Chapter III

Profile of the Study Area and Coir Units
CHAPTER – III

PROFILE OF THE STUDY AREA AND COIR UNITS

3.1 INTRODUCTION

For a proper appreciation of the problem selected for the study, a discussion on the socio-economic background of the study area, Thanjavur District and the profile of coir units have to be outlined. They are discussed in the following two sections of this chapter.

3.2 PROFILE OF THE STUDY AREA— THANJAVUR DISTRICT

Thanjavur District is the Rice Bowl of Tamil Nadu. The Big Temple and the other famous temples in the district are known all over the world. Thanjavur was the cultural capital of the country in 1790. Thanjavur gained prominence during the period of Chola Kings, who made it as their capital. Thereafter, it was ruled by Nayaks and Maratta Kings, who nurtured art and culture. The cultural, the architectural and the scholarly pursuits of these rulers are reflected in the great monuments like Grand Anaicut, Big Temple and Serfoji Mahal Library etc. in the district.

Thanjavur, formerly known as Tanjore, is a municipality and the headquarters of the Thanjavur District in the Indian state of Tamil Nadu. The name Thanjavur is derived from "Tanjan", a legendary asura in Hindu mythology. Thanjavur is one of the ancient cities in India and has a long and varied history dating back to the Sangam period. The town was founded by Mutharayar king Swaran Maran and rose to prominence during the rule of the Later Cholas when it served as the capital of the Chola Empire. After the fall of the Cholas, the city was ruled by various dynasties like Pandyas, Vijayanagar Empire, Madurai Nayaks, Thanjavur Nayaks, Thanjavur Marathas and British. It has been a part of independent India since 1947.

Thanjavur is an important center of South Indian art and architecture. Most of the Great Living Chola Temples which are UNESCO World Heritage Monuments are located in and around Thanjavur. The foremost among the Great Living Chola temples, the Brihadeeswara Temple, is located in the center of the city. Thanjavur is also the home of Tanjore painting, a painting style unique to the region. The city is an important agricultural center located at the heart of the region, known as the Rice bowl of Tamil Nadu.
South Zone Cultural Centre in Thanjavur is one among several regional cultural centres established by Indian Government to preserve and promote traditional cultural heritage of India. It had a population of a 2,90,732 in 2011

- **Infrastructural Facilities**

  Thanjavur is located at 10.8°N 79.15°E. It is situated in the Cauvery delta, at a distance of 314 kilometres (195 miles) south-west of Chennai and 56 kilometres (35 miles) east of Tiruchirappalli. Though most of Thanjavur District is a level plain watered by the Cauvery and tributaries, the taluk of Thanjavur is made up of mostly barren uplands sloping towards the east. To the south of Thanjavur town, is the Vallam tableland, a small plateau insterspersed at regular intervals by ridges of sandstone.

  The nearest seaport is Nagapattinam which is 84 kilometres (52 miles) east of Thanjavur. The nearest International Airport is Tiruchirapalli located at a distance of 56 kilometres. The town has an elevation of 57 metres above mean sea level. The total area of the city is 36 kms.

  The urban agglomeration encompasses Vallam to Mariamman Koil (west - east) and Vayalur to the Air Force Station (north-south) for an area of about 100 kms.

- **Industrial Scenario in the District**

  Infrastructure and support services are conductive enough for setting up industrial units in the district. There are 14 large and medium scale industries in the district which are mostly concerned with the textiles and sugar sectors. Small scale sector industrial units numbering 6698 are found in the district and the sector is next to agriculture in providing livelihood to the people of this region.

  The establishment of the District Industries Center (DIC) in the district on 05.06.1997 was a landmark for the development of cottage and small industries, tiny and household sectors in the district. The DIC helps the new generation entrepreneurs for the establishment of the industrial undertakings in the district. It extends credit facilities, marketing assistance, extension services besides quality control.

- **Economy**

  Agriculture in Thanjavur is the main source of livelihood for most of its people. Agricultural cultivation has been the major occupation of the local inhabitants of
Thanjavur as the land is ideal for growing crops like paddy. The maximum portion of Thanjavur land is used for cultivation and agriculture. The total percentage of land fit for cultivation is 58%. The city of Thanjavur consists of tertiary, alluvial and ancretaceous types of soil. The major portion of Thanjavur land consists of alluvial deposits. The eastern region of Thanjavur abounds in alluvial type of soil fit for agriculture. This region is thereby producing the maximum number of crops. Organic farming is gradually being implemented to the farmers of Thanjavur. In order to maximize the agricultural production, organic farming is being implemented.

Thanjavur is known as the Rice bowl of Tamil Nadu. The Major crops, other than Paddy, are blackgram, banana, coconut, gingelly, ragi, redgram, sugarcane, green gram and maize. Indian Institute of Crop Processing Technology (IICPT) is located in Thanjavur on Madurai National Highway (NH 226). The Institute tests a variety of Food Processing Technologies that suit cultivation of the crops and Consumers. The institute conducts many training programs and also delivers training to Research scholars every year.

