CHAPTER III

ECONOMIC CONDITION

The economy of South Travancore was based on agriculture as in other parts of India. Only a few industries existed in South Travancore. Agriculture was the main occupation of the people of South Travancore. The peasant population cultivated paddy, tapioca and coconut.\(^1\) Besides this, small scale industries like coir, weaving, palmgur and palmyra fibre making were adopted by the people even from very early period. After independence, along with other parts of India South Travancore also stepped forward towards development activities.

**Agriculture**

Agriculture was the main occupation of a large section of the population. Paddy was cultivated throughout the state of Travancore in all places.\(^2\) In South Travancore in the southern taluks where the rainfall was comparatively scanty, over 55,000 acres of paddy fields were served by the Kodayar Irrigation Project completed in 1907.\(^3\) A total length of 322 miles of irrigation channels was maintained within the system.\(^4\)

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In the areas not commanded by this project, artificial irrigation was carried out by means of channel-fed or rain-fed tanks maintained for the purpose. There are numerous tanks of this description in Nanchilnad, Kalkulam and Vilavancode taluks.\(^5\) The productive lands were mostly occupied with paddy cultivation.\(^6\)

Wet lands in the southern districts upon which rice is grown are called Nanchay.\(^7\) This Nanchay land is known as Nanchilnad, which comprises the two taluks of Thovalai and Agasthiswaram. The name is derived from the extensive paddy fields that were formed in this tract as contrasted with the other parts of Travancore.\(^8\) Nanchilnad was called as 'the granary of the South' as it had the most extensive paddy fields in the state. The transplantation of single seedlings 6" apart had been proved to be the best method for Nanchilnad.\(^9\)

Wooden plough and spade formed the chief agricultural implements. Water lifting appliances were mostly absent though during 1950's diesel pumps had come into vogue gradually.\(^10\) Farm yard manure, green leaves, municipal compost and ash were the common manures that were used for

\(^5\) Emily Gilchriest Hatch, *op. cit.*, p. 234.
the paddy crop. Farm yard manure and ash, mixed together was applied as a basal dressing, during the preliminary ploughing of land for dry sowing of paddy in the kharif season. Green leaves were chopped and buried under the wet puddled soil, just before transplanting the seedlings during the rabi season a top dressing of ash was also added.\textsuperscript{11}

The series of manurial experiments with different kinds of oil-cakes conducted in the Paddy Farm at Nagercoil during the previous year were continued in 1932 with satisfactory results.\textsuperscript{12} As a result of the continued and sustained propaganda of the Agricultural department, important organic manures (groundnut cake and bone meal) and fertilizers like ammonium sulphate and super phosphate were largely used by the ryots for manuring the paddy crop.\textsuperscript{13}

Through the rural development centres, demonstrations were conducted to show the advantages of scientific methods of cultivation of important crops such as paddy, tapioca and banana during the year 1944.\textsuperscript{14} During the World War II period and after, India as a whole was affected by shortage of food supply. Further the population growth was at a highly alarming rate. The Congress party was then struggling for independence.

\textsuperscript{11} Ibid.
\textsuperscript{12} Travancore Administration Report 1931-32, Trivandrum, 1933, p. 117.
\textsuperscript{13} Sivaraman Nair, U., \textit{op.cit.}, p. VII.
\textsuperscript{14} Travancore Administration Report 1944-1945, Trivandrum, 1946, p. 92.
The English East India Company, which was ruling the country, did not take any step to improve the food production.\textsuperscript{15}

Rice was the staple food of the people and there was a heavy deficiency prevailing in the state.\textsuperscript{16} Rationing of food grains on a statewide basis, introduced during 1944, was continued. The overall size of the ration unit at the beginning of the year 1946 was four nazhies of food grains consisting of three nazhies of rice and one nazhi of wheat. The size and composition of the ration unit was altered from time to time according to the availability of stock.\textsuperscript{17}

During 1950 shortage of food stuffs prevailed in South Travancore as in other parts of Travancore. This was the pressing problem of the Government, forcing it to introduce new methods of agriculture.\textsuperscript{18} In 1950 a scheme for intensive cultivation was carried out with a view to bring about an immediate increase in the production of paddy. An area of 27,000 acres in South Travancore, Onattukara, Kuttanad, Alwaye and Trichur were selected for intensive manuring. This measure together with the use of improved seeds and the adoption of effective methods for plant protection was expected to step up the production of paddy.

\textsuperscript{15} Madras Information, Vol. XI, January 1956, p. 56.
Besides an intensive drive for compost production by converting all waste into valuable manure had been undertaken and over a thousand teachers had been given training to do propaganda work in the villages for compost production.\(^{19}\) The Government also conducted exhibitions and awarded prizes to the peasants for their exhibits. The agricultural department also participated in the Vavubali Exhibition at Kuzhiturai.\(^{20}\) For meeting the shortage of food grains, the Government hastened the investigations regarding the Perinchani Scheme and the Neyyar Project.\(^{21}\)

During the year 1951 paddy was cultivated in 142.9 ayacut acres in Vilavancode taluk.\(^{22}\) In 1953 Japanese method of paddy cultivation was introduced for the first time in Travancore\(^{23}\). In 1953, for the benefit of the agricultural labourers, co-operative societies were formed in some parts of South Travancore. The Neendakara Multi purpose Co-operative Society Ltd., NO. 3454, Rajakamangalam, Agasthiswaram taluk was registered in 1953 for the benefit of agricultural labourers belonging to the Sambavar community.\(^{24}\)

One of the chief obstacles in promoting the efficiency of agriculture was the existence of uneconomic holdings. Owing to extensive subdivision

\(^{19}\) Ibid, p. 3.


\(^{22}\) Sivaraman Nair, U., op.cit., p. XI.


and fragmentation agriculture was not well developed. Seventy-three percent of the wet land plots were less than one acre in extent. The size of the average family holdings was also very small. The major problems of the peasants were soil erosion and agricultural indebtedness. Subdivision of holdings and fragmentation were two of the other factors which kept down the agriculturists. Subdivision of holdings was chiefly due to laws of inheritance which stipulated sharing of the wealth of the ancestor among the legitimate heirs. Another factor that contributed subdivision of land was the increase in population.

