalo (79841 Nos.) Sheep (345608 No.s) and Goat (449203 No.s)** Of the total population, cross breeds accounted for 58.75 percent, indigenous animals accounted for 16.26 percent and buffaloes accounted for 24.99 percent in **Salem district stands top in dairy sector and huge potential could be tapped due to high quality breeds.** The average milk yield is about 4.36 tonnes. The compound growth rate for milk is worked out to 7.68 percent. However, this sector is deficient in terms of fodder availability ie it has green and dry fodder deficiency of about 87 and 64 percent respectively. This offers potential for setting up of bio-gas plants in rural areas in terms of space and dung, which are the pre-requisites for setting up the bio-gas plants.

Indicative skilling in Animal husbandry, Dairying and fishing

- Clean milk production (CMP)
- development
- Feed and fodder management
- Fish rearing Integrated dairy and management

- Goat, Piggery and Poultry rearing and management
- Ornamental fish farming and Rabbit & duck farming

Dairy development

Dairy sector is important not only as the producer of highly nutritious food products, but also for the sustenance of poor farmers and over all prosperity of the farming community. The Salem Dairy complex is situated in about 46 acres of land bounded by Sithanur and Dhalavaipatty villages in Steel Plant Road. In total 1100 Milk Producers Co-operative Societies are affiliated and 932 Societies are functioning. The milk is collected through 55 milk routes daily ranging from 2.5 lakhs to 3.25 lakhs liters of milk per day depending on the season. The Procurement and Input operations are managed through 5 milk procurement team offices at Salem, Sankari, Attur, Mettur, and Valapady. The Dairy has installed capacity to process 3 Lakh litres of milk per day, to produce 10 MT of Skim Milk Powder 9 MT of Butter and 6 MT of Ghee.

The infrastructure facilities like dairy cooperative societies, cooperative marketing societies, veterinary clinics and milk collection centres were located in different blocks of the district. Further, artificial inseminations with exotic, cross bred and murrh bull semen are being undertaken through the 564 Artificial Insemination Sub-Centres of the Primary societies / Union and doing on an average of 26,000 Artificial Insemination per month. Nutritious Cattle Feed is being supplied to the members at par rate. Salem Union markets about 83,000 litres of liquid milk per day in Salem & Namakkal Districts through 15 Routes, 375 sale points and 25 parlors.

During the village visits made to Salem villages it was observed that each Household has one to two milch animals. The production of milk is 3.0 lakh litres per day. There is ample scope for goat and sheep Farmer Producer Company as the goat population is observed to be high. There is no viable cattle feed units in the district whereas the

materials for cattle feed such as rice bran and millet bran is readily available in the district. The scope for milk value added products is also high.

Source: salem.tn.nic.in/DAAVIN.HTM

12.2 Poultry development

Poultry farming has emerged as most gainful activity and it provides subsidiary income and gainful employment to farmers throughout the year. Among the various poultry rearing activities, Layer, Broiler and Desi Birds farming are popular on commercial lines. The broiler farming is being taken up on contract farming, wherein the small farmers enter into contract arrangement with the larger poultry companies, who provide all the inputs and buy back the broiler birds. Of late, the commercial desi bird farming is gaining momentum in the District for meat production and 'fighting' purposes. The district produced 3,21,897 numbers of fowls(*Census 2011*).

12.3 Fisheries

The total inland fresh water spread area is 32400 Ha with 15500 Ha reservoir; 1300 Ha seasonal irrigation tanks and 15600 Ha short seasonal ponds. The produced fish is about 10840 tonnes with a value of 589.12 lakhs during the year 2017-18. There are 98 inland fishing villages, 16 Fishermen co-op societies (5759 members), 3 Fisherwomen co-op societies and total fisher folk population is 19673 in the district.

Mettur Dam is the largest reservoir established in the year 1964 and total water spread area of 15346 ha and Fish Production (2017-18) Achievement is 986.98 Tons. There are 3 reservoirs in the district having a total water spread area of 15638 ha. In the absence of perennial rivers and tanks, there is poor response for commercial fish culture. As the tanks in the district are rain-fed and the rains are scanty in the district, there is poor response for fresh water fish culture

Sources: <https://salem.nic.in/fisheries/>

12.4 Sericulture

A separate department for Sericulture was established during the year 1979, with its headquarters at Salem, famous for its high count **designer fine cotton sarees and half fine silk sarees** produced under handlooms besides production of power loom textile under co-operative and private sector. The scope for improving sericulture further is bright in Salem as the demand for silk yarn has been growing every day. Self-help groups were best promoters of sericulture, which would generate rural employment on a large-scale. Soft and shiny **Salem's Venpattu (white silk)** was recognized with the **Geographical Indication mark**. Venpattu dhoties produced also very unique and have got authorization to use geo-index number. The State Government would set up 'Seri Tourism' center in Yercaud for providing all information about sericulture activities at an outlay of 2.50.

2741.7 acres of land is under mulberry cultivation in this District. Training in Mulberry farming, Rearing Silk Worms is done through a large network of Govt. Departmental Institutions of Sericulture such as Silk quality development farms, Govt. Sericulture training center, Govt. Sericulture Farm, Base seedlings (grain age) development farms, Govt. Bi-voltine grain age centers, govt. cocoon markets, silk reeling unit, silk twisting unit, technical support and service center for rearing silk worm. Among the blocks, Attur and omalur block has contributed to the larger area and production of cocoons (*Source: District Sericulture handbook :2017-18*). **Table 16 – Sericulture details**

Name of the block	Area under Mulberry (Acres)	Production of Cocoons(Kgs)	Value of the cocoon (Rs.)
Mecheri	353.75	80723	32289200
Edapady	582.85	152853	6114120
Salem(R)	357.90	93224	37289600
Salem(Ex)	604.25	144140	57656000
Attur	488.00	135219	54087600
Omalur	354.95	80698	32279200
Total	2741.7	6,86,860	21,97,15,724

13.0 Potential Opportunities in Non Farm Sector:**13.1 Industrial Scenario**

Salem has a greater establishment of Large Scale Industries. Large Scale industrial Units covers a wide range of product lines grouped into Chemical, Mineral based Industries, Steel, Spinning, etc. Major Large Scale Industries in the District are SAIL, Burn & Co., JSW Steels, MALCO, Chemplast Sanmar, Tamil Nadu Magnesite, Sago Serve, etc., providing employment opportunities in the district. There are **57139 registered micro, Small and medium Scale** Industrial units with the State Industries Department. The district is bestowed with rich wealth of minerals such as Bauxite, Limestone, Quartz, Felspar, Magnasite and Granite.

MSME Sector contributes 9 per cent to the country's GDP, 45 per cent to the manufactured output and 30 per cent to the country's exports. Further, it is also estimated that around 45 per cent of the MSMEs are in rural areas. Since the secondary sector contributes around 33 per cent to the GDDP, development of the sector through appropriate credit support assumes importance in the context of the prosperity of the district.