3.3 PROFILE OF COIR UNITS IN THE STUDY AREA

This section has been devoted to discuss the organisational aspects of the coir units, focusing on their location, age, types and sources of raw material, period of stocking raw material and finished fibre, sources of capital and its pattern of investment based on the primary data collected through a well-structured interview schedule.

- **Location of units**

  The selection of an appropriate location ensures smooth and efficient functioning of units with less of operational expenses. Location plays an important role in determining the type of diversification and the nature of linkages generated. It is estimated that production and distribution cost may vary to an extent of 10 per cent simply by virtue of the choice of the enterprise location.

- **Location-wise Distribution of Coir units**

  The location-wise distribution of coir units in the study area is presented in Table 3.1.
Table 3.1 discloses that nearly 58 per cent of the total units of the district are concentrated in rural areas whereas 42 per cent of the units are located in urban areas. With regard to the size of the units, nearly 83 per cent of the small units are located in the rural areas and only 17 per cent of them are located in urban areas. In the medium size units, 73.91 per cent are located in urban areas, followed by 26.09 per cent in rural areas.

**Taluk-wise Distribution of Coir units**

The Taluk-wise distribution of Coir units in the study area is presented in Table 3.2.

### TABLE 3.2

<table>
<thead>
<tr>
<th>Name of the Taluk</th>
<th>Number of Units</th>
<th>Percentage to the Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thanjavur</td>
<td>2</td>
<td>3.85</td>
</tr>
<tr>
<td>Thiruvaikuram</td>
<td>4</td>
<td>7.69</td>
</tr>
<tr>
<td>Thiruvikrai</td>
<td>6</td>
<td>11.54</td>
</tr>
<tr>
<td>Panasam</td>
<td>2</td>
<td>3.85</td>
</tr>
<tr>
<td>Kumbakonam</td>
<td>2</td>
<td>3.85</td>
</tr>
<tr>
<td>Pattukkottai</td>
<td>14</td>
<td>26.92</td>
</tr>
<tr>
<td>Peravurani</td>
<td>18</td>
<td>43.62</td>
</tr>
<tr>
<td>Orathanadu</td>
<td>4</td>
<td>7.69</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: District Industries Centre, Thanjavur.

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It is observed from Table 3.2 that out of 52 Units, the Peravurani Taluk accounts for the maximum of 18 units (43.62 per cent), Pattukottai Taluk stands second with 14 units (29.92 per cent) and Thiruvidaimarudur Taluk stands third with 6 units (11.54 per cent). Peravurani, Pattukottai and Thiruvidaimarudur Taluks put together accounts for 73 per cent of total units (38 units) in the district. Orathanadu, Thiruvaikulam, Thanjavur, Papanasam and Kumbakonam Taluks have 4, 4, 2, 2 and 2 units respectively.

- **Age of the Units**

The age of the units has been the most important factor that determines the experience and performance in coir fibre making. The year-wise formation of the units of the study area is presented in Table 3.3.

TABLE 3.3
PERIOD-WISE FORMATION OF COIR UNITS IN THE STUDY AREA

<table>
<thead>
<tr>
<th>Year of Formation</th>
<th>Small Units</th>
<th>Medium Units</th>
<th>Total</th>
<th>Cumulative Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1990</td>
<td>7 (24.14)</td>
<td>-</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>1991 – 1995</td>
<td>10 (34.48)</td>
<td>3 (13.04)</td>
<td>13 (25.00)</td>
<td>20</td>
</tr>
<tr>
<td>2001 – 2005</td>
<td>3 (10.34)</td>
<td>9 (39.13)</td>
<td>12 (23.08)</td>
<td>44</td>
</tr>
<tr>
<td>2006 – 2008</td>
<td>2 (6.90)</td>
<td>6 (26.09)</td>
<td>8 (15.38)</td>
<td>52</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29 (100.00)</strong></td>
<td><strong>23 (100.00)</strong></td>
<td><strong>52 (100.00)</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total.

From Table 3.3 it is clear that out of the total 52 units, 13 (25 per cent of the total units) were started between 1991 and 1995. Between 1996 and 2005, 24 (46.16 per cent) units were started. In group-wise formation, only 7 small (24.14 per cent) units were started prior to 1990. The table further shows that out of 23 medium units, 15 (65.22 per cent)
were started after 2000. The lowest number of 3 (13.04 per cent) units was started between 1991 and 1995. However, it is noted that out of the 23 medium units, 15 were started after 2000.

- **Type of Organisation**

  The Selection of the right type of organisation is one of the basic inputs for any business. The details of Coir units and their types of organisation are given in Table 3.4.

