



# DISTRICT DIAGNOSTIC STUDY



Tamil Nadu Rural Transformation Project  
Pudukkottai District



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## GLOSSARY

BHEL	Bharath Heavy Electricals Limited
CLG	Common Livelihood Group
FPO	Farmer Producer Organization
JLG	Joint Liability Group
KVK	Krishi Vigyan Kendra
MSME	Micro Small and Medium Enterprises
NABARD	National Bank for Agriculture and Rural Development
NFDB	National Fisheries Development Board
NGO	Non Government Organization
NRLP	National Rural Livelihoods Project
PMKSY	Pradhan Mantri Krishi Sinchayi Yojana
SHG	Self Help Group
SFAC	Small Farmers Agribusiness Consortium
SIDCO	Small Industries Development Corporations
SIPCOT	State Industries Promotion Corporation of Tamil Nadu
TAFCOFED	Tamil Nadu State Apex Fisheries Co-operative Federation Limited
TANSEDA	Tamil Nadu State Seeds Development Agency
TNEPRP	Tamil Nadu Empowerment and Poverty Reduction Project
TNIAMP	Tamil Nadu Irrigated Agriculture Modernization Project
TNAU	Tamil Nadu Agricultural University
TNRTP	Tamil Nadu Rural Transformation Project
TNSRLM	Tamil Nadu State Rural Livelihood Mission
VPRC	Village Poverty Reduction Committee

# Executive Summary

Pudukkottai district has a history of early trade with foreign countries especially with Rome. The age old ports of Mimisal, Salaiyur and Tondi marks an important indo-Roman trading center, through which the inland trade route ran between the western and eastern port during that time. Pudukkotai is filled with ancient treasure of archaeological sites and temples like Sittannavasal, Avudaiyarkoil, Thirumayam, Viralimalai etc. and hence, it is also termed as archeological paradise. Jain saints (9th century AD) drawings and 3000 year old burial site, 7000 years old rock paintings spotted in Thirumayam fort can be still seen in Sittannavasal. The Famous religious literature 'Thiruvagasam' was written by saint Manikavasakar at Avudaiyarkoil. Pudukottai District top in cultivation of Eucalyptus in Tamil Nadu state. Pudukkottai placed in third position in area of cultivation of cashew nut in Tamil Nadu state. Similarly Jackfruit comes in 5th position and lemon in 7th place.

Despites Pudukkottai district is categorized as an economically backward district, Pudukkottai has many scope to strengthen it. This diagnostic study helped in identifying, prioritizing potential sectors, sub sectors, commodities for promoting rural enterprises in the local context. The study presents thoroughly from secondary data and details gathered from line departments, community based organizations, Farmer producer organizations, research papers, journals, books and websites. The details and scope of the study are explained in detail.



Tamil Nadu Rural Transformation Project (TNRTP) is a transformative project that looks beyond Poverty alleviation by building sustainability and prosperity of rural communities through enterprise promotion, access to finance and employment opportunities. The project will build on the investments made by Tamil Nadu Empowerment and Poverty Reduction Project (TNEPRP), Tamil Nadu State Rural Livelihood Mission (TNSRLM) and National Rural Livelihood Project (NRLP) since 2005 and 2011. These projects enabled vulnerability reduction through building strong community institutional structures.

Project Development objective of TNRTP is “to promote rural enterprises, access to finance and employment opportunities in selected blocks of Tamil Nadu”

The project will work with a total of 411,620-targeted individuals out of which 325,000 individuals will be organized into Producer Collectives and Enterprise Groups. In addition, the project will also support around 6,620 individual entrepreneurs, 40000 youth for skills enhancement through convergence and 40000 through Community Skill Schools (CSS).

The project will be implemented through four components and sub-components

1. Rural Enterprises and ecosystem development
2. Enterprise business plan financing
3. Skills and job opportunities
4. Project Management

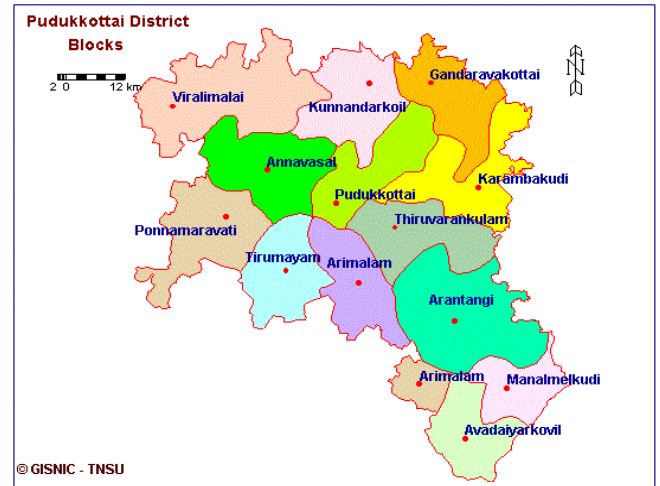
District Diagnostic Study is the first level of analytics, based on stakeholder consultations and analysis of secondary information. The objective of the District diagnostic study is “to identify and prioritize major sectors/ subsectors and commodities for enterprise promotion in the local context” The study broadly analyses the indicators, such as social profile, rural profile, urbanization trends and labor 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 centres 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 will provide inference for understanding factors contributing to rural economy through employment generation and high value economic activities thus resulting in increase in the household income.

## Methodology

Secondary Data were collected from various line departments, SHGs, Farm and Non-farm Associations, Resource Institutions, NABARD, LEAD Bank and 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 was held to validate the secondary data.

Pudukkottai district is one of the princely states of Tamilnadu which holds rich cultural heritage with Fortresses, Palaces, Temples, Cave Paintings and many other historical monuments. The district was one of the homes of pre-historic man. Many of the villages are of ancient foundation and also referenced often in Tamil Sangam Literature. Pudukkottai district is well endowed with natural resources of land and sea bounded by the marine hedge of Bay of Bengal in the east conjoined by the southern districts viz, Trichy, Sivaganga, Ramanathapuram and Thanjavur. Pudukkottai District was carved out of Tiruchirappalli and Thanjavur districts in January 1974. The district has an area of 4663 Sq. Km. with a coast line of 39 Kms. It is bounded by Tiruchirappalli district in the North and West, Sivaganga district in the South, Bay of Bengal in the East and Thanjavur district in the North East. At present, this district is composed of three Revenue Divisions, namely, twelve Taluks 45 firkas and 763 Revenue Villages.



Apart from rich cultural heritages, Pudukkottai has both irrigated and rainfed crops. In agricultures Paddy, sugarcane, groundnut, maize, pulses like blackgram, green gram and red gram and millets like sorghum, finger millet, pearl millet and kodo millets are sown. In horticulture, Coconut, cashew, banana, mango, lemon, guava are grown. Both inland and Marine fisheries available in the district. Fishermen communities promotes seaweed cultivation other than fishing. Umbalachery variety of breeds in cattle, Ramnad Black and Keelakaraisal kind of breeds in goats are available in the district. Further industries like BHEL, Pudukkottai District cooperative spinning mill, Iraizar TVS, High Energy Batteries (India) limited and Livia Polymer bottles are the major players of this district besides various small cottage industries functioning across the districts. Furthermore in mines, colour granite sources are available, also pebble trades in Pudukkottai District, etc., which are a huge potential source for leveraging and promoting for non – farm based enterprise. There are 13 blocks and 499 village panchayats. Tamil Nadu Rural Transformation Project works on four backward blocks which are Pudukkottai, Thiruvarankulam, Aranthangi, Viralimalai.

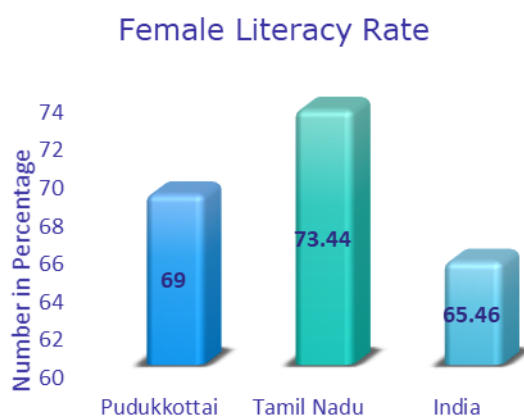
### 3.1 Population

The district population is 16,18,345 in 2011 as against 14,59,601 in 2001. The decadal population growth during 2001- 2011 in the district was 10.9%. The density of the population in the district is 347 persons per sq.km in 2011, as against 342.5 per sq.km in 2001 which is due to the increased population as shown in figure. The urban population is 3,16,354 constituting 19.55 % of the total Population, the remaining 80.45% ie.13,01,991 is rural population. SC population is 2,84,804, ST Population is 1283. The district sex ratio (1015) was higher than the State sex ratio of 996. This district ranks 5th in the State for having lowest urban population share of 19.55%.The decadal population growth during 2001- 2011 in the district was 10.86%. There is an increase of 0.88 per cent.

### 3.2 Sex Ratio

The above figure shown that sex ratio remains the same during 2001 and 2011 as 1015 females per 1000 males. So, gender discrimination and sex selection do not seem to be the major issue in Pudukkottai district. The percentage of 0-14 year old children was 28.40 per cent in 2001, which has decreased to 24.28 per cent in 2011 which may be an attribution due to the increased awareness regarding family welfare measures and also to the increasing urbanization.

### 3.3 Literacy



The female literacy rate (69%) is considerably higher than the national level (65.46%), but it is lower than the State level (73.44%).

Figure 1: Female literacy -rate

Source; District Census Handbook 2011 - Pudukkottai

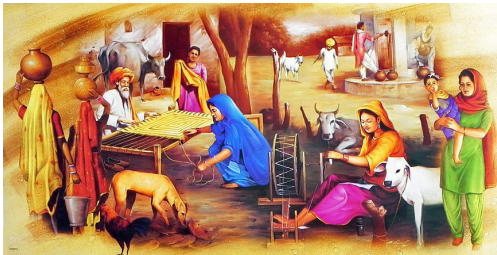
# COMPARATIVE POPULATION STATUS CENSUS 2001 & 2011



Population



Proportion to state



Rural Population



Urban Population



Decennial growth (percent)



Density of population per sq.km



Urban population (percent)



Sex ratio



Percentage of 0-14 years old



Average Literacy



Female Literacy



Source; Census 2001 and 2011.

A study done by Bharathidasan University Trichirappalli shows that the variations among blocks in terms of Female Literacy Rate are higher than Male Literacy Rate. The Female Literacy Rate is higher in Annavasal block with 78.77 per cent, while Pudukkottai block has the lowest Female Literacy Rate among the blocks in Pudukkottai district. Five blocks Annavasal, Aranthangi, Gandharavakkottai, Karambakkudi and Thiruvarankulam have better Female Literacy Rate of 69 per cent.

The top five blocks with GII (Gender inequality Index) necessarily indicate the lowest gender inequality. Annavasal ranks first with an index value of 0.006 indicating lowest gender inequality among the blocks in Pudukkottai district. The top five blocks in terms of GII or gender inequality are Annavasal, Pudukkottai (0.013), Gandharvakkottai (0.025), Manmelkudi (0.028) and Karambakkudi (0.032). These blocks record lower inequality in gender achievements or in other words, achievements of women have been higher in these blocks. Thiruvarankulam with 13th GII rank, stands last with the highest GII value of 0.105. The bottom five blocks in terms of GII are Thiruvarankulam, Arimalam (0.096), Viralimalai (0.087), Kunrandarkovil (0.070) and Ponnamaravathi (0.070). In these blocks, gender gap is very high, so these blocks need attention in terms of women empowerment. These blocks record higher values of GII.

### 3.4 SC, ST Population

The district has 17.6% of Scheduled Caste population whereas the Scheduled Tribe population was one of the lowest (0.1%) among the districts in the State. Scheduled Castes and Scheduled Tribes accounted for 17.6% and 0.1 % of the population respectively which is lower than the state percentage of 20.01% and 1.10% respectively. Among the social groups, the percentage share of Scheduled Caste (SC) is 17.6, as per Census 2011 as against 17.09 percent of Census 2001 and that of Scheduled Tribes (ST) is 0.1 percent in 2011 as against 3.33 percent in Census 2001. Overall in the district the ST population has increased by 0.03 percent in 2011.

### 3.5 Occupation Profile

**Table 1.Total Workers and Non workers**

Category	2001	percent	2011	Percent
<b>Population</b>	14,59,601	100.00	16,18,345	100.00
<b>Workers</b>	6,78,289	46.47	7,61,693	47.07
<b>Main</b>	5,54,752	38.01	6,40,248	39.56
<b>Marginal</b>	1,44,097	9.87	1,21,445	7.50
<b>Non-workers</b>	7,60,752	52.12	8,56,652	52.93

Source; Census 2001 and 2011.

The percentage of total workers in Pudukkottai has increased from 46.47 percent to 47.07 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 38.01 percent to 39.56 percent and reduction of marginal workers from 9.87 percent to 7.50 percent.

This could be attributed to creation of additional employment in the primary sector and secondary sector. Overall the work participation rate in the district is higher than Tamil Nadu which is 44.7 in 2011.

In Literacy Rate, the variations among blocks in terms of Female Work Participation Rate (WPR) are much higher than in Male WPR. Viralimalai block has the highest Female WPR among the blocks of Pudukkottai district, which is closely followed by Karambakkudi. The least Female WPR is found in Pudukkottai block with 25.85 per cent. Eight blocks, Annavasal, Kundrandarkovil, Ponnamaravathi, Viralimalai, Avudayarkovil, Gandharvakkottai, Karambakkudi and Thiruvankulam have better Female WPR than the district rate of 35.65. The Female WPR in Non-Agricultural Sector for Pudukkottai block was far better than other blocks in Pudukkottai district with a rate of 20.55 per cent. Arimalam block equals the district level of 20.55. Four blocks Annavasal, Pudukkottai, Thirumayam and Manamelkudi perform better than the district rate. The least performing blocks are Gandharvakkottai with 8.92 per cent and Avudayarkovil with 9.74 per cent. The Male WPR in Non-Agricultural Sector ranges from 17.52 per cent in Gandharvakkottai block to 73.63 per cent in Pudukkottai block. Three blocks Annavasal, Pudukkottai and Manamelkudi have better Male WPR than the district rate of 39.16 per cent.

### 3.6 Community Based Organisations

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

- 7570 SHGs
- 483 VPRCs
- 483 PLFs
- 14 CLGs
- 135 JLG





The average membership per SHG 12. A majority of the community based organizations in Pudukkottai district focus on poverty reduction and development and a few organizations recently emerged like Farmers Producer Organizations (FPOs), commodity groups are functioning with the focus on enterprise development.

