CHAPTER - IV

AREA OF PROFILE
KANYAKUMARI DISTRICT
AND TIRUNELVELI
DISTRICT
CHAPTER -IV
AREA PROFILE

4.1. Kanyakumari District

4.1.1. Location

Kanyakumari is the southern most district of Tamil Nadu. The district lies between $77^\circ 15'$ and $77^\circ 36'$ of the eastern longitudes and $8^\circ 35'$ of the northern Latitudes.

The District is bound by Tirunelevli district on the North and the east. The South Eastern boundary is the Gulf of Mannar. On the South and the South West, the boundaries are the Indian Ocean and the Arabian Sea. On the West and North West it is bound by Kerala.

4.1.2. Climate

The District has a favourable agro-climatic condition, which is suitable for growing a number of crops. The proximity of equator, its topography and other climatic factors favour the growth of various crops. The paddy varieties grown in the second crop season in Thovalai and Agasteeswaram taluks are grown during the first crop season in Kalkulam and Vilavancode taluks. This shows that there is distinct variation in the
climatic conditions prevailing within the district. Unlike, other districts in Tamil Nadu, it has a rainfall both during the South West and the North East monsoons. The South west monsoon period starts from the month of June and ends in September, while the North East monsoon period starts from October and ends in the middle of December.

4.1.3. People & Culture

The people are the human resource of the district. Their culture, religion, aptitude, habits, beliefs, talents and the like have a bearing on how the district presents itself to others. Tamil and Malayalam are the main languages of this district. Hindus and Christians form a sizeable percentage of the population of the district and there are a number of Muslims dominated belts in the district. The caste system in the society has weakened to a great extent especially after independence because of growth of education and improvements in transport and communication. Some of the communities in the district are Nadars, Nanjil Nadu Vellalars, Paravas, Mukthavas, Vilakki Thalanayar, Kamaalar or Asari, Chackarevars and Kerala Mudalis. Rice is the staple food of the rich and the poor alike in the district. Some, among the poorer section, also use tapioca. Beverages like tea and coffee are widely spread even into the rural areas of the district.
Table No : 4.1. Area and Population in Kanyakumari District

<table>
<thead>
<tr>
<th>SI. No</th>
<th>Name of the Blocks/ Municipalities</th>
<th>Area (sq.km)</th>
<th>Population (as per 1991 census report) Peoples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1.</td>
<td>Agastheswaram</td>
<td>143.35</td>
<td>115188</td>
</tr>
<tr>
<td>2.</td>
<td>Rajakkamangalam</td>
<td>135.49</td>
<td>127325</td>
</tr>
<tr>
<td>3.</td>
<td>Thovalai</td>
<td>360.91</td>
<td>97802</td>
</tr>
<tr>
<td>4.</td>
<td>Kurunthancode</td>
<td>109.54</td>
<td>168810</td>
</tr>
<tr>
<td>5.</td>
<td>Thuckalay</td>
<td>127.41</td>
<td>162019</td>
</tr>
<tr>
<td>6.</td>
<td>Thiruvattar</td>
<td>88.37</td>
<td>159182</td>
</tr>
<tr>
<td>7.</td>
<td>Killiyoor</td>
<td>138.86</td>
<td>151034</td>
</tr>
<tr>
<td>8.</td>
<td>Munchiri</td>
<td>71.45</td>
<td>175454</td>
</tr>
<tr>
<td>9.</td>
<td>Melpuram</td>
<td>27.57</td>
<td>173426</td>
</tr>
<tr>
<td>10.</td>
<td>Nagercoil Municipality</td>
<td>19.37</td>
<td>190084</td>
</tr>
<tr>
<td>11.</td>
<td>Padmanabapuram</td>
<td>6.47</td>
<td>19269</td>
</tr>
<tr>
<td>12.</td>
<td>Colachel</td>
<td>5.18</td>
<td>24305</td>
</tr>
</tbody>
</table>

Source : www.kanyakumari district.com

4.1.4. Roadways

The Chennai-Kanyakumari Highway joins the Kanyakumari – Trivandrum road near Aralvoimozhi and passes through Nagercoil touching other important places and terminates at Trivandrum in Kerala State covering a distance of 62.4 km. from Aralvoimozhi to Kerala
border. The views on either side of the road, can never fail to attract the travellers.