  **TABLE 3.4**

  **FORMS OF ORGANISATION OF COIR UNITS**

<table>
<thead>
<tr>
<th>Type of Organization</th>
<th>Small Units</th>
<th>Medium Units</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole Proprietary Concern</td>
<td>27 (93.10)</td>
<td>6 (35.29)</td>
<td>33 (63.46)</td>
</tr>
<tr>
<td>Partnership Concern</td>
<td>2 (6.90)</td>
<td>17 (64.71)</td>
<td>19 (36.54)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29 (100.00)</strong></td>
<td><strong>23 (100.00)</strong></td>
<td><strong>52 (100.00)</strong></td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total

From Table 3.4, it is evident that the coir units located in the study area are managed by two types of organizations namely sole proprietorship and partnership. Out of the total units, 63.46 per cent of the coir units are sole proprietary concerns and the remaining 36.54 per cent are partnership concerns.

The coir units in the study area are either sole proprietorship or partnership type. Among 52 units, 33 are sole proprietary concerns whereas 19 are of the partnership type. Table 3.5 shows the total number of partners in the partnership type of coir units.
TABLE 3.5
DISTRIBUTION OF PARTNERSHIP CONCERNS BY NUMBER OF PARTNERS

<table>
<thead>
<tr>
<th>Number of partners</th>
<th>Number of Units</th>
<th>Total Units</th>
<th>Total No. of Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Medium</td>
<td>7</td>
</tr>
<tr>
<td>2 Partners</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>3 to 4 Partners</td>
<td>-</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>5 to 6 Partners</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>17</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total

Table 3.5 shows that out of the 19 partnership type of coir units, 7 units (36.84 per cent) are managed by 2 partners, whereas 11 units (57.90 per cent) by 3 to 4 partners and the remaining 1 unit (5.26 per cent) has 5 to 6 partners. The medium firms with 3 to 4 partners are 11 in number and in total they have 35 partners out of the total 54 partners in the coir units which are the highest. It is also clear that 2 small units have only 2 partners each.

• Sources of Raw Material

The raw material is considered as the flesh and blood for any industry. The fibrous husk, surrounding the coconut palms, basically feeds the coir units. Husks are generally available at rock bottom prices Rs.200-Rs.300 per thousand pieces. The sources from which they meet their requirements are presented in Table 3.6.
TABLE 3.6  
SOURCES OF RAW MATERIAL

<table>
<thead>
<tr>
<th>Sources</th>
<th>Number of Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Medium</td>
</tr>
<tr>
<td>Coconut Groves (own source)</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>(6.89)</td>
<td>(39.13)</td>
</tr>
<tr>
<td>Coconut Merchants</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(27.59)</td>
<td>(47.83)</td>
</tr>
<tr>
<td>Intermediaries / Husk Dealers</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(65.52)</td>
<td>(13.04)</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>(100.00)</td>
<td>(100.00)</td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in the brackets are Percentages to the total.

It is observed from Table 3.6 that out of the 52 units, 22 (42.31 per cent) depend on husk dealers as their source followed by 19 units (36.54 per cent) who depend on coconut merchants. Only 11 units (21.15 per cent) got husk from their own source (Coconut Groves).

- Average Stocking Period of Raw material

The average stocking period of raw material in the small and medium units is presented in Table 3.7.

TABLE 3.7  
AVERAGE STOCKING PERIOD OF RAW MATERIAL
(SMALL AND MEDIUM UNITS)

<table>
<thead>
<tr>
<th>Average Stocking Period (in days)</th>
<th>Small Units</th>
<th>Medium Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Units</td>
<td>Total Average Period (in days)</td>
</tr>
<tr>
<td>17.5</td>
<td>6</td>
<td>105</td>
</tr>
<tr>
<td>22.5</td>
<td>14</td>
<td>315</td>
</tr>
<tr>
<td>27.5</td>
<td>9</td>
<td>247.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
<td><strong>667.5</strong></td>
</tr>
</tbody>
</table>

| Average Stocking Period           | **23.02**    | **24.24**    |

Source: Primary data
It is understood from Table 3.7 that the prevailing stocking period of raw material for coir units in the study area ranges from a minimum of 17.5 days to a maximum of 27.5 days. Among the 29 small units, 9 have a maximum stocking period of 27.5 days, whereas 6 units have a minimum stocking period of 17.5 days. In between, a maximum of 14 units have a stocking period of 22.5 days. Overall, the average stocking period of raw material for the small unit, worked out to 23.02 days.

In the case of the medium-size units of 23, a maximum of 12 units have a maximum stocking period of 27.5 days, followed by 7 and 4 units which have 22.5 and 17.5 days respectively. Overall, the average stocking period of raw material for these units worked out to 24.24 days.

**Average Stocking Period-Finished Fibre**

The average stocking period of finished fibre by both small and medium units is presented in Table 3.8.