**Coconut**

Coconut was the main cash crop raised along the coastal belt. The alluvial soil along the coastal strip was well adopted for the cultivation of coconuts. So also were the valleys in the interior. In certain portions of the taluks of Vilvancode, Kalkulam and Eraniel taxes were levied for coconuts. The collection was fraught with much inconvenience and was a source of oppression to the ryots. Orders were issued during the year 1898 directing the levy of the tax in money at the commutation rate of fifteen fanams for a

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26 Travancore Information and Listener, February 1949, p. 68.
hundred coconuts.\textsuperscript{28} For this purpose in Vilavancode taluk too, the counting of trees was done.\textsuperscript{29}

Plaiting coconut leaves for thatch was a subsidiary occupation for women. As ninety five per cent of the houses were thatched, considerable quantities of thatch were needed every year. Besides paddy and coconut tapioca, pepper and edible roots were the principal dry crops cultivated in almost all the taluks of South Travancore. Rubber and tea were cultivated in the hilly and mountainous tracts.\textsuperscript{30} Other crops were arecanut, plantains, tapioca, pepper, ginger, rubber, tea and coffee.\textsuperscript{31}

**Tapioca**

Tapioca was popularly known as "the poor man’s food" in Travancore. In South Travancore it occupied the third place among the most extensive cultivated crops in the state, and flourished well in almost all kinds of soil and yielded plenty of tuberose roots. The tapioca of commerce, which is nothing but the starchy substance obtained from the tubers was used in foreign countries for sizing yarns and fabrics and for manufacturing dextrin. There was a possible source of power alcohol. Topioca was cultivated over an extent of about 44,549 acres throughout Travancore.\textsuperscript{32}

\textsuperscript{28} *Travancore Administration Report 1897-1898 A.D.*, Trivandrum, 1898, p. 15.
\textsuperscript{29} *Ibid.*, p. 23.
\textsuperscript{31} *Travancore-Cochin Administration Report 1951-52*, Trivandrum, 1953, p. 87.
\textsuperscript{32} *Travancore Administration Report 1940-1941*, Trivandrum, 1942, p. 106.
Tapioca constituted a major portion of the diet among the poor people of South Travancore, many of whom could not afford to eat rice. Most of the tapioca areas came under Kalkulam and Vilavancode taluks where terraced type of cultivation was practiced. The duration of the crop is ten months\textsuperscript{33} and it has the additional advantage that when cut into slices and thoroughly dried it was kept in perfect condition for months\textsuperscript{34}. The leaves of the plant which grew from five to eight feet height were used as green manure around banana trees.\textsuperscript{35} Chips were made by cutting the tubes into small pieces and drying in the open sunshine. Chips were used in flour mills for making various products.\textsuperscript{36}

**Fruits and Grains**

Mango, jack and laurel were grown in all parts of South Travancore. The mangoes and jack fruits of Surankudi in Agasthiswaram taluk were noted for high excellence. Apart from the palmyra palms which grew in abundance, only manure trees were grown in Kalkulam, while plants of almost all kinds were found in Vilavancode taluk.\textsuperscript{37}

Experiments on the cultivation of fruits were continued in the fruit farm at Cape Comorin founded in 1922, with eighteen varieties of fruits,

\textsuperscript{33} Gopalakrishnan, M., *op.cit.*, p. 214.
\textsuperscript{34} Emily Gilchriest Hatch, *op.cit.*, p. 218.
\textsuperscript{36} Gopalakrishnan, M., *op.cit.*, p. 214.
both indigenous and exotic. From the nursery attached to the farm several seedlings of different kinds of fruit trees were sold to the public.\textsuperscript{38} Several new varieties of fruits were introduced in 1926 in the fruit farm.\textsuperscript{39} Fruits and fruit plants were sold to the public from the fruit farm at Cape Comorin. During the year 1946-1947 the revenue realized from the farm amounted to Rs. 2,272.\textsuperscript{40}

**Cotton Cultivation**

Cotton was originally grown in all the taluks of South Travancore. Any dry waste land was used for the cultivation of cotton. Probably the best area for cotton cultivation was in the Thovalai taluk. The cotton cultivation has disappeared altogether, owing to various causes, the chief among them, being, the conversion of dry land into wetland by irrigation from Kodayar Dam.\textsuperscript{41}

Dry grains such as horse gram and gingili and edible roots like chena, kachil and chempu were cultivated with profit. Plantains of different varieties and coconut palms were common in all the taluks.\textsuperscript{42} Cereals like peas, grams, thenai, chamai were also cultivated in small quantities.

\textsuperscript{38} Travancore Administration Report 1931-1932, Trivandrum, 1933, p. 121.
\textsuperscript{39} Travancore Administration Report 1926-1927, Trivandrum, 1928, p. 97.
\textsuperscript{40} Travancore Administration Report 1946-1947, Trivandrum, 1948, p. 85.
\textsuperscript{41} Travancore Information and Listener, January 1946, p. 29.
Cattle Farms

The Agricultural Department had rendered substantial help towards the improvement of cattle by the introduction of superior milking breed of Sindhi cows by encouraging its breeding by the sale of young stock to the public and by introducing grants to private persons for the maintenance of good breeding bulls. The cultivation of fodder crops was being popularized among the ryots.43 Of the various fodder crops Napier grass and Guinea grass44 were found to be specially suited to South Travancore and their cultivation was encouraged by the free distribution of seeds and tussocks among ryots.45

Form of Tax Payment

Formerly, taxes were used to be collected in money as well as in kind such as coconuts and paddy. Anjali was the name of a kind of tax levied on paddy lands in South Travancore. It was considered to represent ‘the tax in grain which was substituted in place for the expenses for providing wicker-work images’. It was the duty of the Nanchilnad people to set up them during the festivals in temples.46 At the settlement with the farmers in 1937-1938 all taxation in kind except paddy in respect of paddy lands was

45 Travancore Administration Report 1931-1932, Trivandrum, 1933, p. 120.
abolished and money payments substituted. The Division Peishkars or their Assistants conducted the jamabandi inspection of village registers and accounts. Several defects were noticed in the village registers and accounts were rectified on the spot.

**Large Scale Industries**

Only a few industries were found in South Travancore. Two factories under European management were working at Manavalakurichi in the Kalkulam taluk for the extraction and export of Monozite, Zircon and Ilmenite. They were the largest ilmenite factories in the world. The Travancore Minerals Factory was started in 1907 originally to mine monazite, and yellow sand contained thorium, the oxide of which had the property of becoming incandescent when heated and was thus valuable for gas mantles, very lights and pyro-technics in general. Before 1907, Brazil supplied the world with monazite.

