CHAPTER IV

KANYAKUMARI DISTRICT AND ITS PALMYRAH TAPPING INDUSTRY – A PROFILE

Tamil Nadu, as it is well known, is famous for its palmyrah tapping industry. Among all the districts in Tamil Nadu, the districts of Tirunelveli and Kanyakumari account for 60 per cent of the palmyrah tapping population. Historical evidences show that the palmyrah tapping industry in these two districts have certain unique characteristic features. The investigator seeks to highlight these features with special reference to Kanyakumari district. The reason why it is confined to Kanyakumari district is that, it is here the industry has staged a signing off mode due to the interventions of development and service oriented NGO called Palmyrah Workers’ Development Society. This chapter will bring to light the profile of Kanyakumari district, its palmyrah wealth, and the economic and social conditions of the palmyrah tapper families before the advent of PWDS.
4.1 The Profile of Kanyakumari District and its Palmyrah Wealth – An Overview

4.1.1 Location

As it is well known, Kanyakumari district constitutes the southernmost tip of the Indian sub-continent. It is also widely known as the lands end. Geographically speaking, the district lies between 77º05´ and 77º36´ of the eastern longitudes and 8º03´ and 8º35´ of the northern latitudes. The district is bounded by Tirunelveli district in the north and the north-east. The south-eastern boundary is the Gulf of Mannar. On the south and south-west, the boundaries are the Indian Ocean and the Arabian Sea. On the west and north-west, it is bounded by Kerala. The area of Tamil Nadu is 130,058 sq.kms. Of this, Kanyakumari district occupies 1684 sq.kms i.e. 1.29 per cent of the total extent of Tamil Nadu.

4.1.2 Climate and Rainfall

The district has a warm humid climate, with no cold season. The summer season is particularly oppressive. The summer from March to May is followed by the south-west monsoon season from June to September. The period from October to November is the north-east monsoon season. Records of rainfall in the district are available for a good network of 19 stations for periods ranging from 15 to 70 years. The average annual rainfall in the district is 1469.7 mm. The density of population was 1,106 per sq.km in 2011 as against 995 per sq.km in 2001.
4.1.3 Agriculture

Paddy is the principal food crop in Kanyakumari district. In the hills, plantation crops such as tea, coffee, rubber and pepper are being grown. In the lower slopes of the hills, tapioca and banana are raised as rain-fed crops. In the plains paddy, coconut and vegetables are cultivated as main crops. It is the only district of Tamil Nadu where rubber is grown on a large scale. The total cultivated area of the district is 100653 hectares.

4.1.4 Palmyrah Cultivation in Kanyakumari District

Palmyrah trees are known for their innate adaptability to climate. Generally speaking, it is the only crop which can survive successfully under tropical conditions. It can survive in drought prone areas. In olden days, the tropical palmyrah trees were used as bordering trees in dry land farming. A luxuriant growth of them could be found along the banks of streams and rivers. In Tamil Nadu, it is widely cultivated in the southern most districts. In Kanyakumari district, it was cultivated in about 533 acres according to an estimate made in 1981. So during the 80s the palmyrah cultivation had attained its maximum growth. Since then it has been on the decline with the area coming down to nearly 120 acres in 2010.
What is unique about the palmyrah trees is that they are the tallest among all trees. Their height ranges from a low of 40 feet and to a high of 100 feet. They always stand straight. During the rainy season they become helpless victims of thunderstorms. They could be divided into male trees and female trees. The female trees bear fruit through cross pollination.

Botanically speaking the palmyrah trees are monocotyledon. The leaves are fan like. When they are green they could be used for basket making, mat making and for thatching huts. When paper was not in use for writing purposes in India, palmyrah leaves were used for note making and record writing. In Tamil, they were called ‘OLAI SWADDI’ meaning palm
leaf manuscript. Even today Olai Swaddis are maintained scientifically in the archives and the museums. Precious historical evidence about the achievement of the ancient monarchs of India could be obtained only from the Olai Swaddis.

In India where astrologers are held in high esteem, the astrological calculations and speculations about the life of any child upon its birth were recorded by astrologers only in Olai Swaddis. On top of all these, the discoveries and innovations of ancient sages hermits and Siddhas about herbal medicines were recorded in Olai Swaddis. Even today, they are used by the students who take up a course of Siddha medicine or Indian medicine.