The Salem handloom industry is one of the most ancient cottage industries and producing quality sari, dothi and angavasthram out of silk yarn and cotton yarn. More than 75,000 handlooms and more than 125 spinning mills, with modern weaving units and garment units established itself as one of the major textile center in Tamil Nadu .The history of handloom and spinning mills dates back to pre-independence period in Salem. Private handloom weaving started thriving in the region along with the large scale cooperative sector handloom weaving and marketing units. Small scale hand dying units were started around the region to the industry. Around 1980s the textile industry grew significantly. Many major spinning mills and waste spinning units came up into existence. Many Handloom societies and dying houses were established. New and increased number of Power Loom units were mushroomed in the places

like Gugai, Ammapet, Attayampatti, Magudanchavadi, Taramangalam, Chinna Tirupathi, Mecheri, Omalur, Jalakandapuram and Elampillai.

Salem is one of largest Sago producers who are engaged in production Sago Foods and Starch. In Salem District alone, 34000 hectares of land is under tapioca cultivation which is the raw material for the sago industries and there are 650 units engaged in tapioca processing. In and around Salem the yield of tapioca is about 25-30 T/ha, highest in the World. National average is 19 T/ha and World average production stands at 10 T/ha. Hence it is called land of sago. In 1981, Salem Starch and Sago Manufacturers Service Industrial Co-operative Society Ltd (popularly called as SAGOSERVE) was established to promote the growth of sago industries. Nearly 80% of the national demand for Sago and Starch is being met and distributed by the Sagoserv

Salem Steel Plant, a special steel unit of Steel Authority of India Ltd have their plant located in Salem which produces Cold rolled stainless steel and Hot rolled stainless steel/carbon steel. The plant can produce Austenitic, ferritic, Martensite and low-nickel stainless steel in the form of coils and sheets with an installed capacity of 70,000 tonnes/year in Cold Rolling Mill and 1,86,000 tonnes/year in Hot Rolling Mill. In addition, the plant has country's first top-of-the-line stainless steel blanking facility with a capacity of 3,600 tonnes/year of coin blanks and utility blanks/circles. Expansion and modernisation of Salem Steel Plant is ongoing. The plan envisages installation of Steel Melting and Continuous Casting facilities to produce 1,80,000 tonnes of slabs along with expansion of Cold Rolling Mill complex, enhancing the capacity of Cold Rolled Stainless Steel Products from 65,000 TPA to 1,46,000 TPA and an additional Roll Grinding Machine for Hot Rolling Mill for increasing production to 3,64,000 TPA. The total project area is 1130 acres and cost of the project is 1780 crores.

The region around Salem is rich in mineral ores. Salem has one of the largest Magnesite, Bauxite and also Iron ore deposits in India. As

regards other mineral resources available are lime stone, feldspar, granite, rough stone, etc. It has many magnesite factories operated by private and public sectors such as burn Standard & Co, Dalmia Magnesites and Tata Refractories, SAIL refractories. The Leigh Bazaar market in Salem is the biggest regional market for agro products. Narasus coffee one of the famous coffee in Tamil Nadu, Nandhi Dall Mills the oldest flour mill company, BSP refineries (Usha Refined Sunflower Oil) are other few companies have their presence in Salem.

Table 17 Overview of the Industrial scenario

S.No	Type of Industrial units	No. of units	Investments (in lakhs)	Employment
1.	Large scale	84	581.75	5381
2.	Micro	52972	251709	225580
3.	Small	4083	2175.45	62989
4.	Handicrafts	1875	13.90	3759
5.	Cottage Industries	2864	9.54	7589

Source : MSME Salem 2016-19

Important Economic activities in the District

- Handloom is the main industry which produces high count fine cotton sarees and half fine silk sarees besides production in power loom textile under co-operative and private sector. Handloom center is found in Chinnathirupathi (Omalur), Nilavarapatty, Neikarapatti (Panamarathupatti), Thoppur, Amaragundi (Tharamangalam), Virudasampatty (Mecheri)
- Dairy development, sheep and goat rearing, poultry farming, silk worm rearing, reeling are the important allied agricultural activities. Salem with an impressive milk production of 5.23 LLPD stands first in the State.
- The Salem Steel Plant is a special steel unit of Steel Authority of India Limited, which produces Cold rolled stainless steel and Hot rolled stainless steel/ carbon steel and prominent in the field of

chemical, minerals, steel, spinning, automobiles, auto ancillaries, pharmaceuticals, purified water plants, etc.

- Salem has a good concentration of food processing industries such Sago and Starch Industries, Modern Rice Mills, Sugar cane crushing and Jaggery units, Flour milling, Dhal industries, bakery products and edible oil industries, etc.

Table 18 - Potential Enterprises Clusters

Existing Enterprises scenario	Emerging Enterprises scenario
Rice & Sago – Starch milling	Design Stone and Aari work handloom weaving
Handloom unit	Design Silver Earrings and anklet
Powerloom unit	Powerloom and Auto loom innovation
Metal product	Woven fabrics and Apparels & Technical Textiles
Lorry body building	Curcumin extraction unit
Lorry ancillary business	Defence Corridor Hub
Sericulture	Aluminum and Steel Engineering and Fabrication
Dairy development	Synthetic, Banana, Bio fibre Bag and Paper cup
Flour Mill	Vegetable Food processing unit (Chauce & Paste)
Edible Extraction unit	Flower Essence unit
General Engineering works	Certified seed Production unit
	Coir Fibre/ Yarn/ Pith Block/ Matt/ Carpet.
	Arecanut plates
	Coir products
	Sanitary Napkin unit
	Non-woven Jute Bags and files
	E Lorry service and logistics
	Korra mat weaving
	Feed Mixing unit
	Grading unit of Agri commodities for Export
	Country Bricks making and coir making