It was a German scientist by name Mr. Schomberg, who discovered the presence of monazite in the sands that got collected in a godown in Germany, where the coir imported from the Manavalakurichi area was stacked. The coir had carried some sands also, quite likely, as the coconut husks were processed and converted into coir in the sands only. Probably the

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48 *Ibid*, p. 35.
49 Emily Gilchriest Hatch, *op.cit.*, p. 224.
manufacturers and exporters themselves might have added these heavy sands into the coir deliberately, in order to increase the weight. Any way, the Germans traced back the source of the monazite sand and started a factory in 1911 for concentrating monazite.  

The large factory exported about 30,000 tonnes annually, mostly to the United States. When electricity was discovered gas mantle industry declined so also the demand for monazite. However by the time other valuable minerals like ilmanite, zircon, garnet and rutile had been discovered in the beach sands of Manavalakurichi.

Zircon was being mined and was used for lining high temperature furnaces. Practically all of the sand was shipped from the Colachel port a mile or two north of the factory. The principal use for ilmenite was in the production of paint. Ilmenite found a good market in the United Kingdom, Japan and other foreign countries while the monazite found its use in the Indian Rare Earths Limited at Alwaye.

During World War I, the British captured the sand industry from the Germans and were controlling it till independence. This industry was

51 Ibid, p. 348.
52 Emily Gilchriest Hatch, op.cit., p. 224.
53 Gopalakrishnan, M., op.cit., p. 348.
54 Emily Gilchriest Hatch, op.cit., p. 225.
55 Ibid.
56 Gopalakrishnan, M., op.cit., p. 346.
nationalized after independence and the monazite export was also banned.\textsuperscript{57} When the reorganization of states took place in 1956 the above concern was taken over by the Government of Tamil Nadu. It provided employment for about 200 persons and the production was approximately 40 tonnes of ilmenite per day in 1956.\textsuperscript{58}

At Colachel in South Travancore where the Danes once had their Indigo factory. The port at Colachel was the outlet for the coffee produced on the Asambu Hills.\textsuperscript{59} The manufacture of salt was carried on successfully in several factories at Thamaraikulam near Manakudi Lake in the Agasthiswaram taluk. There were fifteen factories scattered in Thamaraikulam, Rajakamangalam, Colachel and Kanyakumari.\textsuperscript{60}

Sugar was manufactured in the Travancore Sugars Ltd in their factory at Thuchkalai. The Thuchkalai Sugar Factory was the only sugar refinery in the state. This factory worked for only forty five days during the year 1930. The local production of sugar fell short of expectation. The supply of sugar from British India was however fairly regular. Though the quota of sugar was insufficient to cope with the normal demands of the state, and was further reduced from 1 December 1945.\textsuperscript{61} The total quantity of sugar

\textsuperscript{57} Ibid.
\textsuperscript{58} It was in the year 1965 Indian Rare Earths Limited took over this industry. (Ibid.)
\textsuperscript{59} Velu Pillai, T.K., op.cit., Vol. III, p. 42.
\textsuperscript{60} Ibid., p. 617.
\textsuperscript{61} Travancore Administration Report 1929-1930, Trivandrum, 1931, p. 43.
distributed during the year 1947 was 87,964 bags.\textsuperscript{62} The manufacture of arrack was carried on in the distillery at Nagercoil.\textsuperscript{63} These two industries were changed from these places and on 5 April 1955, N.E. Noor Muhammed a member of the Legislative Assembly questioned the government in the Assembly for this act of the government.\textsuperscript{64} Iron industry once flourished at Marunkur near Suchindram.\textsuperscript{65} A variety of sugar candy, locally known as panamkalkandu was also manufactured.\textsuperscript{66}

**Trade and Commerce**

South Travancore developed itself from early times as the seat of industry and trade due to direct royal initiative and patronage.\textsuperscript{67} Colachel had the distinction of being a natural harbour. Through Colachel the fine cotton fabrics of Kottar and Eraniel were conveyed to distant countries. Kottar was a flourishing centre of trade even from the very ancient past.\textsuperscript{68} The commercial importance and the ever increasing wealth of Kottar with its seaboard attracted many invaders. The South Travancore Chamber of Commerce at Nagercoil was established in 1934.\textsuperscript{69} Through the Aramboly

\textsuperscript{62} Travancore Administration Report 1946-1947, Trivandrum, 1948, p. 44.
\textsuperscript{63} Velu Pillai, T. K., op.cit., Vol. IV, p. 607.
\textsuperscript{64} Proceedings of the Travancore–Cochin Legislative Assembly, 5 April 1955, p. 1273.
\textsuperscript{65} At present iron industry is not in existence in Marunkur.
\textsuperscript{66} Velu Pillai T.K., op.cit., Vol. IV, p. 617.
\textsuperscript{67} Sivaraman Nair, U., op.cit., p. 19.
\textsuperscript{68} Vellu Pillai, T.K., op.cit., Vol. IV., p. 607.
\textsuperscript{69} Sivaraman Nair, U., op.cit., p.19.
pass considerable trade was carried on between South Travancore and
different parts of the Tirunelveli District.\textsuperscript{70}

**The Motor Service**

The Pioneer Motor Service, Nagercoil was the private motor service
which functioned in South Travancore.\textsuperscript{71} The Central Government
sanctioned an institute of Technical Training Scheme for the Pioneer Motor
Service in 1942. The Government sanctioned a monthly collection of fees at
the provisional rate of seven rupees per head per month for the institution.
As far as the trainees, it was twenty seven rupees per month for matriculates
and twenty two rupees per month for non-matriculates. Sanction was also
accorded for the appointment of staff required in consultation with the
Regional Inspector.\textsuperscript{72}

**Small Scale Industries**

The womenfolk of South Travancore pursued small industries in their
own cottages, to which they devoted the leisure at their disposal. This
brought an additional income to the meager income of the poor cultivator.

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\textsuperscript{70} Velu Pillai, T.K., *op.cit.*, Vol. IV., p. 608.
\textsuperscript{71} File No. 908/44, 23 May 1944. *Letter from Colonel G.P. Murphy Resident for the Madras State to the Dewan of Travancore, General Department*.
\textsuperscript{72} *Letter from the Government of India*, Labour Department dated Simla 20, II June 1942 to the Dewan of Travancore.
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engaged themselves as whole time workers in their little avocations. But to the large majority, cottage industries furnished a subsidiary occupation.  

Understanding that the Government headed by Jawaharlal Nehru had directed the provincial Governments to adopt measures that were needed for improvement, the Vilavancode Taluk Karshaka Samajam had submitted a memorandum in 1949 to the State Government requesting it to start an industry in Vilavancode taluk. The government had investigated the possibility of starting an industry by making use of the raw materials available. But throughout the length and breadth of South Travancore small scale industries began to grow.