Tracing the history of a regular system of road communication in the Kanakumari area, it dates back to 1860 and the credit goes to Sir Madhava Rao, the then Dewan of Travancore-Cochin State. The work part of it was executed by the Engineering Department which was set up during his period. However, these roads were primarily intended for the movement of troops, but in the days to come it accommodated civilian traffic also. During the rule of Rama Varma (1758-98A.D.) a good road was laid between Kanyakumari - Kodungalur (Crangalur).

The road network in Kanyakumari district consists of National highways, State highways, District roads and rural roads. The trunk road from Chennai to Nagercoil joins the Kanyakumari – Trivandrum road near Aralvoimozhi and passes through important places over a distance of 62.4 km. and finally enters Kerala State. The road from Kanyakumari to Trivandrum is one of the busiest roads in the country.

The erstwhile state of Travancore – Cochin adopted a policy of nationalization of transport and as a result the Transport Department was
formed in the State in 1938. Routes between Trivandrum and Kanyakumari (Via) Nagercoil and Colachel were the first to be taken up for nationalization. After the reorganization of States in 1956, the bus transport service in Kanyakumari district was taken over by the State Transport Department of the then Madras State.

4.1.5. Electricity

Kanyakumari district is under the control of Chief engineer (Distribution) stationed at Madurai. The Kanyakumari Electricity Distribution Circle is headed by a Superintending Engineer with headquarters at Nagercoil. He is assisted by Executive Engineer (General) in all technical and administrative matters. Further, he is helped by the Assistant Executive Engineers, (General), (Materials Management), Development, MRT, -cum-Special Maintenance and Civil Assistant Executive Engineer, (General) in all technical matters. He has a Personal Assistant to assist in all administrative matters.

In this district, there are three Operation and Maintenance (O & M) Divisions, each headed by an Executive Engineer with headquarters at Nagercoil, Thuckalay and Kuzhithurai. These Executive Engineers are responsible for the proper maintenance of power supply to
the consumers in their respective areas. One construction – cum – commercial division headed by an Executive Engineer is also functioning, which looks after the construction works and extension of supply to new consumers in the district.

There are five revenue units, two at Nagercoil one at Thuckalay and two at Kuzhithurai which are responsible for collection and accounting of revenue. All the existing 5 towns, 66 Villages, 2490 hamlets and 371 Adi-dravider colonies in the district have already been electrified. Power to 2850 agricultural pump sets and 2932 huts have been extended in the district as on 31 March 1998.

The number of connections with respect to service types, available as of now in the District are as follows:

Table 4.2. The number of Connections with respect to service types in Kanyakumari District

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Number of Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>3,26,348</td>
</tr>
<tr>
<td>Huts</td>
<td>3144</td>
</tr>
<tr>
<td>Street Light</td>
<td>5230</td>
</tr>
<tr>
<td>Public Water Supply</td>
<td>1693</td>
</tr>
<tr>
<td>Educational Institutions, Theatres, Studios</td>
<td>4969</td>
</tr>
<tr>
<td>Cottage Industries</td>
<td>63</td>
</tr>
<tr>
<td>Industrial Service</td>
<td>5439</td>
</tr>
<tr>
<td>Agricultural Service</td>
<td>5948</td>
</tr>
<tr>
<td>Commercial Purpose</td>
<td>48,980</td>
</tr>
</tbody>
</table>

Source: www.kanyakumaridistrict.com
4.1.6. Education

The Christian missionaries, as elsewhere in India, were the pioneers of English Education in the erstwhile Travancore State and more particularly in the then South – Travancore, the area that presently forms the Kanyakumari District. The Portuguese and the Dutch who came to the erstwhile Travancore State even prior to the British, were the Roman Catholics and they did little towards the cause of Education. But, the Protestant Missionaries who arrived later were the first to introduce English Education in the District, which was part and parcel of the then Travancore State. The founder of the English School in the erstwhile Travancore State was Rev. William Tobias Ringle Taube, a native of Prussia and a man of great force and character. He came to the State in 1806 and then onwards, he devoted his whole energy to evangelistic work and wherever he went, he carried with him the mission of English education. He was incessantly preaching and teaching and he established many schools for poor children, Christians as well as for non-Christians.