### 3.7 Farmer Producer Organizations (FPOs)

The following table shows the status of FPOs in Pudukkottai District. There are 8 FPOs promoted by Agriculture Department, NABARD and Resource Institutions. Out of 8 FPOs 5 FPOs were promoted under TNSFAC and remaining 3 were by NABARD. Rose NGOs, Vrutii, Dhan foundation, MSSRF are the resource institutions for the above mentioned FPOs. Most of the FPOs are working on Paddy, Groundnut, pulses especially Black Gram. Few of them have installed Value added Units.

**Table 2: Details of FPOs in Pudukkottai District**

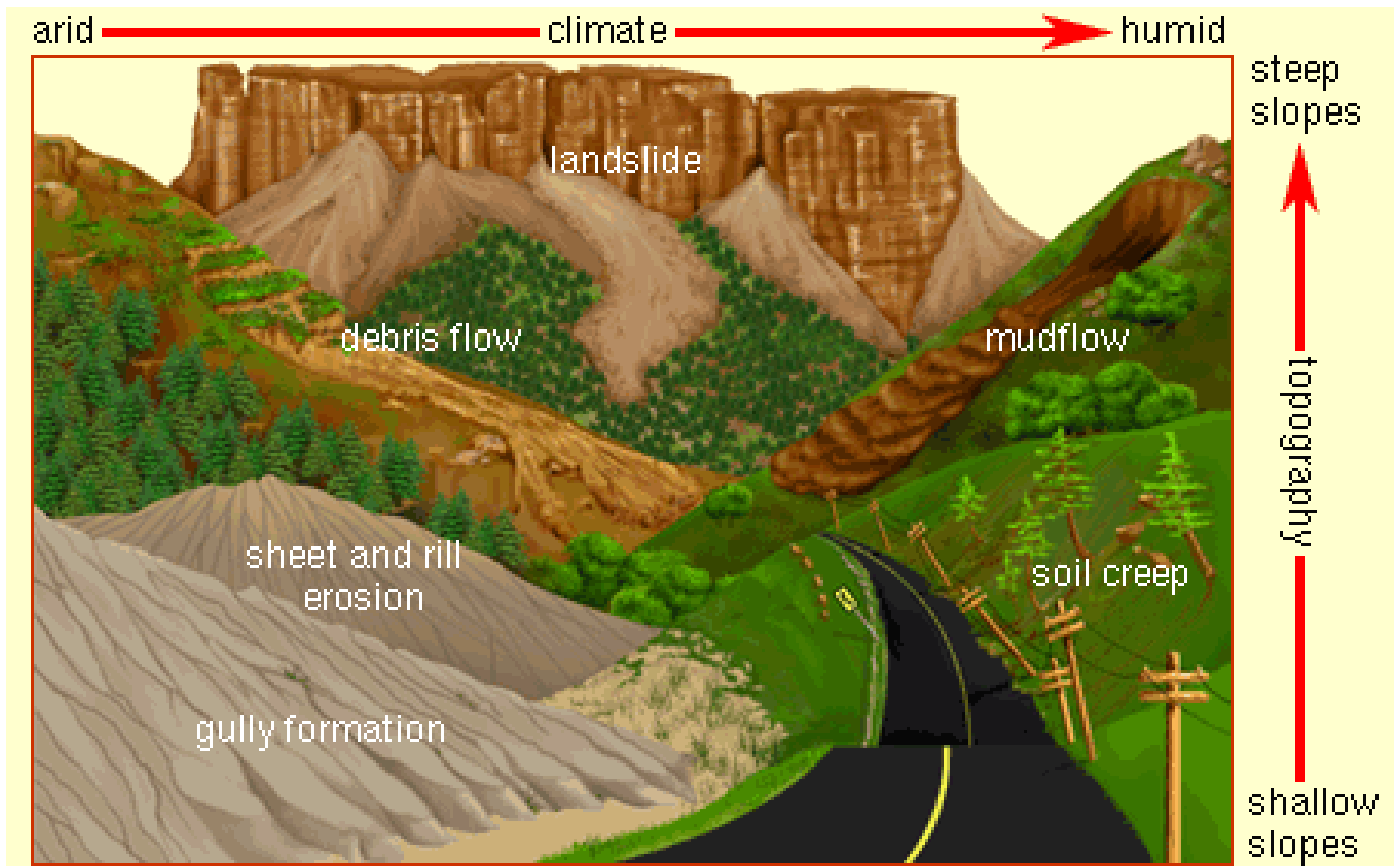
S. No	FPO Name	Promoted By	Major commodities	Tie up NGO	Brand Name
1	Pudukkottai Organic Famers Producer company Limited	SFAC	Millets(Finger Millet, Foxtail Millet, Finger millet, Cumbu, Little Millet)  Indigenous Paddy (Map-pillaisamba, Kullakar, Seeragasamba, Thooyamalli, Kavuni, Kichadisamba)	ROSE NGO	Punjai organic
2	Illupur Farmers producer company	SFAC	Pulses (Blackgram, Green gram, Redgram)	MSSRF	Pattikadu
3	Coconut Farmers Producer Company Limited	SFAC	Coconut	DHAN Foundation	-
4	Ambuliaaru Agriculture producer company Limited	NABARD	Paddy  Groundnut  Blackgram	Vrutti	-

S. No	FPO Name	Promoted By	Major commodities	Tie up NGO	Brand Name
5	Mukkanicholai Agriculture Producer Company limited	NABARD	Paddy Groundnut	Vrutti	
6	Karambakudi Agriculture Producer company Limited	NABARD	Paddy Goundnut Maize	Vrutti	
7	Nakeerar Coconut Farmers Producer Company Limited	SFAC	Coconut	DHAN Foundation	
8	Aranthai collective Farmers producer company	SFAC	Coconut	DHAN Foundation	

Source; Nabard, SFAC, Agriculture Department

A FPO named Pudukkottai Organic Farmer producer Company Ltd., which is 5 years old has mobilized around 20 lakhs as equity and seen profits. With 1,028 shareholders they promoted millets and traditional paddy varieties. About 37 type of value added products they promoted. Last year turn over this FPO was 1.5 crores. Coconut Farmers Producer Company Limited promoted traditional coconut oil. They have also got license from the Government and marketed Neera Drink. Illupur Agriculture producer company limited, owns a rice mill, dhal processing unit and also they process milk and selling it. Only three FPOs among all having FSSAI, GST, Brand license, Trade licenses. Though groundnut and pulses has great potential in the district, except Pudukkottai Organic Farmer producer Company Ltd none have promoted value added products in ground nut. About 460 Farmer Interest Groups were there in Pudukkottai District. No FPOs have separate cold storage unit to preserve vegetables, flowers, milk etc.





### 4.1. Topography

Pudukkottai District is well endowed with natural resources of land and sea, bounded by the marine hedge of Bay of Bengal in the east conjoined by the southern districts viz, Trichy, Sivaganga, Ramanathapuram and Thanjavur. It measures an area of 4663.29 sq.kms with a coastal length of 42 kms.

#### Geology of Pudukkottai District:

The geological formation of Pudukkottai District comprises of the hard rocks formed in the Arcana age to the sedimentary deposits of the Quaternary period. Geologically the entire study area can be divided into hard rock and sedimentary rock regions. The hard rocks are found on the western side and sedimentary formation towards the eastern direction of the study area. About 45 % of the study area is under hard massive formation of Arcana age and the rest 55 % comprises of the sedimentary formation ranging from Pre-Cambrian to Quaternary period.

The various types of hard rocks found here are Charnockites, Hornblende Gneiss, Biotite Gneiss, Granite and Quartzite's. Various types of Gneiss rocks are found in the western part of Pudukkottai District. Charnockites and granites rocks are mostly found in the central part including the blocks of Kunnandavarkoil, Thirumayam and the southern parts of Pudukkottai Block. The various types of Gneiss rocks are found in the western part of the study area, consisting the blocks of Viralimalai, Annavasal and Ponamaravathy. Quartzite deposits are found in small quantity in some parts of Annavasal and Thirumayam Blocks. In the Blocks of Kulathur, Thirumayam and parts of Pudukkottai crystalline rocks are found.

## 4.2 Climate and Rainfall

The temperature ranges from a maximum of 40.10 to minimum of 18.60. Hot weather is experienced from April to June and November to January being the coldest months. High temperature prevails throughout the year. Generally a dry and hot climate prevails in this District.

The actual annual rainfall was put at 716.3 mm during 2017-18 against the normal rainfall of 887.4 mm for the district. The annual precipitation is lesser than normal rainfall by 171.1 mm. About 407.3 mm is received in South West Monsoon, 207.5 mm, is received in North East Monsoon, 7.3mm rainfall is recorded for winter and 94.2 mm is received in Hot Weather Period.

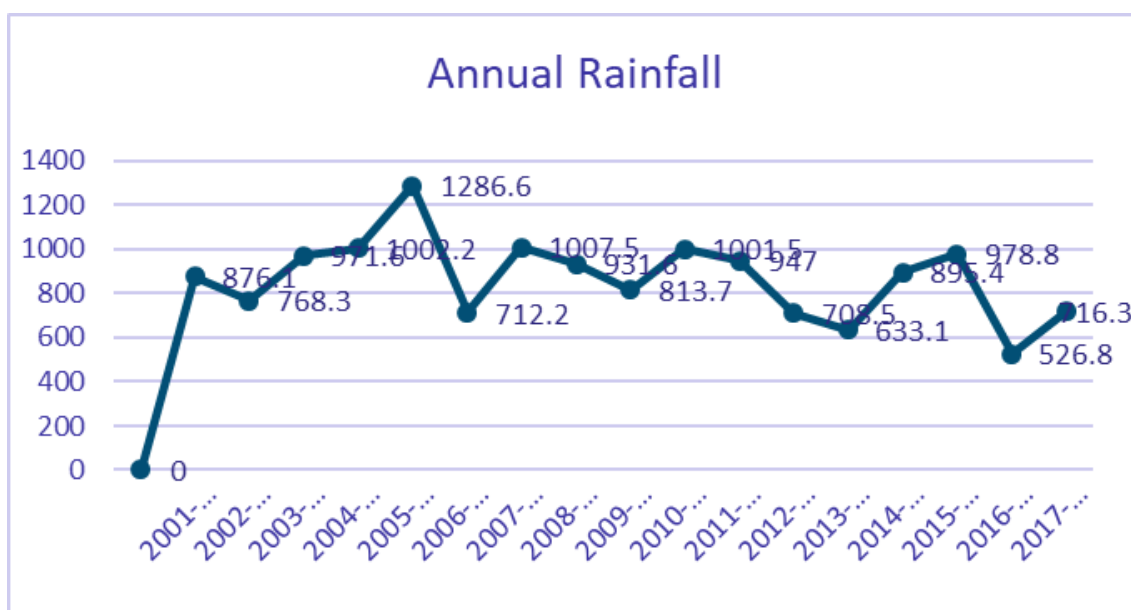


Figure 2 :Trend in rainfall | Source; Dist. Stat Handbook 2017-18

The above table indicated that annual rainfall received during the last three years were viz., 978.8, 526.8 and 716.3 mm respectively. An analysis of the rainfall trend has been varies for most of the years.

### 4.3 Land Use Pattern of the District

Soil is one of the natural resources which have the most direct impact on agricultural development. Different types of soil, rainfall and irrigation projects have influenced the development of land use in the district.

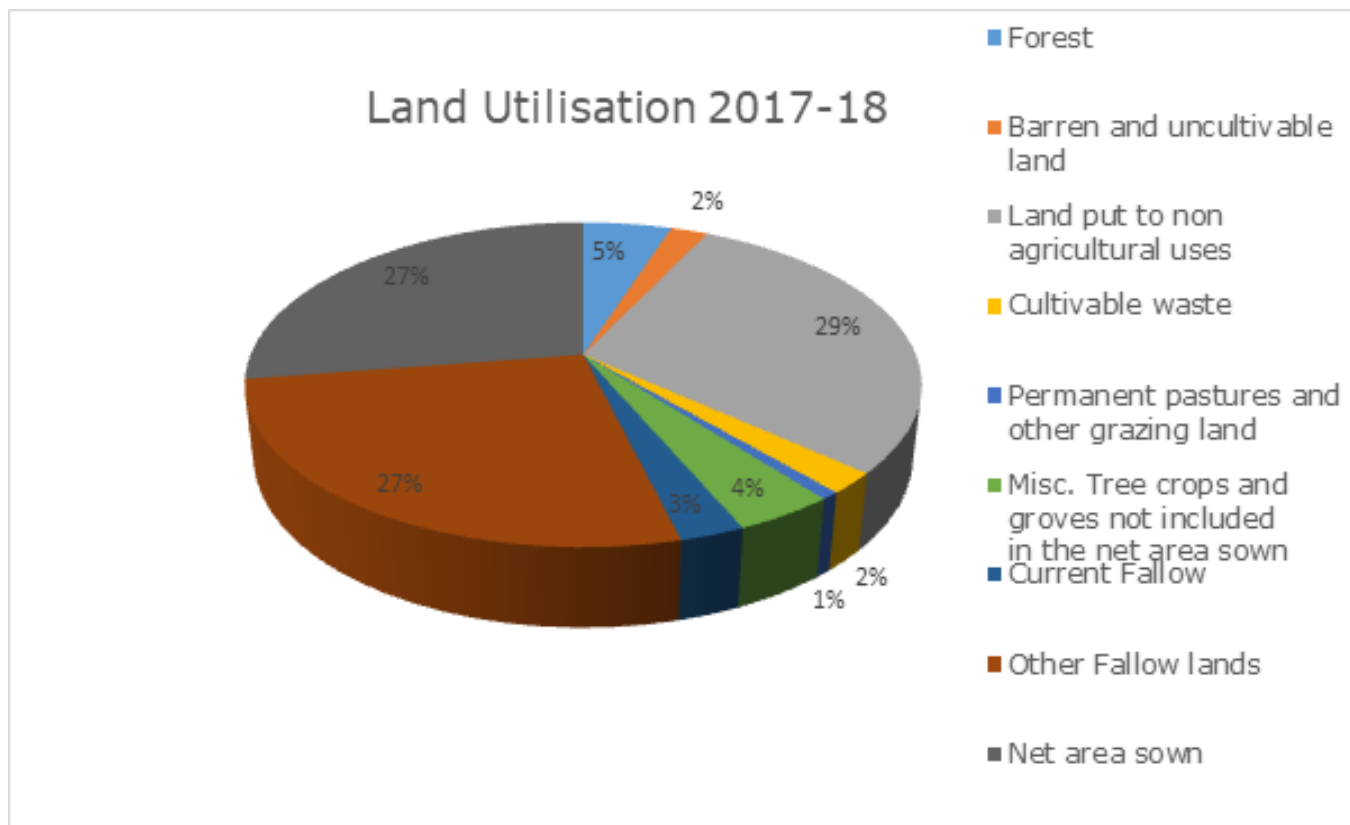


Figure 3: Land utilization 2017-18 | Source: Dist. stat Handbook 2017-18.

