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Chapter Five

SPATIAL PATTERN OF SMALL SCALE INDUSTRIES IN THENI DISTRICT IN 2007 AND TEMPORAL CHANGES IN THE STUDY PERIOD

5.1 Introduction

In geographical analysis, the spatial pattern of distribution of any one phenomenon in a region is undertaken usually. Through this spatial analysis, the relative significance of different subparts of the region is brought out. However, to understand the process of change, usually the temporal dimension is also included for analysis. Thus the spatio- temporal approach has been accepted as a valid methodology of geographical research. Taking the same line, the present study also has considered spatio temporal approach for the study on Small Scale Industries in Theni District. For this, two points are considered, namely 1997 and 2007. In the previous chapter, a status report on the spatial pattern of Small Scale Industries in Theni district for 1997 was given. The present chapter tries to present the status report of Small Scale Industries for the second time point, namely 2007. Salient futures of changes between 1997 and 2007 are also analysed to understand the controlling factors.

5.2 Status of Small Scale Industries in Theni District 2007

5.2.1 Distribution of Small Scale Industries

There has been a steady growth of small scale industries in the study area over a period of time. Between 1997 and 2007, a lot of improvement has been made in this sector. On the whole there has been an almost 4 times increase in the number of registered units and about 3 times increase in the number of workers within ten years. In 2007, there were 5145 registered small scale industrial units in Theni district and they employed 12728 persons. Spatially these are distributed unevenly among the blocks.
In 2007 also, Theni block had the highest number of workers (33.4%) followed by Periyakulam (15.7%), Andipatti (13.3%) and Bodinayakanur (11.3%). In the second time point also Kadamalaikundu- Myladumparai has the lowest share (Table 5.1). Fig. 5.1 shows the spatial pattern of total small scale industrial workers in Theni District in 2007.

When the different groups of small scale industries are considered, it may be seen that the same groups which were significant in 1997 occupy the first three ranks in 2007 also. However, there is variation in their share. Textile group improved its position in 2007 and had a share of 43.9% share to the total small scale industrial workers. On the other hand both Agro based group (15.1%) and Engineering and Allied based group (14.6%) have a decline in their share between 1997 and 2007 (Table 4.2 and 5.2).

The most notable aspect of 2007 distribution is a comparatively lower growth of Chemical and Pharmaceutical group than the other groups. Because of this the share of Chemical and Pharmaceutical group was only 6.4% making it to slip to 6th rank among the different groups of small scale industries. Forest based industrial group had the lowest share of 2.2% in 2007.

**Changes between 1997 and 2007**

1. There has been a threefold increase in the total number of Small scale Industrial workers during the study period.
2. Forest based industries had the least share while Textile had the largest share in both time points.

Similar to the analysis done for 1997, here also the individual group of small scale industries are analysed separately in detail.
Theni District
DISTRIBUTION OF SMALL SCALE INDUSTRIAL WORKERS (2007)

Legend
( In Percentage)
- < 5
- 5 - 15
- 15 - 25
- > 25

Scale
Kilometers
0 10 20

Fig. 5.1
### Table 5.1

**Theni District**

**Distribution of Small Scale Industrial Workers -2007**

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Block Name</th>
<th>No. of units</th>
<th>No. of workers</th>
<th>No. of Workers in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Periyakulam</td>
<td>967</td>
<td>2004</td>
<td>15.74</td>
</tr>
<tr>
<td>2.</td>
<td>Theni</td>
<td>1320</td>
<td>4254</td>
<td>33.42</td>
</tr>
<tr>
<td>3.</td>
<td>Andipatti</td>
<td>751</td>
<td>1694</td>
<td>13.30</td>
</tr>
<tr>
<td>4.</td>
<td>Kadamalaikundu - Mayladumparai</td>
<td>164</td>
<td>379</td>
<td>2.97</td>
</tr>
<tr>
<td>5.</td>
<td>Bodinayakanur</td>
<td>507</td>
<td>1434</td>
<td>11.26</td>
</tr>
<tr>
<td>6.</td>
<td>Cumbum</td>
<td>504</td>
<td>1099</td>
<td>8.63</td>
</tr>
<tr>
<td>7.</td>
<td>Chinnamanur</td>
<td>410</td>
<td>666</td>
<td>5.24</td>
</tr>
<tr>
<td>8.</td>
<td>Uthamapalayam</td>
<td>522</td>
<td>1198</td>
<td>9.44</td>
</tr>
<tr>
<td></td>
<td><strong>District</strong></td>
<td><strong>5145</strong></td>
<td><strong>12728</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Theni District Industrial Center.*

### 5.2.2 Agro Based Industries

In 2007, the total number of units in this group was 528 employing about 1924 labourers. This group is distributed in all blocks of the study area. As a whole, the group accounts for a share of 15.1% of total small scale industrial workers in 2007. However, Theni (21.18%) and Cumbum (16.02%) have a comparatively higher share of this group (Table 5.2). Bodinayakanur, Andipatti and Kadamalaikundu – Mayladumparai blocks have about 13 to 15% of the total small scale industrial workers engaged in this industry. Even here, one can see the concentration of a
Table – 5.2
Theni District
Group wise Small Scale Industrial Workers - 2007

<table>
<thead>
<tr>
<th>Block Name</th>
<th>Agro Based</th>
<th>%</th>
<th>Forest Based</th>
<th>%</th>
<th>Textile Based</th>
<th>%</th>
<th>Engg &amp; Allied Based</th>
<th>%</th>
<th>Chemical &amp; Pharmaceutical Based</th>
<th>%</th>
<th>Mineral Based</th>
<th>%</th>
<th>Miscellaneous</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Periyakulam</td>
<td>148</td>
<td>7.39</td>
<td>36</td>
<td>1.80</td>
<td>1021</td>
<td>50.95</td>
<td>358</td>
<td>17.86</td>
<td>141</td>
<td>7.04</td>
<td>117</td>
<td>5.84</td>
<td>183</td>
<td>9.13</td>
<td>2004</td>
</tr>
<tr>
<td>Theni</td>
<td>901</td>
<td>21.18</td>
<td>79</td>
<td>1.86</td>
<td>1441</td>
<td>33.87</td>
<td>682</td>
<td>16.03</td>
<td>303</td>
<td>7.12</td>
<td>421</td>
<td>9.90</td>
<td>427</td>
<td>10.04</td>
<td>4254</td>
</tr>
<tr>
<td>Andipaty</td>
<td>227</td>
<td>13.40</td>
<td>11</td>
<td>0.65</td>
<td>1003</td>
<td>59.21</td>
<td>139</td>
<td>8.21</td>
<td>127</td>
<td>7.50</td>
<td>86</td>
<td>5.08</td>
<td>101</td>
<td>5.96</td>
<td>1694</td>
</tr>
<tr>
<td>Kadamalaikundu-.Myladumparai</td>
<td>50</td>
<td>13.19</td>
<td>0</td>
<td>0</td>
<td>177</td>
<td>46.70</td>
<td>43</td>
<td>11.35</td>
<td>24</td>
<td>6.33</td>
<td>64</td>
<td>16.80</td>
<td>21</td>
<td>5.54</td>
<td>379</td>
</tr>
<tr>
<td>Bodinayakanur</td>
<td>216</td>
<td>15.06</td>
<td>84</td>
<td>5.86</td>
<td>611</td>
<td>42.61</td>
<td>225</td>
<td>15.69</td>
<td>80</td>
<td>5.58</td>
<td>95</td>
<td>6.62</td>
<td>123</td>
<td>8.58</td>
<td>1434</td>
</tr>
<tr>
<td>Cumbum</td>
<td>176</td>
<td>16.01</td>
<td>28</td>
<td>2.55</td>
<td>496</td>
<td>45.13</td>
<td>154</td>
<td>14.01</td>
<td>81</td>
<td>7.37</td>
<td>53</td>
<td>4.82</td>
<td>111</td>
<td>10.10</td>
<td>1099</td>
</tr>
<tr>
<td>Chinnamanur</td>
<td>82</td>
<td>12.31</td>
<td>24</td>
<td>3.60</td>
<td>271</td>
<td>40.69</td>
<td>126</td>
<td>18.92</td>
<td>16</td>
<td>2.40</td>
<td>87</td>
<td>13.06</td>
<td>60</td>
<td>9.01</td>
<td>666</td>
</tr>
<tr>
<td>Uthamapalayam</td>
<td>124</td>
<td>10.35</td>
<td>19</td>
<td>1.59</td>
<td>573</td>
<td>47.83</td>
<td>136</td>
<td>11.35</td>
<td>45</td>
<td>3.76</td>
<td>235</td>
<td>19.62</td>
<td>66</td>
<td>5.51</td>
<td>1198</td>
</tr>
<tr>
<td>Total</td>
<td>1924</td>
<td>15.12</td>
<td>281</td>
<td>2.21</td>
<td>5593</td>
<td>43.94</td>
<td>1863</td>
<td>14.64</td>
<td>817</td>
<td>6.42</td>
<td>1158</td>
<td>9.10</td>
<td>1092</td>
<td>8.58</td>
<td>12728</td>
</tr>
</tbody>
</table>