The State Government took interest in organizing small scale industries in different parts of the district. By this time in a bid to augment the village economy and supplement the efforts of the State Government, the Central Government set up six organizations. They are the All India Khadi and Village Industries Board, The All India Handicrafts Board, The Small Scale Industries Board, the Coir Board and the Silk Board.

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74 Karshaka Samajam was an association of the farmers.
75 Proceedings of the United States of Travancore and Cochin Legislative Assembly - First Session, 1949, p. 93.
Weaving

Next in importance to agriculture was the weaving industry and among all the materials of the textile fabrics cotton undoubtedly holds the first place in South Travancore. Every village had families of weavers and spinners who supplied all local demands and needs.\textsuperscript{77}

Weaving was carried on as a cottage industry by about thousand people. The important weaving centres of South Travancore were Kottar, Vadasery, Eraniel, Unnamalaikadai, Nattalam and Palliyady. There were about hundred weavers in Palliady alone. The average earning of a weaver was eight to fifteen rupees per month in olden days.\textsuperscript{78}

The Ezhavas, Saliars and Patnuls were the chief castes engaged in weaving, but there were also a few other castes who followed this profession. The different kinds of cloth woven were Neriyatu, Tuppatta, Kavani, Kurikavani and Muri.\textsuperscript{79} The preparation of very fine clothes with lace or silk borders of different designs was confined to Kottar and Eraniel.\textsuperscript{80}

There were some centres to supply the traditional wear of the ordinary population.\textsuperscript{81} Spinning and weaving were major industries in this

\textsuperscript{77} Nagam Aiya, V., \textit{op.cit.}, Vol. III, p. 287.
\textsuperscript{78} Barker, S.G., \textit{op.cit.}, p. 436.
\textsuperscript{80} Velu Pillai, T.K., \textit{op.cit.}, Vol. IV, p. 605.
region. It is said that the guilds of weavers which flourished in the region took an active part in every local affair.\textsuperscript{82}

The Chaliyas of Vadaseri supplied 'Kodippadam', 'Kodikayaru' and other articles of worship to the temple at Bhoothapandi and Suchindram and also to His Highness.\textsuperscript{83} The Kottar weavers formerly made the lace-cloth from local materials. In both Vadasseri and Kottar dyers who dyed yarn for colour cloth were found in large numbers.\textsuperscript{84}

The Dewan Kesava Pillay invited a number of weavers, dyers and painters and other industrious workmen from Tirunelveli and Madurai to settle at Kottar and thus this town became a very rich and important one and formed the grand depot for the supply of clothes for the whole kingdom of Travancore.\textsuperscript{85} Since weaving was an important occupation of the people of Vadasery and Kottar, the S.M.R.V. Technical Institute, Nagercoil gave training for the students in weaving.\textsuperscript{86}

The Government opened weaving depot in 1920 at Eraniel. The aim of the institution was to impart instruction to the weavers of the locality in improved methods of weaving and design.\textsuperscript{87} In view of the importance of propaganda work in the matter of introduction and use of improved methods

\textsuperscript{83} Barker, S.G., \textit{op.cit.}, p. 193.
\textsuperscript{84} \textit{Ibid}.
\textsuperscript{86} \textit{Travancore Administration Report 1938-39}, Trivandrum, 1940, p. 56.
\textsuperscript{87} Velu Pillai, T.K., \textit{op.cit.}, Vol. III, p. 546.
and the use of improved implements in regard to weaving, a peripatetic officer was appointed in 1920 to inspect fly shuttle looms, to suggest improvements in them, and to teach their owners how to mend them and supply them with missing or broken parts.⁸⁸

In order to improve the living conditions of the weavers, Weavers’ Co-operative Societies were started by the Government. Through these Handloom Weavers Co-operative Societies loans were issued to the weavers towards working capital. Such loans were interest free and repayable in ten equal annual installments, the first installment, to begin two years after the date of availing the loan.⁸⁹

There were 200 Weavers Co-operative Societies throughout the state and were federated together in the Travancore Sreemoolam Handloom Weaver’s Central Co-operative Society Ltd, Trivandrum. This Central Society purchased yarn from the mills and passed it on to weavers for being made into cloth. The Central Society disposed of the finished products through the medium of its six emporiums, one of which was at Nagercoil.⁹⁰

Silk Weaving

Around 1640 A.D. six families of silk weavers, Saurashtra by caste, were brought down from Devagiri by the Raja of Travancore and settled at

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⁸⁸ Ibid.
⁹⁰ Travancore Information and Listener, March 1949, p. 17.
Kottar for making silk garments for the royal family. They were given land free of tax and other conveniences to make them feel at home. Seeing their prosperity more families came from Devagiri and Kottar became a thriving village of silk weavers. The demand for their silk fabrics declined since only the royal family and the very rich nobles could afford to buy costly silk and gold thread fabrics.91

The weavers of Kottar used to get their silk from Kollegal in Madras Presidency, Mysore, and Bengal and even from far off China. The gold and silver threads used in silk weaving were made locally. Unfortunately, this industry had practically vanished due to the cheap gold and silver threads imported from France and Surat. There were a few families who knew the secret of making these threads and they did make them occasionally when necessary.92 When there was little demand for silk clothes these weavers began to concentrate their attention on cotton weaving for which there was much demand. Hence the silk weaving community of Kottar became cotton weavers.

**Problems of the Weavers**

The weaving industry declined owing to the poverty of the weavers. Their markets were flooded with foreign piece-goods and Khadhar cloth.

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They were handicapped by lack of organization and lack of finance. In order to relieve the weavers from their sad plight the government established co-operative societies. In 1929, a Weavers Co-operative Society was inaugurated.

After independence, as a result of the encouragement given by the Central Government certain steps were taken by the Travancore Government for the improvement of weaving. The Y.M.C.A. one of the voluntary organizations took much pains to educate the people about the importance of handlooms, trained the people, conducted demonstrations and converted them into experts in weaving. The Marthandam Y.M.C.A. started weaving industry in 1952.

After getting sufficient training the villagers started this industry at their homes. The products like lungis, sarees, dhotis, towels of finer varieties of clothes were produced. Though these articles had not faced much competition from the mills, the industry was in a bad plight due to the availability of cheap machine-made British goods in the market. The weavers could not sell their products for profit. Consequently, there was unemployment among the weavers.