### TABLE 3.8
**AVERAGE STOCKING PERIOD OF FINISHED FIBRE**
**(SMALL AND MEDIUM UNITS)**

<table>
<thead>
<tr>
<th>Average Stocking Period (in days)</th>
<th>Small Units</th>
<th>Medium Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Units</td>
<td>Total Average Period (in days)</td>
</tr>
<tr>
<td>4.5</td>
<td>8</td>
<td>36</td>
</tr>
<tr>
<td>7.5</td>
<td>10</td>
<td>75</td>
</tr>
<tr>
<td>10.5</td>
<td>11</td>
<td>115.5</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>226.5</td>
</tr>
<tr>
<td>Average Stocking Period</td>
<td>7.81</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data
It is understood from Table 3.8 that the prevailing period of finished stock of fibre for coir units in the study area ranges from a minimum of 4.5 days to 10.5 days. Among the 29 small units, 11 have a maximum stocking period of 11 days, whereas 8 units have a minimum stocking period of 4.5 days. In between 10 units have a stocking period of 7.5 days. Overall, the average stocking period of the finished coir fibre for the small-size units worked out to 7.81 days.

In the case of 23 medium-sized units, a maximum of 15 units have a maximum stocking period of 10.5 days, followed by 5 and 3 units which have 7.5 and 4.5 days respectively. Overall, the average stocking period for these medium-size units worked out to 9.07 days.

- **Capital Investment Pattern of Units**

Like any other sector, the investment required and the pattern of investment vary from unit to unit in the coir sector. However, by following the norms on capital invested prescribed by the District Industries Centre (DIC), Thanjavur, the units of the study area have been categorized. As per the norms, the units with capital investment up to Rs.25 lakhs are termed as “Small Enterprises” or “Small units”, units with investment between 25 lakhs and 5 crore are termed “small-scale industries” and units with investment of more than Rs.5 crore but less than Rs.10 crore are termed Micro enterprises. As per the norms prescribed by the DIC, Thanjavur, the units of the study area fall under two categories only as “Small units” and “Medium units”. It is because the data related to on their investment showed that none of the units of the study area has investment more than Rs.5 crore and thus the third category of classification as “large-size” units becomes irrelevant for the present study.

- **Classification of Units Based on Investment**

Based on capital investment, the units of the study area are classified and their respective total numbers are presented in Table 3.9.
TABLE 3.9  
CLASSIFICATION OF COIR UNITS BY CAPITAL INVESTMENT

<table>
<thead>
<tr>
<th>Capital Investment Ceiling</th>
<th>Total number of Units</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Small</td>
</tr>
<tr>
<td>Below Rs.15,00,000</td>
<td>7</td>
<td>(13.46)</td>
</tr>
<tr>
<td>Rs.15,00,001- Rs.20,00,000</td>
<td>13</td>
<td>(25.00)</td>
</tr>
<tr>
<td>Rs.20,00,001 – Rs.25,00,000</td>
<td>9</td>
<td>(17.31)</td>
</tr>
<tr>
<td>Rs.25,00,001 – Rs.30,00,000</td>
<td>4</td>
<td>(7.69)</td>
</tr>
<tr>
<td>Rs.30,00,001 – Rs.35,00,000</td>
<td>11</td>
<td>(21.15)</td>
</tr>
<tr>
<td>Above Rs.35, 00,000</td>
<td>8</td>
<td>(15.39)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total.

From Table 3.9, it is clear that out of the total number of 52 coir units in the study area, small sized units are 29 constituting 55.79 per cent, while medium sized units are 23 constituting 44.21 per cent.

It could also be understood from the Table that more than 50 per cent of the small units (13 out of 29) fall in the investment range of Rs.15 lakhs to Rs.20 lakhs. followed by 9 units (17.31 per cent) which have invested between Rs.20 lakhs and Rs.25 lakhs and the remaining 7 units (13.46 per cent) have investment of less than Rs.15 lakhs. In the medium size units of 23, 50 per cent of the units (11 out of 23) fall in the investment range of Rs.30 to Rs.35 lakhs followed by 8 units (15.39 per cent) whose investment range is above Rs.35 lakhs. Only 4 units (7.69 per cent) of that size fall in the investment range of Rs.25 lakhs to Rs.30 lakhs.
• **Sources of Investment**

The sources of investment in coir units are generally of two types, namely “Owned Funds” and “Both Owned and Borrowed Funds”. The details of the source of investment made in coir units are presented in Table 3.10.

**TABLE 3.10**

**SOURCES OF INVESTMENT**

<table>
<thead>
<tr>
<th>Sources of Investment</th>
<th>Number of Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Medium</td>
</tr>
<tr>
<td>Owned</td>
<td>2 (10.34)</td>
<td>1 (8.70)</td>
</tr>
<tr>
<td>Owned as well as Borrowed</td>
<td>27 (89.66)</td>
<td>22 (91.30)</td>
</tr>
<tr>
<td>Total</td>
<td>29 (100.00)</td>
<td>23 (100.00)</td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total.