Compiled by the investigator
particular item or product in particular areas. For example Theni block has rice and
dhall mills, while Cumbum and Uthamapalayam blocks have manufacture of
applam, chips and other similar items.

Ratio map for this group shows a comparatively high share in Theni and
Cumbum blocks (Fig. 5.2) while Periyakulam block has the least significance.
Location Quotient values for the study area also exhibit a similar pattern (Fig 5.3).
Periyakulam had the lowest location quotient in 2007 (Table 5.3).

**Changes between 1997 and 2007**

1. The number of units has increased from 191 to 528 and the labour force
   from 827 to 1924 persons.
2. In general there has been a two-fold to threefold increase in the number
   of workers in this group between 1997 and 2007 in all blocks except
   Bodinayakanur.
3. Kadmalaikundu – Myladumparai exhibits the highest increase (2 in 1997
   to 50 in 2007) indicating a greater development of this group of small
   scale industries in that block during the study period.
4. Chinnamanur exhibited a sharp decline in the location quotient value
   between 1997 and 2007 indicating a decline in the concentration of this
   group.

**5.2.3 Forest based Industries**

In 2007, 89 Forest based industrial units are registered in the study area. 281
persons are engaged in this industrial group. On the whole the share of workers in
this group to the total small scale industrial workers in only 2.2%. However, in
Bodinayakanur block, this group has a share of 5.9% followed by Chinnamanur
(3.6%). Similarly Kadamalaikundu – Myladumparai block does not have this group
of small scale industries.
Ratio map (Fig 5.4) exhibits a higher concentration in the western parts in general and particularly in the northwest. Andipatti block has a very low concentration of Forest based industries (Table 5.2).

Table 5.3 shows that the concentration of workers is the highest in Bodinayakanur (2.5). In Chinnamanur block (1.5) also the concentration is higher than the district. The Location Quotient indicates a lower concentration of this group in all other blocks (Fig. 5.5).

Changes between 1997 and 2007

1. During the study period both the number of units and the workers increased by 250% for this group.
2. Kadamalaikundu – Myladumparai does not have this group as both time points.
3. Number of workers increased notably in all blocks except Bodinayakanur where it was stagnant between 1997 and 2007.
4. In 1997 Andipatti block had no Forest based industries. But by 2007, 4 units have been newly established.
5. The level of concentration (Location Quotient value) declined sharply in Chinnamanur (3.66 to 1.5) and notably in Bodinayakanur and Uthamapalayam.
### Table – 5.3

**Theni District**

**Location Quotient of Small Scale Industrial Groups – 2007**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Block Name</th>
<th>Agro Based</th>
<th>Forest Based</th>
<th>Textile Based</th>
<th>Engg &amp; Allied Based</th>
<th>Chemical &amp; Pharmaceutic al Based</th>
<th>Mineral Based</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Periyakulam</td>
<td>0.46</td>
<td>0.5</td>
<td>1.16</td>
<td>1.21</td>
<td>1.16</td>
<td>0.55</td>
<td>1.12</td>
</tr>
<tr>
<td>2</td>
<td>Theni</td>
<td>1.40</td>
<td>0.5</td>
<td>0.76</td>
<td>1.14</td>
<td>1.16</td>
<td>1.00</td>
<td>1.25</td>
</tr>
<tr>
<td>3</td>
<td>Andipatti</td>
<td>0.86</td>
<td>0.3</td>
<td>1.39</td>
<td>0.57</td>
<td>1.16</td>
<td>0.55</td>
<td>0.62</td>
</tr>
<tr>
<td>4</td>
<td>Kadamalaikundu - Mayladumparai</td>
<td>0.86</td>
<td>0</td>
<td>1.06</td>
<td>0.73</td>
<td>1.00</td>
<td>1.77</td>
<td>0.62</td>
</tr>
<tr>
<td>5</td>
<td>Bodinayakanur</td>
<td>1.00</td>
<td>2.5</td>
<td>0.97</td>
<td>1.07</td>
<td>0.83</td>
<td>0.66</td>
<td>1.00</td>
</tr>
<tr>
<td>6</td>
<td>Cumbum</td>
<td>1.06</td>
<td>1.00</td>
<td>1.04</td>
<td>1.00</td>
<td>1.16</td>
<td>0.44</td>
<td>1.25</td>
</tr>
<tr>
<td>7</td>
<td>Chinnamanur</td>
<td>0.80</td>
<td>1.5</td>
<td>0.93</td>
<td>1.28</td>
<td>0.33</td>
<td>1.44</td>
<td>1.25</td>
</tr>
<tr>
<td>8</td>
<td>Uthamapalayam</td>
<td>0.66</td>
<td>0.5</td>
<td>1.09</td>
<td>0.78</td>
<td>0.50</td>
<td>2.11</td>
<td>0.62</td>
</tr>
</tbody>
</table>

*Compiled by the investigator*

### 5.2.4 Textile Based Industries

Among the chosen group of small scale industries, this group ranked first in 2007 also in terms of both number of units as well as number of workers. In fact, it improved its share to the total small scale industrial workers from 42.8% in 1997 to 43.9% in 2007 (Table 5.2). Among the blocks, Andipatti (59%) and Periyakulam (51%) have more than half of their small scale industrial workers in this group. Theni has the lowest share of 33.8%. In other blocks 40 – 48% of the total small scale industrial workers are employed in Textile group.
The northeastern parts have a higher concentration of this group (Fig 5.6). Compared to other groups, this group has a good concentration in almost all blocks. This is validated by the location quotient map (Fig. 5.7). Theni has the lowest concentration followed by Chinnamaur and Bodinayakanur (Table 5.3).

**Changes between 1997 and 2007**

1. There has been a greater dispersal of this industry in the region during the study period indicating favourable conditions for developing this industry. The total number of units has increased from 683 to 2705 while the total number of workers showed a 3 fold increase between 1997 and 2007.

2. In general there has been two-fold to four fold increase in the number of workers in individual blocks during the study period. Kadamalaikundu – Myladumparai block has the highest growth in this study period. Chinnamanur, Cumbum and Uthamapalayam blocks also experienced a sharp increase in the number of workers this group.