The progress of education through his instrumentality may be inferred from his reply to a query from Col. Munro, the Dewan Resident of Travancore in 1813. He wrote:
“There were six schools for the laity; the instructions that are
given, consist in lessons of reading, writing, arithmetic and to Christian
children the catechism and reading the New Testament or religious
books. The natives were not disposed to send their children to school.
Books were supplied presented from the Missionaries at Tranquebar but
not in sufficient number”. Ringle Taube’s noble efforts in the spread of
education was aided through the recommendation of the Resident Col.
Munro, by a grant of land at a nominal rent made by Rani Laxmi Bai.

Rev. Ringle Taube bid farewell to the little church at Mylaudy of
South Travancore in January 1816 and left this country. During the short
period of ten years (1806 to 1816), he laid the foundation not only for the
growth of the Christianity, but also for the popular education in the area.

As it has been mentioned earlier, till the Government of the then
Travancore Native State took over the direction and control of the
education system, private teachers called Asans (Mrhd;) conducted
schools in villages and imparted such instruction required for day-to-day
life of the ordinary people particularly rural folk. The Government in
those days took no direct part in the field of education. The remuneration
of teachers was not paid out of the State’s coffers, but, was contributed by
the villagers themselves voluntarily. The system though devoid of State control worked satisfactorily and met the requirements of the people until individualistic tendencies has begun to manifest themselves and undermine corporate action on which ancient village organization was passed.

Such was the condition of the society and education in the native state of Travancore in the beginning of the 19th Century. Educational standard had deteriorated and was almost completely neglected in the northern parts of the State (Since in the southern part, the present district of Kanyakumari, the pioneer work in education was begun by the Christian missionaries).

When the district of Kanyakumari was formed and added to the then Madras State in 1956, the Education Department of the State was headed by the Director of Public Instructions. He was assisted by subordinate officers and necessary complementary staff in his office at the state level. Besides, the posts of the Divisional inspectors at Divisional level, the District Educational Officers at the education district level and the Inspectresses of Girls School at the Circle level were created under the administrative and disciplinary control of the Director of Public
Instruction. The entire State was divided into the two Divisions having head quarters at Madurai and Coimbatore. Each division was under the control of a Divisional Inspector. When Kanyakumari district was formed, it was included under the control of the Divisional Inspector, Madurai, who was having jurisdiction over the districts of Madras, Chengalpattu, South Arcot, Thanjavur, Madurai, Ramanathapuram and Tirunelveli. The entire Kanykumari District was formed as one education district and the post of District Educational Officer for the district was also created. Including the District Education Officers at Kanyakumari district, there were 15 District Educational Officers for the whole State. Consequent on the reorganisation of States, 13 senior posts were transferred from Travancore-Cochin State to Madras State, of which 4 posts came under Subordinate Educational Service.

For School Education at the district level, there is the Chief Educational Officer at Nagercoil. He is assisted by three District Educational officers at Nagercoil, Thuchalay and Kuzhithurai and the Inspectress of Girls schools at Nagercoil. The District Educational Officers and inspectress of Girls Schools have direct control over the High and higher Secondary Schools while for the Inspection of middle and primary schools there are Deputy Inspectors of Schools at Range
level. In the district, there are nine such Ranges and each of them is having one Deputy inspector of Schools. The Range Deputy inspectors are having their headquarters at Nagercoil, Suchindrum, Rajakkamangalam, Thuckalai, Colachel, Thiruvattar, Kuzhithurai, Munchirai and Karungal.

4.1.7. Agriculture

Based on the agro-climatic and topographic conditions, the district can be divided into three regions, namely:-

1. The uplands : Comprising of hills and hill bases, suitable for Growing crops like Rubber, Cloves, Nutmeg, Pepper, Pineapple and the like.

2. The Middle : Comprising of plains and valleys, fit for growing crops like Paddy, Tapioca, Banana, Coconut and the like.

3. The low lands : Comprising the coastal belt, ideal for growing Coconut, Cashew and the like.

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4.1.8. Cropping Pattern

This district produces paddy, tapioca and oilseeds such as Groundunt and Coconut, besides commercial crops like Cashew, Rubber, Fruits and Spices. The important feature of this district is the production of off season Mangoes.

PADDY is the main crop of this district. It is grown in two seasons. First crop is sown in the month of April – June (Kannipoo) and second crop is raised in the month of September – October (Kumbapoo).