It is understood from Table 3.10 that out of the total 52 units, 49 (90.38 per cent) have their funds from both sources, which stood highest, followed by 3 units (9.62 per cent) which had their own sources to run their coir units. The same trend prevails irrespective of the size of the units operating in the study area.

• **Sources of Borrowed Funds**

The funds borrowed by units are raised through various sources. It is found (vide Table 3.20) that more than 90 per cent of the coir units thrive on both own and borrowed funds. The financial support extended by the commercial banks, co-operative banks and financial institutions like the TIIC, the SSIDC constitute the major source of borrowed funds. The external sources from which they meet their financial requirements are presented in Table 3.11.
Table 3.11 shows that out of the total 49 coir units, 47 units have borrowed funds from financial institutions followed by 42 units which raised their funds from commercial banks. The sources of friends and relatives and money lenders are used by 19 and 2 units respectively.

- Amount of Capital Borrowed

Table 3.12 shows the extent of capital borrowed by coir units of the study area.
It is understood from Table 3.12 that among the total 49 units, 13 units (26.53 per cent) have borrowed capital between Rs.10 lakhs and Rs.15 lakhs. whereas 11 units (22.45 per cent) have borrowed between Rs.15 lakhs and Rs.20 lakhs. The same numbers of units have borrowed capital between Rs.5 lakhs and Rs.10 lakhs. However, only 4 (8.16 per cent) units have borrowed capital less than Rs.5 lakhs.

- Investment Pattern of Fixed Capital

Funds required to acquire fixed assets are termed fixed capital. It is invested on items like land, building, machinery, furniture and fixtures and vehicles. The fixed capital requirements vary from one unit to another and generally are influenced by the scale of operation. All the owners of the coir units operate their units on their own land and have constructed their own buildings to run such units. It is also found in the study area that no unit runs on leased land.

A reasonable amount of funds is required for purchasing vehicles for transporting the husk to the factory, disposing of the coir dust and transporting workers from nearby villages to work sites. The details of the investment pattern of the fixed capital for the small and medium coir units of the study area are presented in Tables 3.13
### TABLE 3.13

**INVESTMENT PATTERN OF FIXED CAPITAL (SMALL UNITS)**

(Rs in Lakhs)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Range of Investments</th>
<th>Total Investment</th>
<th>Average investment Per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upto Rs.15 Lakhs (7 Units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td></td>
<td>14.35</td>
<td>2.05 (20.10)</td>
</tr>
<tr>
<td>Buildings</td>
<td></td>
<td>10.43</td>
<td>1.49 (14.61)</td>
</tr>
<tr>
<td>Machinery &amp; Equipments</td>
<td></td>
<td>37.31</td>
<td>5.33 (52.26)</td>
</tr>
<tr>
<td>Vehicles</td>
<td></td>
<td>8.75</td>
<td>1.25 (12.5)</td>
</tr>
<tr>
<td>Tools &amp; Appliances</td>
<td></td>
<td>0.56</td>
<td>0.08 (0.78)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>71.40</strong></td>
<td><strong>10.20 (100.00)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Between Rs.15 Lakhs- Rs.20 Lakhs (13 Units)</th>
<th>Total Investment</th>
<th>Average investment Per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td></td>
<td>29.38</td>
<td>2.26 (16.24)</td>
</tr>
<tr>
<td>Buildings</td>
<td></td>
<td>25.48</td>
<td>1.96 (14.08)</td>
</tr>
<tr>
<td>Machinery &amp; Equipments</td>
<td></td>
<td>107.51</td>
<td>8.27 (59.41)</td>
</tr>
<tr>
<td>Vehicles</td>
<td></td>
<td>16.90</td>
<td>1.30 (9.34)</td>
</tr>
<tr>
<td>Tools &amp; Appliances</td>
<td></td>
<td>1.69</td>
<td>0.13 (0.93)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>180.96</strong></td>
<td><strong>13.92 (100.00)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Between Rs.20 Lakhs-Rs.25 Lakhs (9 Units)</th>
<th>Total Investment</th>
<th>Average investment Per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td></td>
<td>26.19</td>
<td>2.91 (16.02)</td>
</tr>
<tr>
<td>Buildings</td>
<td></td>
<td>22.23</td>
<td>2.47 (13.60)</td>
</tr>
<tr>
<td>Machinery &amp; Equipments</td>
<td></td>
<td>99.90</td>
<td>11.10 (61.12)</td>
</tr>
<tr>
<td>Vehicles</td>
<td></td>
<td>13.50</td>
<td>1.50 (8.26)</td>
</tr>
<tr>
<td>Tools &amp; Appliances</td>
<td></td>
<td>1.62</td>
<td>0.18 (1.00)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>163.44</strong></td>
<td><strong>18.16 (100.00)</strong></td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total.