3. The index of concentration (Location Quotient value) shows a marked development of this group of small scale industries in Uthamapalayam, Cumbum, Kadamalaikundu – Myladumparai and Chinnamanur blocks.

**5.2.5 Engineering and Allied based Industries**

There were 950 Engineering and Allied industrial units in 2007 with a labour force of 1863 workers. In terms of the number of units, it ranked next to Textile group in 2007. However with regard to the number of workers, it retains its third rank in 2007 also but had a slight decline in its share (15.5% in 1997 to 14.6% in 2007). Though this group is distributed in all blocks, a higher share of workers in this group is noticed in Chinnamanur (19%) Periyakulam (17.9%) and Theni (16%). Andipatti has the lowest share in 2007 (Table 5.2).
A comparatively higher concentration of this group is found in the northern parts of the study area except Andipatti block (Fig. 5.8).

The location quotient also shows a similar pattern (Fig. 5.9). Andipatti, Kadamalaikundu – Myladumparai and Uthamapalayam blocks have the lowest level of concentration of Engineering and Allied based industries (Table 5.3).

**Changes between 1997 and 2007**

1. During the study period, this group experienced a threefold increase in the number of both units and workers.
2. Kadamalaikundu – Myladumparai block which did not have this group of small scale industries in 1997 had 24 units newly established by 2007.
3. Chinnamanur also exhibited a very high increase in this group. Number of units in this block increased from 7 in 1997 to 90 in 2007.
4. During the study period, Location Quotient value representing the level of concentration declined notably in Cumbum, Uthamapalayam and slightly in Periyakulam blocks.

**5.2.6 Chemical and Pharmaceutical based Industries**

In 2007, this sector has 204 registered units in which there were 817 workers. Though the actual number of workers increased from 380 in 1997 to 817 in 2007, the share of this group to the total small scale industrial workers declined from 7.6% in 1997 to 6.4% in 2007. This group of industries is distributed more in the northeastern and southwestern parts of the region (Fig. 5.10). Theni, Andipatti and Cumbum blocks have more than 7% of their total small scale industries workers in this group while Chinnamanur block has the least share of 2.4% (Table 5.2). This industry was absent in Kadamalaikundu – Myladumparai block in 1997 but by 2007 Four units have been started in this block.
Theni District
LOCATION QUOTIENT
ENGINEERING AND ALLIED BASED INDUSTRIAL WORKERS - 2007

Legend
- < 0.8
- 0.8 - 1
- > 1

Scale
0 10 20 Kilometers

Fig: 5.9
The location quotient analysis also exhibits the same pattern with more concentration in Periyakulam, Theni, Andipatti and Cumbum blocks (Fig. 5.11). Chinnamanur and Uthamapalayam record a lower level of concentration (Table 5.3).

**Changes between 1997 and 2007**

1. Compared to overall small scale industrial growth between 1997 and 2007, the growth of this group is slightly lesser. Because of this, the share and rank of this group declined from 1997 to 2007.
2. Kadamalaikundu – Myladumparai block which did not have this group in 1997, developed 4 units during the study period.
3. Andipatti block has witnessed a marked increase in the number of units and workers during the study period.
4. With regard to the index of concentration, Chinnamanur witnessed a sharp decline of location quotient value (1 to 0.3) between 1997 and 2007. This indicates that other small scale industrial groups have been developed in this block.
5. Uthamapalayam and Bodinayakanur also had a declining location quotient value between 1997 and 2007.

**5.2.7 Mineral Based Industries**

This group has improved its status from 5\textsuperscript{th} rank in 2007. There has been a rapid growth of this industry during the study period. The number of units increased by more than 5 times (34 in 1997 to 173 in 2007) while the workers increased by 5 times (222 in 1997 to 1158 in 2007). Even though all blocks have registered a positive growth in this group, it is more notable in Uthamapalayam, Kadamalaikundu – Myladumparai and Andipatti blocks. In 1997 Kadamalaikundu – Myladumparai did not have this group of industries but in the second time point, 11 new units have come up with 64 workers. Similarly Uthamapalayam experienced a
very high growth rate of nearly 10 times in number of units and workers. In Andipatti, there was only one unit in 1997 but in 2007, there were 16 units employing 86 persons (Table 4.2 and 5.2).

There seems to be a lesser concentration of this group in the northern and southwestern parts. Fig 5.12 shows that only Uthamapalayam, Chinnamanur and Kadamalaikundu – Myladumparai blocks have location Quotient value of more than 1 indicating a comparatively higher concentration of this group than the other blocks in the district. Cumbum has the least value of 0.44 (Table 5.3).

**Changes between 1997 and 2007**

1. This industry exhibited a tremendous growth during the study period in which both the number of units and workers increased by more than 5 times.
2. This group has spread newly to the Kadamalaikundu – Myladumparai block where it was absent in 1997.
3. Uthamapalayam witnessed a very high growth of this industry. The number of units increased from 2 in 1997 to 29 in 2007 and the number of workers from 23 in 1997 to 235 in 2007. Andipatti also exhibited a very high growth rate for this group during the study period.
4. Bodinayakanur and Cumbum blocks have a sharp decline in the concentration which is indicated by lower location quotient values in 2007.
5. Theni block exhibited no change in the level of concentration for this group.

**5.2.8 Miscellaneous Group of Industries**

As noted in the previous chapter, this group has all other assorted small scale industries. Compared to 1997, this group improved its rank from 6th position to 5th in 2007. There were 496 registered units in 2007 which employed 1092 workers.
Though all blocks witnessed an increased growth of this group, it is more notable in Periyakulam, Theni and Chinnamanur (Table 4.2 and 5.2). This group exhibits a comparatively higher concentration in a southwest-northeast axis in the study area (Fig. 5.14).

The location quotient map (Fig 5.15) also shows a similar pattern. The most notable aspect regarding the index of concentration (Location Quotient value) is noticed in Kadamalaikundu – Myladumparai block. In 1997, the block had only 9 workers in all small scale industries. Most of the major groups discussed were absent. Consequently, Kadamalaikundu – Myladumparai block showed a very high location quotient of 8.8 in 1997. However in the 10 year period between 1997 and 2007, this block developed a large number of Small Scale Industries in various major groups. Because of this the number of workers increased from 9 in 1997 to 379 in 2007 (Table 4.2 and 5.2). Similarly the number of units was only 5 in 1997. There was a whopping increase in the number of units (164) between 1997 and 2007. Because of this the Miscellaneous industrial group lost its high concentration status. So location quotient declined very sharply from 8.8 in 1997 to 0.62 in 2007 (Table 5.3).

**Changes between 1997 and 2007**

1. There has been a five fold increase in the number of units and number of workers in this group during the study period.
2. Periyakulam, Theni and Chinnamanur experienced a comparatively high growth rate than the other blocks between 1997 and 2007.
3. Index of concentration for this group declined very sharply in Kadamalaikundu – Myladumparai block during the study period.
4. Cumbum and Chinnamanur also witnessed decline in the level of concentration for this group of industries between 1997 and 2007.
Theni District
RATIO MAP
MISCELLANEOUS INDUSTRIAL WORKERS - 2007

Legend
(In Percentage)
- Very High
- High
- 8.58% District Average
- Low
- Very Low

Scale
0 10 20
Kilometers

Fig: 5.14
5.3 Co-Efficient of Geographic Association

The Coefficient value of Geographic Association indicates the relationship between the distribution of overall manufacturing activity with any particular group of manufacturing. In 2007 also, all the major categories of small scale industries considered in the present investigation showed a high degree of compatibility with overall small scale industries in the study area. The discussion on the status of small scale industries in 2007 brought out the fact there has been a sizable increase in the number of units as well as workers for major group of small scale considered for the analysis. Because of this, the Coefficient value also improved when compared to 1997 values. This is true for all groups except Chemical and Pharmaceutical based groups.