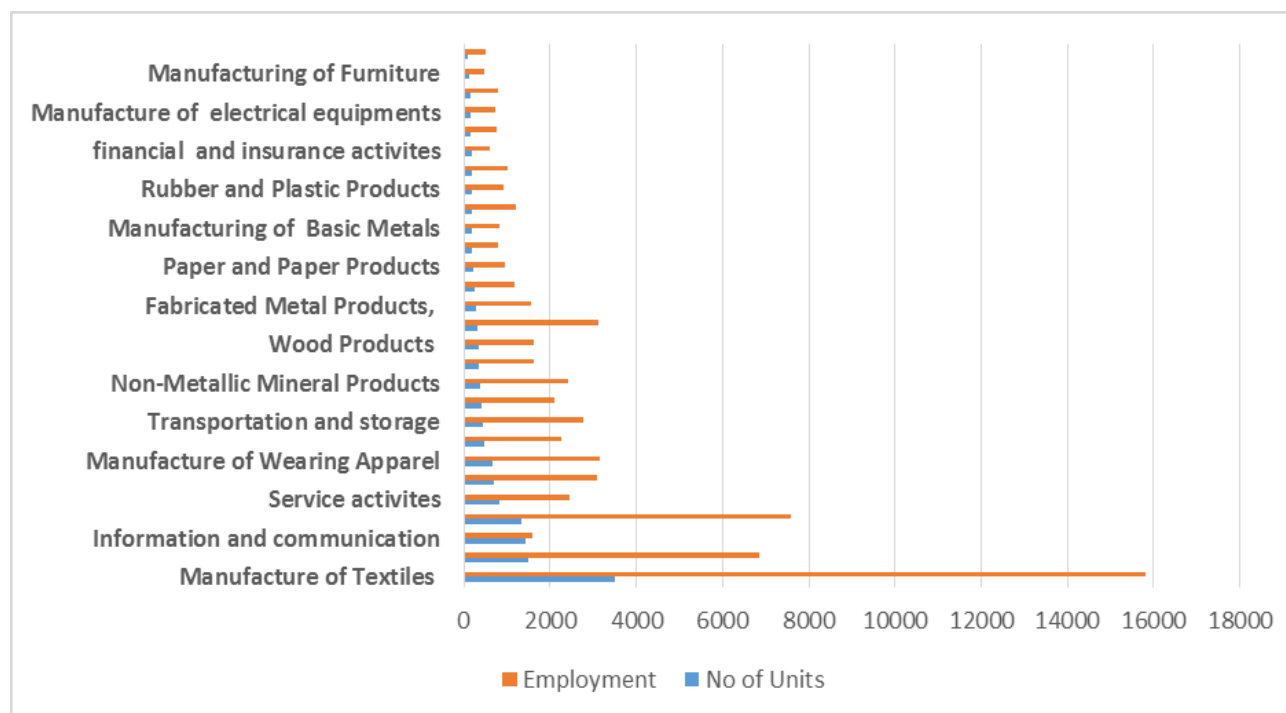
13.2 MICRO SMALL AND MEDIUM ENTERPRISES (MSME) SECTOR**Table (19) Details of MSME Report 2019**

ANNUAL REPORT - APRIL 2018 TO MARCH 2019				
Sl. No.	Industry Group Description : (As per NIC 2008)	Industry group-wise number of UAM units		
		No. of units registered	Investment on Plant and Machinery (lakhs)	Employment Nos.
1	Agriculture, forestry and fishing	344	2200	1625
2	Mining and quarrying	181	2778	1212
3	Food Products & Beverages	1346	13875	7587
4	Manufacture of Tobacco Products	24	177	115
5	Manufacture of Textiles	3505	27122	15808
6	Manufacture of Wearing Apparel	651	2908	3138
7	Leather and related products	27	155	175
8	Wood, Products of Wood	336	2213	1609
9	Paper and Paper Products	220	2156	957
10	Printing and Reproduction Media.	73	637	283
11	Coke, Refined Petroleum Products	11	142	47
12	Chemicals and Chemical Products	171	2155	1017
13	Pharmaceuticals and medicinal products	46	1403	616
14	Rubber and Plastic Products	181	2713	923
15	Other Non-Metallic Mineral Products	384	3400	2423
16	Manufacturing of Basic Metals	192	1592	829
17	Fabricated Metal Products	272	1889	1548
18	computer, electronic ,optical Products	41	350	171
19	Manufacture of electrical equipments	152	1327	724
20	Machinery and equipment N.E.C	238	2280	1179
21	Motor Vehicles, Trailers & semi trailers	144	942	777
22	Other Transport Equipment	24	259	150
23	Manufacturing of Furniture	110	556	462
24	Other manufacturing	1494	10616	6865
25	Repair & installation of machinery	196	1246	794
26	Electricity, Gas Steam and AC supply	23	803	143
27	Water supply & Sanitary Cleaning	43	493	279
28	Construction	308	3226	3111
29	Transportation and storage	436	9079	2764
30	Accommodation & Food service activites	687	3804	3089
31	Information and communication	1433	2250	1600
32	financial and insurance activites	171	691	616
33	Real estate activities	22	233	137
34	Professional scientific & technical	422	3255	2113
35	Administrative and support activities	473	3928	2256
36	Public administration and defence	4	20	11
37	Education	102	782	516
38	Human health & social work activites	162	1768	771
39	Arts entertainment and recreation	65	309	467
40	other Service activites	831	3824	2446
41	Activities of households as employers	5	18	22
	TOTAL :	15550	119574	71375

Source: MSME 2017 -18

There are about 57139 no of units in Micro small and medium enterprises in the district which provides employment to more than 3 lakhs entrepreneur for their sustainable income generation.

Figure:15 MSME sector in Salem district



Source: District Industries Center MSME – Salem 2019

Industry profile of micro, small and medium enterprises is shown in the figure above states that maximum units have been established in Textile enterprises followed by manufacturing and service industries, Information and Communication, apparels and not metallic minerals and wood units, Paper and Rubber products units have also taken the maximum share of investment and employment.

Access to bank credit, capital, technology, skill and marketing are quite unique issues faced by the sector could be possibly tapped by the project with the support of line departments for rural employment.

13.3. Potential activities in Enterprises

Table (20) Details of Major activities

Block	Activities
Omalur	Handloom & Power loom
	Tamarind processing
	Hollow Bricks
	Korai Mat weaving
	Jaggery unit
	Embroidery
	Pottery making
	Coir Products
Tharamangalam	Handloom & Power loom
	Confectionaries
	Coir Products
	Steel and wooden Products
	PVC Pipes
	Steel & Alloy casting
Mecheri	Powerloom
	Sheep Rearing
	Tomato cultivation
	Fishing & dry fishing
Panamaruthupatti	Oleander
	Handloom & Power loom
	Dairy farming
	Mosquito net
	Flour mill
	Bamboo basket making
Sankakri	Lorry body building and Ancillary services
	Powerloom
	Rice milling
	Cotton Ginning
Veerapandi	Coir Products
	Yarn Products
	Handloom & Power loom
	Food Processing units
Attur	Sago processing units
	Arecanut
	Handicraft and cottage units
	Rice Milling
	Steel and wooden Engineering works

Coir Products Cluster:

Mettur Nangavalli Coir mat Consortium has a wide spread groups in mecheri, Pannamarthupatti and Veerapandi promote coir entrepreneur to establish value added products.

Sago Products Cluster:

There is scope to establish sago and starch clusters around Pannamarathupatti, and Attur blocks. Sago food processing unit is mostly cultivated and processed in these mills. Skilled labours and semi skilled persons are needed to work in the Mill. Value addition in Tapioca has high potential in rural enterprises. Discussion with the mill owners indicated that starch and sago used as food item in northern parts of India. Suitable sago variety could be advocated among the farmers to bring high return and in turn fetches high market demand.

Silver Anklet Cluster

These cluster is located in Sivathapuram and high scope in Pannamarathupatti and Veerapandi blocks with ample potential to establish Common facility center to produce finished products at an end.