The average investment per unit on Machinery and Equipment, Land and Buildings (combined) and Vehicles and Tools and Appliances (combined) stand at 52.26, 34.71 and 13.28 per cent respectively for units in the first range.
TABLE 3.14
INVESTMENT PATTERN OF FIXED CAPITAL (MEDIUM UNITS)
(Rs in Lakhs)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Range of Investment</th>
<th>Total Investment</th>
<th>Average Investment</th>
<th>Total Investment</th>
<th>Average Investment</th>
<th>Total Investment</th>
<th>Average Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Between Rs.25 Lakhs – Rs.30 Lakhs (4 Units)</td>
<td>Between Rs.30 Lakhs – Rs.35 Lakhs (11 Units)</td>
<td>Above Rs.35 Lakhs (8 Units)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Investment</td>
<td>Average Investment</td>
<td>Total Investment</td>
<td>Average Investment</td>
<td>Total Investment</td>
<td>Average Investment</td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>13.20</td>
<td>3.30 (15.64)</td>
<td>42.90</td>
<td>3.90 (15.30)</td>
<td>33.60</td>
<td>4.20 (13.19)</td>
<td></td>
</tr>
<tr>
<td>Building</td>
<td>11.40</td>
<td>2.85 (13.51)</td>
<td>37.18</td>
<td>3.38 (13.27)</td>
<td>30.00</td>
<td>3.75 (11.77)</td>
<td></td>
</tr>
<tr>
<td>Machine &amp; Equipments</td>
<td>52.00</td>
<td>13.00 (61.61)</td>
<td>174.90</td>
<td>15.90 (62.40)</td>
<td>172.00</td>
<td>21.50 (67.50)</td>
<td></td>
</tr>
<tr>
<td>Vehicles</td>
<td>7.00</td>
<td>1.75 (8.29)</td>
<td>22.00</td>
<td>2.00 (7.85)</td>
<td>16.00</td>
<td>2.00 (6.28)</td>
<td></td>
</tr>
<tr>
<td>Tools &amp; Appliances</td>
<td>0.80</td>
<td>0.20 (0.95)</td>
<td>3.30</td>
<td>0.30 (1.18)</td>
<td>3.20</td>
<td>0.40 (1.26)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84.40</td>
<td>21.10 (100.00)</td>
<td>280.28</td>
<td>25.48 (100.00)</td>
<td>254.80</td>
<td>31.85 (100.00)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total

It is clear from Table 3.14 that in respect of the medium-size units, the average investment on fixed assets per unit varies on the basis of their total investment ranges which are of three types, namely- (1) Rs.25 to Rs.30 lakhs, (2) Rs.30 lakhs to Rs.35 lakhs and (3) Above Rs.35 lakhs.

The average investment per unit on Machinery and Equipment, Land and Building (combined) Vehicles and Tools and Appliances (combined) stand at 61.61 per cent, 29.15 per cent and 9.24 per cent respectively for units in the first range. For the units in the second range, their Percentages are 62.40, 28.57 and 9.03 and for the units in the third range their per centages are 67.50, 24.96 and 7.54 in the order of the aforesaid fixed assets.
It is further noted that when the range of investment of the units increases, the average investment on machinery and equipment also increases. This trend is uncommon on other fixed assets.

- **Overall Pattern of Investment in Fixed Assets**

  The overall pattern of the investment in fixed assets of both the small and medium size units is presented in Table 3.15.

  **TABLE 3.15**
  **OVERALL PATTERN OF INVESTMENTS IN FIXED ASSETS**
  (Rs in lakhs)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Small (29 Units)</th>
<th>Medium (23 Units)</th>
<th>Total (52 Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land</strong></td>
<td>69.92 (16.82)</td>
<td>89.70 (14.48)</td>
<td>159.62 (15.42)</td>
</tr>
<tr>
<td><strong>Buildings</strong></td>
<td>58.14 (30.80)</td>
<td>78.58 (12.68)</td>
<td>136.72 (13.20)</td>
</tr>
<tr>
<td><strong>Machines &amp; Equipments</strong></td>
<td>244.72 (58.85)</td>
<td>398.90 (64.39)</td>
<td>643.62 (62.17)</td>
</tr>
<tr>
<td><strong>Vehicles</strong></td>
<td>39.15 (9.42)</td>
<td>45.00 (7.27)</td>
<td>84.15 (8.13)</td>
</tr>
<tr>
<td><strong>Tools &amp; Appliances</strong></td>
<td>3.87 (1.35)</td>
<td>7.30 (8.45)</td>
<td>11.17 (1.08)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>415.80 (100.00)</td>
<td>619.48 (100.00)</td>
<td>1035.28 (100.00)</td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total.

The overall pattern of investment on fixed assets by coir units shown in Table 3.15 indicates that on an average 62.17 per cent of the investment on fixed assets goes to Machinery and Equipment, 28.62 per cent to Land and Building (combined) and 19.21 to Vehicles and Tools and Appliances (combined).