Table -5.4
Theni District
Co- Efficient of Geographic Association - 2007

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Types of Industries</th>
<th>Co- Efficient of Geographic Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agro based industries</td>
<td>0.87</td>
</tr>
<tr>
<td>2</td>
<td>Forest based industries</td>
<td>0.77</td>
</tr>
<tr>
<td>3</td>
<td>Textile based industries</td>
<td>0.92</td>
</tr>
<tr>
<td>4</td>
<td>Chemical and Pharmaceutical based industries</td>
<td>0.92</td>
</tr>
<tr>
<td>5</td>
<td>Mineral based industries</td>
<td>0.82</td>
</tr>
<tr>
<td>6</td>
<td>Engineering and Allied based industries</td>
<td>0.91</td>
</tr>
<tr>
<td>7</td>
<td>Miscellaneous Group of Industries</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Compiled by the investigator
In spite of these changes, there has been a very high positive relationship between all group of small scale industries and the overall manufacturing in the study area in 2007 (Table 5.4).

**Changes between 1997 and 2007**

1. Forest based industry has improved its association with overall small scale industries.

2. Association between overall manufacturing and Miscellaneous group is also improved considerably between 1997 and 2007.

The analysis brings out the fact that the growth of small scale industries occurred in all blocks and for almost all groups. This validates that the region has a strong resource base for development of various types of small scale industries.

**5.4 Index of Industrial Diversification**

In 2007, the study area exhibits different values for Index of industrial diversification. It may be noted that all the values are nearer to 0 indicating that the small scale industries have a diversified character in the study area (Table 5.5). Among the blocks Theni and Bodinayakanur shared a higher level of diversification than the district as a whole which is indicated by negative values (Fig. 5.16). Other blocks except Andipatti have a comparatively higher level of diversification.

**Changes between 1997 and 2007**

1. In 1997, 4 blocks had a higher level of diversification than the district as a whole. But in 2007 only 2 had this status.

2. Bodinayakanur is the only block where level of diversification is greater than the District as a whole in both time points.

3. Andipatti had the highest value of index of industrial diversification in both time points. However, there has been a greater diversity in the second point indicated by a lower value.
Theni District
INDEX OF INDUSTRIAL DIVERSIFICATION - 2007

Legend
- < 0
- 0 - 0.3
- > 0.3

Scale
0 10 20 Kilometers

Fig: 5.16
4. Cumbum, Chinnamanur and Uthamapalayam had a higher level of diversification than the region as a whole in 1997. However growth of all groups of industries in all blocks resulted in a comparatively higher diversification for the district as a whole. Because of a comparatively higher diversification at the district level, these blocks have come only to the level for the district as a whole as far as the Diversification index is concerned.

**Table-5.5**  
**Theni District – Index of Diversification - 2007**

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Block Name</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Periyakulam</td>
<td>0.16</td>
</tr>
<tr>
<td>2</td>
<td>Theni</td>
<td>-0.12</td>
</tr>
<tr>
<td>3</td>
<td>Andipatti</td>
<td>0.30</td>
</tr>
<tr>
<td>4</td>
<td>Kadamalaikundu - Mayladumparai</td>
<td>0.13</td>
</tr>
<tr>
<td>5</td>
<td>Bodinayakanur</td>
<td>-0.06</td>
</tr>
<tr>
<td>6</td>
<td>Cumbum</td>
<td>0.05</td>
</tr>
<tr>
<td>7</td>
<td>Chinnamanur</td>
<td>0.006</td>
</tr>
<tr>
<td>8</td>
<td>Uthamapalayam</td>
<td>0.18</td>
</tr>
</tbody>
</table>

Compiled by the investigator
5.5 Sick Small Scale Industrial Units which are Closed

The analysis done in the present investigation for the selected two time points of study has been elaborately discussed so far both in the present chapter as well as the previous chapters. A positive dimension with regard to the small scale industries in the study area is that there has been a four fold increase in the number of registered Small Scale Industrial units between 1997 and 2007. Though a number of new units have come up all over the study area, many existing small scale industrial units have been closed due to varied reasons during the same period. A perusal of the data has brought out the fact that a considerable number of small scale industrial units belonging to various groups have been closed every year.

A census has been conducted by the Department of Industries Government of Tamilnadu during 2008 – 2009 with regard to the number of the registered small scale industrial units closed in the District during previous years. Table 5.6 shows the block - wise and category – wise number of registered small scale industrial units which were closed during previous years. It may be noted that a total of 1525 units have been closed in District till March 2009 due to various reasons. As per the available data, the total number of registered small scale industrial units as on March 2008 was 5145. Hence, if we consider the latest available data, it may be observed that nearly 30% of the units have been closed so far.

Theni block alone has about one – fourth of the total closed small scale industrial units followed by Bodinayakanur (15.9%) and Periyakulam (14.7%) Kadamalaikundu – Mayladumparai block has the least share of only 0.8% among the total closed small scale industrial units. Other blocks have about 10 to 12 % share each.
Table – 5.6

Theni District

Closed Small Scale Industrial Units in Theni District

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Block Name</th>
<th>Agro Based</th>
<th>Forest Based</th>
<th>Textile Based</th>
<th>Engg &amp; Allied Based</th>
<th>Chemical &amp; Pharmaceutic Based</th>
<th>Mineral Based</th>
<th>Miscellaneous</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Periyakulam</td>
<td>9</td>
<td>2</td>
<td>126</td>
<td>55</td>
<td>11</td>
<td>4</td>
<td>18</td>
<td>225</td>
</tr>
<tr>
<td>2</td>
<td>Theni</td>
<td>93</td>
<td>4</td>
<td>112</td>
<td>93</td>
<td>13</td>
<td>18</td>
<td>60</td>
<td>393</td>
</tr>
<tr>
<td>3</td>
<td>Andipatti</td>
<td>32</td>
<td>1</td>
<td>80</td>
<td>34</td>
<td>18</td>
<td>9</td>
<td>11</td>
<td>185</td>
</tr>
<tr>
<td>4</td>
<td>Kadamalaikundu-Mayladumparai</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Bodinayakanur</td>
<td>14</td>
<td>2</td>
<td>132</td>
<td>62</td>
<td>10</td>
<td>3</td>
<td>19</td>
<td>242</td>
</tr>
<tr>
<td>6</td>
<td>Cumbum</td>
<td>28</td>
<td>6</td>
<td>85</td>
<td>38</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>175</td>
</tr>
<tr>
<td>7</td>
<td>Chinnamanur</td>
<td>11</td>
<td>3</td>
<td>62</td>
<td>35</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>129</td>
</tr>
<tr>
<td>8</td>
<td>Uthamapalayam</td>
<td>21</td>
<td>1</td>
<td>89</td>
<td>26</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>210</strong></td>
<td><strong>19</strong></td>
<td><strong>691</strong></td>
<td><strong>347</strong></td>
<td><strong>72</strong></td>
<td><strong>52</strong></td>
<td><strong>134</strong></td>
<td><strong>1525</strong></td>
</tr>
</tbody>
</table>

Source: Department of Industries in Theni District

It one considers the category – wise closure, it may be observed that the Textile group has the maximum share of 45.3% followed by Engineering and Allied group (22.8%) and Agro based group (13.8%). Forest based group has the least share (1.2%) with regard to the total number of closed small scale industrial units.
### Table – 5.7