The condition of the weavers and the steps taken by the government through the handloom co-operative societies from 1953 to 1955 were discussed in the Assembly on 25 March 1955 and Panampilly Govinda Menon, the Chief Minister replied to the questions raised by the members. Accordingly in 1956 handloom weavers were granted interest free loans through Handloom Weavers Co-operative Societies towards working capital. Such loans were repayable in ten equal installments. The weavers were granted further concession after remitting the first installment after two years.

Even then the sad plight of the weavers was not over because this industry was suffering from certain obstacles such as changes in tastes and fashions, inability of the weavers to adopt the improved methods of production and lack of organized marketing facilites.

**Palmyra-based Industries**

Palmyra products formed another important source of income. In the dry areas, people had no ways and means to earn their livelihood. The only source of income was the palmyrah products. Many families were engaged in toddy manufacture, jaggery making and fibre extraction.

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100 Sivaraman Nair, U., *op.cit.*, p. XI.
Palmyrah jaggery production was an important industry in which the village women were engaged mostly. Jaggery making was confined to South Travancore, particularly Kalkulam and Vilavancode where the palmyra palm grew in abundance.\textsuperscript{101} According to the Travancore -Cochin Sweet Toddy Rules 1950 the toddy tappers were given the right to tap sweet toddy in pots freshly coated inside with lime, to manufacture jaggery from such toddy and for the sale or use of such toddy as a beverage without fermentation.\textsuperscript{102}

Women had to undergo the irksome job of boiling off ninety per cent of the water in the palmyrah sap "Neeera" amidst smoke and heat. The Y.M.C.A. introduced the first Palm Gur Adviser of the Khadi and Village Industries Commission.\textsuperscript{103} It saved time and reduced fuel consumption and smoke. This new device helped the rural people to make jaggery without undergoing greater ordeals and take their products early to the market and get high price for the same.\textsuperscript{104}

The Palm Gur Industry was one of the important palmyrah-based industries carried on in South Travancore. The Government had taken steps for the improvement of this industry. The All India Village Industries

\textsuperscript{101} Velu Pillai, T.K., \textit{op.cit.}, Vol. IX, p. 607.
\textsuperscript{102} \textit{Rules and Standing Orders etc, of the Travancore-Cochin Government}, 1956, Ernakulam, 1956, p. 373.
\textsuperscript{104} \textit{Ibid.}
Association had done a lot in the matter of resuscitation of palm gur as a cottage industry.\textsuperscript{105}

For the development of Palm Gur industry the government took a decision in 1952. According to that the government had decided to use the fund which was kept for the development of small scale industries in the Neyyatinkara-Vilavancode Project for the development of palm gur industry.\textsuperscript{106} Liberal grants were given to the Primary Societies to meet the establishment charges and contingencies.\textsuperscript{107}

Palm Gur Instructors were appointed during the year 1954. They imparted instruction to tappers and gur makers on the improved method of making palm gur. Palm Gur Training centres were opened in different places of South Travancore and many persons were trained. The Palm Gur Organisers inspected the work of the Instructors.\textsuperscript{108}

The palm gur development was an off shoot of the prohibition policy in the state. The ex-tappers in the prohibition areas of Thovalai, Agasthiswaram, Kalkulam, Vilavancode and other parts of Travancore had been organised into co-operative units and there were forty four palm gur co-operative societies in 1953 with 3,862 members throughout Travancore. They produced jaggery to the value of Rs. 3,05,151 and their sale amounted

\textsuperscript{105} Travancore Information and Listener, Vol. IV, September 1948, p. 42.
\textsuperscript{107} Travancore Administration Report 1955-56, Trivandrum, 1957, p. 373.
\textsuperscript{108} Travancore-Cochin Administration Report 1953-54, Trivandrum, 1955, p. 121.
to Rs. 3,17,286.\textsuperscript{109} In order to propagate the improved method of making palm gur many sets of gur making implements were distributed free of cost to the selected tapper members of the co-operative societies.\textsuperscript{110}

As a result of the spread of education in South Travancore those people who were engaged in this occupation began to educate their children. The younger generation gave up this occupation and preferred Government jobs. Hence this industry began to decline slowly in South Travancore. At present only a few persons are engaged in this work. Further the Government support also is not encouraging. The Co-operative Societies that were established to encourage this work have also been closed.

**Palmyra Fibre Industry**

Palmyra fibre industry was carried on in many places of South Travancore. Fibre was obtained from the leaf stalk called the pattel and also from the fonds. Four kinds of fibre were taken. The extraction of fibre was done by beating with wooden hammers. The strongest stalk fibre was taken from the edges and the weakest from the centre. The fibre taken from the lower side was not of good quality. Cables, cords, ropes, yarn, brushes, rough hats and baskets were made from the fibre. Fibre and jaggery were

\begin{footnotesize}
\textsuperscript{109} *Ibid*, p. 36.
\textsuperscript{110} *Ibid*, p. 122.
\end{footnotesize}
sold in the local markets where common people and small traders would assemble.\textsuperscript{111}

Fibre from the palmyra palms and aloe plants formed the bulk of export by one foreign company, Aspinwall at Colachel. A resident European was in charge of the company. At about 1888 A.D. fibre from palmyra palm was commercially valuable. The fibre bought from the local markets was taken to the factory at Colachel. Here the brown and black fibre was separated, cut to required size and dyed. After drying and cleaning it was bundled into hanks and bales. The fibre was exported to various parts of United Kingdom and the United States. It was used in the manufacture of brushes.\textsuperscript{112}

The villagers used the palmyrah leaf for firewood. The Marthandam Y.M.C.A. educated the unemployed girls to use the palmyrah leaves for making articles like baskets, mats, hats, and fans. Classes were held at the Marthandam Y.M.C.A. to train girls for making palmyrah leaf articles. One month special training in making palmyrah articles was conducted. Even now the training in palmyrah articles is going on in the Y.M.C.A.\textsuperscript{113}

The palmyrah leaves were used for weaving mats. The weaving of mats out of palmyra leaves was carried on by poor families in the Kalkulam

\textsuperscript{111} Ibid.
\textsuperscript{112} Ibid., p. 224.
taluk. The mats that were made out of these leaves were used for packing purpose. The mats were stronger than those made out of screw pine leaves and were harder in texture. The work was carried on by the poorest people and a worker earned four to five rupees per day which was hardly sufficient to meet the minimum needs of the family.

Besides this, fans were produced from palmyrah leaf. There were two kinds of fans. One was made from the leaf itself, using the leaf stalk as handle and a folding fan with sides of palmyrah wood. The former were in common use and the latter had a ready sale in outside markets.