It is further understood that nearly 59 per cent of the investment is made on machinery and equipments 30 per cent on land and building (combined) and 10 per cent on Vehicles and Tools and Appliances (combined) by the small size units but it is around
65 per cent, 27 per cent and 8 per cent respectively for the medium size units. However the overall pattern of investment indicated that the investment on machinery and equipment tends to increase when the size of the unit expands.

- **Pattern of Working Capital**

In coir units, the working capital is calculated by taking into account the value of the purchase of husk, the payment on wages, electric charges, and the interest on borrowed capital, and the maintenance of machines, equipments and vehicles. In working capital estimation, the purchase of husk, the payment of wages and the maintenance of machinery assume greater importance. The coir units follow the practice of procuring a large quantity of green husk or dry husk on the basis of either immediate payment or advance cash payment. The average investment pattern of the working capital for the small and medium units is presented in Tables 3.16 and 3.17.

**TABLE 3.16**

**INVESTMENT PATTERN OF WORKING CAPITAL (SMALL UNITS)**

(Rs in Lakhs)

<table>
<thead>
<tr>
<th>Elements of Working Capital</th>
<th>Investment Range</th>
<th>Upto Rs.15 Lakhs (7 Units)</th>
<th>Between Rs.15 Lakhs-Rs.20 Lakhs (13 Units)</th>
<th>Between Rs.20 Lakhs-Rs.25 Lakhs (9 Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Investment</td>
<td>Average Investment</td>
<td>Total Investment</td>
<td>Average Investment</td>
</tr>
<tr>
<td>Raw Materials</td>
<td>8.61</td>
<td>1.23 (39.05)</td>
<td>21.84</td>
<td>1.68 (38.71)</td>
</tr>
<tr>
<td>Finished Fibre</td>
<td>6.44</td>
<td>0.92 (29.20)</td>
<td>15.08</td>
<td>1.16 (26.73)</td>
</tr>
<tr>
<td>Cash</td>
<td>7.00</td>
<td>1.00 (31.75)</td>
<td>19.50</td>
<td>1.50 (34.56)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22.05</strong></td>
<td><strong>3.15 (100.00)</strong></td>
<td><strong>56.42</strong></td>
<td><strong>4.34 (100.00)</strong></td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total.
It is clear from Table 3.16 that in respect of the small units the average working capital investment on its elements varies based on the total investment ranges of units which are generally of three types viz: 1) Upto Rs.15 lakhs, 2) between Rs.15 lakhs and Rs.20 lakhs and 3) between Rs.20 lakhs and Rs.25 lakhs.

The average amount of the working capital locked up on raw material, finished fibre and cash are estimated to be 39.05 per cent, 29.20 per cent and 31.75 per cent respectively by the units in the first category, whereas for the units in the second category their percentages are 38.71, 26.73 and 34.56 and for the units in the third range their percentages are 36.08, 26.54 and 37.38 on the order of aforesaid current assets.

**TABLE 3.17**

**INVESTMENT PATTERN OF WORKING CAPITAL (MEDIUM UNITS)**

(Rs in Lakhs)

<table>
<thead>
<tr>
<th>Elements of Working Capital</th>
<th>Medium Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs.25 Lakhs-Rs.30 Lakhs (4 Units)</td>
</tr>
<tr>
<td>Total Investment</td>
<td>Average Investment</td>
</tr>
<tr>
<td>Raw Material</td>
<td>7.08</td>
</tr>
<tr>
<td>Finished Fibre</td>
<td>5.36</td>
</tr>
<tr>
<td>Cash</td>
<td>9.00</td>
</tr>
<tr>
<td>Total</td>
<td><strong>21.44</strong></td>
</tr>
</tbody>
</table>

Source: Primary data. Figures in brackets are Percentages to the total.

It is clear from Table 3.17, that in respect of the medium-size units the average working capital investment on its elements varies on the basis of the total investment ranges of units which are generally of three types viz, (1) between Rs.25 lakhs and Rs.30 lakhs, (2) between Rs.30 lakhs and Rs.35 lakhs and (3) above Rs.35 lakhs.
The average amount of working capital locked up on raw materials, finished fibre and cash are estimated to be 33.02 per cent, 25 per cent and 41.98 per cent respectively for the units in the first range, whereas for the units in the second range their percentages are 32.24, 26.84 and 40.92 and for the units in the third range, their percentages are 30.62, 26.47 and 42.91 on the order of the aforesaid current assets.