**Theni District**

**Number of Total and Closed Small Scale Industries in Block Wise**

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Block Name</th>
<th>Total units 2007</th>
<th>Closed units</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Periyakulam</td>
<td>967</td>
<td>225</td>
<td>23.27</td>
</tr>
<tr>
<td>2</td>
<td>Theni</td>
<td>1320</td>
<td>393</td>
<td>29.77</td>
</tr>
<tr>
<td>3</td>
<td>Andipatti</td>
<td>751</td>
<td>185</td>
<td>24.63</td>
</tr>
<tr>
<td>4</td>
<td>Kadamalaikundu- Myladumparai</td>
<td>164</td>
<td>12</td>
<td>7.32</td>
</tr>
<tr>
<td>5</td>
<td>Bodinayakanur</td>
<td>507</td>
<td>242</td>
<td>47.73</td>
</tr>
<tr>
<td>6</td>
<td>Cumbum</td>
<td>504</td>
<td>175</td>
<td>34.72</td>
</tr>
<tr>
<td>7</td>
<td>Chinnamanur</td>
<td>410</td>
<td>129</td>
<td>31.46</td>
</tr>
<tr>
<td>8</td>
<td>Uthamapalayam</td>
<td>522</td>
<td>164</td>
<td>31.42</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>5145</strong></td>
<td><strong>1525</strong></td>
<td><strong>29.64</strong></td>
</tr>
</tbody>
</table>

*Source: Department of Industries in Theni District*

A block-wise analysis of the closed units indicates that Theni, Chinnamanur and Uthamapalayam blocks exhibit the same level of closure like that of the District as a whole (Table 5.7). Bodinayakanur experienced maximum closure in 2008 (47.7%) followed by Cumbum (34.7%). Kadamalaikundu – Mayladumparai block experienced the lowest number of closure.
### Table 5.8

Theni District

**Number of Total and Closed Small Scale Industries in Categories Wise**

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Categories</th>
<th>Total units 2007</th>
<th>Closed units</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agro based industries</td>
<td>528</td>
<td>210</td>
<td>39.77</td>
</tr>
<tr>
<td>2</td>
<td>Forest based industries</td>
<td>89</td>
<td>19</td>
<td>21.35</td>
</tr>
<tr>
<td>3</td>
<td>Textile based industries</td>
<td>2705</td>
<td>691</td>
<td>25.55</td>
</tr>
<tr>
<td>4</td>
<td>Chemical and Pharmaceutical based industries</td>
<td>204</td>
<td>72</td>
<td>35.29</td>
</tr>
<tr>
<td>5</td>
<td>Mineral based industries</td>
<td>173</td>
<td>52</td>
<td>30.06</td>
</tr>
<tr>
<td>6</td>
<td>Engineering and Allied based industries</td>
<td>950</td>
<td>347</td>
<td>36.53</td>
</tr>
<tr>
<td>7</td>
<td>Miscellaneous Group of industries</td>
<td>496</td>
<td>134</td>
<td>27.02</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>5145</strong></td>
<td><strong>1525</strong></td>
<td><strong>29.64</strong></td>
</tr>
</tbody>
</table>

*Source: Department of Industries in Theni District*

Table 5.8 shows the number of total and closed small scale industrial units in different groups of industries. Agro based industries lost more units than the other groups. It may be observed that nearly 40% of the total Agro based industries in the District has been closed. Similarly about one – third of Engineering group and Chemical and Pharmaceutical group small scale industries have also been closed. Forest based group had the lowest share of closed small scale industrial units.
5.6 Primary Data Generation and Analysis

These details bring out the necessity to know about the reasons for closure of small scale industrial units. Therefore, the investigator collected primary data through interview method to bring out additional dimensions of small scale industries in the study area. The investigator had personally interviewed the entrepreneur of small scale industrial units and collected details regarding investment, loan, source of raw material, marketing and transport. The various problems faced by the entrepreneur have also been collected. A total of 190 entrepreneurs have been contacted by this method. They are chosen as per purposive random sample. The sample is chosen in such a way that all blocks are covered as well as all categories of industries are represented. Hence it is purposive sample. The actual person to be interviewed is chosen purely at random from the list of registered small scale industrial units in the study area. The detailed list of entrepreneurs contacted is given in Table 5.9.

The main purpose of this primary data generation is to know about the pattern of flow of raw material as well as flow of finished products. It also tries to understand basic problems faced by the entrepreneur.

Details gathered through the interview can be categorized into the following topics.

1. Source of Raw material
2. Mode of Transport of Raw material
3. Marketing of the product
4. Mode of Transport of product
5. Capital Investment
6. Loan and Source of Loan
7. Problems faced.
Each of these dimensions has been applied to the selected major groups of industries. The results are discussed below:

Table – 5.9

Theni District

Number of Entrepreneurs Contacted for Personal Interview

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Block Name</th>
<th>Agro Based</th>
<th>Forest Based</th>
<th>Textile Based</th>
<th>Engg &amp; Allied Based</th>
<th>Chemical &amp; Pharmaceutical Based</th>
<th>Mineral Based</th>
<th>Miscellaneous</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Periyakulam</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Theni</td>
<td>16</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>9</td>
<td>46</td>
</tr>
<tr>
<td>3</td>
<td>Andipatti</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Kadamalaikundu - Mayladumparai</td>
<td>6</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Bodinayakanur</td>
<td>11</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>Cumbum</td>
<td>17</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>7</td>
<td>Chinnamanur</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>8</td>
<td>Uthamapalayam</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>65</strong></td>
<td><strong>14</strong></td>
<td><strong>19</strong></td>
<td><strong>27</strong></td>
<td><strong>12</strong></td>
<td><strong>27</strong></td>
<td><strong>26</strong></td>
<td><strong>190</strong></td>
</tr>
</tbody>
</table>
Results and Discussions

5.6.1 Source of Raw materials

Raw material may be available from nearby sources or it may be available from far off places. Depending upon the source, three types are identified here. Some industries depend upon raw material which is available within the district while a few industries may depend upon raw material coming from areas outside the district. It is observed that in some cases raw material is derived both from within and outside the district. For the sample industries as a whole taken in the entire district, it is found that 40% depend upon local raw material while another 42% get raw materials from outside the district. About 18% of industries contacted get raw material both from within the district as well as from place outside the district (Table 5.10).

5.6.2 Mode of Transport of Raw material

Transportation is an important factor in every manufacturing industry. It helps to the frequent movement of both raw materials and finished products. Depending upon the distance, different modes of transport are used both for raw materials and for finished products. If it is shorter distance, two wheeler or even the entrepreneur himself can bring raw material. For longer distance, bigger vehicles like van, lorry, etc are used. For the present study, the mode of transport is grouped into 4 types. Lorry, van and mini lorry form the first type while two wheeler forms the next mode. Manual carrying of raw material is the third mode while bus, tractor and other means are considered as the fourth ‘other mode’ category.
### Table – 5.10

**Theni District**

**Source of Raw Material and Mode of Transport of Raw Material**

*(in percentage)*

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Categories</th>
<th>Raw Material</th>
<th>Mode of Transport of Raw Material</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Local</td>
<td>Outside</td>
</tr>
<tr>
<td>1</td>
<td>Agro based industries</td>
<td>47.7</td>
<td>21.5</td>
</tr>
<tr>
<td>2</td>
<td>Forest based industries</td>
<td>21.4</td>
<td>64.3</td>
</tr>
<tr>
<td>3</td>
<td>Textile based industries</td>
<td>52.6</td>
<td>36.8</td>
</tr>
<tr>
<td>4</td>
<td>Chemical and Pharmaceutical based industries</td>
<td>55.6</td>
<td>40.7</td>
</tr>
<tr>
<td>5</td>
<td>Mineral based industries</td>
<td>16.7</td>
<td>75.0</td>
</tr>
<tr>
<td>6</td>
<td>Engineering and Allied based industries</td>
<td>40.7</td>
<td>33.3</td>
</tr>
<tr>
<td>7</td>
<td>Miscellaneous Group of industries</td>
<td>11.5</td>
<td>76.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>39.5</strong></td>
<td><strong>41.6</strong></td>
</tr>
</tbody>
</table>

For the study area as a whole, lorry, van and mini lorry group is the most important mode of transport used for bringing raw materials. Nearly three fourths of total raw material supply depends upon this mode (Table 5.10). Other mode category accounts for 13% share in the transport of raw material while about 6.3% raw material is brought through two wheelers. Manual carrying has an insignificant share.
5.6.3 Marketing of the product

The market is an important factor in determining the location, size and complexity of many industries. Nearness to the consuming market also saves transport cost. Nearness to market also helps the producers in making necessary adjustments in the manufacturing programmers according to the changing habits and customs on the part of consumers.