Powerloom Cluster:

Majority Silk weaving is located in Elampillai and Tharamangalam blocks of salem. The tradition of silk weaving is very unique to Elampillai and is also very affordable.

Handloom Cluster:

In Omalur block – Chinnathiruapthi & Omalur : Tharamangalam block – Thoppur, Amaragundi, Tharamangalam: Mecheri – Mecheri, Virudasampatty: Veerapandy – Attayampatty: Panamarathupatti – Mallur, Nilavarapatty, Kondalmapaty, Neickaranapatty having weaving villages traditionally having weaving more than 100 years with wider scope for innovation.

Lorry Body Building cluster:

Sankakri is famous for lorry body buiding industry provides employment to 20000 workers both skilled and semi skilled. Modernization and use of machinery for constructing lorry tinkering and painting makes time bound and saves time. Changes in technology may lead to improvement in processing of raw materials, Savings in wastage and greater productivity and more speedy production.

Steel and Wooden Fabrication cluster

Effective establishment of Common facility center in the blocks of Omalur, Tharamangalam, Veerapandi and Pannamarathupatty enables artisans to use of latest equipment and wood carving modern machines helps the entrepreneurs to increment the income and sustainability.

Fly Ash Bricks cluster

High demand and use of Fly ash bricks manufacturing cluster through modern technologies could be tapped in TNRTP blocks

Food Processing cluster – Value chain

Product	Primary	Secondary	Tertiary
Horticulture	Cleaning, Sorting and Cutting	Slices, Pulps, Flakes, Paste, Preserved and flavored	Ketchup, Jam, Juices, Pickles, Candies, Chips
Grains	Sorting and Grading	Flour, Broken Rice, Puff, Malt, and milling	Biscuits, Noodles Flakes and cakes
Livestock	Sorting and Refrigerating	Cut fried, Frozen and chilled	Ready to eat meals
Dairy	Grading and refrigeration	Cottage cheese, Cream, Skimmed and dried milk	Processed Milk, Spreadable fat, Yoghurt

13.4 High Trend Industries**Table (21) Details of MSME Industries 2017-18**

1	Manufacture of Textiles	3505	15808
2	Manufacturing sector	1494	6865
3	Information and communication	1433	1600
4	Food Products & Beverages	1346	7587
5	Service activities	831	2446
6	Accommodation and Food service activities	687	3089
7	Manufacture of Wearing Apparel	651	3138
8	Administrative and support activities	473	2256
9	Transportation and storage	436	2764
10	Professional scientific and technical activities	422	2113
11	Non-Metallic Mineral Products	384	2423
12	Agriculture,forestry and fishing	344	1625
13	Wood Products	336	1609
14	Construction	308	3111
15	Fabricated Metal Products,	272	1548
16	Machinery and equipment N.E.C	238	1179
17	Paper and Paper Products	220	957
18	Repair of machinery and equipment	196	794
19	Manufacturing of Basic Metals	192	829
20	Mining and quarrying	181	1212
21	Rubber and Plastic Products	181	923
22	Chemical Products	171	1017
23	financial and insurance activities	171	616
24	Human health activities	162	771
25	Manufacture of electrical equipments	152	724
26	Motor Vehicles, Trailers and semi trailers	144	777
27	Manufacturing of Furniture	110	462
28	Education	102	516
29	Printing and Recorded Media.	73	283
30	Arts entertainment and recreation	65	467
31	Pharmaceuticals,medicinal chemical	46	616
32	Water supply:sewvrage,wast management	43	279
33	computer,electronic and optical Products	41	171
34	Leather and related products	27	175
35	Tobacco Products	24	115
36	Transport Equipment	24	150
37	Electricity, Gas Steam and air conditioning	23	143
38	Real estate activities	22	137
39	Manufacturing of Coke & Petroleum Products	11	47
40	Activities of households	5	22
41	Public administration and defence	4	11
	Total	15550	71375

Source: DIC Report

13.5 **LARGE INDUSTRY**

There are 84 large scale industries in the District which provides employment to more than a lakh Population in spinning millings, Mineral based Industries, Sago and Rice milling and Steel plant. These industries thrive on the raw materials from the farm sector. There are many ancillary units around the sugar industry, Textile and leather based industries. Some key established units are SAIL, Burn & Co., JSW Steels, MALCO, Chemplast Sanmar, Tamil Nadu Magnesite, Sago Serve, etc., providing employment opportunities in the district.

Proposed Projects in line

- Mini Textile Park
- Integrated Livestock park in 900 acres at Thalaiavasal @ 396 Crores
- Mega Food Park in Sirukaradu at 11.5 Acres @ 75 Crores
- Defence Corridor Hub in Salem

Major Exportable Items

- Elampillai, Pochampalli, Salem brand sarees & dhotis
- Hand loom lungies, towels & Readymade garments
- Silver, Granite and Glass products
- Tapioca and coir value added products
- Mango pulp, Coleus Turmeric and processed groundnut
- Agriculture & Horticulture commodities (Medicinal and Herbal)

Table 22 : Scope for New investment opportunities

<u>Manufacturing Sector</u>	<u>Service Sector</u>
Sago Milling	Health care & Tourism
Rice Milling	Logistics & allied security services
Readymade garments & Cotton textiles	Hotels & hospitality
Powerloom & Auto loom	Manpower supply
Engineering components	Education services

Silk weaving	Decorative and Repairing services
Wood based furniture	Education services
Mineral based industries	Event Management and catering services
Coir and ancillary products	Home services and nursing
Food & Beverages Products	Safety disposal of hospital wastes
Silver anklets	Real estate & marketing consultancy
Natural Fiber value added products	Beauty spa
Engineering and Auto components	Para legal and Auditing services

13.6 Investments in Infrastructure

- There is a continued investment in the industrial complexes manufacturing spinning and ginning mills and related components in the short to medium term. There is also significant investment in textiles. The ongoing and prospective investments hint at a structural shift from an economy based on agriculture to an economy dominated by large scale industries and manufacturing in the district. There are 7 industrial estates in Salem viz. SIDCO Narosithapatti, Mettur and Veerapandi, SIDCO Women industrial Estate at karrupur, Udayapatty Co-operative Industrial Estate, Granite & General Industries Co-operative Industrial Estate, Salem and Electrical & Electronic Industrial Estate.

Table (23) Details of investments

Industry	Outstanding	Completed	Total
Food & agro-based products	16	73	89
Textiles	21	38	59
Consumer goods	15	51	66
Construction materials	2	11	13
Metals & metal products	5	14	19
Automobiles & ancillaries	47	21	68
Total	106	208	314

Source: MSME report , Salem district

Connectivity

The road network in the district was well developed with 182.600 Km of National Highways, 2441.163 Km of State Highways, 1181.884 Km of Corporation/Municipal roads, 7255.93 KM of panchayat roads, and 1134.205 KM of Town panchayat/township roads and 85.985 KM of forest roads. The district headquarters is linked with the State capital by marvelous rail and road. There is an upcoming road expressway from Salem to Chennai in vision.