The total geographical area of Pudukkottai district is 4,66,329 hectares. The total gross cropped area of the district was 9863 hectares and net area sown was 127868 hectares in 2017-18. Further it could be seen that the forest area was 5 % of the total geographical area (Figure)

The net area sown is 127868 hectares (2017-18) which accounts to 27% of the total geographical area. The area sown more than once has increased from 2671 hectares (2016-17) to 4487 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.

## 4.4 Soil



Black soil, Red loamy, Sandy coastal Alluvium, Red sandy soil are found to be popular in this district. The details of major soil types are furnished in Table.

**Table 3 Soil Type of Pudukkottai district**

S.No	Type of soil	Places in District
1.	Red Loam	Annavasal, Pudukkottai, Gandaravakottai, Thirumayam, Ponnamaravathy, Thiruvarangulam, Aranthangi
2.	Black Soil	Karamabakudi, Viralimalai, Annavasal, Kunnandarkoil
3.	Sandy Costal Alluviam Soil	Avudaiyarkovil, Manamelkudi
4.	Red Sandy Soil	Viralimalai, Pudukkottai, Arimalam, Thiruvarangulam, Aranthanthangi

*Source: Agri -Engineering (Soil Conservation), Pudukkottai*

### Red Loam:

These soils usually contain greater amounts of nutrients and humus than their sandy 'relatives'. They also offer better drainage and infiltration of water and air than silty soils, and are easier to till than clay soils. This soil type is considered ideal for agricultural purposes on account of its ability to retain nutrients well. It also retains water while still allowing excess water to drain away. Red ferruginous lateritic soils are formed on the high ground, south of Annavasal, west of Illupur, north of Malaipatti around Kulakurichi near Gandarvakottai, East of Arantangi around Arimalam and Alangudi.

### **Black soil:**

Black soils are derivatives of trap lava and are spread mostly across regions where there is both moderate rainfall and underlying basaltic rock. Because of their high clay content, black soils develop wide cracks during the dry season, but their iron-rich granular structure makes them resistant to wind and water erosion. Black soils are formed in the western part of the district.

### **Sandy coastal alluvial soil:**

These are light grey, pale yellow or brown sand, with gravelly sandy loam to clay loam in subsurface horizons and are acidic in reaction, low in CEC (cation exchange capacity) base saturation and water holding capacity and deficient of major nutrients. These soils are classified under order Entisols with sub-orders Aquents, Fluvents and Psamments.

### **Red sandy soil:**

The iron in red sandy soil prevents iron deficiency in plants. This is often offset by the soils acidity. On the down side, sandy soils require more frequent watering or the use of other methods to retain moisture. Adding organic matter and careful watering help overcome this issue.

Alluvial soils consist of blackish and brownish sandy and silty soils which can be found along the course of the Vellar, Agniyar and Ambuliyar rivers, whereas, the beach sands are found along the coast of the district.

## 4.5 Water Resources



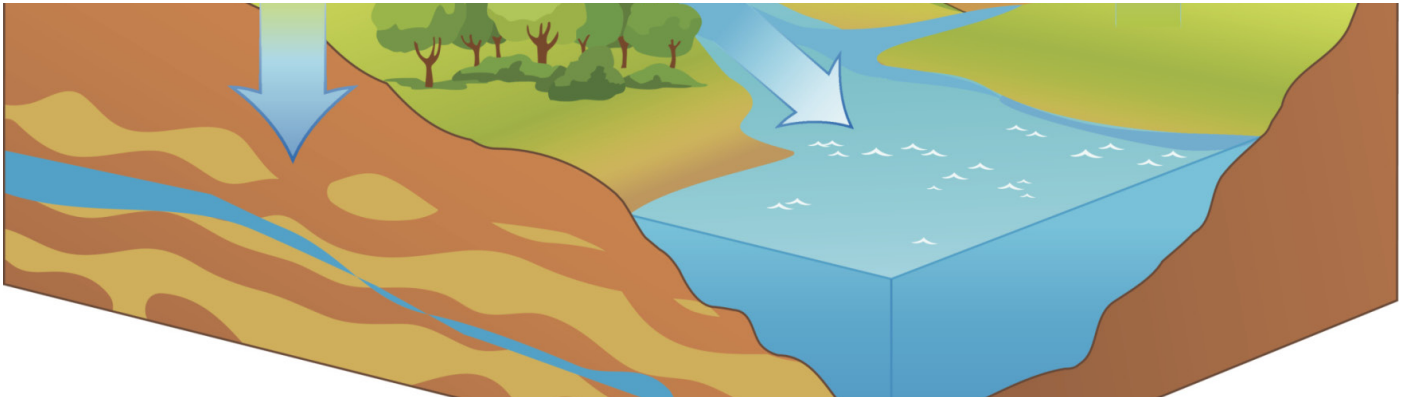
### 4.5.1 Rivers

Pudukkottai is the part of Cauvery Basin and parts of Vellar, Agniyar, Ambuliyar, Koraiyar, Gundar and Pambar sub basins. Vellar is the major river, which flows in an East- south easterly direction and confluences with the Bay of Bengal near Manamelkudi. Agniyar, Ambuliyar, Koraiyar, Gundar and Pambar are the other important rivers draining the District. The total length of stream in the District is 241km and covers basin area of about 47000 hectes. Almost all the rivers are ephemeral in nature. There are about 7130 tanks in the District.

### 4.5.2 Reservoirs

No reservoirs available in Pudukkottai District.





**Table 4 Block Wise of details of Ground Water Potential of Pudukkottai District**

Categorization Based On Extraction	No. of Blocks	Block
Over Exploited (>100%)	0	-
Critical (90%-100%)	0	-
Semi Critical (70%-90%)	3	Thiruvarankulam, Viralimalai, Annavasal,
Safe (<70%)	09	Aranthangi, Avudaiyarkoil, Karambakkudi, Kunnandarkoil, Pudukkottai, Thirumayam, Gandarvakkottai Arimalam, Ponnamaravathy
Others (Poor& Saline)	1	Manalmelkudi
Total	13	

Source; Water supply status as on 1.4.2018, TWAD

From the table, it could be seen that over exploitation of ground water (100 per cent) critical position was not there in any blocks, whereas Blocks namely Viralimalai and Around Alangudi town panchayats are in semi critical state. All other block waters are in safe condition. Apart from these Manamelkudi are have saline and poor ground water status. In the absence of any major water intensive industry, the industrial water requirements of the district are also met with from either surface water or ground water resources available locally. Pudukkottai is a water starved district. The erratic and deficit rainfall over the last few years have brought down the water table.



## 6.1 Power Supply

Generally power supply position in Pudukkottai District is normal. No power generation plants are available in Pudukkottai District.

## 6.2 Rural Electrification

Rural electrification is 100% in Pudukkottai District.



## 6.3 Road and Rail Network

Of the road network, 11801.78 KM were surfaced roads and 15497.18 KM were unsurfaced roads. There are two national highways namely the NH336 Trichy - Ramanathapuram road and NH226 Perambalur - Manamadurai road that pass via Pudukkottai. There are two state highways that pass via the town - SH 26 Trichy - Mimisal road and SH 71 Musiri - Sethubavachatram road. The other major district roads connect Pudukkottai to other parts of the district. The Pudukkottai bus stand is a B-grade bus stand located in the centre of the town. The State Express Transport Corporation operates long distance buses connecting the city to important cities like Chennai and Bengaluru. TNSTC Kumbakonam division operates frequent intercity and intra state buses to cities like Rayavaram, Tiruchchirapalli, Thanjavur, Madurai, Coimbatore, Aranthangi, Karaikudi, Devakottai, Sivagangai, Pattukkottai, Ponnamaravathi, Rameswaram, Kodaikanal, Dindigul, Theni, Tiruppur, Karur, Palani, Salem, Erode, Mettupalayam, Velankanni, Villupuram, Vellore, Tiruvannamalai, Nagercoil, Tiruchendur and Thoothukudi. KSRTC operates daily buses between Bengaluru and Pudukkottai.

### Rail Transport:

83.57 Km of Broad gauge rail transport in the Kumaramangalam and Thirumayam segment utilized for both passenger and goods transportation. There are 7 railway stations in Pudukkottai District. Pudukkottai railway station has daily express trains to and from Chennai, Rameswaram and weekly express trains to Coimbatore, Puducherry, Kanyakumari, Varanasi and Bhubaneshwar. The town has passenger train services to Trichy, Manamadurai, Rameswaram and Karaikudi.

Pudukkottai station is a focal point of the historic main line Chennai-Rameswaram Line. Due to the Karaikudi Jn to Thiruvavur Jn Gauge Conversion, the trains have been suspended for few years.

The line is being converted to broad gauge at a high pace and is expected to be activated from June 2019. Once the gauge conversion work is completed, Trichy railway division has plans to operate two trains between Thiruvarur and Karaikudi.

There are two proposed lines which have been approved by Indian Railways. One is Needamangalam Junction - Mannargudi - Pattukkottai Branch line and the other is Thanjavur Junction - Pattukkottai - Karaikudi Junction Branch line.

### **Connectivity by Flight:**

The nearest local and international airport is the Tiruchirapalli International Airport (TRZ), located 45 km from the town. Madurai airport (IXM) is 122 km away from Pudukkottai.



## 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 Pudukkottai district have less than one hectare occupying 37 percent of the land area. These details are presented in Table.

**Table 5 Number and area of operational land holdings**

Size Class of holdings (Hectares)	Land Holders			Area (ha.)		
	S.C.	S.T.	Others	S.C.	S.T.	Others
Marginal	22032	51	188391	7384.14	16.82	65023.32
Small	2453	2	30334	3335.87	3.005	42268.37
Semi Medium	613	2	11477	1625.15	4.285	30672.99
Medium	128	0	3096	660.76	0	17402.26
Large	11	0	465	170.8	0	8345.023
All sizes	25237	55	233763	13177	24.11	163712

*Source: District Statistical Handbook 2017-18*

The distribution of land size holdings as shown in Table, indicates the fact that 22032 farmers were marginal i.e. holding less than 0.5 hectare and this scenario continues as the number of farmers gradually decrease with the operational holdings from marginal to small (0.5 to 2.0 hectares) and thereafter drastically reduced to very small number of farmers holding large area (10 & 20 hectares) and Eleven percent of the land holders belong to SC/ST community.

## 7.2 Irrigation

The chief irrigation sources in the area are the tanks followed by tube wells, dug wells and canals.

There were 24197 Tubes and Bore wells Open wells used for irrigation and 22594 dug wells and 28 canals were used for irrigation purpose. 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 Pudukkottai district.

The major irrigated crops in the district are paddy, pulses, groundnut, coconut, sugarcane, banana, vegetables, 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, groundnut and pulses can also be increased to the target levels by proper water management practices.

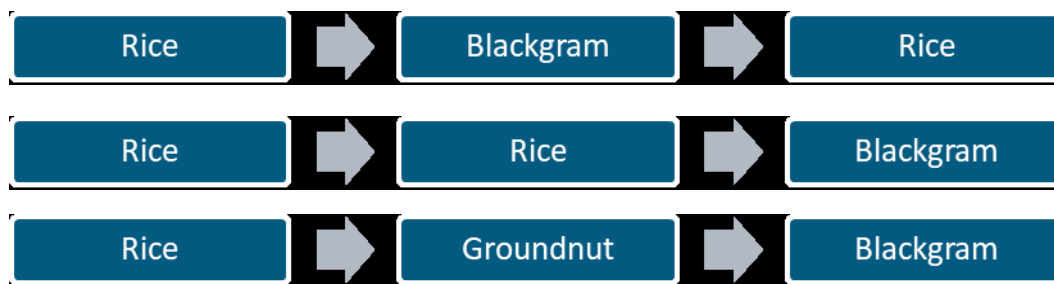
## 7.3 Cropping pattern and Major Crops

Important crops grown in the district are Paddy, Groundnut, maize, millets, pulses (Redgram and Blackgram) and sugarcane. The most important cash crop of the district is groundnut. It is cultivated both under irrigated and rainfed conditions. In horticulture, coconut is the predominant crop. Followed by Coconut, Banana and Jackfruits are cultivated. Aranthangi, Arimalam, Thiruvarankulam and Avudaiyarkoil blocks are irrigated area, various types of paddy were cultivated in this area. Blocks like Kundrandarkoil, Karampakudi, Viralimalai, Annavasal and Ponnamaravathy are rainfed area and here millets are predominant crops. Eucalyptus trees are largely grown both by people and government. Sugarcane is the next most important cash crop of the District. Sugar mill is located at Kurungalur, Aranthangi Block. Flower cultivation also good numbers in Pudukkottai District especially Aranthangi and Thiruvarankulam Blocks.

### 7.3.1 Cropping pattern:

Pudukkottai District is predominantly an agricultural district. Paddy, groundnut, sugarcane, maize and cashew nuts are the major crops grown in this district. In Pudukkottai Districts, farmers were generally followed 2 main seasons such as Karif and Rabi. Gross area sown and gross area irrigated under food and non-food crops stood at 1,08,497.970 Hectares and 92,461.185 Hectares respectively during 2017-18. About 15 percentage of the gross area sown was rain fed. The sequence of cropping season is from Samba (April to July) Kuruvai (August to November) and Navarai (December to March). The Sequence of Cropping season is Kuruvai, Samba and Navarai. The cropping Season is from Kuruvai (June to September) Paddy and Short duration variety like ADT37 Cultivated and Samba cultivated (September to January).

Cropping pattern in a year in irrigated places:



Millets is Sown mainly under Rainfed condition.

### 7.3.2 Area, Production and Productivity of Major Crops

The major crops in the district considering the area of cultivation are Paddy, Groundnut, Sorghum, and maize, Cumbu, Finger millet, and Gingelly. The figure shows that Paddy and black gram predominant crop in Pudukkottai Districts. Groundnut and maize's are coming at next place of cultivation. In oilseeds, Groundnut comes first and Gingelly occupies the second place. Whereas, in Cash Crops Coconut is occupies the first place in Pudukkottai District.