Similar to raw material, marketing of the product may be done exclusively within the district or exclusively outside the district or both within the and outside the district. In the present analysis it is observed that about 61% of the total manufactured products are marketed within the district while another 30% go outside the district (Table 5.11). Only about 11% of the products have market both within and outside the district.
<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Categories</th>
<th>Market</th>
<th>Mode of Transport of Product</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Local</td>
<td>Outside</td>
<td>Both</td>
<td>Self</td>
<td>Two Wheeler</td>
<td>Lorry, Van, Mini Lorry</td>
<td>Others</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Agro based industries</td>
<td>52.3</td>
<td>30.8</td>
<td>16.9</td>
<td>0</td>
<td>12.9</td>
<td>72.9</td>
<td>14.1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Forest based industries</td>
<td>57.1</td>
<td>14.3</td>
<td>28.6</td>
<td>0</td>
<td>0</td>
<td>87.0</td>
<td>13.0</td>
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</tr>
<tr>
<td>3</td>
<td>Textile based industries</td>
<td>42.1</td>
<td>52.6</td>
<td>5.3</td>
<td>31.6</td>
<td>0</td>
<td>63.2</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Chemical and Pharmaceutical based industries</td>
<td>70.4</td>
<td>25.9</td>
<td>3.7</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mineral based industries</td>
<td>25.0</td>
<td>75.0</td>
<td>0.0</td>
<td>0</td>
<td>0</td>
<td>75.0</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Engineering and Allied based industries</td>
<td>59.3</td>
<td>33.3</td>
<td>7.4</td>
<td>17.4</td>
<td>2.2</td>
<td>45.7</td>
<td>34.8</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Miscellaneous Group of industries</td>
<td>92.3</td>
<td>3.8</td>
<td>3.8</td>
<td>62.1</td>
<td>3.4</td>
<td>17.2</td>
<td>17.2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>60.7</td>
<td>28.6</td>
<td>10.7</td>
<td>12.7</td>
<td>5.2</td>
<td>63.9</td>
<td>18.3</td>
<td></td>
</tr>
</tbody>
</table>
5.6.4 Mode of Transport of Product

As mentioned earlier, transport is also essential for marketing the product. Here also, the same four categories of transport which were considered for raw material supply are taken. Nearly two-thirds of the products are sent to markets through lorry, van, mini lorry while 18% are marketed through ‘other mode’ category (Table 5.11). An interesting dimension here is that 13% of the products are marketed by ‘self’ and two wheeler has only a share of 5%.

5.6.5 Capital Investment

Establishment of any small scale industrial unit needs capital. Depending upon the size of the units and the product, the amount of capital needed may vary from a few lakhs of rupees to a few crores of rupees. In the present analysis 5 categories of capital investment are observed. They are

1. Less than Rs 5 lakh
2. Rs 5 lakh to 10 lakh
3. Rs 10 lakh to 40 lakh
4. Rs 40 lakh to 80 lakh
5. More than Rs 80 lakh

In the present study nearly two – thirds of small scale industrial units had an investment of less than Rs 10 lakhs (Table 5.12). About 38% had only less than Rs 5 lakh, investment while another 25% had an investment between Rs 5 and 10 lakh. Industries which had an investment of Rs 10 to 40 lakh accounted for a share of 17% while about 12% small scale industrial units had an investment of more than Rs 80 lakh.
5.6.6 Loan and Source of Loan

When capital investment is high, it is not possible by many entrepreneurs to start a unit with their own source of money. They have to get loan from financial institutions. Already it has been explained in detail in chapter 3 about the availability of credit facilities from various government sources. In the present study area also some of the entrepreneurs have availed loan. About 55% of respondents have availed loan while the rest utilized their own source of money (Table 5.12).

Among the persons who availed loan, different sources were utilized. For the present study, the source for loan is grouped into 3 categories, namely Nationalised banks, Other Scheduled banks and Industrial Finance Institutions (Table 5.12).

As far as the present study is concerned, Scheduled banks form the most important source for loan. About 45% of the entrepreneurs who availed loan got money from Scheduled banks. Nationalised banks are also equally significant since they accounted for 40% share of the loans disbursed to small scale industrial units in the district. 15% availed loan from Tamilnadu Industrial Investment Corporation (TIIC).

The discussion given so far has brought out the varied aspects of total sample small scale industrial units in the district. However, it has also been observed that there are wide differences among the different group of Small scale industries with regard to all the 6 aspects discussed above. Hence it is apt to industrial group of industries and analyse the pattern of raw material, market, mode of transport, capital, etc.
<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Categories</th>
<th>Investment in lakhs</th>
<th>Loan</th>
<th>Sources</th>
<th>Industrial Finance Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>&lt; 5</td>
<td>5 -10</td>
<td>10 -40</td>
<td>40 - 80</td>
</tr>
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<td>1</td>
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<td>15.4</td>
<td>21.5</td>
<td>9.2</td>
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<td>2</td>
<td>Forest based industries</td>
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<td>28.6</td>
<td>42.9</td>
<td>7.1</td>
</tr>
<tr>
<td>3</td>
<td>Textile based industries</td>
<td>47.4</td>
<td>21.1</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td>4</td>
<td>Chemical and Pharmaceutical based industries</td>
<td>3.7</td>
<td>0</td>
<td>3.7</td>
<td>14.8</td>
</tr>
<tr>
<td>5</td>
<td>Mineral based industries</td>
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<td>75</td>
<td>25.0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Engineering and Allied based industries</td>
<td>44.4</td>
<td>29.6</td>
<td>14.8</td>
<td>11.1</td>
</tr>
<tr>
<td>7</td>
<td>Miscellaneous Group of industries</td>
<td>46.2</td>
<td>46.2</td>
<td>7.7</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>38.4</strong></td>
<td><strong>24.7</strong></td>
<td><strong>16.8</strong></td>
<td><strong>8.4</strong></td>
</tr>
</tbody>
</table>
5.7 Agro Based Industries

Out of 190 sample small scale industries, 65 Agro based units are contacted. They are distributed in all the 8 blocks (Table 5.9).

With regard to source of raw material, these agro based industries depend more on sources exclusively within the district. Nearly 48% of the units get their raw material only from within the district. Unlike the total small scale industries, 31% of the Agro based industries get raw material from both within and outside the district. Only 21% of the units in this category depend upon raw material from outside the district (Table 5.10). As far as the local sources are concerned, Theni, Periyakulam, Chinnamanur and Cumbum blocks provide most of the raw material for this group of industries. Concentration of coconut plantations lead to the provision of coconut husk for Coir industry which is one of the important small scale industries in Agro based group.