Table 24 Upcoming infrastructure projects in Salem District

Details	Investments (Rs Crore)
Chennai Salem Expressway(Eight lane) at 277.3 km	10000
Mini Textile Park	2.5
Integrated Livestock Park at Thalaivasal NH 79 in 900 acres	396
Mega Food Park in 11.5 Acres	75
Defence Corridor Hub in 1200 acres	
Construction of Bridges (Salem-Coimbatore National Highway) – Via Project block	121.55
New Mettur surplus water scheme – Via project block farmers	615
Smart City Project	198.85
Two Tier Bridges from five roads to Four roads	320
Strengthening banks of Thirumanimutharu river	18.08

13.7 Investment Opportunity

Due to Availability of Railways and good roads, Agriculture, Steel, Auto loom, Bio technology, Software, Electricals and electronics, automobiles, pharmaceuticals, textiles, chemicals, Artificial Intelligence, Educational institutions, Health care has abundant potential to grow in future. *Source: Brief Industrial Profile of Salem district.2017-18 MSME*

13.8 Service sectors

The services sector employs 1.7 lakh people in the district. Most of the population engaged in logistic services, Industrial design making and layout preparation, Automobile repairing, Power tailoring machine, Beauty spa and Rural BPOs, silver Anklets cottage industries, Civil works, Call Taxi, Commercial Advertising agency. Vinayaga mission and Sona College is famous institution for education attracts huge students through out nation. *Source: Statistical handbook of Salem 2017-18*

14. Tourism

Tribal Tourism – Huge scope in untapped hilly areas available throughout the district in promotion of peaceful stay and trekking arrangements for pleasure

Heritage and Cultural Tourism – Mettur Dam, Yercaud, Sankagiri Fort and Temples around Salem brings divine spirit could arrange one day Trip with food arrangements

Medical Tourism – The Presence of corporate hospital is abundant in Salem and there is a high scope for establishing home stay, caring and counselling units

Spiritual and Divine tourism - The Presence of most sacred temples were growing trend nowadays and there is no proper guidance and promoting a guide is a need of the hour.

Incremental Human Resource Availability

The current work force is estimated to be 13.28 lakh, which is estimated to grow to 17.42 lakh by 2022. The highest incremental human resource

availability is expected at the unskilled level, while the lowest incremental availability is estimated at the semi-skilled. The diagnostic study also focussed on identifying the skill gap and availability of jobs across farm, off-farm, non-farm and service sectors for self-employment and wage employment. For this purpose, the data was collected from secondary sources, direct interviews, and focus group discussions. Recommendations are arrived to address the employability, based on the suggestion given by department officials from Agriculture, Horticulture, DIC, TNSRLM, TNSDC, target people the review of literature from the secondary sources. *Source: NSDC salem*

15.0 Qualitative Skill Gaps

PREFERENCE MISMATCH

- Low interest in traditional, labor-intensive sectors such as handloom & handicrafts, gems & jewelry and leather
- Preference for service sector industries such as hospitality and retail
- Low supply of labor at lower skill levels due to preference for white collar jobs.
 - Excess supply of skilled labor.

QUALITATIVE MISMATCH

- Skill sets do not match educational attainment
- High attrition preventing assimilation of skills
 - Lack of industry exposure
- High variation in quality of work force
- Unwillingness to migrate

INFORMATION ASYMMETRY

- Lack of awareness regarding skill development and qualifications required by industry

- Mismatch between job expectations and work conditions
- Low collaboration between industry and training providers for curriculum development

QUALITY OF TRAINING

- Unavailability of quality trainers
- Outdated equipment used for training
- Poor basic education preventing absorption of vocational education

DISINCENTIVES FOR SKILL ACQUISITION

- Low access to skill training providers
- Lack of guidance regarding skill development
- Opportunity cost of skilling in terms of loss of employment and wages
- Lack of mobility between formal and vocational education
- Career progression not institutionalized

ATTITUDES AND PREFERENCES

- Low dignity associated with blue collar jobs
- Preference for formal education
- Socio-economic constraints for skilling of women

16.0 BANKING PENETRATION IN THE DISTRICT

In Salem there are 347 branches of commercial Banks, 27 branches of Regional Rural Bank, 42 Branches of District Central Co-op Bank. The number of public sector banks operating in the District is 16 with 153 branches and the number of private sector banks is 6 with 26 branches. There are no unbanked villages in the district.

Annual Credit highlights

The banks have projected Rs 650.00 crores for 2019-20. The lending issues faced by the banks were high level of NPA of upto 30%. The banks are willing to lend to farmers/Producer Groups directly. But there is a high demand for working capital support from the FPOs.

SHG Bank linkage

Total credit linkage through SHG in the district in the **year 2018-19 is 650 crores through 13009 SHGs**. Financial literacy center is present in Salem. INSETI is a RSETI model of training institute functioning in Salem has completed 10 years of functioning. E-Shakti project enables the SHGs in digitalized book keeping and grading of SHGs,

Joint Liability Groups(JLGs)

JLGs mode of financing serves as a collateral substitute for loan provided to small and marginal farmers. It enables the banks to reach farmers through group approach, facilitate peer education and credit discipline. The total number of JLGs promoted in the district are 2175. They have been promoted by Nabard and NGOs

MFI Presence:

Salem District is moderately served by 6 Microfinance institutions. Due to delay in financing to SHGs by formal bank institutions, MFIs take an opportunity to lend the SHGs with enormous interest and stringent collective methods which are user friendly services. Small Banks are the new category of banks announced by RBI in July 2014. Around 8 companies have received this bank license across India. Madhura, Asirvad, Ujivan, Dhan, Smile and BELLSTAR have good presence of MFIs in this district. Ujjivan, Janalakshmi and Equitas are the small finance banks operating in district.