TAPIOCA is raised as a subsidiary food crop in this district. The main planting season is April-May. In some pockets, September – October planting is also done as second season crop. It is purely raised as rainfed crop in Kalkulam and Vilvancode taluks and as irrigated crop in some areas of Agastheeswaram taluk of this district.

COCONUT is an important cash crop of this district. The main planting season is May to July.

PULSES are raised in rice-fallow and as intercrop in Tapioca. The important pulses are Blackgram, Greengram, Horsegram, Cowpea and
Redgram. In the months of April–May and September–October pulses are grown as intercrop with Tapioca. In the months of February–March pulses are raised as pure crop in rice–fallow.

VEGETABLES are cultivated during January–February and July–August. Vegetable is also grown as 3rd crop after the harvest of 2nd crop paddy in some pockets of this district.

BANANA is cultivated mainly during March–April and October–November as rainfed crop in small extent. In addition, Pepper, Cloves, Arecanut, Betelvine, Cocoa, Gingelly, Ginger, Turmeric, Arrowroot and the like are also grown in this district.

Crop Sequences followed in Kanyakumari District

1. Paddy - Paddy - Fallow (One year rotation)
2. Paddy - Paddy - Pulses (One year rotation)
3. Paddy - Banana - Paddy (One year rotation)
4. Paddy - Banana - Tapioca (One year rotation)
5. Paddy - Banana - Banana (One year rotation)
4.1.9. Farms, Research Station Laboratories and Institutions:

1. Soil Testing Laboratory: To analyse the soil samples collected and sent by the farmers.

2. Mobile Soil Testing Laboratory: To visit the villages and collect samples, analyse and suggest suitable fertilizer recommendations to the farmers on the spot.

3. Fertiliser Control Laboratory: To ensure the quality of fertilizer distributed in Tamil Nadu through various outlets to the farmers as per the Fertilizer Control Order.

4. Bio-Control Centre
   
   (a) Parasite Breeding Centre: To produce the parasites Bethelid, Braconid and Eulophid, which parasite on Block Headed Catterpillar which infest coconut palms.
   
   (b) Green Muscardines Funi Production Centre: To produce Green muscardine fungus which parasite and kill the grub of Rhinocerous beetle which causes heavy damage to coconut palms.
(c) Mushroom Spawn Production Centre: To produce pleurotus fungi’ spawn which is used for compositing coirpith and cultivation of edible Mushroom.

(d) Government Horticultural Farm: To produce fruit and flower plants for distribution to the farming community.

(e) Agricultural Research Station, Thirupathisaram: The object is: crop improvement; crop management; and releasing of location specific new varieties suited to Kanyakumari District.

(f) Horticultural Research Station, Pechiparai: It undertakes Research in high rainfall zone, evaluation of suitable pineapple varieties, Jack, Bandra Vegetable, Tapioca and spices and standardisation of management techniques for horticultural crops.

(g) Farmer Training Centre, Thirupathisaram: The Farmers Training Centre is located in Thirupathisaram village, 6Km. away from Nagercoil. It caters the needs of Kanyakumari District farmers by imparting village level training and demonstrations and improved farming technologies and innovations.
4.1.10. On Going Schemes

Centrally Sponsored Schemes:

Integrated Cereal Development programme

1. Certified Seed Distribution : @ Rs.4/Kg.
2. Hybrid rice demonstration : @ Rs.1000/Ac.
3. Production Technology : @ Rs.2500/Ha.
4. I.P.M. demonstration : Rs.6000/demn.
5. Distribution of Bio-fertilizer : Rs.45/Ha.(50%)
6. Distribution of M.N. Mixture : 50% Cost
7. Distribution of Gypsum : Rs.500/Ha.
8. Training of Farmers : Rs.5000/Trg.
9. Publicity, Seminar and Workshop : Not Specified

National Pulses Development Scheme

1. Certified / Foundation Seed production : Rs.5 / Kg.
2. R.C. Pockets distribution : Rs.50 /Ha.
5. Seed Treatment : Rs.100 / Ha.
Coconut Development

1. New area coverage : @ Rs.8000 / Ha.
2. Small Coconut Nursery : @ Rs.3 / lakhs
3. Demonstration Plot : @ Rs.17500 / plot
4. Organic Manure Production : @ Rs.20000 / unit
5. Cut or removal of disease affected farms : @ Rs.250 / tree

4.1.11. Forest

1. The Forests in Kanyakumari district is verdant and virgin forests and said to be of 75 million years old. Of the total district area of 167130 hectares. Government Forests occupy an area of 50486 hectares, which comes to 30.2% of the total District geographical area.