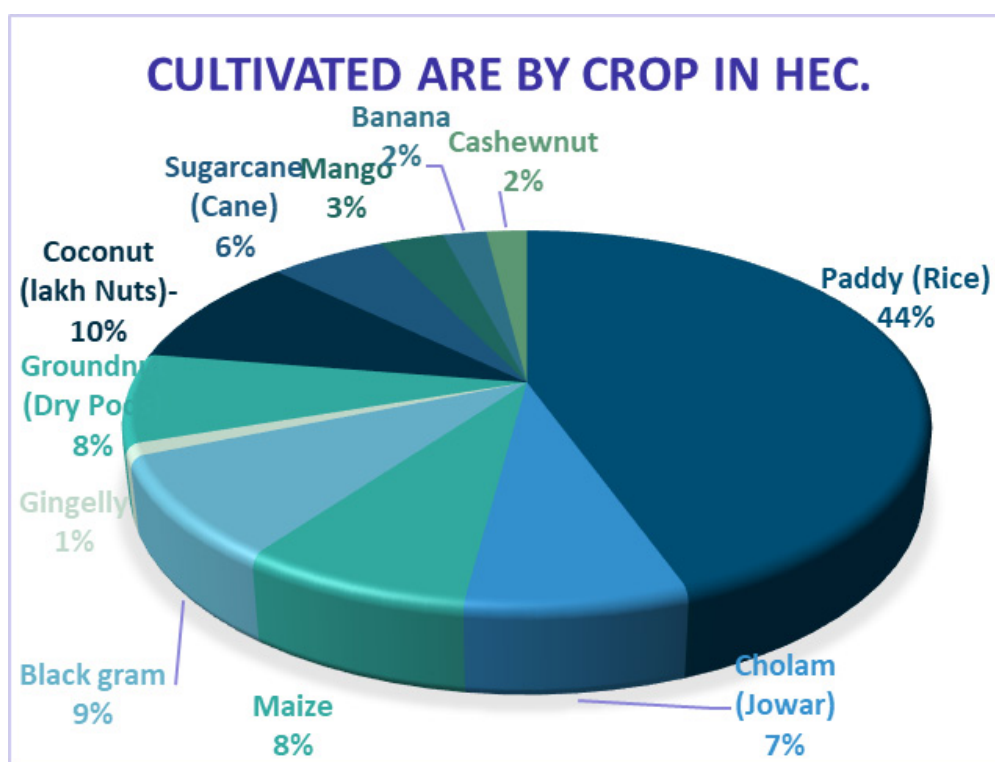


Figure 4: Cultivated area crop wise 2017-18

## a) Trend in area of cultivation:

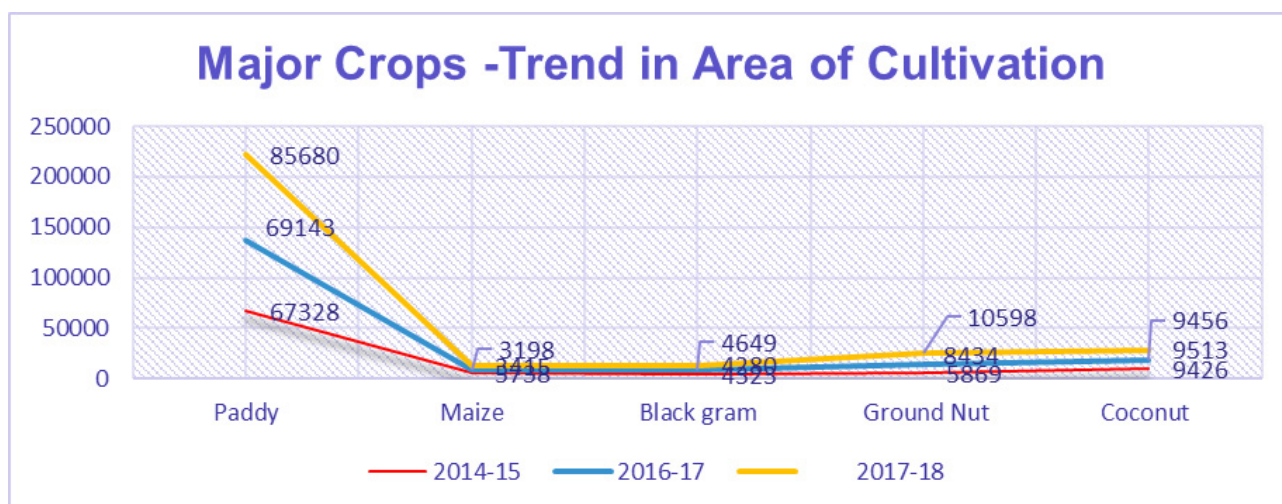


Figure 5. Trend in Area of Cultivation in ha of Paddy, Groundnut, Black Gram, Coconut and Maize

Figure shows that the trend of Paddy cultivation area has increased drastically, since 2014-15. The trend of in area of cultivation of Ground nut also has been increasing steadily from 2014-15 to 2017-18. Black Gram, cultivation area goes up and down but maintain the stability. Maize date shows that gradual decrease.

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

Table 6: Major Crops in Area (ha.) to State (16-17)

Crop	State	Pudukkottai	Percentage to state
Paddy	14,93,276	85,680	5.74
Groundnut	2,82,488	10,598	3.75
Maize	2,91,052	4,022	1.38
Blackgram	4,29,784	4,280	1.00
Coconut	4,34,875	9,513	2.18

Source; Data from Agriculture Department, Pudukkottai

The district contributes significantly to the state's Area of production in Paddy, Groundnut, maize, Blackgram and sorghum. The area of cultivation of Groundnut to the state is substantial (3.75%).



### c) Major crops to State Production (MT)

**Table7 -Major crops to State Production (MT) (16-17)**

Crop	State	Pudukkottai	Percentage
Paddy	40,50,334	4,141	0.10
Groundnut	7,85,362	3,184	0.41
Maize	9,46,363	8,468	0.89
Blackgram	3,95,186	3,087	0.78
Coconut	6,57,06,300	59,625	0.01

*Source; Data from Agriculture Department, Pudukkottai District*

Pudukkottai share in terms of production of the state is .89% and 0.78% to State in production of maize and Blackgram respectively.

### d) Productivity of Major Crops

**Average Agricultural Productivity of Major Crops (Kg/ha) 16-17**

S.No	Crops	State	District
1.	Paddy	3687	4141
2.	Groundnut	2574	1589
3.	Maize	7132	7905
4.	Blackgram	699	410
5.	Coconut	14251	11855

*Source; Data from Agriculture Department, Pudukkottai District*

The average productivity of paddy at district level is higher than the state level average productivity which could be inferred from the above shown table. There is a substantial potential to increase the productivity of Groundnut, Blackgram and Sorghum.

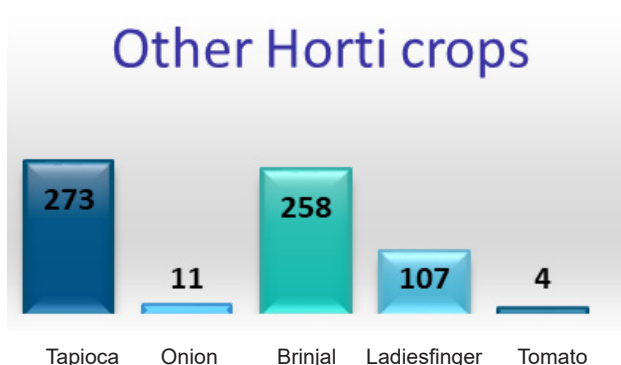
### 7.3.3 Horticulture crops

The major horticultural crops are coconut (434875 ha), mango (139142 ha), Cashewnut (88415 ha) and Banana (94214 ha) are cultivated in this district. Intercrop system is very common in Pudukkottai District, In Vadakaadu and Maangadu villages pepper is cultivated as intercrop with Coconut tree. Apart from pepper vegetables like Brinjal, ladies finger, chilies, and flowers are

cultivated as intercrops. Crop byproduct enterprise in coconut (coco products –neera drink, coconut tree leaf mat, tender coconut, pith), cashew (Cashew oil, fruit, cashew skin), Banana byproducts (unripe banana, banana leaf, stem, flower) etc. however jackfruit, they directly selling as raw fruit.

There are Two state Horticulture Farms one at Kudumiyanmalai (118.68 Ha) and another one at Nattumangalam (53.02 Ha) established by State Government. Giant Orchard farm was established at Vallathirakottai with 521.2 Ha.

### 7.3.4 Other Crops



Other Crops like Tapioca, Brinjal, Ladies finger, Tomato and onions are grown.

## 7.4 Block wise Cropping Area distribution.

Paddy, Groundnut, Sugarcane and Black Gram are among the top three crops with respect to the area of cultivation against the blocks, millets are the other minor crops cultivated in the crops.

### Top three Major and Minor crops in TNRTP blocks of Pudukkottai (in terms of area of production 2016-17)

Block	Major Crops	Minor Crops
<b>Pudukkottai</b>	Paddy,Groundnut,Maize	Finger millet,Gingelly, and Millets
<b>Thiivarangulam</b>	Paddy,Groundunt, Blackgram,	Green gram, Vegetables
<b>Aranthagi</b>	Coconut, Groundnut, Paddy, Blackgram, Sugarcane	Minor Millets
<b>Viralimalai</b>	Paddy, Groundnut	Millets Like Kuthiraivali, Samai,Finger millet

**Pudukkottai:** Paddy, Groundnut and Maize are the major crops in terms of area of cultivation. Finger millet, Gingelly and millets are the minor crops widely cultivated.

**Thiruvarankulam:** Paddy, Groundnut and Blackgram are the major crops in terms of area of cultivation. Other minor crops widely cultivated are Green gram and Vegetables in the block.

**Aranthangi:** The major crops widely cultivated are Coconut, Groundnut, Paddy and Blackgram in the block. Minor millets are the minor crops are grown in the block.

**Viralimalai:** Paddy, and Groundnut are the major crops, Millets are the minor crops cultivated in the block. It could be noted that Groundnut is predominantly cultivated in all the blocks. Apart from these Pulses, Millets are widely cultivated in all the blocks.

## 7.5 Prioritisation of crops

Paddy and Sugarcane are the major crops in Pudukkottai in terms of area of cultivation, but due to low price for farmers on sugarcane, the production has come down and as an impact EID Sugar mill has shut down in Pudukkottai District. Maize production is also declining in TNRTTP implemented blocks, hence it would be excluded for further interventions. Accordingly Ground Nut and Black Gram are the top two prioritized crops and coconut will be the next priority due to thrust from the Government and high community involvement. Though cashew nut production is good in the district, since there is no special programme for cashew nut has been introduced by the Government and hence, it is not prioritized.

## 7.6 Crop wise discussion

### 7.6.1. Paddy

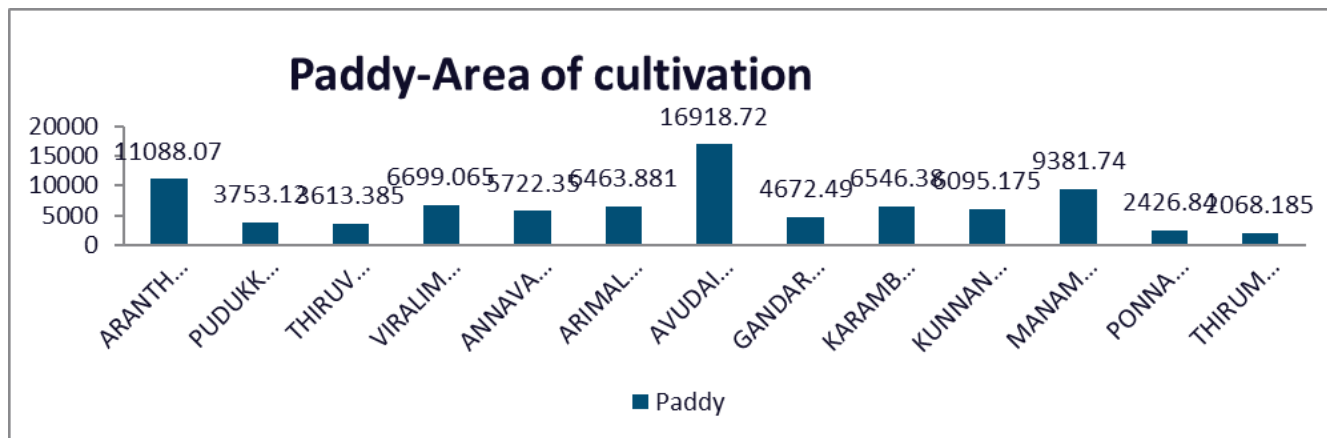


Figure 6: Paddy area of Cultivation in Pudukkottai (Blockwise 2017-18)

Paddy is widely cultivated in all blocks of Pudukkottai District. In Avudaiyarkoil predominant (16918.72 ha) in paddy cultivation among all the blocks of Pudukkottai District. Aranthangi with 11088 ha comes at second place.

### 7.6.2. Groundnut

Groundnut is widely in almost all the blocks of Pudukkottai District. TNRTP working blocks have reasonable cropping pattern of groundnut production.