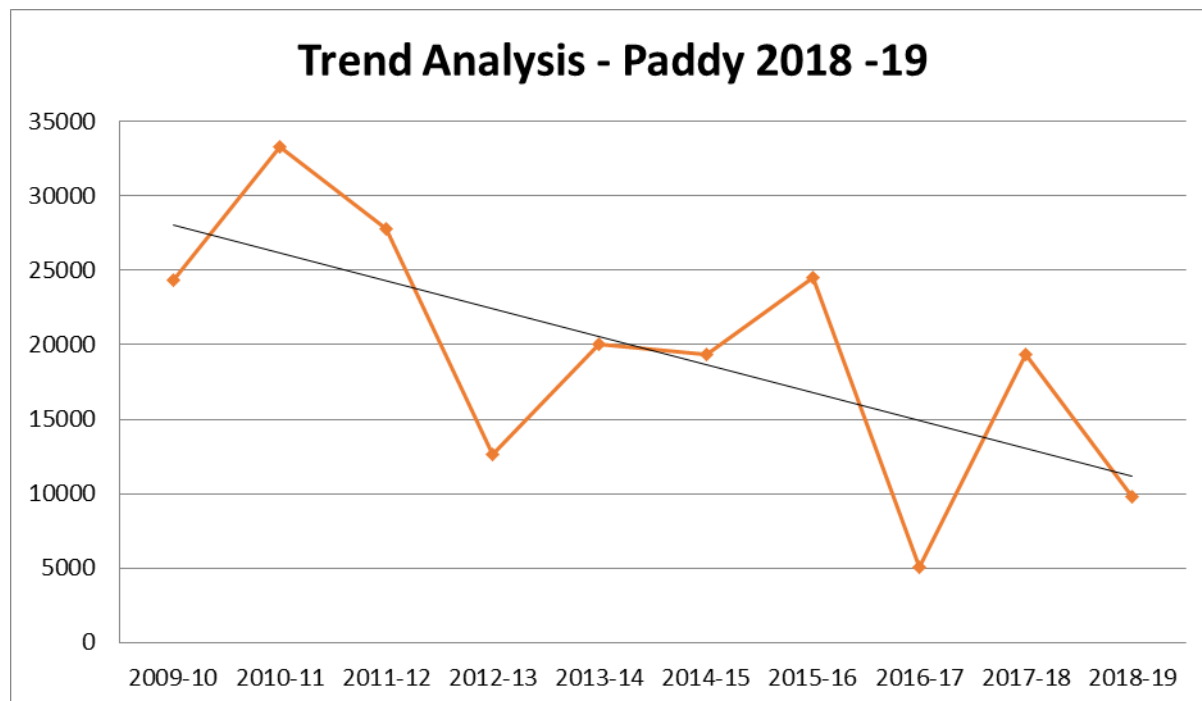
17.0 COMMODITY PRIORITIZATION

COMMODITY PRIORITIZATION Table

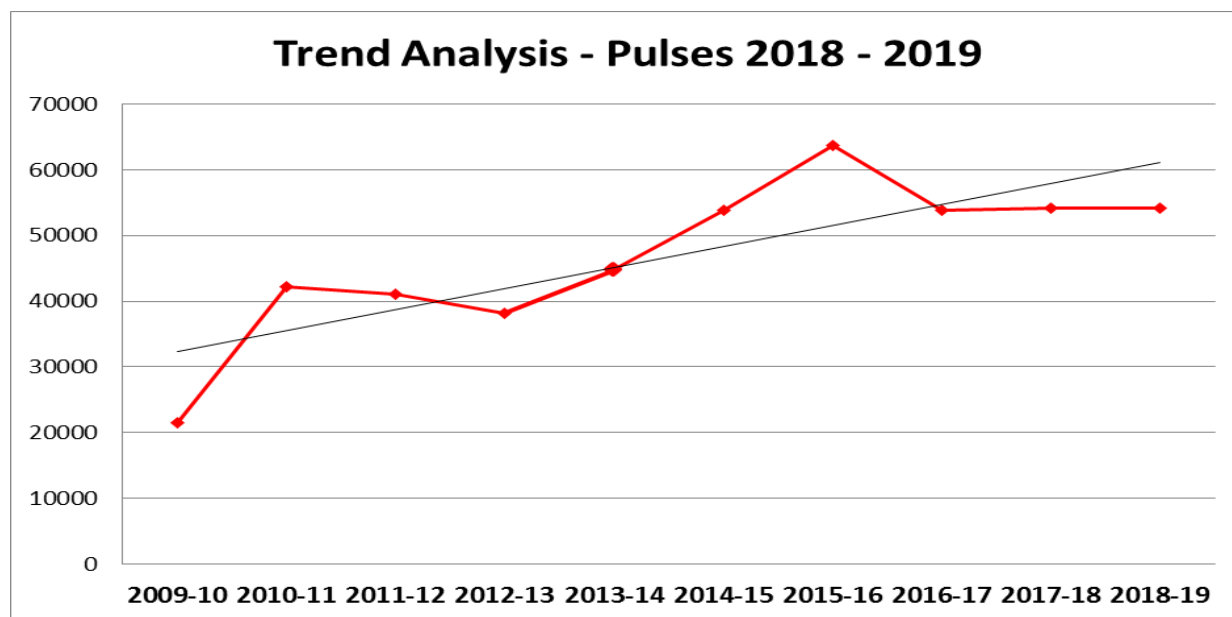
S.No	CRITERIA	DESCRIPTION	COMMODITY			
			Cholam	Maize	Tapioca	Cow Pea
1	Trend in number of producers involved in the commodity	Large number of producers and prioritized crops.	Positive	Positive	Positive	Positive
2	Community Interest	Modern technology innovation, Demand in Market Economic Feasibility	Dry land and Markets production available in all seasons	Extensively cultivated and prolonged to drought value for money	Extensively cultivated in dry area and value for money	Extensively cultivated prolonged to drought and value for money
3	State/National Priority (Thrust from government)	State/National Government Schemes and Investments	Semi-Arid crop research support and Subsidies schemes available for high yielding varieties	Indian Institute of Maize research support and Subsidies schemes available for high yielding varieties	Research center available for Tapioca	Integrated scheme provides subsidies
4	Comparative advantage	Production, Favorable climatic conditions, GI type characteristics, Uniqueness emerging out of Ethnicity and culture,	Major share in state production, High demand, Soil and climate favourable for production	Major share in state production, High demand, Soil and climate favourable for production	Major share in state production and Good digestive fiber present	Major share in state production, High demand, Soil and climate favourable for production
5	Access to Market	Ability to sell the produce at a remunerative price- Local, National & International markets.	High production and value addition demand for Export	High production and value addition demand for Export	Steady increase in demand throughout the nation and value addition	Regular demand and marketed domestically in large volume
6	Opportunity for Value Chain Interventions	Productivity and value added products.	High Productivity for value chain in Animal Feed and Nutrition food	Scope for productivity enhancement and promotion as Corn flakes, Starch and Animal feed	Productivity higher than the State Average and possible in starch and sago products	possible for value chain analysis

18.0 Trend Analysis Report in District - Figure 17

Paddy in Decreasing Pattern



Pulses in Increasing Pattern



The trend analysis of paddy and Pulses for the ten years shows that due to low rainfall , there is a decrease in cultivation of paddy and increase in cultivation of pulse crop majorly; Green Gram, Cow pea and Red Gram . As the trend is positive for pulses, it can be prioritized comparing to paddy.