The petiole or the leaf stalk is knife edged. To be very precise it looks like a hacksaw blade. The portion of the stalk which is right under the knife edge could be carefully removed and used for cot making, basket making and rope making. In villages, it is used as an easily accessible binding material. They have been successfully replaced by jute yarn coir yarn and yarns made of polyethylene fiber.

In olden days, the palmyrah trees were used for construction works. In houses big and small with a tile roofing frames made of palmyrah wood are liberally used. Frames carefully maintained under normal circumstances have a life exceeding 100 years. Palmyrah wood carefully cut out shaped and polished could be used for making furniture.
There was a time when the wealth of a person was estimated in terms of the number of palmyrah trees owned and the quantity of jaggery produced. As far as maintenance cost of palmyrah trees is concerned, it can be held with effortless ease that it is next to nothing.

There are historic evidences to show that the man with all his ingenuity can never succeed in producing dwarf varieties of palmyrah trees. One example would suffice to make this point clear. The Tamil Nadu Agriculture University had a research center at Srivilliputhur. It was tasked the responsibility of conducting experiments for exploring the possibilities of producing dwarf varieties of palmyrah trees. However, these efforts proved to be an exercise in futility. Consequently, the research centre itself was closed. All these show that palmyrah trees by nature are destined to be matchlessly tall.

4.1.5 The Process Involved in Palmyrah Tapping

The palmyrah tapping is a difficult task. Palmyrah tappers should have the stamina and determination to apply themselves heart and soul to their formidable task. No time is earlier or too late for them. They get up early in the morning around 2 or 3 a.m. and get ready for the task. By 8 o’clock in the morning they retire home and remain home bound mostly. Their afternoon work starts at or after 2 p.m., it will go on till 7 p.m. in the evening. The work is so tiring that they invariably take a liberal dose of toddy to replenish their strength and energy. Over and above these
climbing leaves its hideous marks on the legs and arms of the palmyrah tappers. No plastic surgery can ever remove these indelible scars. Thus palmyrah tapping is one of the most difficult occupations ever known to mankind.

TAPPER IN HIS CONVENTIONAL OUTFIT
TAPPER IN THE FIRST STAGE OF ACTION

TAPPER COLLECTING NEERA
The fruits of the palmyrah trees are harvested in stages. The first one comes before the fruits ripen and this stage is called noungu. It is jelly like and appeals to the taste buds of any human being whether he is an Indian or a foreigner. But at the same time it is cheap. That is why it is very often said that the noungu can conquer the plates of the young and the old. In Kanyakumari district during the summer one can see most of the streets and roads lined with noungu vendors. Most of the passers-by, travellers, or tourists stage a halt around them and enjoy cup of the juicy and jelly like noungu. Noungu has no side effects. It can suit the taste of the young and the old, the sick and the healthy. It is not out of bounds for even chronic sugar patients. When the noungu or jelly like substance is put in palmyrah juice or pathaneer or neera served in a cup, it invariably has a invigorating effect upon anybody. So during the summer season palmyrah pathaneer noungu combination is one of the most sought after and widely popular health drinks.

4.1.6 Palmyrah Products

Palmyrah is popularly known as Kalpagaviruksham and palmyrah juice or pathaneer is a bounty of nature. It is a highly nutritious food. The working class people take it as a health drink every morning. The convention that is in vogue in the district is that tappers supply palmyrah juice free of cost to any passer-by who is hungry or thirsty.
Palmyrah juice could be used for producing a wide range of products. They include jaggery, spiced jiggery, value-added palm candy and toddy.

4.1.6.1 Jaggery

Jaggery is a palmyrah product of profound medicinal value. Coffee with jaggery is extremely good for health. Jaggery-coffee with some dried ginger added to it could be used as a throat lozenges when one gets an attack of cold. People in villages use jaggery-coffee during all seasons. People who work in farm under the scorching sun take jaggery and water to gain absolute freedom from physical fatigue. The ancient Siddhas used jaggery as one of the ingredients for the production of herbal medicines to cure illness. Jaggery is available in many shapes and forms.
4.1.6.2 Spiced Jaggery

Spiced jaggery contains a liberal dose of all kinds of spices with a certain fixed quantity of jaggery. Usually it is packed up with small boxes made of palmyrah leaves. They are displayed in tourist centers, sweet stalls, bakeries and grocery shops. It very easily catches the fancy of tourists from foreign countries and from the north Indian states.