**Coir Industry**

Since South Travancore was rich in coconut trees there was much scope for coir industry. Coir making provided employment for a large number of people along the coastal regions of South Travancore. It was carried on a small scale in Ezghudesapattu Pakuthy. It served as the main source of livelihood to a substantial portion of the coastal population.

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106 Ibid, p. 335.
107 Ibid.
110 Sivaraman Nair, U., *op.cit.*, p. XI.
Coir fibre was prepared from rotten coconut husks and the fibre was spun into coir yarn either by hand or on a wheel. The Marthandam Y.M.C.A. started a coir making cottage industry. In the Y.M.C.A the villagers were taught to make coir from the husk of the coconut. As a matter of fact, coir making became one of the self supporting schemes which promoted the financial position of the village women.

Mats and matting of coir yarn were generally manufactured on wooden looms operated by men. Prior to the World War II, the principal markets for coir mats and matting were in the United Kingdom, Australia, New Zealand, U.S.A., Africa, Holland and the countries of Europe except U.S.S.R, Italy and Greece.

During Second World War Great Britain and America who were the large buyers of coir products, stopped the imports of coir products from Travancore. Consequently the export of coir dwindled from 4,27,000 tonnes in 1939 to 3/4 of it in 1941. Realising the sad plight of coir industry workers, the government of Travancore-Cochin established a Coir Trade Committee on 16 December 1943. Yet the plight of the coir workers continued. Consequently the Government contemplated further changes. A Coir Conference was held at Trivandrum on 14 February 1952 which was

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111 Ibid.
presided over by Shri. Govinda Menon, the Finance Minister. In that conference decision was taken to sell the products through the Co-operative Societies. They planned to form a Coir Board to regulate and develop the industry and the coir products quickly.¹¹⁵

The coir industries in South Travancore also joined with the Travancore industries and met all the hardships and sufferings and enjoyed all the beneficial measures of the government that were introduced then and there.

**Lace and Embroidery Industries**

Lace is a term applied to a transparent network in which the threads of the waft are twisted round those of the warp. It may be made of silk, flax or cotton or even gold or silver thread.¹¹⁶ It is usually a pattern worked upon it either during the process of making lace or with a needle after this has been completed.¹¹⁷ The lace is used in varying quantities, very little in the case of some and rather profusely in others.¹¹⁸

The protestant missionaries have done a lot for the growth and development of lace industry. With the setting up of the boarding school for girls by Mr. Mead in 1819 the C.S.I lace industry developed. In 1859 Mrs. Leah James Duthie arrived at Nagercoil and she took charge of the lace

industry in 1860.¹¹⁹ The finished materials of the lace industry were sent to
different parts of the country.¹²⁰ Lady Muir of Allahabad, and Mrs. Cardy of
Poona were also very helpful in marketing the products.¹²¹ In 1860, forty six
girls completed the school education and continued lace making in their own
houses and eleven girls were learning lace-making.¹²²

The girls in the Neyyoor Boarding school were employed in spinning,
needle work and embroidery in the afternoons. Their needle work was
mainly employed in the making of jackets for sale among women of the
Neyyoor congregations.¹²³ The girls continued to do embroidery work which
was readily sold among the Europeans in India, especially those in Bombay.
twelve girls learned embroidery in 1865.¹²⁴

The wages of the workers were fixed according to the type of lace
and its length. Sometimes it was fixed on the basis of design and the breadth
of the lace.¹²⁵ By 1909 the number of women employed by the lace industry
had risen to about 1000.¹²⁶ In the following year the number increased to
1100.¹²⁷

¹²³ Ibid.
¹²⁷ Annual Report of the one hundred and Fifteenth Report of the L.M.S. London, 1910,
p. 117.
A further revival of the industry was made by the Belgium nuns who opened a convent at Mulagumudu in Kalkulam taluk. Mother Lousia a remarkable woman from Belgium started the famous Mulagumudu lace and embroidery work which has been the means of financing a large part of their orphanage work. Young nuns trained in the art in all its historical aspects and modern developments and to understand the latest taste, fashions and market centres were being frequently recruited from Belgium. The form of their organisation also helped to preserve beautiful quality.

There is an orphanage "The Infant Jesus Orphanage" with over 350 girls who were all taught lace and embroidery. On marriage a part of the dowry was always a complete lace making outfit and the girls carried on the work as a cottage industry. Every new pattern was taught at the orphanage under the direct tuition of the Sisters. All materials were supplied by the convent, and invariably they were of the best quality. The Mulagumudu convent has branch convents at the Cape Comorin, Nagercoil, Asaripallam, Palliady, Mariapuram and Kulasekharam. In all its centres improved methods of work were promoted. The kinds of lace made were Torchon, Bruger, Hointon and Duchese. The establishment of these centres

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129 Emily Gilchriest Hatch, op.cit., p. 219.
131 Ponniah, P.J., Kumari Jilla Yedu (Tamil), Nagercoil, 1968, p. 47.
132 Ibid.
promoted the social and economic upliftment of the women of South Travancore.

The embroidery industry was commenced by the London Mission Society at Nagercoil. Like lace it was a purely cottage industry. Materials and patterns were provided from the head station to which the women returned the finished work. There were two centres for embroidery work at Neyyoor and Marthandam. The Mulagumudu convent pursued this industry also and taught it in its several forms of Mount Mellic, Broderie Anglaise, Richelieu and Roman Embroidery.\(^\text{133}\)

**Fishing**

Fishing was carried on the coasts of South Travancore by thousands of fishermen. The lagoons along the coast also yielded a rich supply.\(^\text{134}\) Fishing was their hereditary profession. Fishing industry was their monopoly and they earned their living by harvesting the seas.\(^\text{135}\) The fishermen supplied the locality with fish and other articles such as shells. The preservation of fish by sun drying was also carried on at several places in the coast. Nearly the whole of the salt fish export by sea was to

\(^{133}\) *Ibid.*  
^{135}\) *Travancore Information and Listener*, September 1948, p. 49.
Colombo. Dried fish was exported from South Travancore to Madras. Fish oil was extracted but the methods employed were crude.

Whitebait (4 varieties) mural (rainbow sardine), butter fish, ribbon fish, perches, seer fish, tunny, red mullet, sharks, rays, small shoals of sardine, dorab, catfish, horse mackerel, sailfish, barracuda, jewfish, balistis were the chief marine fishes. The chief fishing centres were Kadiapattanam and Chinnamarthandamthurai.