2. The Forests of Kanyakumari District was transferred from Kerala to Tamil Nadu on 1st November 1956 as a result of the State reorganization. The Forests of Boothapandy, Mahendragiri R.F.Divisions were previously managed by the District Forest Officer, Tirunelveli South Division with Head quarters at Tirunelveli. Consequent on the formation of Kalakad and Mundathurari sanctuary, Kanyakumari Division was formed exclusively to manage the forests of Kanyakumari District with
Head quarters at Nagercoil from 01.04.1977 as per G.O.Ms.No. 261 dated 26.03.1977.

3. Forest in Kanyakumari Division: 14 types of forests from luxuriant tropical wet evergreen to tropical thorn forests occur in this District because of diverse locality factors. (according to Champion and Seth's classification) Rainfall varies from 103 cm to 310 cm. Elevation ranges from sea level to 1829 m. The forest area is 30.2% of total district geographical area which is next to Nilgiris district with 59% and Dharmapuri District with 38% in the State. The District is having 52% of its forests as dense forests coming only second to Dharmapuri District with 58%.

4. The forests consist of soaring and lofty trees of Mesua ferrea, Bischofia Javanica, Vitex altissima to smaller trees of Dillini a species festooning climber, shrubs valuable herbs, variety of orchids, different types of canes, many indigenous palms and cycas. The important timbers are: Teak. Rosewood, Vengai and Aini and this District is worth mentioning here, for the easy availability and quality timbers. Various types of forest produces like bamboos, reeds, canes, soft wood, tamarind, lemon grass, rubber, coconut, arecanut, kaduai, cinnamon bark, nelli, cardamom,
mango, and many medicinal plants of high value, are harvested in this District. The Maruthuvalmalai located among green paddy fields and fluttering coconut plams is famous for valuable medicinal plants. This is the only district in Tamil Nadu, where rubber and clove plantations have been raised in Reserve Forests in an area of 4785.70 ha and 110 ha respectively. The district is rich in wildlife with at least 25 types of mammals, about 60 species of birds including 14 species of migratory birds and many species of fishes, reptiles and amphibians listed. In short, these forests are a veritable trove of biological diversion.

5. From Tourism angle, the forests are highly enchanting with pleasant shoals of hill top forests, beautiful grass lands, panoramic valleys, top hillocks, singing streams, vast stretches of rubber plantations, valuable teak plantations and excellent climate. No body should miss seeing Mahendragiri, Maramalai, Sea field and Balamore estate area, Ecology farm, Kalikesam, Pechiparai Dam, Perunchani Dam, Upper Kodayar, Maruthamparai and Mukkudal areas for their scenic beauty. All areas in the forests are worth seeing in Kanyakumari District only.

The following are the Reserve Forests in this Division.
Table 4.3. Reserve Forests Area in Kanyakumari District

<table>
<thead>
<tr>
<th>SI.No.</th>
<th>Reserve Forests</th>
<th>Area in Ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Therkumalai East and West</td>
<td>1741</td>
</tr>
<tr>
<td>2</td>
<td>Thadagaimalai</td>
<td>797</td>
</tr>
<tr>
<td>3</td>
<td>Poigaimalai</td>
<td>1243</td>
</tr>
<tr>
<td>4</td>
<td>Mahendragiri</td>
<td>4360</td>
</tr>
<tr>
<td>5</td>
<td>Veerapuli</td>
<td>28109</td>
</tr>
<tr>
<td>6</td>
<td>Velimalai</td>
<td>1126</td>
</tr>
<tr>
<td>7</td>
<td>Old Kulasekaram</td>
<td>694</td>
</tr>
<tr>
<td>8</td>
<td>Kilamalai</td>
<td>8106</td>
</tr>
<tr>
<td>9</td>
<td>Asambu</td>
<td>4310</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50486</td>
</tr>
</tbody>
</table>