Among the outside sources raw material is procured from various places in Tamilnadu as well as from Andhra Pradesh, Karnataka and Kerala. In Tamilnadu Tuticorin, Madurai, Coimbatore, Salem, Tiruchirapalli and Virudhunagar are the major sources. Bangalore also provides raw materials for this group of industries (Fig. 5.17). It is interesting to note that Cashew nut is procured from nearby Kerala State, processed and marketed back to Kerala State.

Regarding the mode of transport of raw material, Agro based industries also fall in line with the total small scale units. However share of lorry, van and mini lorry is only 67% while two wheeler and ‘Other mode’ category have a higher share in the transport of raw material (Table 5.10)

With regard to the marketing of the products also, this Agro based group exhibits similar share like that of total sample small scale industries. However share of local market is only 52% here while share of both local and outside markets is 17% (Table 5.11).
Products from Agro based small scale industries in the study area are sent to various places both within and outside the district. Almost all the blocks except Kadamalaikundu –Myladumparai, Andipatti and Uthamapalayam form the major markets within the district. Products also sent to Madurai, Tirunelveli, Nagercoil, Viruthunagar, Sivakasi, Tuticorin, Coimbatore, Salem, Erode, Tiruppur and Chennai. Some of the small scale industrial units also send their products to Kerala, Delhi and Mumbai. Coir fibre is primarily marketed in Kerala (Fig. 5.18)

Products from this group of small scale industries are transported mainly by lorry, van and mini lorry (73%) and ‘other mode’ category (14%). It is to be observed that unlike the total sample small scale industries, here self-marketing is nil (Table 5.11). On the other hand, transport through two wheeler has a higher share than that of district as a whole.

In general one-third of sample Agro based small scale industrial units had an investment of less than Rs 5 lakh. About 22% of the sample units had the highest investment of more than Rs 80 lakh. In fact, among the different groups of small scale considered in the present study, Agro based industries rank next to chemical industries to have units of very high capital investment. Most of these high investment units are Coir fibre separation units as well as processing of cashew nuts units. Another 21% sample Agro based small scale industrial units have an investment between Rs 10 and 40 lakh (Table 5.12).

Unlike the case of total sample small scale industries, entrepreneurs who availed loan in this group is less (45%). Similarly Nationalised banks have given maximum loan (52%) followed by other Scheduled banks (Table 5.12).

5.8 Forest Based Industries

There were 14 Forest based units in sample survey. They are distributed in 6 out of 8 blocks in the district (Table 5.9).
Theni District
MARKETING AREA

Forest Based Industries

Agro Based Industries

Textile Based Industries

Fig: 5.18
With regard of sources of raw material, these forest based industries depend more on sources of raw material from outside of the district. Nearly 65% of the units get their raw materials from outside of the district. 21% of the total forest based industries get raw material from within the district. Only 14% of the units in this group of industries depend upon raw material from both within and outside the district (Table 5.10). As far as local sources are concerned, Theni is the most important block. Raw material for this group of small scale industries is derived from Tuticorin, Dindigul, Coimbatore, Trichy and Virudhunagar. Manufacture of paper cups depends mostly from outside source for raw material. Though forests occur in the district, these small scale industrial units get wood from other places for furniture making (Fig. 5.17).

Regarding the mode of transport of raw material. Almost all the raw material for the group of small scale industries is transported only through lorry, van and mini lorry group. Only 6% of the raw material is transported by ‘other mode’ category. Two wheeler as well as self transport is absent here (Table 5.10).

Local marketing is the main mode for the products of this group of small scale industries. It has a share of 57%. Only 14% of the products are sent to places outside the district. 28% of the units market their products both within and outside the district.

Within the district, Theni, Cumbum, Bodinayakanur and Uthamapalayam form the major market centres. In the case of markets outside the district, the products of this group are sent to Madurai, Coimbatore, Dindigul, Trichy, Sengottai and Chennai (Fig. 5.18).

In the case of mode of transport, 87% of the products are transported to the various markets by lorry, van and mini lorry group while the rest is marketed by ‘other mode’ category of transport.
43% of the sample units in this group have an investment between Rs 10 and 40 lakh. In fact, this group has the highest share in this category of investment among the different types of small scale industries considered. Nearly 29% of the units have an investment between Rs 5 and Rs 10 lakh while another 21% have an investment of less than Rs 5 lakh (Table 5.12).

Only 43% of the sample small scale industrial units availed loan facility mostly from Scheduled banks.

5.9 Textile Based Industries

Altogether 19 sample units from this group are considered for primary data generation. These units are distributed in all blocks of the study area (Table 5.9).

Local sources provide more than 50% of the raw material for this group of small scale industrial units while 37% of raw material comes from outside the district. The rest get raw material from both within and outside the district (Table 5.10). Theni and Kadamalaikundu – Myladumparai blocks are the most important sources for raw material, especially silk cotton. In addition, raw material is also brought from Madurai, Dindigul, Karur, Coimbatore, Tirupur for these units. A few units get raw material from Karnataka and Kerala (Fig. 5.17).

The mode of transport of raw material from Textile based industrial units also fall in line with the total small scale industrial units. However share of lorry, van, mini lorry is only 67% while other mode of transport is 17%. Two wheeler (11%) and self (5.6%) are also used for transport of raw material (Table 5.10).

Unlike the case of small scale units as a whole, this group depends more upon outside market (53%) than local (42%) market. Only 5% of the products are marked both within and outside the district (Table 5.11).

It is to be observed that most of the products are marketed to Coimbatore and Chennai as well as to Delhi, Mumbai and some place in Kerala (Fig. 5.18).
Lorry, van and mini lorry (63%) are mostly used for transporting the products of this group of small scale industries to markets. An interesting dimension is that about one-third of marketing is done by self (Table 5.11). About 70% of the sample units have an investment of less than Rs 10 lakh while the other 3 category have a share of 10% each. This is one of the groups of small scale industries where the investment category of more than Rs 80 lakh is noticed (Table 5.12). About 63% of the sample entrepreneurs availed loan facility mostly from the Scheduled banks.

5.10 Chemical and Pharmaceutical Based Industries

A total of 12 Chemical and Pharmaceutical units have been contacted as sample units. This industrial group is absent in Kadamalaikundu – Myladumparai. Hence units in other 7 blocks were chosen for sample study (Table 5.9).

With regard to source of raw material, this group of industries depend more on sources within the district. Nearly 56% of the units get their raw material only from within the district. 41% of the sample units procure raw material from outside the district and only 4% units get raw material from both within and outside the district (Table 5.10).

Theni, Peryakulam and Cumbum are the important sources for raw material within the district. However raw material is also purchased from Chennai, Madurai, Trichy and Salem in Tamilnadu as well as from Delhi, Mumbai, Bangalore, Kolkata and from Gujarat State (Fig. 5.19).

With regard to the mode of transport of raw material, lorry, van and mini lorry group has the highest share (87%) while ‘other mode’ while as well as two wheeler have a share of about 6% each. No raw material is brought by self.

Unlike the case of total samples, products from Chemical and Pharmaceutical group of small scale industries are marketed mostly (70%)
within the district and about one-fourth of the products are marketed outside the district (Table 5.11).

Theni and Cumbum are the major markets within the district for the products of this group of small scale industries. As far as markets outside the district are concerned, most of the products are sent to Chennai, Madurai and to various places in the neighbouring States of Andhra Pradesh, Karnataka and Kerala (Fig. 5.20).

In general establishment of chemical and pharmaceutical industrial units requires more capital. Units manufacturing PVC pipes etc require higher investment. It is also validated in the sample study. In fact among all the categories of small scale industries considered in the present study, only this group has the highest share (50%) in the more than Rs 80 lakh investment category. Similarly another one-third units have an investment of Rs 40 to Rs 80 lakhs (Table 5.12).