Source: District Agricultural Report 2017 -18

19.0 Potensial opportunites in Salem District

- Scope for high potential in establishing **Handloom cluster** and promoting entrepreneurs by producing quality saree, dothi and angavasthram out of silk yarn and cotton yarn besides production in power loom textile. Handloom center are also found in Chinnathirupathi (Omalur), Nilavarapattty, Neikarapatti (Panamarathupatti), Thoppur, Amaragundi (Tharamangalam), Virudasampatty (Mecheri) of TNRTP blocks which can also be further leveraged upon. Further Indian Institute of Handloom Technology has its headquarter in Salem and EDI provides latest technological support and guidance for traditional weavers
- A high potential to promote **Power loom** and **Air Jet loom** cluster units through adoption of Latest technology and considering faster development of auto looms, nowadays booming weavers have not access to organized market and they end up as wage earners. Govt announced setting up of **mini Textile Park in Salem is value added scope.**
- A Separate **common Facility center** could be initiated for technology innovation like modification of pattern design and Demand based production and linking with export for their sustainability and increase their income.
- Making of **silver ornaments** and silver anklets by hand work is an important cottage industry in Salem which has a huge potential opportunity for promoting as an enterprises cluster.
- **A Value chain analysis** on the following existing farm and non farm commodities can be taken up for leveraging benefits such as Power loom, maize, Cholan, tapioca, paddy, pulses , sugarcane, groundnut, Cotton and millets Native Sheep and bird rearing, Agro food processing units, etc.,

- Highly potential enterprise activity in farm sector is Coconut and Arecanut plucking Hydraulic ladder, Neera Banam, Breed stock center, Desi bird rearing, mini Flower market center, Millet biscuit making, Bee farming,
- **Sago Serve in Salem** is a gift to Tapioca industry. Salem is known as the land of Sago being cultivated in more than 20000 Ha and running nearly 450 processing units. New innovation can be adopted to bring user friendly value added products like kitchadi, Pappad, Vadai, Halwa, Puri, Kheer, Uppuma, Laddu, Pakoda, Chikki, Murukku, Vermicelli, Fry, Noodles, Sago rice, Sundal in domestic and international markets.
- New Technology innovation could be tapped in food processing industries such as Sago and Starch Industries, Modern Rice Mills, Sugar cane crushing and Jaggery units, Flour milling, Dhal industries, bakery products and edible oil industries, etc. The up-coming Government **Mega Food Park in Salem** has huge opportunity to further aggregate the above commodities.
- **Vegetable aggregation center and Agri input center** could be promoted through Farmer Producer Organizations encouraged. Women Self Help Groups (SHGs) will also be encouraged to take up organic agriculture clusters. Agri-logistics and food processing facilities could be established. Opportunity to sell the farmers produce commodities through E market technology could be done. Good Agricultural practices could be followed
- Salem district is also highest producer of milk at 5.23 lakh LPD. With more than 60 per cent of the milk produced is handled by unorganized sector, there is vast potential for dairy and allied processing industries in the small scale and cottage sector. **One stop Shop** for cattle feed processing unit and fodder cultivation, Poultry hatchery facilitation center could be promoted and support

through convergence for common infrastructure possible for both forward and backward support in forming producer groups/collectives.

- There is a huge Potential in the genetically **superior Mecheri sheep breed** and (Tellichery, Kodi Adu, Salem Black) in goat rearing, eco-friendly backyard poultry rearing to be enhanced through modern technology and innovation brings better marketing
- The activities like fresh water fish farming, prawn farming, ornamental fish farming, supply of ice boxes for fish preservation, may be encouraged.
- Salem district generates enormous agricultural wastes like rice husk, coconut shells, maize cobs, etc. The major constraint in tapping the potential available in the district is lack of awareness among the investors about availability of technology, raw material, subsidy available under various schemes, etc to be tapped.
- The major items that are exported from Salem district are stainless steel products, cotton and synthetic yarn, grey woven fabric, rice, chemicals, apparel, granite, and processed food.
- Rich minerals like magnesite, Bauxite, Granite, Limestone and iron ore were used in mining industries, cement manufactures, refractory, bricks manufacturer, Aluminum melting units and its allied sector has huge promotion of small scale units.
- Horticultural scheme encourages crop diversification and promotion of hi-tech practices to ensure holistic growth of Horticultural crops like Tomato, Turmeric, Tapioca Moringa, Custard apple, Tamarind and minor millets and have potential to setting up of processing unit in salem which has high demand for Value addiction and export
- Ample scope in the field of chemical, minerals, steel, spinning, automobiles, auto ancillaries, pharmaceuticals, purified water

- plants, cold rolled stainless steel and Hot rolled stainless steel/ carbon steel gaining importance
- Opportunities in production of unbleached Nattu Sarkkarai is an important cottage industries which is not tapped.
 - The Future demand of bio fertilizers is in tremendous place for farmers which envisaged the potential in setting up of bio-fertilizer and bio-pesticide production units. Vermicomposting Units and Vermi beds will be in large demand to farmers which converts organic waste into resources.
 - Untapped opportunities and value chain analysis can be done in Vegetable production and Processing of Arali, Sambanki, cultivating Medicinal Coleus is gaining much importance to establish and modernize the units (First Place in TN)
 - **Salem Thattu Vadai Set** is a popular street food with savory, crispy sandwich savory deep fried rice flour cookies slathered with green coriander-mint chutney and red tomato-onion chutney and filled with a mixture of grated carrots, beetroots and onions in tangy lemon juice. Opportunities to explore in different dimension could be identified.
 - There is an urgent need for application of ITS (Intelligent Transport System) making use of information technology like AVL (Automatic Vehicle Location) and GPS (Global Positioning System) to improve road safety, coordination and control. E lorry, E logistics and mobile support services for lorry industries could be tapped and promote to emerging vibrant entrepreneurs in this field.
 - Home stay and Community Food enterprises in NH road has high potential in Salem increases greater income for rural entrepreneurs
 - Sericulture which involves mulberry cultivation, silk worm rearing, and silk reeling, dyeing and weaving provides employment to a sizable

section of population. Though, it is considered as a subsidiary occupation, technological innovation has made it possible to take it up on an intensive scale capable of generating adequate and continuous income to SF/MF.

- Potential scope in cottage industries like Pappad manufacture, Confectionery items, Jam making, Vermicelli , Artificial flowers, Power tailoring, Ornamental craft, Fibre products, country bricks, pottery and snacks and food processing units increasing demand and trend nowadays.
- Huge scope in handicraft items like Rope making, Silver Jewellery Beads Jewellery, Arts metal ware, pottery, Wood carvings, Banana fiber unit, Jute bags, Embroidery, Bamboo products, Stone ware utensils, Coconut shell products, Terracotta design making have extensively high opportunities which are untapped as most of them are unorganized workers and there is a large scope to tie up with convergence schemes for promoting and establishing **rural artisan complexes/ common work sheds.**

20.0 Conclusion

Effective use of resources and efficient in enterprises promotion is unique identity to Salem. A mixed economical based district with majority of the landholdings were owned by marginal farmers. Women are engaged as agricultural labourers mostly in transplanting, processing and rearing of livestock. Though it has a few irrigated pockets majority of the area under cultivation is rainfed. 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 Tapioca and pulses. Under farm sector the commodities that could be prioritized are Maize, Cholan and Cow Pea. Groundnut is widely cultivated in all blocks of Salem district. It is cultivated under both irrigated and rainfed conditions and in all three seasons in a year. When the water availability is low the farmers skip Paddy and cultivate Pulses found. There is a need to improve the seed quality among the farmers. Seed production, delayed marketing, Groundnut based food products are major opportunities from Groundnut.