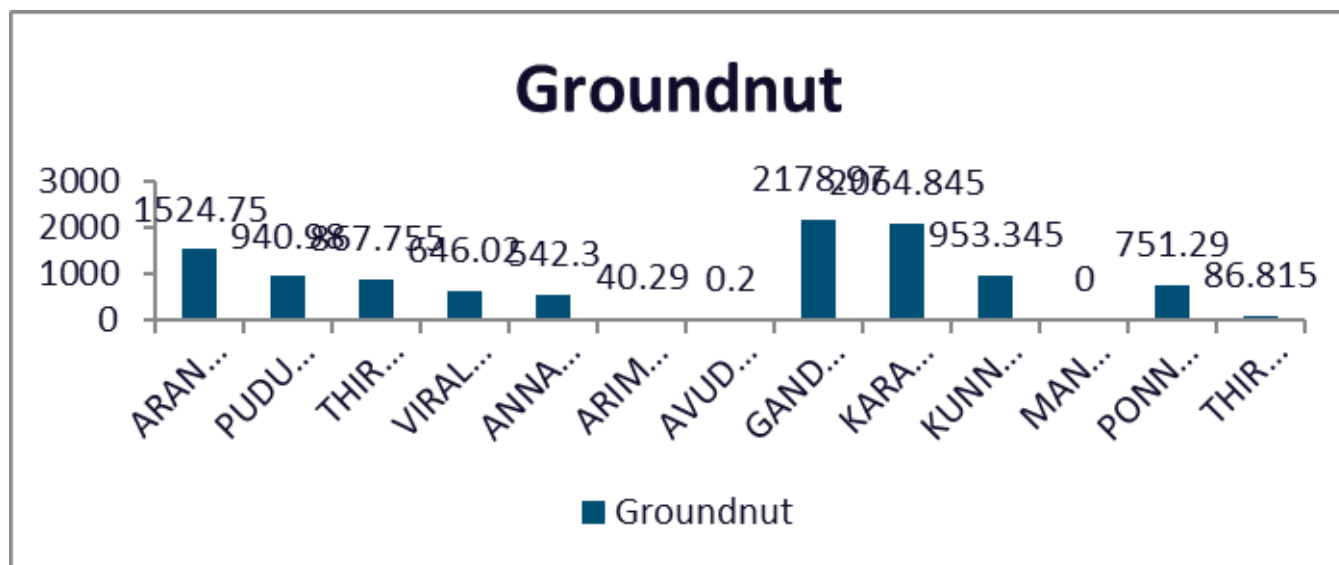


Figure 7: Groundnut area of Cultivation in Pudukkottai (Blockwise 2017-18)

### 7.6.3 Blackgram

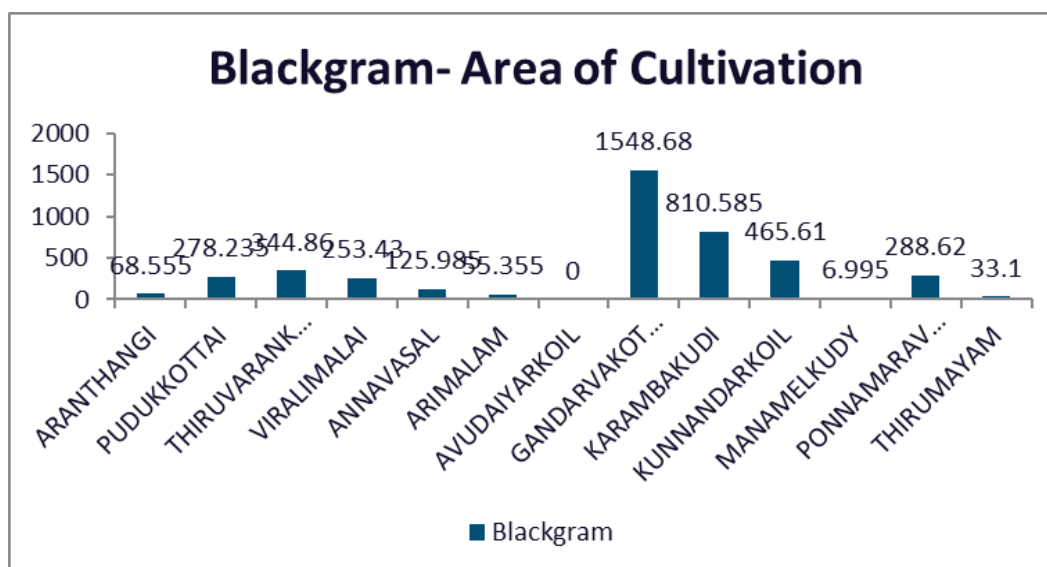


Figure 8 : Blackgram area of cultivation in Pudukkottai (Block wise 2017-18)

Blackgram is widely cultivated in Gandarvakottai, Karambakkudi and Kunnadarkoil blocks and reasonable trends in TNRTP blocks such as Pudukkottai, Thiruvarankulam and Viralimalai blocks.

### 7.6.4. Coconut:

Coconut is cultivated all blocks in Pudukkottai district. Intercropping is very common among coconut farm in Pudukkottai District. Figure showed that Aranthangi block cultivated coconut in large area. Thiruvarankulam placed second position. Pudukkottai block is the least cultivator of coconut. There is a state coconut seed nursery available in Pudukkottai district.

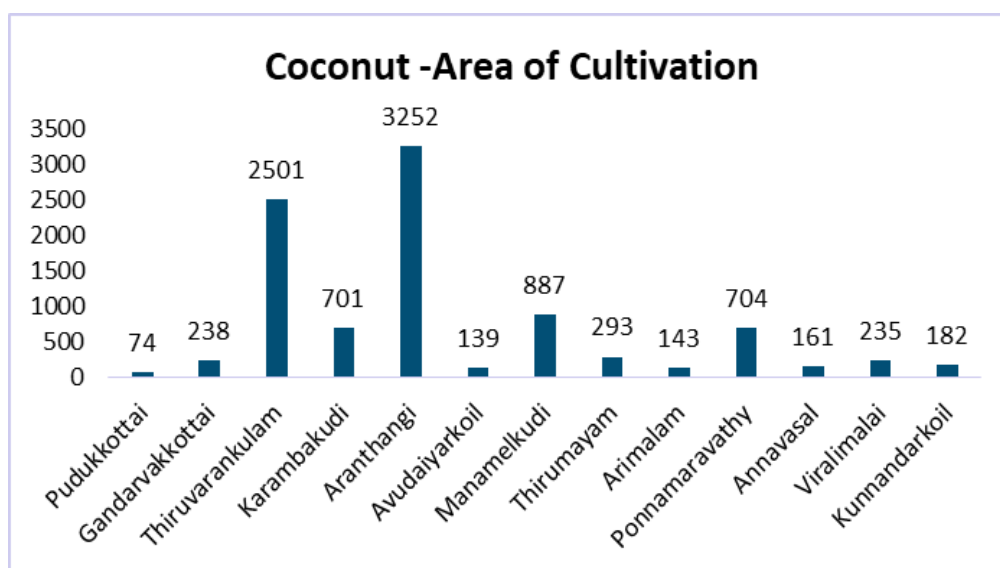


Figure 9 : Coconut area of cultivation in Pudukkottai (Block wise 2017-18)

In order to facilitate buying and selling of Agricultural Produce for the benefit of the farming community. Pledge Loan are given to farmers and traders based on their quantity of Agricultural Produce at the rate of maximum Rs.3.00 lakhs for farmers and Rs.2.00 lakhs for traders for Six months. The interest rate is 5% for farmers and 9% for traders. There are 10 Regulated Markets and they are Pudukkottai, Alangudi, Gandarvakkottai, Keeramangalam, Aranhangi, Avudaiyarkovil, Ponnamaravathy, Illuppur, Keeranur and Karambakudi.

### Modern Cold Storage facilities

To enable the farmers to store and sell their produce at favorable price and to get quality food products to consumers. Cold Storages are established at Illuppur (100MT capacity) and Alangudi (25MT capacity) The details of markets are as described as under. Regulated market is wholesale market where buying and selling is regulated and controlled by the state government through the market committee. The primary object of regulating the market is to safeguard the interest of the producer sellers raise the standards of the local Markets where the first exchange of the goods takes place. It has 10 regulated markets through which the farmers sell their agriculture products directly to the government. The number of regulated markets and quantity and value of commodities transacted in those markets are given in Table.

Quantity and Value of Commodities Transacted in Regulated Markets of Pudukkottai District during 2017-18

**Table 8 Quantity and Value of Commodities Transacted in Regulated Markets of Pudukkottai District during 2017-18**

No. of Regulated Markets	Quantity arrivals(in MT) (Product wise)		Receipts(Rs in Lakhs) (Product wise)
10	Paddy	6092.704	8.964
	Coconut	37.200	0.050
	Maize	1173.500	1.074
	Chillies	1.000	0.005
	Neem seeds	15.000	0.035
	Tamarind	27.090	0.047

*Source; Secretary, Pudukkottai Market Committee, Pudukkottai.*

The average annual rice production in the district was 73.74 lakh tonnes. However, the transaction of paddy through regulated markets in the district was only 6092 tonnes. Therefore, the reasons for the poor market arrivals to the regulated markets should be identified and the more facilities need to be created in the regulated markets to attract larger arrivals. Also other major crops like groundnut, millets, sugarcane etc. was not marketed through regulated market.



## 1. Groundnut

Ready availability of groundnut especially the varieties VRI 1,2/TMV 7 have high potential for value addition like barfi and chikki. Though groundnut cultivated in all the blocks of Pudukkottai District, predominant areas are at Alangudi surroundings like Thiruvarankulam and Aranthangi blocks. Alangudi and Aranthangi private owners procured groundnut from the farmers for direct selling and produce oils.

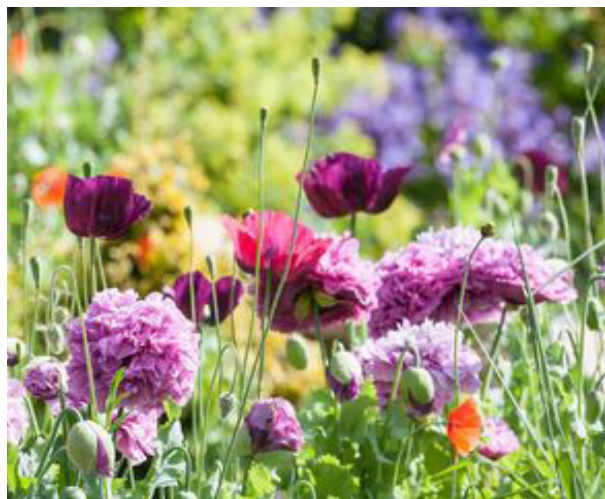
## 2. Rice:

Paddy predominately cultivated in all the blocks of Pudukkottai. DBT5204, ADT 37, Ponni Deluxe are the most cultivated varieties. Some farmers from Annavasal, Thiruvankulam, Kunndrandarkovil and Pudukkottai were cultivated indegenious paddy varieties like Thooyamalli, Mappillaisamba, Seeragasamba, Kichadisamba, and Kullakaar variety.

## 3. Vegetables

Thiruvarangulam, Arimalam, Pudukkottai blocks were predominant in producing vegetables. Brinjal, Chillies, ladies finger, drumstick, tomato and greens were produced in these areas. These clusters need a cold storage facilities and logistic support to boost up marketing.





## 4. Flowers

Vadakadu and Mangadu areas were cultivate flowers such as Jasmine, button rose, Cockscomb, winter jasmine, Crossandra, marigold. Logistical support is required for the transport of Rose and there is a potential for establishing additional Jasmine processing units. There is an increasing trend of cultivating flowers due to increased market demand.

## 5. Millets

Millets cultivation is Pudukkottai district is main Purpose of consume of food grains. 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). Mostly finger miller, Pearl Millet, Banyard Millet and little millet are cultivated in this district. Farmer interested groups were promoting value added products of millets like flours, health mix, sweets and savories. It is essential to introduce machineries for millets grain extraction, flouting, baking and food processing units.

## 6. Horticultural crops

In Pudukkottai District Coconut, Banana, Cashewnut, Palmaosa, Jackfruit are the important horticultural crops grown. Eucalyptus are grown in both irrigated and rainfed areas. Eucalyptus promoted for paper making. Lemon, guava also produced in Viralimalai and Aranthangi Blocks.



The Govt schemes in the district are Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) for micro irrigation. Mission on Sustainable Dry land Agriculture (MSDA) to form farmers club at village panchayat level and for entry level activities. Tamilnadu state schemes are Seed procurement under TANSEDA. National Food Security Mission for Rice (NFSM) is to increase the production of Paddy through area expansion and increasing productivity, restore the soil fertility and thereby enhancing the farm level economy. National Horticulture Mission (NHM) is a sub scheme under the Mission for Integrated Development of Horticulture. The scheme encourages crop diversification and promotion of hi-tech practices to ensure holistic growth of Horticulture. FPOs are covered under the Collective farming scheme and SFAC scheme.

### **State Seed Farm (SSF), Annapannai**

The state seed farm situated in Annavasal block. The farm multiplies the breeder seeds and foundation seeds and distribute them for the further mass multiplication of these seeds as certified seeds at farmers field as a part of Seed Multiplication scheme. Paddy, Pulses and Oilseeds crops are major part of the Seed production programmes in SSF.

### **Pulses Seed Multiplication Farm (PSMF), Vamban**

The State Seed Farm is situated at Thiruvarangulam block. The farm multiplies the breeder seeds and foundation seeds and distribute them for the further mass multiplication of these seeds as certified seeds at farmers field as a part of Seed Multiplication scheme. Redgram, Blackgram, Cowpea, Groundnut, Horse gram, etc., This farm introduced Vamban 6, Vamban 8 blackgram varieties.

### **SOSF, Vellalaviduthy**

The Farm multiplies the breeder seeds and foundation seeds and distribute them for the further mass multiplication of these seeds as certified seeds at farmers field as a part of Seed Multiplication scheme. Oilseeds, Groundnut, Gingelly, Pulses etc., are major part of the Seed production programmes in SOSF, Vellalaviduthy.

### **State Coconut Nursery, Vellalaviduthy**

This Coconut Nursery is to produce and distribute good quality Tall, and Tall X Dwarf coconut seedlings to the farmers of Pudukkottai district. Every year 40000 Tall nuts procured with the production of 30000 seedlings for distribution.



## State Agricultural Extension Management Institute (STAMIN), Kudumianmalai, Pudukkottai district.

STAMIN provides capacity building on extension management technology, office administration and computer to Agricultural Department functionaries.

### Central Control Laboratory:

Central Control Laboratory Kudumianmalai, Pudukkottai District is the Apex Laboratory which imparts capacity building trainings for all laboratory personnel, helps in calibrating and maintaining accuracy of analysis of the laboratories besides providing widespread awareness on soil-test-based fertiliser recommendation

### Other institutions:

Agricultural College and Research Institute, Kudumianmalai

Tamil Nadu Veterinary and Animal Sciences University, Regional Research and Education Centre

Krishi Vigyan Kendra, Vamban

Soil Testing Laboratories (STL) and Mobile Soil Testing Laboratories (MSTL)

Micro Nutrient Mixture Production Centre, Kudumianmalai

Horticulture Training Centres (HTC), Kudumianmalai

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

## 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 drayer. 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. Umbalacherry breeds of cattle, Ramnadwhite and Keelakaraisal breeds of Goat are common in Pudukkottai District.

### Livestock population in the district

According to Data arrived from Animal Husbandry, population of the livestock in the district includes 11, 32,442 number. Of which 3,55,957 No's were cattle's, 11,852 No's were buffaloes, 1, 17,289 No's were sheep's, 1,57,079 No's were goats and 20,003 no's were dogs.

### Dairy development

In Pudukkottai District dairy sector plays an important role for rural people livelihood enhancement. Dairy not only producing nutritious food products but also used for substantial food for the poor farmers and all over the prosperity for the farming community. The major quantity of Milk is procured from farmers who near cattle in the villages from the Milk produced by small and marginal farmers. A Small quantity is sold locally and the remaining quantity is collected by societies. In some areas, vendors collects milk from the farmers, sell certain quantity and supply the remaining quantity to MPCS and to others. Milk producer also selling milk to the private traders like Hutsun, Bhart and others.