4.1.6.3 Value-added Palm Candy

VALUE-ADDED PALM CANDY

Neera, the palmyrah juice collected by the palmyrah tapper is filtered for removing impurities and heated in a pan to 40°C to 60°C. A deliming process is done at this stage and then filtered again to remove any sediments formed in the process. The filtered neera is again boiled upto
108°C and palm syrup is obtained. The syrup is transferred into crystallizers and kept in a safe place without vibrations. Jaggery crystals are formed and they are collected after 40 days. The jaggery crystals are called palm candy. After collecting palm candy, the remaining syrup is boiled again and poured into crystallizers for two more such cycles. The collected crystals are cleaned, dried, graded and then packed for sale.

Palm candy is used as throat lozenge especially by those who suffer incessant cough. It surpasses sugar in taste. Compared to jaggery palm candy fetches higher price because of the value-addition made by introducing new-processing technology. Value-added palm candy production was introduced by PWDS as community-based enterprise among the palmyrah tapper families. Ten such units were initiated in Kanyakumari district with the total participation of the palmyrah tapper families. These units produced export quality candy and made profit out of it. The following exhibit will make any casual reader understand what it normally looks like.

4.1.6.4 Toddy

Toddy is one of the domestic intoxicants available to people in Kerala state and Kanyakumari district. In Kerala there is no restriction on the production and marketing of toddy. One can see toddy shop everywhere in Kerala. In ancient India toddy was one of the major food items. Toddy, tapioca and fish combination was considered to be a source
of insurmountable energy. In Tamil Nadu, in recent years production and marketing of toddy have been banned.

There are archeological evidences to show that during the reign of the ancient Chera, Chola and Pandia kings, palmyrah juice was used for construction purposes. Lime mortar prepared with a judicious admixture of palmyrah juice will add strength to the construction of palaces and forts. Even houses were built with lime mortar prepared with palmyrah juice. Thus true to its traditional name, palmyrah tree is extremely useful for the growth of mankind in the lowest rungs of social ladder.

4.2 Palmyrah Trees and Their Environmental Significance

Palmyrah trees were vital source of livelihood for the rural populace of Kanyakumari district. Apart from this, they were important source of raw-material for numerous subsidiary micro enterprises in and around Kanyakumari district. Though these enterprises are gradually fading with a paradigm shift in the attitudes of the people, it is absolutely essential to delve deep into the heydays of these enterprises. The following discussion will suffice to make this point clear.

4.2.1 The Palmyrah and the Umbrella Making Industry

Long before the advent of the English government, the umbrellas of the modern type were not in use. India in those days was industrially, culturally and economically backward. So, by force of
circumstances, people have to take recourse of the use of umbrellas made of palmyrah leaves. There were two kinds of such umbrellas. The first one was cap like. It had a diameter of two to three feet. In the middle there was a cap like attachment. During extremely hot season or during the rainy days people used to put it on their head and move around. It was an excellent shelter from rain and sun. The second type of umbrella looked exactly like the modern umbrella. Though it had a holder, it could not be folded as it lacked flexibility. As it was too heavy to carry, children and women used to avoid it.

There are historical evidences to show that umbrella making industry was prospering like anything and the artisans who produced them had a roaring business. But with the advent of modern civilization and fashionable umbrellas, umbrella making industry has almost disappeared from Indian economy in general, and Kanyakumari district, in particular.

4.2.2 The Mat Industry

Mats made of palmyrah leaves are used by people for numerous purposes. The most popular among them would include:

- For drying food grains
- For roofing purposes
- For people to comfortably sleep and sit on and,
- For packaging purposes.
The mats used for sitting and sleeping purposes are bit expensive. They are made with specially cut out and colored palmyrah leaves. Such mats are reported to be extremely good for health.

4.2.3 Basket Making Industry
JAGGERY IN PALM LEAF BASKETS

The baskets which are in every day use produced out of palmyrah leaves are of different shapes and size. There are about 5 types of baskets. They are:

- Baskets used for carrying loads.
- Baskets used for preserving eatables.
- Baskets used for storing grains.
- Baskets used for shopping purposes
- Baskets used for business purposes

In villages farmers and petty traders even today use the first type of baskets for carrying farm products such as coconuts, banana, tapioca and vegetable items. They are available in different shapes and
size. Baskets makers charge as much as Rs.500/- for making an optimum size basket. The cost of a medium size basket is around Rs.250/-. Smaller baskets costs about Rs.100/-. Very small baskets used for collecting grains and vegetable items are sold for prices ranging from Rs.10 to Rs.15/-. These baskets are in very great demands.