The potentiality of horticultural crops like Senna, Periwinkle, Kanvali kizhangu (*Gloriosa superba*), *Coleus forskohlii*, Annatto, Palmarosa, Tuberosa, Kadukkai, Aswagandha, Shatavri, Thulsi, Aonla, has unique identity to this area is not fully tapped. Floriculture is picking up in all blocks as the market potential is high. There is a high potential to improve the productivity of all the crops. Additional Feed mixtures units is to be established which could supplement the dairy development.

In Non-Farm sector, silk weaving and reeling has tremendous opportunity. Coir is predominant economic activities found. Salem Coir mat Consortium in Mettur plays a vital role and acts as enthusiasm for coir manufacturers to promote value added products. Rural Artisans and handicraft are also found in Attur blocks. Spiritual, Farm and Seri Tourism is also major opportunity which could be tapped in Salem district.

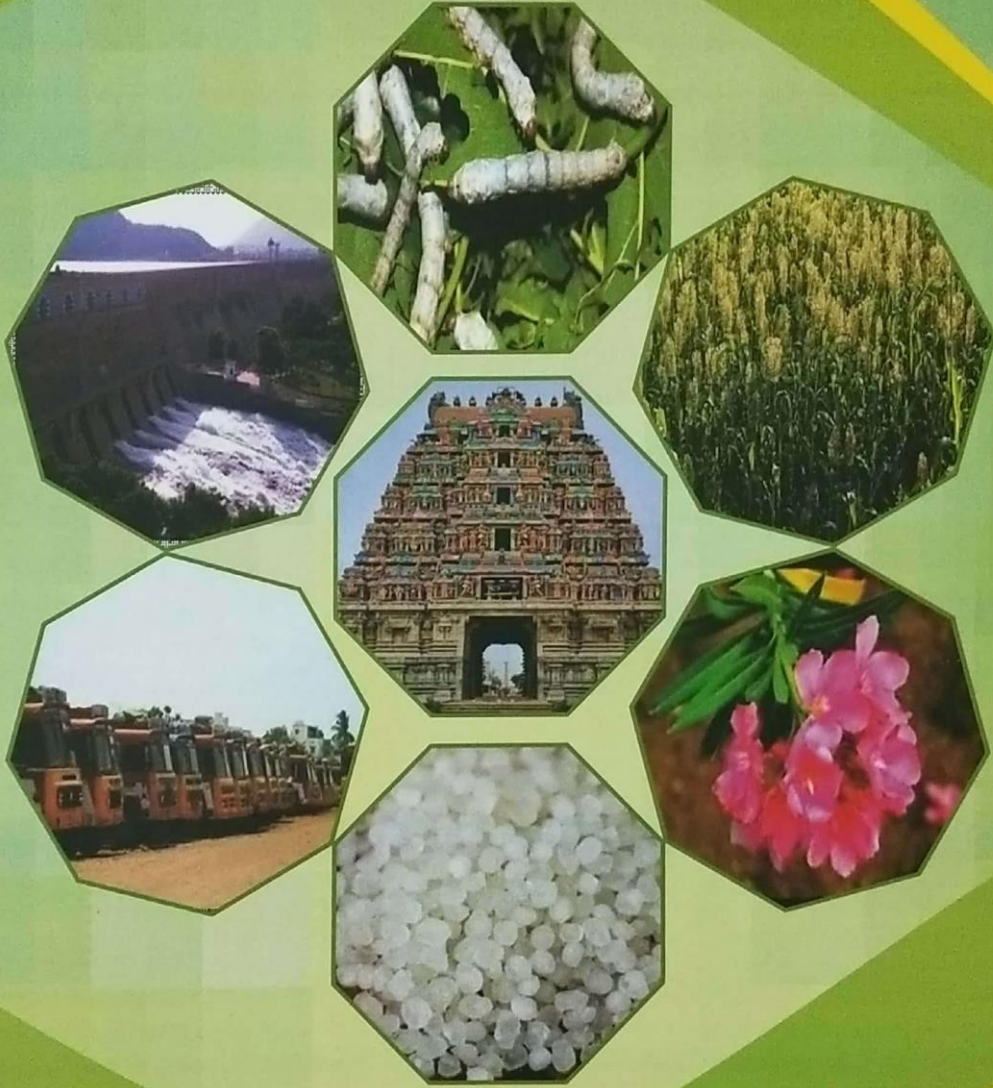
Annexure 1 List of persons met in Salem for data collection:

Sno	Head of Dignitaries
1.	District Collector
2	DRO
3	PD DRDA
4	PA G
5	PD- TNSRLM
6	DDM-NABARD
7	Manager DIC
8	LDM-Indian Bank
9	DD Powerloom
10	Deputy Director- Statistics
11	JDA – Agriculture
12.	Deputy Director-Agriculture (block wise)
13.	Deputy Director- Agriculture- State Schemes
14.	Deputy Director- Marketing
10	Director – Sericulture
11	JD – Animal Husbandry
12	DD Horticulture
13	Agriculture marketing and Business
14	Seed Production and certification
15	THADCO, DADWO & DBCWO officer
16	NIC Officer
17	Indian Institute of Handloom technology
18	SAGO SERVE
19	Entrepreneurship Development Institute
20	ITCOT
21	KVK , VUTRC
22	confederation of Indian industry
23	Salem Productivity council
24	FPOs & POPIs - NGOs

Annexure:2

Details of Taluks, Blocks and TNRTP blocks in Salem District

S.No	Taluks	S.No	Blocks	S.No	TNRTP Blocks
1	Mettur	1	Salem	1	Omalur
2	Omalur	2	Veerapandy	2	Tharamangalam
3	Edappadi	3	P.N.Patty	3	Mecheri
4	Sankari	4	A.Pattanam	4	Panamarathupatti
5	Salem	5	Valappady	5	Veerapandi
6	Yercaud	6	Yercaud	6	Attur
7	Vazhapadi	7	Attur	7	Sankari
8	Attur	8	P.N.Palayam		
9	Gangavalli	9	Gangavalli		
		10	Thalaivasal		
		11	Omalur		
		12	Kadaiyampatty		
		13	Tharamangalam		
		14	Mecheri		
		15	Nangavalli		
		16	Kolathur		
		17	Sankagiri		
		18	Magudanchavadi		
		19	Edapady		
		20	Konganapuram		



DISTRICT EXECUTIVE OFFICER
TAMILNADU RURAL TRANSFORMATION PROJECT
Old Nattanmai Building, District Panchayat Office Campus,
Salem Distict - 636 001.
E-mail : slm.tnrtp@yahoo.com