- **Overall Pattern of Working Capital**

The overall pattern of the working capital invested on its elements is presented in Table 3.18

**TABLE 3.18**

**OVERALL PATTERN OF WORKING CAPITAL**

<table>
<thead>
<tr>
<th>Elements of Working Capital</th>
<th>Small Units (29 Units)</th>
<th>Medium Units (23 Units)</th>
<th>Total (52 Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Material</td>
<td>47.82 (37.77)</td>
<td>45.87 (31.73)</td>
<td>93.69 (34.55)</td>
</tr>
<tr>
<td>Finished Fibre</td>
<td>34.30 (27.09)</td>
<td>38.20 (26.42)</td>
<td>72.50 (26.73)</td>
</tr>
<tr>
<td>Cash</td>
<td>44.50 (35.14)</td>
<td>60.50 (41.85)</td>
<td>105.00 (38.72)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>126.62 (100.00)</strong></td>
<td><strong>144.57 (100.00)</strong></td>
<td><strong>271.19 (100.00)</strong></td>
</tr>
</tbody>
</table>

Source: Compiled data. Figures in brackets are percentages to the total

The overall pattern of investment on working capital by coir units shown in Table 3.18 indicates that on an average 34.55 per cent of the working capital goes to raw material, 26.73 per cent to finished fibre and 38.72 per cent to cash.

It is further understood that nearly 38 per cent of the working capital is locked up on raw material, 27 per cent on finished fibre and 35 per cent on cash in hand and in banks by the small-size units but it is around 32 per cent, 26 per cent and 42 per cent respectively for the medium-size units.
3.4. SUMMARY

In this chapter, profile of the study area and various other aspects regarding coir units were examined.

Location of coir units was analysed and found that nearly 58 per cent of the total units of the district are located in rural areas. It is also found that nearly 73 per cent of the small units are located in rural areas whereas 74 per cent of the medium size units are in urban areas.

The age of the coir units was analysed and found that nearly 46 per cent of the units were started between 1996 and 2005.

The form of organisation was analysed and found that majority of the units (63.46 per cent) are sole proprietary concerns and the remaining are partnership firms.

The sources of raw material were analysed and found that 42 per cent of the units depend on husk dealers followed by 37 per cent that depend on coconut merchants for their raw materials and only 21 per cent got it from their own Coconut Groves.

The raw material stocking period was analysed and found that the average stocking period of coir units ranges from 17.5 days to 27.5 days. The average raw material stocking period of small units was found to be 23.02 days and of medium size units was 24.24 days.

The finished fibre stocking period was analysed and found that the average stocking period of coir units ranges from 4.5 days to 10.5 days. The average finished goods stocking period of small units was found to be 7.81 days and of medium size units was 9.07 days.

The capital investment pattern of coir units was analysed and found that more than 50 per cent of the small units fall in the investment range of Rs. 15 Lakh to Rs.20 Lakh and 50 per cent of the medium units fall in the investment range of Rs.30 Lakh to Rs.35 Lakh.

The source of investment of the coir units was analysed and found that a vast majority (90 per cent) of the units used owned funds as well as borrowed funds and majority of them borrowed from financial institutions.
The investment pattern of fixed capital of small units was analysed and found that the average investment per unit on Machinery and Equipment, Land and Buildings (combined) and Vehicles and Tools and Appliances (combined) stand at 52.26, 34.71 and 13.28 per cent respectively.

The investment pattern of fixed capital of medium size units was analysed and found that it varies on the basis of their total investment ranges which are of three types, namely- (1) Rs.25 to Rs.30 lakhs, (2) Rs.30 lakhs to Rs.35 lakhs and (3) Above Rs.35 lakhs. The average investment per unit on Machinery and Equipment, Land and Building (combined) Vehicles and Tools and Appliances (combined) stand at 61.61 per cent, 29.15 per cent and 9.24 per cent respectively for units in the first range. For the units in the second range, their percentages are 62.40, 28.57 and 9.03 and for the units in the third range their percentages are 67.50, 24.96 and 7.54 in the order of the aforesaid fixed assets. It is further noted that when the range of investment of the units increases, the average investment on machinery and equipment also increases. This trend is uncommon on other fixed assets.

The overall pattern of investment on fixed assets by coir units was analysed and found that on an average 62.17 per cent of the investment on fixed assets goes to Machinery and Equipment, 28.62 per cent to Land and Building (combined) and 19.21 to Vehicles and Tools and Appliances (combined). It is further understood that nearly 59 per cent of the investment is made on machinery and equipments 30 per cent on land and building (combined) and 10 per cent on Vehicles and Tools and Appliances (combined) by the small size units but it is around 65 per cent, 27 per cent and 8 per cent respectively for the medium size units. However, the overall pattern of investment indicated that the investment on machinery and equipment tends to increase when the size of the unit expands.

The investment pattern of working capital small units as well as medium units and the overall pattern were analysed and found that on an average 34.55 per cent of the working capital goes to raw material, 26.73 per cent to finished fibre and 38.72 per cent to cash. It is further understood that nearly 38 per cent of the working capital is locked up on raw material, 27 per cent on finished fibre and 35 per cent on cash in hand and in banks by the small-size units but it is around 32 per cent, 26 per cent and 42 per cent respectively for the medium-size units.