4.2.4 Muram

Muram is otherwise known as sieves. It is used for separating grain from chaff or for removing dust and particles of stones or clay. Their popularity is on the vain due to the advent of readymade flour and quality tested and scientifically packaged with ISI marking rice, black gram green gram and wheat. But those who still depend on the conventional methods of cooking, cannot do without these muram. The cost of the muram varies from Rs.150/- to Rs.200/.

4.2.5 Brush Making

Brushes used for toilet cleaning and floor cleaning are made out of palmyrah fiber. Palmyrah fiber is extracted out of the stalk of the palmyrah leaves. What is usually done is to cut off the bottom portion of these stalks and then they are subjected to a process of machine pounding for purposes of fiber extraction. These brushes are available in different size. The brush making industry in spite of the rising competition has been making remarkable progress over the years. Thus it is obvious that the
The palmyrah tree has been a source of the major inputs for numerous industries.

4.3 Garbage Pollution and the Palmyrah Tapping Industry

Garbage pollution was a serious threat to the health of the people in rural areas. The accumulation of agricultural waste, the accumulation of dry leaves around the trees and the fast growing thorny bushes were the breeding place of mosquitoes, harmful bacteria and dangerous reptiles. As the palmyrah tappers use this garbage as fuel for producing palmyrah products such as jaggery, the streets and the places around the villages become clean. The smoke pouring out of the domestic hearths is an antidote for mosquitoes and flies. Thus they contribute to the environmental cleanliness.

4.4 The Economic and Social Conditions of the Palmyrah Tappers and their Families before the Advent of PWDS

The palmyrah workers were considered to be the most ill-fated segments of the Indian population. They lived under miserable conditions. Their life was despicable. Their woes were beyond description. Their problems were beyond solution. They work day in and day out. They lived in hand to mouth existence. They were under-clothed. Their children were denied proper education and proper medical care. Their wives were fated to work without any proper rest. Without adequate shelter, the
Palmyrah tapping is a seasonal industry. Extremes of climate are not suitable for the industry. Every year, peak season lasts for five months from the middle of November to the middle of April. Sample survey of 150 palmyrah tappers revealed that 60 (40 per cent) of them had the habit of migrating to Tirunelveli district where the palmyrah tapping season lasts up to the month of August. Twenty (13.3 per cent) of them reported that they were involved in cultivation and cattle rearing during off season. For majority (46.67 per cent) of them off-season was a period of hibernation. As they did not have any other source of income, they found it extremely difficult to keep the wolf from the door. Consequently, they were left with no options other than borrowing profusely from their employers or the owners of palmyrah trees. It was due to this kind of unavoidable borrowing they almost became bonded people. Thus, it is obvious that nearly 47 per cent of the sample member palmyrah tappers were relatively wedded to poverty before the advent of PWDS.

4.4.1 Income and Expenditure Pattern

As it has been referred to earlier, the lives of palmyrah tappers were riddled with the problem of abject poverty. Their daily income was abysmally small but their domestic expenditures were very
high. Their income levels before the advent of PWDS could be better understood from the table 4.1.

**TABLE No. 4.1**

**DAILY INCOME OF PALMYRAH TAPPER FAMILIES BEFORE THE ADVENT OF PWDS**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Income Brackets (in Rs.)</th>
<th>No. of Tapper Families</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>100-150</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>2.</td>
<td>151-200</td>
<td>34</td>
<td>23</td>
</tr>
<tr>
<td>3.</td>
<td>201-250</td>
<td>45</td>
<td>30</td>
</tr>
<tr>
<td>4.</td>
<td>251-300</td>
<td>31</td>
<td>21</td>
</tr>
<tr>
<td>5.</td>
<td>&gt; 300</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>150</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

SOURCE: Sample Survey of Palmyrah Tappers.

The reason why the daily income of the palmyrah tapper families is apparently quite small is that they earn their income on alternative days. In other words, the total quantum of palmyrah juice obtained is shared equally between the tappers and the community owning the palmyrah trees. Strictly speaking, the payment to palmyrah tappers comes in kind, that is, the juice of the palmyrah tree which would be converted into jaggery or toddy and sold in the market at the going price. The tender palmyrah palm leaves and fiber are very often taken from the trees and sold in the market. This shows how vulnerable the palmyrah tapper families were without a steady and sustainable income. This income whitles down to nothing with the onset of the rainy season. Quite shocking
as it may seem, their domestic expenditure on the contrary, was very high.

It could be seen from the table 4.2.