Different species of fish were found in the rivers and tanks also. The villagers caught fish by means of the basket trap (Ottalu). This was made of thin stakes of bamboo or reed with a diameter of 2 1/2 feet at the bottom and six inches at the top. The stakes were kept in position by being tied with thin bamboo pieces all round. The net was held by the right hand and was placed over fish in shallow water. The catch was removed through the hole at the top.

Certain steps were taken by the government for the economic upliftment of the fishermen. Fishermen Co-operative Societies emerged as a boon to the suffering fisherfolk in the later part of the nineteen fifties. So far, the Government of India and the State Governments had stressed the

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136 Travancore Administration Report for the year 1883 – 1884, Trivandrum, 1885, p. 79.
139 Sivaraman Nair, U., op.cit., p. viii.
need for having Fishermen Societies in each village. In 1937, Fishermen Co-operative Society was started in Colachel and it was the first in South Travancore. In 1948 two societies were started in Kanyakumari and Mela Manakkudy, followed by societies in Midalam and Enayam in 1949.\textsuperscript{142}

The Fisheries Department attended to the administration of different types of fishery and also to development works such as fish culture, stocking of ponds with suitable varieties of fingerlings, supply of yarn and timber to fishermen at concession rates and socio-economic work for the uplift of the fishermen.\textsuperscript{143}

**Co-operative Dairying**

There were six milk supply unions and twenty one primary milk supply societies throughout Travancore. The Union at Nagercoil was registered on 25 January 1949 and it started functioning on 17 February 1950. At the inception, it was registered under the name "Nanchilnad Co-operative Milk Supply Society".\textsuperscript{144}

It was running milk bars to popularise the milk products. Grants were distributed to the milk unions by the government. Several families in rural

\textsuperscript{142} Register of Fishermen Co-operative Societies 1937 - Assistant Director of Fisheries, Nagercoil, p. 15.
\textsuperscript{143} Travancore - Cochin Administration Report 1951-52, Trivandrum, 1953, p. 70.
\textsuperscript{144} Gopalakrishnan, M., op.cit., p. 251.
parts found subsidiary occupation through this milk supply. The Union at Nagercoil earned on an average Rs. 600 per annum.\textsuperscript{145}

**Bee-Keeping**

Bee-keeping came into prominence in Vilavancode taluk. S. Spencer Hatch took charge of the Marthandam Y.M.C.A. in 1924.\textsuperscript{146} He took steps to develop bee-keeping as an important cottage industry for the benefit of the villagers. Mr. S. Manuel who was the Extension Secretary with Dr. Hatch did much to popularise bee-keeping in the villages around Marthandam.\textsuperscript{147}

Bee-keeping, as an important subject taught at the annual Y.M.C.A. summer course for six weeks, was started in 1926 at Marthandam. The students who were trained in the summer school planted the seeds of bee-keeping in Kerala, Madras, Mysore, Cochin and Bombay.\textsuperscript{148} It became a model for bee-keeping in India. Students from Ceylon, Burma and even from Egypt had attended the courses.\textsuperscript{149} Moreover a system of rigorous training in bee-keeping course for the duration of four months was introduced in 1939 and till now it is being conducted regularly. Bee-keepers

\textsuperscript{146} Travancore - Cochin Administration Report 1951-52, Trivandrum, 1953, p. 70.
\textsuperscript{148} Rajaiah, J., Modern Bee-keeping, Marthandam, 1976, p. 3.
\textsuperscript{149} Golden Jubilee Souvenir of the Marthandam Y.M.C.A., op.cit., p. 68.
trained at Marthandam can now be found from the Himalayas to Cape Comorin.\textsuperscript{150}

As bee-keeping became a profitable cottage industry, the Marthandam Y.M.C.A. made a carpentry unit to make bee-hives with teak wood. The industry started functioning with forty seven carpenters who were given regular job.\textsuperscript{151} Unfortunately due to unavoidable circumstances, the carpentry unit was closed. It was an irreparable loss for the poor people and no step was taken to revive the carpentry unit.

With the assistance of D. Spencer Hatch, the Marthandam Bee-keepers Co-operative Society was started. The society was registered on 19 March 1937 under the Travancore Co-operative Societies Act with Register Number 2050.\textsuperscript{152} The Society started functioning in April 1937. The aim of the Society was to avoid the exploitation by middle men. It had grown enormously and marketed honey and bee-equipments till 1953.\textsuperscript{153}

The Society was engaged in the business of collection of honey from the members and in its scientific preparation and marketing.\textsuperscript{154} From the beginning the Y.M.C.A. was struggling hard for its existence. At its critical juncture, the All India Khadi and Village Industries Commission was

\begin{itemize}
\item \textsuperscript{151} Samuel, M.A., Annual Report of the Marthandam Y.M.C.A., 7 August 1953, p. 2.
\item \textsuperscript{152} Report of the Special Officer, Bee-keeper's Co-operative Societies Ltd, No. 2050, Marthandam, 2 September 1974, p. 2.
\item \textsuperscript{153} Golden Jubilee Souvenir of the Marthandam Y.M.C.A., p. 59.
\item \textsuperscript{154} Travancore Administration Report 1937-38, Trivandrum, 1939, p. 138.
\end{itemize}
constituted in 1953. The Commission realized the importance of bee-keeping industry and extended all possible help to improve the bee-keeping industry. So the Khadi and Village Industries appointed Bee-Field Men and supplied improved hives and implements at a subsidized price.\textsuperscript{155}

M.A. Samuel the Senior Secretary of the Marthandam Y.M.C.A helped J. Rajaiah to attend the All India Bee-keeper's Conference. He cooperated with the All India Khadi and Village Industries Commission and got grants for the Y.M.C.A to develop the Bee-keeping industry. With the help of the Commission, he secured employment opportunities for hundreds of young men trained in bee-keeping under the Marthandam Y.M.C.A.\textsuperscript{156}

**Poultry Keeping**

Poultry keeping also came into prominence in the Vilavancode Taluk.\textsuperscript{157} In Travancore there were three societies engaged in poultry farming of which the most important was the Marthandam Y.M.C.A. Poultry society, besides encouraging the members to rear better poultry, collected and sold the eggs. 159, 713 eggs were collected and sold for Rs. 8,808 during the year 1937.\textsuperscript{158}