The Pudukkottai dairy can process 70,000 liters of milk a day would benefited nearly to 22,923 milk producers under the cooperative fold in the district. It would also help augment the per capita milk availability in the district. The district hold about the nearly 313 milk societies at various blocks. Kundrandarkovil block possess the predominant in producing milk (8183 liters) with 50 milk society. Followed by Viralimalai block has 41 milk society and producing 8051 liters per day.

The Infrastructure facilities like dairy cooperative societies, cooperative marketing society, veterinary clinics and milk collection center were located in different blocks of the district. The veterinary department and agriculture agronomy department produce new fodder crops varieties. They also encourage farmers to cultivate Azolla and Mineral Mixture and Nutrient Supplement to produce high value milk fat content.

It was observed that Pudukkottai district, rural people rearing cattle's like cow, goat, and buffalo. This scenario requires block wise milk value addition processing unit to avoid huge transportation for milk value addition. Pudukkottai has huge chances to develop milk value added products like milkshake, curd, chees, palcova, butter etc. Karambakudi farmers Producer Company only runs a cattle feed unit. But it requires more in number.

## 12.2 Poultry development

Poultry rearing is one of the important activities of Animal Husbandry Sector in the district. 4,69,088 numbers of chicken available. The district has 30 broiler farms. Country chicken farms are available suramangalam, Vamban and Ayakkudi.

## 12.3 Fisheries

The total inland fresh water spread area in the district is about 2000 ha and produced fish of about 215.85 tonnes with a value of 172.69 lakhs during the year 2017-18. And marine fish production was 78534 tonnes with the value of 940.35 Lakhs. There were 4 private ice plants for storage of fishes. Manalmelkudi, Ammapattinam, and Kattumavadi are the key fish selling points. Eight ice factories are available to preserve the fishes and sea species. Two cold stores are available in the seashore. About 4846 fisherman families are involved in marine fishing and also 349 families are involved in inland fishing. In Inland fishing thirumayam block contributes major production of inland fish and also aranthangi block contributes highest number families engaged in inland fishing.

In Tamil Nadu large number of fisherfolk directly involved in retail fish marketing are street vendors. They use bicycle as mode transport or do sales by head loads. NFDB has introduced the special drive under its mobile fish retail marketing scheme- Supply of two wheeler moped with ice box with 25% subsidy. Tamil Nadu State Apex Fisheries Co-operative Federation Limited (TAFCOFED) was a nodal agency for implementation of supply of mopeds with insulated ice boxes and these enable small fish retailers/vendors to handle more volume of good quality fishes. During the year 2015-2016, 306 mopeds were given to fish retailers with Rs. 28,84,465 subsidy.

## 12.4 Sericulture

The scope for improving sericulture further is bright in Pudukkottai as the demand for silk yarn has been growing every day. Self-help groups and farmers were promoters of sericulture, which would generate rural employment on a large-scale. Pudukkottai cocoon is generally seems little bigger in size.

In 13 blocks, about 314 farmers cultivates 624.60 acres of land is under mulberry cultivation in this District. Training in Mulberry farming, Rearing Silk Worms is done through a large network of Govt. Departmental Institutions of Sericulture such as Silk quality development farms, Govt. Sericulture training center, Govt. Sericulture Farm, Base seedlings (grain age) development farms, Govt. Bi-voltine grain age centers, govt. cocoon markets, silk reeling unit, silk twisting unit, technical support and service center for rearing silk worm, with the above maintained facilities sericulture industry has good scope in this district. In the 624.60 acres of mulberry cultivation, 1,76,993 kg of cocoons is produced with a value of 6,45,338 rupees. Among the blocks, Thiruvarankulam block has contributed to the larger area of about 228 acres followed by 68.15 acres in Karambakkudi block.



Pudukkottai district is considered to be industrially backward in general and so, the Government of Tamil Nadu has taken several steps to industrialize the district. In this respect, the district has three SIDCO industrial estates and one SIPCOT complex with a total area of 96.08 acres. The two SIDCO industrial estates are located in Machuvadi (Pudukkottai block) and Mathur (Viralmalai block), while the SIPCOT complex is located in Vellanur (Annvasal block). Apart from these, there is one BHEL plant located in Olaikudipatti (Thirumayam block), which is the latest addition of industries in Pudukkottai district, built at a cost of Rs.250 crores and a capacity of 25,000 metric tonnes, directly and indirectly generating employment of about 4,000.

The thrust sector activities identified for industrial growth in the next five years are heavy steel and structural fabrication, manufacturing of boilers, granite cutting and polishing, modern rice mill, coir products and briquettes, cashew nut processing, fisheries based industries like fish processing, manufacturing of fish meal, fabrication and servicing of mechanized boat - FRP boat, ice plants and cold storage.

Other industries are manufacturing of articles from sea weed, mineral based industries like mechanised bricks, Mangalore tiles, ceramic and mosaic tiles, Attangudi tiles, granite cutting and polishing, blue metal jelly, quicklime, white cement, forest based industries like saw mill, agro based industries, automobile ancillaries, cashew based units, modern freezing plants for processing of fish, prawns, crabs, etc., in the coastal areas of this District.

**Table 9: Overview of the Industrial scenario**

S.No	Type of Industrial units	No. of units	Investments (in Lakhs)	Employment
1.	Large scale	16	130.13	1,776
2.	Small	9,730	15,867.24	23,290
3.	Handicrafts	5,044	254.77	7,549
4.	Cottage Industries	5,925	414.91	8,883
		20,715	16,667.05	41,498

Source: Ministry of MSME, Pudukkottai District, Gol Year 2015-16

The total number of registered industries in Pudukkottai district is 20,715 out of which 9,730 are Small Scale Industries (SSIs), 5,925 are Cottage Industries (CIs), 5044 are Handicraft Industries (HIs) and 16 are Large and Medium Scale Industries (LMSIs). The total investment in all these



industries is estimated to be about Rs.16,667.05 lakhs, out of which, Rs.15,867.24 lakhs, Rs.414.91 lakhs, Rs.254.77 lakhs and Rs.130.13 lakhs are the investment amounts of SSIs, CIs, HIs and LMSIs respectively. The total employment generated by these industries is 41,498, out of which, 23,290 is generated by SSIs followed by CIs with 8,883, HIs with 7,549 and LMSIs with 1,776 respectively.

### **Potential for MSMEs in the District:**

#### **Raw material Based:**

- Coir fiber, Rope and Coir pith block - Aranthangi
- Rice mill – Alangudi, Aranthangi
- Oil mill – Alangudi, Aranthangi
- Cashew nut Processing - Athanakottai
- Paper mill – Pudukkottai, Kallur
- Fisheries based products – Jegathapattinam, Manalmeikudi, Kattumavadi

#### **Demand based:**

- Steel and Structural Fabrication - Pudukkottai, Annavasal, Viralimalai
- Fertilizer and Pesticides – Aranthangi, Thiruvarankulam
- Manufacturing of Agricultural implements – Annavasal, Avudaiyarkoil, Karambakkudi, kundrandaarkoil, Pudukkottai

#### **Skill based:**

- Gem cutting - Annavasal, Illupur, Viralimalai, Thiruvappur
- Steel and Structural Fabrication –Pudukkottai, Mathur

#### **Export Oriented:**

- Fish and Fish Products - Manalmeikudi
- Cashew nut Processing - Athanakottai
- Granite Products - Annavasal
- Coir Products and Coir pith block - Aranthangi

#### **Rural artisans based:**

- Terracotta and Earthenware – Malaiyur, Alangudi
- Brass Utensils Ponnamaravathy
- Brass sculpture Ponnamaravathy

## Existing Status of Industrial Areas in the District Pudukkottai

SIDCO Industrial Estate, Machuvadi	23.18 acres
SIPCOT complex- Vellanur	51.45 acres
SIDCO Industrial Estate, Mathur	21.45 acres

**Table 10: Existing industries scenario vs emerging industries scenario**

Existing industries scenario	Emerging industries scenario
Modern Rice Mill	Heavy steel and Structural Fabrication
Coir Products and Coir Briquettes	Manufacturing of Boilers
Fisheries based industries like, fish processing, manufacturing of fish meal	Granite cutting and polishing
Fabrication, servicing and repairing of mechanised boats	Coir Products and briquettes
Ice plants, cold storage, Articles from Seaweed	Cashew nut Processing
Mineral based industries like mechanized bricks, Mangalore tiles, Ceramic and mosaic tiles, Attangudi tiles	Fisheries based industries like fish Processing, manufacturing of fishmeal
Forest based industries like manufacturing of paper, gums, sawmill	Fabrication and servicing of mechanized boat FRP boat
Agro based industries	Ice plants and Cold storage
Cashew based units	
Poultry feed and cattle feed	
IT and IT enabled Services.	

## 13.2 Micro Small And Medium Enterprises (Msme) Sector

There are about 16 types and 1683 units of Micro small and medium enterprises in the district which provides employment to about 11267 employees with an investment of 15305 lakhs Agro based, Metal based, Readymade garments, Mineral based and engineering units form the most prominent ones.

## Number of MSME units in Pudukkottai

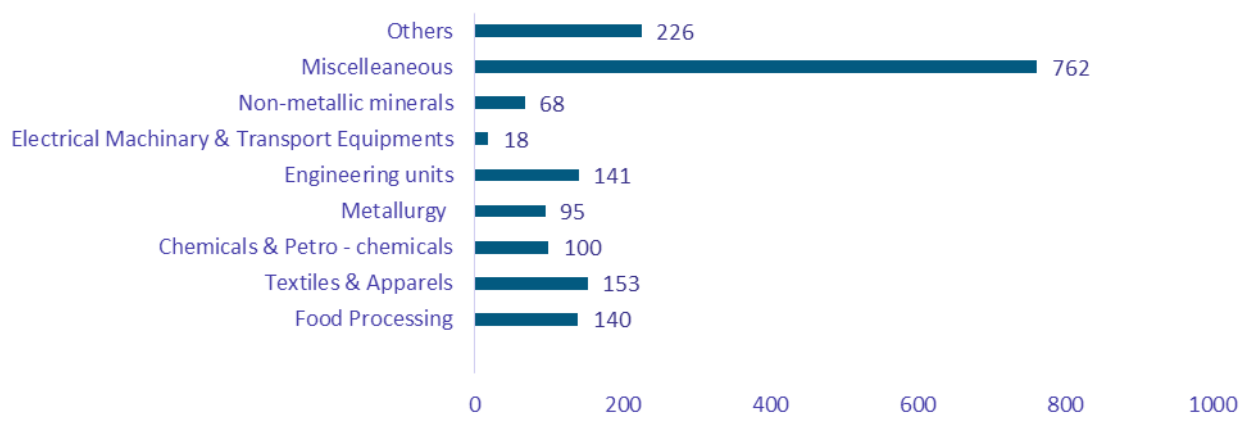


Figure: 10 MSME sector in Pudukkottai district

Source: Ministry of MSME, Pudukkottai District, Gol Year 2015-16

Industry profile of micro and small enterprises is shown in the figure above.

There are about 762 units that come under the miscellaneous category. MSMEs like wood, paper, repairing and servicing are included in the category of others in the district. Other major industries present in the district are Technical textile industries, processing, food processing, chemicals and petrochemicals. Major exportable items of the district are fish and fish products, coir products, cashew nuts, granite products, gemstone.

### 13.3.Existing clusters of Micro and small enterprise

Table 11: Details of Major Cluster

Cluster	Block	Location
Coir fiber, Rope and pith block	Aranthangi	Avathankottai, Keeramangalam
Rice Mills	Aranthangi, Pudukkottai	Alangudi, Aranthangi, Pudukkottai
Terracotta	Karambakkudi, Aranthangi, Pudukkottai and Thiruvankulam	Malayur, Thanthoni, Poovarasangudi, Kaikurichi, Vaarappur and manaviduthi

Cluster	Block	Location
Cashewnut	Pudukkottai	Athanakottai, Itchadi
Millets	Annavaasal, Viralimalai, Kunnandarkoil , gandarovakkottai and Ponnamaravathy	Illupur, gandarovakkottai, ponnamaravathy, odugampatti, annavaasal, viralimalai
Structural and steel fabrication	Pudukkottai	Pudukkottai & Mathur
Gem Cutting	Annavaasal, Viralimalai, Pudukkottai	Annavaasal, Illupur, Viralimalai, Thiruvappur

Source: Ministry of MSME, Pudukkottai District, Gol Year 2015-16

### Coir fibre Cluster:

These clusters are spread around Melapattu Amanji in Aranthangi block and Kothamangalam in Thiruvarankulam Block. Apart from coir people are making split coconut leaf, Also makes coconut leaf-stalk based products like rope, coir pith block etc.

### ice mill Cluster:

Rice mills clusters are located around Thiruvarankulam and Aranthangi blocks. Especially at Alangudi and Aranthangi each cluster has 50 units. Deluxe Ponni is mostly cultivated and processed in these mills. In Pudukkottai, the varieties such as Kalsar, kurvai, ponni, kundunel are cultivated and processed at mills in Pudukkottai. Skilled labours and semi-skilled persons are needed to work in the Rice Mills. Small Paddy Processors / Mobile Paddy Processors can be potential rural enterprises.

### Terracotta:

These clusters are located in Malayur village of Karambakkudi block. Also located in some parts of Thanthoni in Aranthangi Block, Poovarasangudi and Kaikurichi in Thiruvarankulam block and Vaarappur and manaviduthi villages in Pudukkottai Block.

People from above mentioned villages are making pots, stoves, horse idols, lambs (agal vilakku) and eye gaze etc. Potter were invited to train and make terracotta at other states and countries.



Copyright: Ramsons Kala Pratishthana

### **Cashew nut processing Clusters:**

Cashew nut processing is located in Athanakottai and Ichadi villages in Pudukkottai Block. Many families are doing the cashew nut processing manually. Few private industries also there at athanakottai, ichadi and Gandarvakottai for cashew nut processing. Apart from cashew nut, cashew oil are extracted and supplied. Cashew skin also sold to paint companies.

### **Millet Clusters:**

Millets are produced in Pudukkottai, Viralimalai, Ponnammavathy and Annavasal Blocks. Small millets are produced in Gandarvakottai and Annavasal blocks. Kodo millets are produced in Annavasal and Kundrandarkoil block. Banyard millets are produced at Annavasal block. Sorgam (Black, Red and White), pearl millet (Bajra) and finger millet (Finger millet) are produced at Viralimalai Block. Millet processing unit is available at Pudukkottai SIPCOT and these will be processed and marketed it by the Pudukkottai organic producers company limited.