**TABLE No. 4.2**

**DOMESTIC EXPENDITURE PATTERN OF THE PALMYRAH TAPPER FAMILIES**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Income Brackets (Rs.)</th>
<th>No. of Palmyrah Tapper Families</th>
<th>Items of Expenditure in Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Food</td>
</tr>
<tr>
<td>1.</td>
<td>100-150</td>
<td>25</td>
<td>71</td>
</tr>
<tr>
<td>2.</td>
<td>151-200</td>
<td>34</td>
<td>71</td>
</tr>
<tr>
<td>3.</td>
<td>201-250</td>
<td>45</td>
<td>75</td>
</tr>
<tr>
<td>4.</td>
<td>251-300</td>
<td>31</td>
<td>77</td>
</tr>
<tr>
<td>5.</td>
<td>&gt; 300</td>
<td>15</td>
<td>79</td>
</tr>
</tbody>
</table>


A cursory glance of the table 4.2 shows that the palmyrah tapper families were under compulsion to spend more on food as their daily income swells. This contradicts the established theories of Economics. One of the axiomatic truth in Economics is that the ‘Marginal Propensity to Consume’ tends to decline with every increase in income. But in the case of palmyrah tapper families, as their daily income grows, there arise an unmanageable burst of expenditure on consumption. This is one of the stark realities which confronted the over-burdened lives of the palmyrah tappers. It is these predicaments in life that prompted them or goaded them to accept wholeheartedly the call of PWDS to become members of mantrams.
4.4.2 Savings and Indebtedness

Saving is that part of income which is not spent. Generally, saving depends upon the capacity to save and willingness to save. The capacity of the palmyrah tappers to save was limited due to their low income. An analysis of the data of annual savings of the palmyrah tapper families indicated that 27 (18 per cent) out of 150 families did not have any savings at all. The annual savings of the members of palmyrah tapper families are given in Table no.4.3.

**TABLE No. 4.3**

**ANNUAL SAVINGS OF THE PALMYRAH TAPPER FAMILIES BEFORE THE ADVENT OF PWDS**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Amount Saved (Rs.)</th>
<th>No. of Families</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>&lt;100</td>
<td>35</td>
<td>28.46</td>
</tr>
<tr>
<td>2.</td>
<td>100-200</td>
<td>56</td>
<td>45.53</td>
</tr>
<tr>
<td>3.</td>
<td>200-300</td>
<td>24</td>
<td>19.51</td>
</tr>
<tr>
<td>4.</td>
<td>300 and above</td>
<td>8</td>
<td>6.50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>123</strong></td>
<td><strong>100.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Sample Survey of Palmyrah Tappers.

As can be seen from Table 4.3 majority (45.53 per cent) of the palmyrah tapper families had annual savings between Rs.100/- and Rs.200/-, 28.46 per cent families less than Rs.100/- and 19.51 per cent families had annual savings between Rs.200/- and Rs.300/-. Only a few (6.50 per cent) of the palmyrah tapper families had Rs.300/- or above Rs.300/- as their annual savings before the advent of PWDS.
The palmyrah tapper families were forced to borrow mainly due to the seasonality of their occupation. Data on their indebtedness showed that 98.67 per cent of the palmyrah tapper families were in debt and only 1.33 per cent were free from debt. Table 4.4 gives an idea of their debt position just before the advent of PWDS.

**TABLE No. 4.4**

**BORROWING OF THE PALMYRAH TAPPER FAMILIES**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Sources</th>
<th>No. of Families</th>
<th>Total Debt (Rs.)</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Money lender cum jaggery merchants</td>
<td>75</td>
<td>43,931</td>
<td>56.75</td>
</tr>
<tr>
<td>2.</td>
<td>Palmyrah tree owners</td>
<td>62</td>
<td>29,410</td>
<td>37.99</td>
</tr>
<tr>
<td>3.</td>
<td>Friends and relatives</td>
<td>6</td>
<td>2,196</td>
<td>2.84</td>
</tr>
<tr>
<td>4.</td>
<td>Institutional credit</td>
<td>5</td>
<td>1,868</td>
<td>2.42</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>148</strong></td>
<td><strong>77,405 (523)</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

**NOTE**: Number in parenthesis shows average outstanding debt.

**SOURCE**: Sample Survey of Palmyrah Tappers.

Table 4.4 shows that the total outstanding debt of the 148 palmyrah tapper families was Rs.77,405 and their average debt was Rs.523/- before the advent of PWDS. The money lender cum jaggery traders constituted their main source (56.75 per cent) to them and palmyrah tree owners the second main source (37.99 per cent). Institutional credit formed only a marginal percentage of their total debt. It is an indication of their poor access to institutional credit.