\textsuperscript{155} Report of the Special Officer, Bee-keepers Co-operative Society, p. 2.
\textsuperscript{157} Velu Pillai, T.K., op.cit., Vol. IV, p. 592.
\textsuperscript{158} Travancore Administration Report, 1937-38, Trivandrum, 1939, p.138.
The Y.M.C.A had undertaken to implement an intensive poultry project sponsored by the Indian Council of the Agricultural Research. This enabled the Y.M.C.A. to distribute about 50,000 white Leghorn chicks to the villagers at a subsidized rate in 1952. An Incubator of 4,500 egg capacity was installed at the Y.M.C.A to hatch large number of chickens.\textsuperscript{159}

The Y.M.C.A. had a good poultry farm of White Leghorns, Ostrolops, Rhode-Island Reds and Minorcas. The cock circuit system was popular and this helped the villagers to raise good poultry cocks and hens. The villagers were given hatching eggs at half the price. Eggs were purchased from the neighbouring villages and were then marketed in several towns in South India.\textsuperscript{160} The scheme for starting poultry units attached to veterinary hospitals was taken up, and construction of poultry house at Nagercoil was started in the year 1954.\textsuperscript{161}

**Other Minor Industries**

In 1952 four farm centres were started by the Government.\textsuperscript{162} A key farm centre was shifted from Rogani Dairies, Eraviputhoor to Nagercoil in 1952.\textsuperscript{163}


\textsuperscript{161} *Travancore-Cochin Administration Report 1953-54*, Trivandrum, 1955, p. 87.

\textsuperscript{162} Ibid., p. 89.

\textsuperscript{163} *Travancore Administration Report 1926-1927*, Trivandrum, 1928, p. 93.
The making of native ornaments with gold and silver gave the
goldsmiths ample scope for the display of their artistic skill and their
workmanship was much admired.\textsuperscript{164} Besides ornaments, plates, trays, vases,
kujahs, spoons, dishes, rose-water sprinklers and other useful utensils were
made of silver. Most of the vessels used in the worship of the household
deity were made of silver and some even of gold. All the rich temples of
South Travancore have a large number of gold and silver vessels.\textsuperscript{165}

All hollow brassware and domestic utensils were manufactured out of
imported brass sheets. The only place in Travancore where articles were
manufactured out of brass sheet was Kottar in South Travancore. About
fifteen to twenty families were engaged in this work. The artisans here
knew the proportions of 'solid solutions' of copper and zinc to be used to
produce malleable brass.\textsuperscript{166}

Pottery is a very ancient and important industry. There were no
houses in the country even of the poorest classes where earthen pitchers,
water jars, cooking pots, frying pans, dishes and other vessels made by the
potter were not used. There was thus an immense demand for these in every
village and the potter was, by virtue of his calling, an important factor in the
village organization.\textsuperscript{167}

\textsuperscript{164} Nagam Aiya, V., \textit{op.cit.}, Vol. III, p. 299.
\textsuperscript{165} \textit{Ibid.}
\textsuperscript{166} Velu Pillai, T.K., \textit{op.cit.}, Vol. III, p. 556.
\textsuperscript{167} Nagam Aiya, V., \textit{op.cit.}, Vol. III, p. 306.
A scheme was made for the development of the village pottery industry in the Neyyatinkara Vilavancode Community Project area.\textsuperscript{168} Red clay was found in several places and the village potters made several varieties of articles required for domestic use. The people engaged in pottery industry were financially very backward and always sank in debt.\textsuperscript{169}

The korai grass industry occupied an important place in the rural economy. Large number of people earned supplementary income out of this. Mats made from this grass were very common in every household in India. Matting of various designs and patterns and fancy articles enjoy a good foreign market. This industry was in an underdeveloped state because only women of the lower middle class of the Muhammadian community were engaged in this work.\textsuperscript{170}

Korai grass was grown in plenty at Thovalai of Agasthiswaram taluks and the korai grass mat industries existed there. In 1955, N.A. Noor Muhamad a member of the Legislative Assembly requested the Government to start Co-operatives Societies in that area and helped the people to earn their livelihood. In 1954 Rs. 50000 was allotted for a scheme for the development of korai grass mat industry in Travancore, but not even paise was spent on this industry. The Government did not take any step to

\begin{flushright}
\textsuperscript{170} \textit{Ibid.}
\end{flushright}
develop this industry.\textsuperscript{171} The development of the korai grass industry had stimulated the growth of two subsidiary cottage industries namely indigenous dyeing industry and the manufacture of twine out of the alloy fibre.\textsuperscript{172}

Basket making from reeds, bamboos and palmyra leaves was very popular among the men and women of the Kuravas, Kanis and other poor people who belonged to other communities too.\textsuperscript{173} Lime shell burning was followed on small scale in the coastal parts of Agasthiswaram taluk.\textsuperscript{174} Carpenters did the wood work of the house and planned how it should be built according to Tachusastram.\textsuperscript{175}

The indigenous variety of tiles and bricks were also manufactured in South Travancore. The semi-solid mass of clay prepared according to the recipe known to every potter was spread on level ground and allowed to dry for two or three days. It was then cut into required sizes and shapes by a sharp edged piece of wood or other instruments and left to dry a little more. The bricks or tiles were collected and heaped into a kiln constructed in the form of a rectangle with a number of holes on all the sides. Dry twigs and firewood were strewn at the top and bottom of the heap and also in one or

\textsuperscript{171} \textit{Proceedings of the Travancore Cochin Legislative Assembly}, 5 April 1955, Trivandrum, 1956, p. 1270.
\textsuperscript{172} \textit{Ibid.}
\textsuperscript{173} Sivaraman Nair, U., \textit{op.cit.}, p. XI.
\textsuperscript{174} Velu Pillai, T.K., \textit{op.cit.}, Vol. IV, p. 604.
\textsuperscript{175} Tachusastram or the science of carpentry prescribed in minute detail the rules of construction. The chief or head carpenter prepare designs for buildings know that science by heart.
more layers inside it and burnt. After sufficient burning they were removed
and were ready for use. Like this only the potter made his bricks and tiles.\textsuperscript{176}

The economic progress in South Travancore was not considerable
when compared with other parts of Travancore. Yet, there were clear
symptoms of economic changes in South Travancore. Since the
Government of Travancore did not take much interest in the establishment
of major industries, the village and cottage industries made great progress.
Thus the Government schemes that were introduced now and then enabled
these industries to thrive. Further, the training programmes that the
Government introduced in cottage industries such as weaving, mat making,
jaggery making, and palmgur industry were highly beneficial. They paved
the way for the voluntary social service organisations such as the Y.M.C.A
and the missionary centres to start training programmes for the welfare of
the people.