### **Sanitary Napkins:**

Most Indian women fashion up pads out of cotton cloth as a homemade and inexpensive solution to the hygiene and comfort needs during periods. These are washed and reused. They lack the absorbing and liquid retention capacity of sanitary napkin and hence this practices associated with very high risk of cervical cancer. 3.20 crores of women in India did not have access to sanitary napkins.

Using of sanitary napkins will helps to maintain good hygiene during periods, reduce the risk of Urinary Tract Infection, Increasing awareness on menstrual hygiene also creates a demand of low cost sanitary pads, Recently Government of India and Government of Tamil Nadu made a decision to reduce the usage of plastic, Hence, Bio-degradable sanitary napkins are promoted. Recent announcement from Central Government also creates a demand. In Pudukkottai, 10 SHGs are involved in sanitary napkin production. About 7 SHGs are involved in supplying belt type sanitary napkins to government health facilities through DPH. Promotion of other types in order to reduce plastic and protect environment by promotion of bio-degradable sanitary napkins, herbal, reusable and dissolving napkins etc.

### **Seaweeds:**

Seaweeds or marine macro algae constitute one of the commercially important renewable marine living resources. They are primary producers, shelter, nursery grounds and food sources for marine organisms. Seaweeds are not only of high ecological, but also of great economic importance. Dried thalli are directly used as human and animal food and also as fertilizer. Extracted seaweed substances are used as stabilizers and stiffeners in food industry, cosmetics, pharmaceutical industry, and biotechnology.

In Pudukottai, Bottom mololine method is used. This is cheaper to establish, easier to maintain and not so prone to surface weather conditions. A hectare of 35 modules consequently contains 35 000 plants with about 1000 plants per module. The plants were collected of an interval of 15 up to 45 days.

In Pudukkottai, Kappaphycus alvarezii seaweeds are cultivate. About 300 members are involved in cultivation. Wet seaweed cost per Kg is Rs. 5. For dry seaweed it is Rs. 45-50 per Kg. Since, 2013, export to foreign country was not permitted as large quantity of seaweeds required at domestic.

They harvest four to five times in a year. There are 18 panchayat village families are involved in this activity namely Avudaiyarpattinam, Kattumavadi, Mumbalai, Karakottai, Krishnasipattinam, Manamelkudi, Ammapattinam, Vichur, Vettivayal, Nattanipurassakudi, Poonamarg, Puthampur, Enathi, Kottaipattinam, Jegathapattinam, Palakudi, Memisal, Arasanagaripattinam. These panchayats are comes under Manamelkudi and Avudaiyarkoil blocks. Most of the cultivates are women.

## 13.4 Tourism

Pudukkottai District comprises marvellous Archaeological sites and rich Cultural Heritage. The History of Pudukkottai is an epitome of the History of South India. Different Dynasties such as Pandya's, Cholas, pallavas, Nayaks, Irukku veliyar, Mutharayar, Thondaman, Vijayanagar Emperors and Hoysalas ruled over this District on different occasions. The prosperity of the District that had existed on the periods of Monarchy continued and maintain the same pride still now.

- The Heritage Buildings (i.e. vijaya raghu natha thondaman Palace, Court Building) Archaeological Monuments (ie Thirumayam fort)
- Cave Temples (ie Malaiadi patti)
- Paintings (ie sittannavasal)
- Jain temples (ie Kannangarapatti, Arimalam )
- Inscriptions (ie Kudumiyan malai)

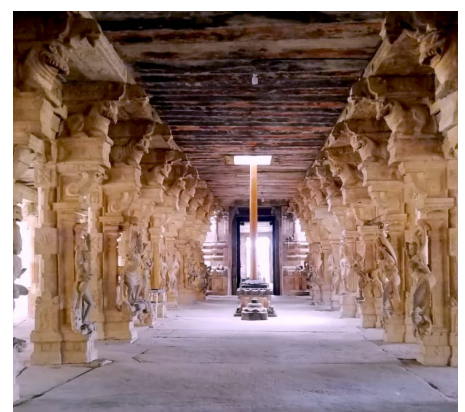
Expose the culture, life and times of the ancient people. The vijaya Raghunatha Thondaman Palace, now the collectorate complex Building has been built on the Indo- Italian style of Architecture. Sangam age literature mention some of the hint



about Pudukkottai. Kodumbalur has been mentioned in the epic silapathigaram. Narthamalai, Thirumayam , Kudumiyanmalai , Kunnandar Koil , Avudayar koil and Sittannavasal are the familiar archaeological sites express the ancient Tamil culture, architectural Beauty and a wonderful Proof for the rich cultural Heritage.

'Muttai Mass' is the famous recipe in Pudukkottai District. Pudukkottai has wide scope in establish pilgrimage tourism, heritage tourism and rural tourism. But, some of the factors we have look into consideration to develop tourism activities such as:

- Increase the connectivity to Pudukkottai District as very minimal number of trains to reach this destination.
- In the service sector especially food to be served in the closed air restaurant, the place should be clean and price to be nominal.
- It's also very essential in providing quality drinking water
- Parking facilities to be established at the tourist places especially in pilgrimage tourism.
- Need more accommodation facilities, it is better to establish at rural level with basic amenities.
- 70 percent of the pilgrims are from other state, if the people in the pilgrim sites develop their skills on language then the visitors' numbers might get increased.
- It is essential to ensure good toilet facilities at the tourist spots.
- Solid waste management is required.
- It is essential to incrase the public transport



The diagnostic study also focused 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. The findings are presented below.

### **Incremental Human Resource Availability:**

The current work force is estimated to be 10.27 lakh, which is estimated to grow to 12.35 lakh by 2022. The incremental availability of human resources in 2012-17 is estimated to be 98,000 and in 2017-22, the incremental availability is estimated to be 1.09 lakh. The highest incremental human resource availability is expected at the unskilled level, while the lowest incremental availability is estimated at the semi-skilled level. High levels of disguised unemployment

Pudukkottai is one of the most backward districts of Tamil Nadu. Economic activity is very low, with the district relying on agriculture and small scale industrial units for income generation. In the absence of robust industrialization and the high dependence of people on agriculture, the district is observed to have very high levels of disguised unemployment. As a consequence the average skill levels of the district have remained low. This has curtailed the potential of the farm labour to find gainful employment outside the district.

### **Lack of local demand for labour; a disincentive to skill acquisition**

A majority of the district's inhabitants are engaged in some form of agricultural activity. There is very little industrial development in the district. Lately, a few industrial estates have been set up in the district; however, most of these units are automated and do not generate substantial employment opportunities. Further, most of the land area currently used for agricultural purposes is small, which does not allow for large scale mechanization processes, resulting in lower wages.

In the absence of adequate demand for labour coupled with low wages, most of the people seem to be averse to acquiring skills.

### **Low capacities creation**

There are very few ITIs and polytechnics in the district and there is no incentive for other skill training providers to enter the market since the demand for vocational education is very low.



Capacity utilization in existing ITIs is extremely low. There is a need for focused capacity creation for sectors such as construction and retail.

### **Lack of entrepreneurship**

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

In Pudukkottai, there are 182 branches of commercial Banks, 12 branches of Regional Rural Bank. The number of public sector banks operating in the District is 4 with 29 branches and the number of private sector banks is 20 with 49 branches. There are no unbanked villages in the district.

### Annual Credit highlights

The banks have projected Rs. 3825 crores for 2019-20. Crop loan at Rs. 3230.00 crores accounts for the major share of 84.44%.The banks do not encourage lending to the FPOs. 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 225.75 crore through 7570 SHGs. Financial literacy center is present Pudukkottai RSETI (Rural Self Employment Training Institute) is a training institute functioning in Pudukkottai district.

### Joint Liability Groups(JLGs)

The total number of JLGs promoted in the district are 135. They have been promoted by IFAD and NABARD.

### MFI Presence:

Tamil Nadu contributes to 16% of the total MFI portfolio in India (8048 crore). There are 25 institutions with 951 branches with a present outstanding of INR 3666 Crores with a member level average outstanding of 14301 INR. Small Banks are the new category of banks announced by RBI in July 2014. Around 10 companies have received this bank license across India. Pudukkottai District is moderately served by Microfinance institutions. Suryadev, L&T, Grama vidyal, Equitas, Dhan foundation and IDFC are the some MFI in Pudukkottai District.

SWOT analysis is a strategic planning technique used to help a person or organization identify strengths, weakness, opportunities, and threats related to business competition or project planning. Here we do SWOT analysis to understand the viability in promote rural enterprises, promotion of producer groups, enterprise groups and creation of opportunities for skill and jobs. Also to understand the weakness and threats in the field.

## STRENGTHS

- GOI investments in pulses seed multiplication, research
- GOI investment in State Coconut Nursery
- Horticultural hub Coconut, Jackfruit, cashew, banana
- Connectivity
- Hub for pulses
- Multi Entrepreneurial Districts
- Many number of Heritage & pilgrimage sites

## WEAKNESSES

- Lack of Value Chain Strengthening
- Lack of technology skills
- Lack of cold storage
- High Influence of middlemen.
- Transaction done through Cash and carry.
- Enterprises have not been mainstreamed
- No tourist guides

## S.W.O.T. ANALYSIS



## OPPORTUNITIES

- Scope for food processing
- Scope for setting up of cold chains
- Food enterprises
- Growth trend in tourism and service enterprises

## THREATS

- Climate change
- Water
- More of Chemical fertilizers and pesticides
- Perishability

Commodity Prioritization Table						
s. no	criteria	description	Commodity			
			paddy	Groundnut	Black gram	Coconut
1	Trend in number of producers involved in the commodity	For commodities which has large number of producers.		>100%	Positive	>100 %
2	Community Interest	Economic viability, Staple food, Knowledge and technology availability, Extension services, Awareness about Market availability	Water Intensive crop. Hence not prioritized	Almost all the blocks are involved in production, Ready markets production in all three seasons. Increased number of oil mills.	Raised under rainfed conditions Under water stressed conditions. Cultivated new type of varieties (Vamban 6&8)	Area of cultivation is in increased trend. Coconut and coco products were produced and sold by communities, They also export it products. 40 Coconut producer Societies registered under Coconut development board.
3	State/National Priority (Thrust from government)	State/National Government Schemes and Investments		One of the chosen districts for Oilseeds mission and seed production, MSDA scheme.	One of the chosen districts for NFSM, Integrated Development of Pulses Village Scheme. Pulses Seed Multiplication Farm also available. and	Government established a state coconut nursery in Pudukkottai District.

4	Comparative advantage	Production, Favorable climatic conditions, GI type characteristics, Uniqueness emerging out of Ethnicity and culture, A prevalent cluster.		Good share in state production, High demand for Certain varieties, Soil and climate favorable for groundnut production	Largest producer of Blackgram, favorable climatic condition. New varieties vamban 6, and 8 were used.	Largest promoter and good consumers of coconut available in the state. There were
5	Access to Market	Ability to sell the produce at a remunerative price- Local, National & International markets.		High demand for groundnut for oil extraction. and the proximity to Chennai and Bangalore	Steady increase in demand throughout the nation, rise in prices.	High demand for coconut in local market. Arrivals in APMC high after Paddy. Export of coco products.
6	Opportunity for Value Chain Interventions	Productivity and value added products.		Productivity significantly lower than the State Average though largest producing state, Value added products	Scope for productivity enhancement, promotion of summer pulses, delayed marketing facilities, scope for promote value added products like urud dhal, both full (skin removed) broken, and flour.	Productivity significantly lower than the State Average though the largest producing district in the state. Scope for more oil mills. Neera drink promoted. Allied activities carried out.

Based on the study it is observed that promotion of rural enterprise activities would be viable. These potential commodities and sectors were identified, based on the availability of resources, community interest, trend in progression, scope for promotion.

## POTENTIAL COMMODITIES AND SECTORS

### FARM



### Food grains:



1. Paddy
2. Millets
  - Sorghum
  - Finger millet
  - Pearl millet
3. Maize
4. Oil seeds:
  - Groundnut
5. Pulses
  - Black gram
6. Horticulture crops:
  - Coconut
  - Cashew nut
  - Jackfruit
  - Lemon
  - Mango

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### NON FARM SECTOR





1. Dairy
2. Fisheries
3. Sericulture
4. Sea weed
5. Coir industry
6. Terracotta and Earthenware
7. Coco products and Fodder units
8. Oil mill
9. 9)Rice mill
10. 10)Food Processing (Milk product, Pickling, Nipped, Cashew processing etc.)

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### SERVICE SECTOR



1. Tourism – Rural Pilgrimage & Heritage
2. Logistics
3. Transportation
4. Lodges
5. Hotels
6. Financial Institution
7. Construction
8. Structural fabrication

- Government has made substantial investments in agriculture, horticulture and sericulture.
- Pudukkottai districts is one of the district which has more youth population and also having more resources, both need to be utilized.
- Opportunities for both community based farm and community skill schools to develop the skills for youth.
- Silkworm pupae oil extract which is extracted from wastage of silkworm extracting unit could be promoted if a unit is established as at present such infrastructure is not available in the district.
- Large number of archaeological and pilgrimage spots available in Pudukkottai district which are a huge potential for promotion rural tourism and ethnic food hubs.
- Government has supported to develop clusters of villages concentrating in pulses, coconut.
- Producing of sugarcane has went completely down due low price for sugar cane and water scarcity.
- Potential possibility of sea weed cultivation in sea shore area of Manalmelkudi.
- Irrigation for agriculture of Pudukkottai district is based on ground water and ponds.
- Viralimalai block production of vegetables and fruits are high but cold storage was not available which if promote will enhance the additional income and storage of surplus produced.

The above DDS study has provided enormous inference on the scope for promoting and to developing both new and existing enterprise activities in agriculture crops such as paddy, groundnut, blackgram and millets such as sorghum, finger millet, and pearl millet. There are scope for promotion of enterprises in horticulture crops like coconut, jackfruit, mango, lemon and guava. In Pudukkottai district, oil mills, rice mills, paper mills, fisheries based products and forest based products (NTFP) are available and opportunities on these area gives scope for both enterprise building and associated job opportunities. Steel and structuring industries are also common in one of the TNRTP project implementing area. There is also ample scope for rural artisans enterprises like terracotta and bronze utensils. Further there are scope for flower based enterprise activities as markets are locally available, scope opportunity . for exporting cashew based products, coconut and allied products and groundnut and allied products, etc.,. furthermore Pudukkottai as a district have good opportunities to develop rural tourism, ethnic food hubs as these religious and heritage places for tourist interest will attract both international National and local tourist if made available as a package to them.