Source: www.kanyakumaridistrict.com

Table 4.4. Areas leased for other Activities in Kanyakumari District

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Area in Ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Area leased to Arasu Rubber Corporation Ltd for raising Rubber</td>
<td>4785.00</td>
</tr>
<tr>
<td>B</td>
<td>Area leased to Arasu Rubber Corporation Ltd for raising Clove</td>
<td>110.00</td>
</tr>
<tr>
<td>C</td>
<td>Area leased for Space Research work to I.S.R.O.</td>
<td>1199.20</td>
</tr>
<tr>
<td>D</td>
<td>Kodayar Hydro Electric Project T.N.E.B</td>
<td>133.24</td>
</tr>
</tbody>
</table>

Source: www.kanyakumaridistrict.com
8. Medicinal plants

Medicinal Plants Conservation Area Scheme is being implemented in this Division with the assistance of Foundation for Revitalisation of local Health Traditions, Bangalore (FRLHT) from the year 1993 – 94 onwards.

4.1.12. Irrigation

Unlike other Districts in Tamil Nadu State, Kanyakumari is receiving a fairly good rainfall from both South-West and north-East monsoons. The period of South West Monsoon is from June to September, while that of North-East Monsoon is from October to December.

Table 4.5. Rivers in Kanyakumari District.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thamiraparani</td>
</tr>
<tr>
<td>2.</td>
<td>Pazhayar</td>
</tr>
<tr>
<td>3.</td>
<td>Valliar</td>
</tr>
<tr>
<td>4.</td>
<td>Ponniavaikal</td>
</tr>
<tr>
<td>5.</td>
<td>Paraliyar</td>
</tr>
</tbody>
</table>

Source: www.kanyakumaridistrict.com
Table 4.6. Dams in Kanyakumari District

<table>
<thead>
<tr>
<th>No.</th>
<th>Dam Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pandiyan Dam</td>
</tr>
<tr>
<td>2.</td>
<td>Puthen Dam</td>
</tr>
<tr>
<td>3.</td>
<td>Pechipparai Dam</td>
</tr>
<tr>
<td>4.</td>
<td>Perunchani Dam</td>
</tr>
<tr>
<td>5.</td>
<td>Chittar Dam – I</td>
</tr>
<tr>
<td>6.</td>
<td>Chittar Dam – II</td>
</tr>
</tbody>
</table>

Source: www.kanyakumaridistrict.com

Table 4.7. Channels in Kanyakumari District

<table>
<thead>
<tr>
<th>No.</th>
<th>Channel Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pandiyan Kal</td>
</tr>
<tr>
<td>2.</td>
<td>Thovalai Channel</td>
</tr>
<tr>
<td>3.</td>
<td>Regulatory Kal</td>
</tr>
<tr>
<td>4.</td>
<td>Anandanar Channel</td>
</tr>
<tr>
<td>5.</td>
<td>Nanchinad puthanar Channel</td>
</tr>
<tr>
<td>6.</td>
<td>Padmanabhapuram Puthanar Channel</td>
</tr>
<tr>
<td>7.</td>
<td>Chittar Pattanam Channel</td>
</tr>
</tbody>
</table>

Source: www.kanyakumaridistrict.com

The major river in the district is Thambaraparani locally known as Kuzhithuraiar. This river has got two major distributaries, namely, Kodayar and Paralayar. There are many distributaries for Kodayar river, of which Chittar I and Chittar II are major ones. The origin of
Tambaraparani River is Western Ghats and the river confluences with Arabian sea near Thengapattanam, at a distance of about 56 Km. west of Cape Commorin, the southern most tip of India.

Valliar, another small river and its tributary Thoovalar, originate from Velimalai hills, collect the drainage from P.P. Channel and its branches, ayacuts and confluence with Arabian sea near Manavalakurichi.

Pazhayar another small river starts at Shorlacode, a place about 18 km north west of Nagercoil. This is mainly a drainage river mostly collecting the drainages of Thovalai, Ananthanar and N.P. Channels.
4.1 Figure – Kanyakumari District map
4.2. Tirunelveli District

4.2.1. Geographical Data

The Tirunelveli District is located in the world map, between 08°8' and 09°23' latitude 09' and 77°54' longitude. The total geographical area of the district is 6,823 sq. km.

The district is surrounded by the State of Kerala, Gulf of Mannar and the Virudhunagar, Thoothukudi and Kanniyakumari districts.