**4.4.3 Social Problems**

The social problems of the palmyrah tappers were far too
many. Palmyrah tapping, as it has been alluded to earlier is an extremely
tough job. Climbing twice daily palmyrah trees up and down with heights
ranging from 40 to 100 feet is no easy task at all. It leaves its tedious
marks on the ankles, forearms, palms and chest of the palmyrah tappers.
They cannot be hidden from public gaze nor can they be removed by
plastic surgery. These scars betray their identity wherever they go. They
are virtually loathed by the public for these ugly trade marks which ruin
their personality. Further, the stark of neera cannot be easily removed by
any numbers of dips with the local channels and tanks. On top of all these,
they cannot skip work under any circumstance. Deaths, marriage and
illness in families cannot be an excuse for absenting from palmyrah
tapping. Failure to do the work even once in a day will seriously fell upon
the yield of palmyrah trees. To put in simple terms palmyrah tappers
should seriously engage in their work daily in and day out. No time is too
earlier or too late for them.

The social stigma they suffer travails down the memory lane
from one generation to another. Another very important thing which needs
special mention in this context is that the wives and children of palmyrah
tappers are under-clothed and under-nourished; changes in civilization and
culture seldom had any effect on them before the advent of PWDS.
The children of palmyrah tappers were deprived of the pleasures of childhood. The social transformation among palmyrah tappers and their families was found to be extremely necessary by the PWDS.

**TABLE No. 4.5**

EDUCATIONAL STATUS OF THE FAMILY MEMBERS OF THE SAMPLE PALMYRAH TAPPERS BEFORE THE ADVENT OF PWDS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Literacy Level</th>
<th>Before the advent of PWDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total Members</td>
</tr>
<tr>
<td>1.</td>
<td>Illiterates</td>
<td>639</td>
</tr>
<tr>
<td>2.</td>
<td>Pre-school</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Primary School</td>
<td>306</td>
</tr>
<tr>
<td>4.</td>
<td>Middle School</td>
<td>51</td>
</tr>
<tr>
<td>5.</td>
<td>High School</td>
<td>20</td>
</tr>
<tr>
<td>6.</td>
<td>Pre University Course</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>Under graduate</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>Post graduate</td>
<td>1</td>
</tr>
<tr>
<td>9.</td>
<td>ITI/ Polytechnic</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>Typewriting</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1020</strong></td>
</tr>
</tbody>
</table>

NOTE: Pre-school includes pre-kindergarten, lower kindergarten and upper kindergarten levels of education.

SOURCE: Primary Data.

As shown in Table 4.5, before the advent of PWDS illiteracy is quite common among the members of the palmyrah tapper families. Nearly two-third (62.65 per cent) of their members were illiterates. None of their children got pre-school education. Only four (0.39 per cent) out of 1020 members had availed education beyond high school level.

4.4.4 Housing Conditions

Housing conditions influence the status and productivity of
any individual. Generally, good housing conditions promote the welfare of people. The nature of houses of the sample palmyrah tappers is depicted in Table 4.6.

**TABLE No. 4.6**

**NATURE OF HOUSES OF THE PALMYRAH TAPPERS BEFORE THE ADVENT OF PWDS**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Nature of the House</th>
<th>No. of Families</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thatched</td>
<td>74</td>
<td>49.33</td>
</tr>
<tr>
<td>2.</td>
<td>Tiled</td>
<td>18</td>
<td>12.00</td>
</tr>
<tr>
<td>3.</td>
<td>Huts</td>
<td>58</td>
<td>38.67</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>150</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

SOURCE: Sample Survey of Palmyrah Tappers.

As shown in Table 4.6 nearly 50 per cent of the sample palmyrah tappers were living in thatched houses and 12 per cent were living in tiled houses. More than 38 per cent of their dwellings were huts built of sub-standard materials like palm leaf, coconut leaf, straw, reed and mud.

To sum up, though palmyrah tapping industry flourished in Kanyakumari district during 1970s, the palmyrah tappers and their families who were involved in it faced many problems. Their reliance on money lenders, jaggery merchants and palmyrah tree owners for credit and lack of access to institutional credit always kept them in dire poverty. Their pressing problems are low income from palmyrah tapping, seasonal unemployment, hazardous nature of occupation, reliance on money lender
cum jaggery traders for borrowings, low social status and poor housing. These are the stark realities which confronted the over burdened lives of the palmyrah tapper families before the advent of PWDS.