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- Department of Sericulture, Pudukkottai
- Department of Fisheries, Pudukkottai
- Department of Statistics, Pudukkottai
- Department of Agriculture, Pudukkottai
- Ground Water Department, Pudukkottai
- District Industrial Centre
- Department of Agriculture Marketing & Agri Business
- Department of Dairy Development
- Southern Railway, Pudukkottai
- Superintending Engineer, Pudukkottai Elec.Distn.Circle, Pudukkottai
- NABARD
- Pudukkottai Market Committee, Pudukkottai

# Annexure

## Cropping Pattern In Tnrtp Implementing Blocks

CROPPING PATTERN IN TNRTP IMPLEMENTING BLOCKS					
District: Pudukkottai					
S.No.	Season	Pudukkottai	Thiruvarankulam	Aranthangi	Viralimalai
I.	<b>WET LANDS</b>				
A)	<b>Cauvery - Mettur Project (CMP)</b>				
i.)	Kuruvai - June to September, October		Paddy	Paddy	
ii)	Samba - September to January		Paddy	Paddy	
iii)	Navarai- October to January		Paddy	Paddy	
B)	<b>OTHER AREAS</b>				
i)	Single crop wet land - September to Jan.	Paddy	Paddy	Paddy	Paddy
II.	<b>GARDEN LAND</b>				
a.	July to September	Groundnut	Groundnut	Groundnut	Groundnut
	October to January	Paddy	Paddy	Paddy	Paddy
	February to May	Ragi/Maize	Maize	Maize	Ragi/Maize
b.	July to October	Groundnut/ Maize	Groundnut/Maize	Groundnut/ Maize	Groundnut/Maize
	October to February	Chillies	Chillies	Chillies	Chillies
	March to June	Maize	Maize	Maize	
c.	July to November	Paddy	Paddy	Paddy	Paddy
	November to February	Groundnut	Groundnut	Groundnut	Groundnut
d.	July to October	Ragi	Ragi	Ragi	Ragi
	October to February	Paddy	Paddy	Paddy	Paddy
	February to June				Cotton
e	January, February to October, November	Sugarcane	Sugarcane	Sugarcane	Sugarcane
III.	<b>DRY LAND</b>				
	June to September	Groundnut / Pulses	Groundnut / Pulses	Groundnut / Pulses	Groundnut
	October to December	Groundnut / Minor Millets	Groundnut /Pulses	Groundnut / Pulses	Groundnut /Minor Millets

## Tourist places

S.No	Place	Importance
1	Kunnandar Koil	It is a monument of national importance , The rock cut cave temple and the Mandapam in vijayanagar style made of pink granite at the foot hill is a site taken up for archaeological studies. It has admirable portrait sculptures in the cave.
2	Kodumbalur	It is an archaeological site, This place finds a mention in Sangam period literature classic Silapathigaram. The Muvarkoil built in the 10th century AD is a fine show case of Tamil Art and Architecture. Muchukundeswarar temple was built by the Cholas.
3	Mallaiyadipatti	There are two interesting cave temples of Siva and Vishnu cut in one rock. The cave temples are fine examples of ancient art bas relief and sculptures.
4	Thiruvengaivasal	The Vyagapuriswar-Brahadambal Temple, a Chola architecture built in the 11th century. It was subsequently renovated by the Pandiya emperors during 13th – 14th century. The epigraphy with six Chola inscriptions, seven Pandya, one each of the Vijayanagara and Pallava-rayar periods provides an important source of information on the socio-political history of the area. Beautiful statue of Dakshinamoorthy [God for Wisdom] is found inside this temple.
5	Avudayarkoil	It is also called as Tiruperunthurai. The presiding deity is not in the form of Siva Lingam. Only a pedestal [Avudai] is found and worshipped here, hence it is called Avudaiyar Koil. Lord Siva's Consort and Nandi here is without an icon. Saint Manickavasagar who wrote Tiruvacakam here realized the truth of formlessness and Lord siva is called as Atmanathar too. Attractive murals and the stone cornice called Kodunkai are wonderful aspects of the temple.
6	Thirumayam	The Siva and Vishnu rock cut cave temples and the fort are attractive features here. The cave temples belong to the 9th Century AD. The Vishnu temple is called Adirangam and Tirumangai Alwar sung hymns, praising Lord Vishnu here

S.No	Place	Importance
7	Narthamalai	The structural Vijayalaya Choliswaram in veera style of architecture [10th Century AD], the Cave temples, Paliyili Isvaram, Samanar Kudagu, Kadambar Koil are the important monuments here.
8	Kudumianmalai	SikaNathar or Shikagireeshwarar –Akilandeswari are the presiding deities of the siva temple, The outer Mandapam and its beautiful sculptures are the main tourist attractions. One can reach the Cave Temple of Kugai Jayanthavanesvarar temple [Cave Temple] through the prakarams [courts] of Sikanathar / Sikagiriswarar temple. Musical Notes' inscriptions on the right side of the Cave temple is a remarkable piece of attraction.
9	Sittanvasal	It is a small hamlet and the meaning in both Tamil and Sanskrit is the abode of great saints/siddhas. Number of megalithic dolmens of the 1st century attest the antiquity of the area. The Sittanavasal Cave, also known as Arivar Kovil, is a Jain monastery of the 7th century. The earliest Brahmi Tamil script of 2nd century is found in the Jain Natural Cavern called Ezhadipattam. We still find stone beds used by Jain monks around 2000 years ago.
10	Government Museum	Thirukogarnam, a suburb of this district houses the Government Museum which is the second largest of its kind next to Chennai Government Museum. Rare and exotic collections of Geology, Zoology, Anthropology, Archaeology are exhibited for public viewing. Exhibits of Sculpture, bronze images, weapons, paintings, copper plates, wood carvings, musical instruments, coins manuscripts and historical records are a part of the collection of the past. This museum is open to all public on all days.
11	Pudukottai Palace	The Pudukottai Palace, residence of the Tondaiman rulers, who ruled here from 1673 till 1948, now houses the district collector's office

## Pilgrimage Tourism Destinations

S. No	Place	Importance
1	Avur	A beautiful Roman Catholic church was built by Father John Venantius Bouchet in the year 1547. The church was reconstructed in 1747 in the form of a Cross. Father Joseph Beschi, popularly known as Veeramamunivar, began his missionary life at Avur. The Mother Mary is called locally as Periyanyaki. The Easter Passion play followed by car Festivals, takes place in summer, which attracts people of all faiths from faraway places too.
2	Thirupunavalal	The temple here is called as Viruthapureeswarar Temple. This is a Padal Petra Sthalam. That means Saivite Saints Thirunavukarasar and Thirugnana Sambandar have sung hymns in praise of Lord Siva here. The vaikasi festival is the main festival of the year.
3	Kattubhava Pallivasal	Bhava Fakruddin Aulia also known as Kattu Bhava is entombed here. This Dargah was built by the Arcot Nawab in the 17th century. People of all religious faith without disparity throng here. Kanthuri, the annual festival attracts large number of pilgrim from all parts of the region.
4	Kodumbalur	This place finds a mention in Sangam period literature classic Silapathigaram. The Muvarkoil built in the 10th century AD is a fine show case of Tamil Art and Architecture. Muchukundeswarar temple was built by the Cholas. Archaeological monuments can be visited between 9.00 am and 5.30 pm every day and the ASI collects entrance fee of Rs.5/- for Indians and Rs.100/- for foreigners
5	Mallaiyadipatti	There are two interesting cave temples of Siva and Vishnu cut in one rock. The cave temples are fine examples of ancient art bas relief and sculptures.
6	Thiruvengaivasal	The Vyagapuriswar-Brahadambal Temple, a Chola architecture built in the 11th century is 6 Kms on the Pudukottai-Tiruchirapalli road. It was subsequently renovated by the Pandiya emperors during 13th – 14th century. The epigraphy with six Chola inscriptions, seven Pandya, one each of the Vijayanagara and Pallava-rayar periods provides an important source of information on the socio-political history of the area. Beautiful statue of Dakshinamoorthy [God for Wisdom] is found inside this temple

S. No	Place	Importance
7	Keeranur	The Uthama Nathaswami Temple is of a Mutharaya edifice and contains epigraphs of Cholas and Vijayanagar Empires.
8	Avudayarkoil	It is also called as Tiruperunthurai. The presiding deity is not in the form of Siva Lingam. Only a pedestal [Avudai] is found and worshipped here, hence it is called Avudaiyar Koil. Lord Siva's Consort and Nandi here is without an icon. Saint Manickavasagar who wrote Tiruvacakam here realized the truth of formlessness and Lord siva is called as Atmanathar too. Attractive murals and the stone cornice called Kodunkai are wonderful aspects of the temple.
9	Thirumayam	The Siva and Vishnu rock cut cave temples and the fort are attractive features here. The cave temples belong to the 9th Century AD. The Vishnu temple is called Adirangam and Tirumangai Alwar sung hymns, praising Lord Vishnu here.
10	Narthamalai	The structural Vijayalaya Choliswaram in veera style of architecture [10th Century AD], the Cave temples, Paliyili Isvaram, Samanar Kudagu, Kadambar Koil are the important monuments here. The Mariamman Temple is very popular in this region attracts a large crowd during the car and Poochoriyal [flower dedication] festival in the Month of April.
11	Kudumianmalai	Sika Nathar or Shikagireeshwarar –Akilandeswari are the presiding deities of the siva temple, The outer Mandapam and its beautiful sculptures are the main tourist attractions. One can reach the Cave Temple of Kugai Jayanthavanesvarar temple [Cave Temple] through the prakarams [courts] of Sikanathar / Sikagiriswarar temple. Musical Notes' inscriptions on the right side of the Cave temple is a remarkable piece of attraction. Temple of Lord Subramaniya Swami is located on top of the Kudumiyanmalai hill.
12	Viralimalai	The famous abode of Murugan temple called Lord Shanmuganathar Temple is located on top of this Granite hill, Viralimalai. The temple was once a renowned seat of the Bharatanatyam dance form and boasted of a separate dancer for each of the 32 adavus (dance movements). The Viralimalai is a Bird Sanctuary, particularly a natural sanctuary of peacocks. Large number of those birds are found in this Hill zone is a common sight. The Viralimalai town, Temple and Peacock Sanctuary have been declared and funded as a Heritage zone by the order of the Governor.

S. No	Place	Importance
13	Ponamaravathy	During the 16th century, Ponnamaravathy was a separate kingdom, named after the kings Ponnann and Amaran. The present town was built by these kings Choleswaramudaiyaan [siva temple] built by Raja Raja Cholan II and Soundararaja Perumal/Azhu Perumal temple ½ Km from here are the two important temples of this area. This is an important pilgrim center of this region.
14	Aranthangi	KasiViswanathar temple and the Rajendra Choleeswaram in the Fort are the main temples visited. The Car festival of Viramakaliamman Temple during the month of April-May attracts thousands of devotees to this town.
15	Peraiyur	Naganathasamy Temple located here belongs to the 12th century. This temple visited by many pilgrims to get relieved of malefic effects of Naga dosham. Vedic centric Nagapradishta [installing serpent statue] in the temple is done here
16	Thirukogarnam	The Pallava period, gigantic, rock-cut Thiru Gokarneshwara Temple, also known as Vyagapuriswara-Brahadambal Temple in Pudukkottai town. Built during the reign of Mahendravarma Pallava, the temple's presiding deity is Gokarneshwara, with his consort Brahadambal. While the temple attracts tourists by the droves for its sheer architectural and sculptural magic, devotees throng it since they believe it to be a powerful wish-fulfilling place of worship. On the towering rocks that form the background to the temple, are carved the idols of the 63 Nayanmars or Saivite saints.
17	Kulamangalam	Sri Perungarayadi Meenda Ayyanar Temple is one of the famous temple in Pudukkottai District. The temples history is dated back to 18th century. The exact year in which the temple is constructed is not known. The Horse Idol is of mammoth 37 feet height with the front legs are in the Air and the others in the ground. The Idol is facing the South side. It's one of the finest creative of the ancient Tamilians. The structure is so unique in its construction and Devotees believe that it is the biggest Horse idol in the world.
18	Thiruppunavayil	The Thiruppunavayil Shiva temple is located on the sea shore in Thiruppunavasal near Pudukkotai in Tamil nadu. This temple is regarded as the 7th of the Tevara Stalams in the Pandya region of Tamil Nadu. The presiding deity is called Vruddhapureeswarar or Pazhampathinathar.
19	Avanathankottai	Avanathankottai is a village located near Aranthangi in the Pudukkottai district. The village is home to the Elumichi Amman temple and the Sri Utchama kaliamman temple which is located on the campus of the Naina Mohamed College of Arts and Science.

Source: <http://www.tamilnadutourism.org/places/CitiesTowns/Pudukkottai.aspx>



## Other Attractions in Pudukkottai

S.No	Place	Importance
1	Ammapattinam (Manamelkudi)	This lighthouse and similar lights at Pasipattanam and Rameshwaram were built by the slip form method to improve navigation in the Palk Strait. The immediate purpose was to help Indian fishermen stay in Indian territorial waters without straying over into Sri Lankan waters; ultimately they may guide ships through the Sethusamudram Ship Channel. An inauguration ceremony for the three lighthouses was held here on 9 October 2005

## CROP WISE Major Season

S. No	Crop	Season		
<b>1</b>	<b>Paddy</b>	Kuruvai	Samba	Navarai
<b>2</b>	<b>Millets</b>			
	Cholam	Kharif	Rabi	
	Cumbu	Kharif	Rabi	
	Ragi	Kharif	Rabi	
	Maize	Kharif	Rabi	
	Varaghu	Kharif	Rabi	
	Minor millets	Kharif	Rabi	
	<b>Total</b>			
<b>3</b>	<b>Pulses</b>			
	Redgram	Kharif	Rabi	
	Blackgram	Kharif	Rabi	
	Greengram	Kharif	Rabi	
	Cowpea	Kharif	Rabi	
	Horsegram	Kharif	Rabi	
	<b>Total</b>			

<b>4</b>	<b>Oilseeds</b>			
	Groundnut	Kharif	Rabi	
	Gingelly	Kharif	Rabi	
	Castor	Kharif	Rabi	
	Sunflower	Kharif	Rabi	
<b>5</b>	<b>Cotton</b>	Kharif	Rabi	
<b>6</b>	<b>Sugarcane</b>	Kharif	Rabi	

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