Table 4.8. Land Category Area (in Hectares) in Tirunelveli District

<table>
<thead>
<tr>
<th>Land Category</th>
<th>Area in Hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet</td>
<td>79,668</td>
</tr>
<tr>
<td>Dry</td>
<td>3,58,151</td>
</tr>
<tr>
<td>Assessed Waste</td>
<td>39,274</td>
</tr>
<tr>
<td>Unassessed Waste Dry</td>
<td>57,696</td>
</tr>
<tr>
<td>Poramboke</td>
<td>25,456</td>
</tr>
<tr>
<td>Forest lands</td>
<td>1,22,055</td>
</tr>
<tr>
<td>Total</td>
<td>6,82,300</td>
</tr>
</tbody>
</table>

Source: www.nellai.com
4.2.2. Climatic condition

Temperature

In the day time the coastal regions are cooler than the interior parts by about a degree during summer and southwest monsoon seasons and warmer by one to two degrees during winter period. From about the middle of February, temperature increases steadily. In May, usually the hottest month in the interior, the mean daily maximum temperature is 37.1 celsius. The weather is quite hot in May and June and the maximum temperature at sometime reaches 45 degree Celsius. With the onset of the southwest monsoon by the end or beginning of June, there is some drop in temperature. By about the middle of October, the night temperature decreases appreciably. The period from November to January is coolest part of the year with the mean daily maximum temperature of about 30 to 31 degree Celsius in the interior parts. The mean daily minimum in these months is about 22 to 23 degree Celsius in the district in general.

Humidity

The relative humidity, in general, during the year is between 55 and 65 percent in parts of the district, except during the northeast monsoon season, when it is over 65 percent. The coastal parts are comparatively more humid.
Cloudiness

During the months of April and May, the skies become heavily clouded and threatening afternoons on many days when thunderstorms follow. In the southwest monsoon seasons, the sky is heavily clouded or overcast.

Winds

- Generally light to moderate in strength.
- Between May and September, winds are mainly north westerly or westerly
- From October to February, winds are mainly north easterly or northerly

Rainfall

- Main rainy season is from October to the middle of January.
- During the southwest monsoon season, the rainfall is more in the western parts of the district.
- November is generally the rainiest month.
- The heaviest rainfall in 24 hours recorded in the district was 371.5 mm at Sivagiri.
- The average rain fall in the district is 814.8 mm per annum.
4.2.3. Mineral Resources

Limestone

It is available at several places in the district. The major part comes from the limestone deposit occurring near Ramayanpatti, Talaiyuthu and Padmaneri. A total of 4.06 million tonnes of limestone up to a depth of 15.2 meter in Ramayanpatti band, and 5.08 tonnes up to a depth of 15.25 meter in Talaiyuthu band, has been estimated. The available limestone here contain Calcium Oxide from 34.97 to 55.49 percent and Magnesium Oxide from 0.31 to 7.24 per cent. The Padmaneri band consists of six limestone lenses with an aggregate strike length of 800 meter, with an additional 0.199 million tonnes of cement grade lime estimated from this band. The Singikulam band extends over a strike length of 17 meters contains seven limestone lenses with an aggregate strike length of about 6.4 km and a width of 13 meters. About 3.160 million tonnes of cement grade limestone is estimated in this band.

Six bands of good quality limestone occur near Pandapuli and 4,34,000 tonnes suitable for the manufacture of cement and chemical industries have been estimated.
Sulphides

Light traces of sulphides occur in and around Pattankadu and Munradaippu. This mineral is of economic importance.

Ilmenite – Garnet Sands

Occurrence of red garnet sands in the beds of the river Nambiar and Uvari have been found. The proportion of garnet is 75 per cent in the rich deposits and 45 per cent in the surface. Local concentration of limonite sands are noticed near Vijayapathi and Kuttankuli.

4.2.4. Forest and Flora

Forests

The total area of the forest of the district is 1,22,055 ha, of which 81700 ha are set apart as reserve of Mundanthurai and Kalakadu. The entire forest of the district stretches in the Western ghats.

Various types of forests from luxuriant tropical wet evergreen forests to southern hill top forests occur in the district owing to its diverse geographical factors. The forests in the district are technically classified as: Southern hill top, tropical evergreen forests, West Coast evergreen forests, Southern most mixed deciduous forests, Ochlandra reed forests,
umbrella thorn forests, Southern Euphorsia scrub and Southern thorn scrub.

4.2.5. **Rivers in Tirunelveli District**

- Tamiraparani
- Pachaiyar
- Korayar
- Chittar
- Aluthakanniar
- Aintharuviar
- Jambunathi
- Ramanathi
- Gadananathi
- Hanumannathi
- Karuppanathi
- Gundan
- Mottaiyar
- Manimuthar
- Nambiyar
- Karunaiyar
4.2.6. Agriculture

Tirunelveli district is predominantly an agricultural district. The district has mainly two seasons, namely, kar, the first crop (June to September) and pishanam, the second (November to February).

Cropping Pattern

Tirunelveli has fertile soils only in scattered regions. Less fertile red soils are distributed over most of the region. The network of the irrigation system marks full use of the water resources. Cropping pattern of the district varies from taluk to taluk. Wet cultivation is, essentially paddy cultivation and major share of the gross cropped area is under one crop. In dry regions, diversified crop patterns exist and no single crop claims a large share of the gross cropped area. Cultivation which characterises these regions is also basically millet and cash crop cultivations. Even in dry regions, wherever water is available, it is the...
paddy crop that is sown by the farmers. Paddy occupies the largest area of cultivation, followed by Cotton. Paddy is cultivated mainly in Tirunelveli, Palayamkottai, Tenkasi, Shencottai, Ambasamudram and Nanguaeri Taluks.

Other crops grown in the district are: cumbu, ragi, pulses, groundnut, gingelly, banana, chillies and indigo. Portions of Sankarankoil Taluk have the rich, fertile black soil which is highly suitable for cotton cultivation. Factors such as: type of soil, climatic condition, irrigation facilities, and the like determine the cropping pattern in a region. Most of the rainfed areas are cultivated in both the seasons. Most of the crops are on the ground for three or four months, except chillies and cotton which take more than five months.

4.2.7. State Seed Farms, Nurseries and Research Centres

Government Orchard – cum – Nursery

A Government model orchard attached with a nursery, is situated at Courtallam. It supplies quality pedigree plants to ryots for obtaining enhanced yield. The orchard started in 1959 in an area of 15 acres. Mangoes, acid lime, guava, cloves, nutmeg and pepper are grown in this nursery. Quality cloves and nutmeg seedlings are distributed to hill
ranges of western ghat areas. A high yielding pepper variety is multiplied and distributed by this orchard.

State Seed Farm, Karaiyiruppu

The State Seed Farm was formed on 1st October 1957 at Karaiyiruppu in Tirunelveli taluk and is engaged in production of high yielding paddy seeds [(certified and foundation seed) pulses, bhendai and green manure seeds]. It has a total area of 83.59 acres with a cultivable area of 80 acres.

Dwarf x Tall Coconut Farm - Ettankulam

Dwarf x Tall (D x T) Coconut farm commenced functioning since 26th September 1983 at Ettankulam. It lies in Manur block, which is about 30 km from Tirunelveli. The farm is functioning in an area of 301.55 acres. It raises mother palms, Tall varieties and Dwarf varieties. It produces hybrid seed nut through crossing and raises T x D seedling. Mother palm initially was cultivated in 103.26 acres, is now being extended to 198.29 acres. The Dwarf varieties that grown are Malayam orange Dwarf, Malayam Yellow Dwarf, Chawghak ora Dwarf and the like.
Coconut Crossing Centre, Vadakarai

Coconut Crossing Centre is located in Vadakarai village in Tenkasi taluk about 15 km from Tenkasi. It started functioning from 1st December 1991 in an area of 3.94 acres. Procurement of nuts and distribution of seedlings are the main function of this Centre.

State Oilseed Farm, Vadakari

The State Oilseed Farm has been functioning from 5th April 1971 at Vadakarai Village. It is functioning in an area of 76.53 acres. The function of the farm is to produce and distribute coconut seedlings to the farmers.

State Coconut Nursery, Shencottai

A State Coconut Nursery was started in Shencottai on 5th August 1958. This produces nuts and distributes tall, tall X dwarf and dwarf variety coconut seedlings. The nursery is in 1.95 acres.

Parasite Breeding Station, Melagaram

Parasite breeding station is functioning at Ayirapperi, Melagaram village, which is 4 km from Tenkasi. The Station has been functioning from 15th July 1973.
4.2 Figure Tirunelveli District map