In spite of huge investment, it is strange to note that the number of entrepreneurs who availed loan is very low (8%). More than 90% entrepreneurs met the investment capital from their own source. Where loan is availed, it is derived mostly from Nationalised banks (55%) and Scheduled banks (36%).

5.11 Mineral based industries

In the Mineral based industrial group, 12 sample units are contacted. This type of industry is distributed in all blocks except and Kadamalaikundu - Myladumparai (Table 5.9).

Most of the sample units (75%) in this group get raw material only from areas outside the district. Only 17% units depend upon local raw materials. The rest get raw material from both within and outside the district (Table 5.10).

Theni, Andipatty, Periyakulam, Cumbum and Chinnamanur are the major sources for raw materials for this group of small scale industries within the
district. Similarly, raw material is also procured from Madurai, Virudhunagar, Trichy, Salem and Coimbatore (Fig. 5.19).

About 88% of raw material is carried by the lorry, van and mini lorry group. Other mode category has only 7% share in the transport of raw material (Table 5.10).

Products from this group of small scale industries are marketed mostly outside the district. Among the sample units 75% market their products to various places outside the district and only 25% are marketed locally (Table 5.11).

Theni, Andipatti, Periyakulam are the most important local market centres. Madurai, Dindigul, Rameswaram, Trichy are the major market centres in Tamilnadu for the products of this group of small scale industries. In addition, products from this industrial group are also sent to Kerala and Karnataka (Fig. 5.20).

The mode of transport of products of this group in given in Table 5.11. It is noticed from the table that lorry, van and mini lorry group carries 75% of the products while the share of ‘other mode’ category is only 25%.

Investment of the sample units is presented in the Table 5.12. In general, this group requires comparatively less investment. Compared to the share of overall sample units, here the less than Rs 5 lakh investment group has a higher share (56%). Another one – third of the sample units have an investment from Rs 5 to 10 lakh. Only 10% units have a capital of Rs 40 to 80 lakh (Table 5.12).

Because of the comparatively lower level of investment, 85% of entrepreneurs have not availed any loan facility for establishment of the industrial units. Among those who got loan facility, most of them got loan from Scheduled banks (Table 5.12).
5.12 Engineering and Allied Based Industries

27 units under this group have been taken for the sample study. These samples are distributed in all the blocks (Table 5.9).

Similar to the overall source of raw material scenario, here also 40% units get raw material only from local sources. Only one – third of the sample units depend upon raw material from outside the district (Table 5.10).

Theni is the main source for raw material within the district while Chinnamanur, Cumbum, Andipatti and Uthamapalayam also provide some raw material. Regarding the sources outside the district, Chennai, Madurai, Coimbatore, Mumbai, Ernakulam and Delhi are the major centres from where raw material is procured (Fig. 5.19).

Here also, about 58% of the raw material is transported by lorry, van and mini lorry group while 40% is transported by ‘other mode’ category (Table 5.10).

It is noticed that nearly 60% of the sample units market for their produce within the district, whereas 33% have markets outside the district (Table 5.11). Theni, Bodinayakanur, Chinnamanur, Uthamapalayam and Cumbum are the major marketing areas within the district. Salem, Trichy, Thanjavur, Chennai, Pollachi, Bangalore and Delhi are the important market centres outside the district (Fig. 5.20).

Compared to the overall marketing scenario, the share of lorry, van and mini lorry group in transport of products for this industrial group is less (46%). Here ‘other mode’ category has a comparatively significant share of 35%. Another notable aspect is that about 17% of the products is marketed by self (Table 5.11).

Table 5.12 shows that the capital of 44% sample units is less than Rs 5 lakh. 29% of the units had an investment from Rs 5 lakh to Rs 10 lakh. 14%
of the sample units have an investment between Rs 10 and Rs 40 lakh. There is no unit with more than Rs 80 lakh capital.

Only 45% of entrepreneurs availed loan facility. They got their loan mostly from Nationalised banks (42%) and Other Scheduled banks (33%). This group has a comparatively more number of units who availed loan from Industrial Finance Institutions (Table 5.12).

5.13 Miscellaneous Group of industries

Out of 190 sample small scale industries, 26 samples were taken from Miscellaneous group of industrial units. They are distributed in all the blocks except Kadamalaikundu – Myladumparai (Table 5.9).

Regarding source of raw material, this group of industries depend more on sources exclusively outside the district. Nearly 80% of the units get their raw material only from outside the district. Only about 11% units get raw material locally. As far as the local sources are concerned, Theni, Cumbum and Chinnamanur blocks provide most of the raw material for this group of industries. Among the outside sources raw material is procured from various places in Tamilnadu such as Madurai, Virudhunagar and Chennai as well as from outside Tamilnadu from Mumbai and Delhi (Fig. 5.19).

Since most of the raw material is brought from outside the district, lorry, van and mini lorry group has the highest share (80%) followed by ‘other mode’ category 17%. Two wheeler have a share of 3% (Table 5.10).

It is noticed that regarding markets for the sample units 92% of the units have market for their produce within the district and only 4% of the products are sent outside the district (Table 5.11).

Theni, Cumbum, Chinnamanur and Bodinayakanur are the main markets within the district while some products are sent to Chennai and Madurai (Fig. 5.20).
The most notable aspect of this category is that 62% of the products are marketed by self. No other industrial group has such a high share in the mode of transport of products for market. Lorry, van and mini lorry group and the ‘other mode’ category have an equal share of 17% each (Table 5.11).

Most of the industrial units in this group have a comparatively lower level of investment. 46% of the units had an investment of less than Rs 5 lakh while another 46% have an investment between Rs 5 lakh and Rs 10 lakh. No industrial unit from this group has an investment of more than Rs 40 lakh (Table 5.12).

50% of the entrepreneurs got loan facility. Among the sources for loan, only in this group of small scale industries, Industrial Finance Institution have provided maximum loan (38.5%). Nationalised banks also had an almost equal share (Table 5.12).

5.14 Major Problem Faced by Small Scale Industries

The account given so far has brought out the varied characteristics of the major groups of small scale industries considered in the present study. Like all other economic activities, these industries also face a number of problems. In the primary survey the entrepreneurs were asked to list out the major problems faced by them and the details are discussed here.

Broadly, it is possible to group the problems into 5 categories. They are:

1. Problem related to raw material
2. Problem related to production and marketing
3. Problem of labour supply
4. Problem of Finance and
5. Other Miscellaneous problems
5.14.1 Problem of raw material supply

One of the most serious problems faced by the small scale industries in the study area is related to inadequate supply of raw material. This is particularly more severe in the case of Agro based, Forest based, Textile and Chemical based industrial groups. In the case of Agro based industries, some oil mills are affected due to non supply of cotton seed because of a decline in cotton production. Some is also applicable to oil industries which depend on groundnut. In the case of Forest based industries, availability of good quality wood from local sources has declined due to introduction of new species of trees. For example coconut trees are used more in the saw mills. But new varieties of coconut trees are not suitable for this kind of product.

In the case of Chemical industries, recycling of waste plastic is done and new plastics products like pots, rope and small boxes are made. Collection of broken waste plastic is declining leading to inadequate supply to the industries.

5.14.2 Problem of production and Marketing

All the industrial groups have indicated inadequate power supply as the major problem related to production. However, this is a temporary problem and can be solved. Erratic power supply also resulted in poor quality of the product. Further wastage is more leading to higher cost. Because of this, these products would not compete with other products in the market.

In addition competition from other industries also affects the marketing of products from small scale industries. For example, availability of readymade door, window, etc has affected forest based wood product industry. Similarly Hallow blocks has become a main competitor for brick industry. Soft drinks from major companies have crushed the local soft drinks manufacturing. Availability of readymade chappals has affected the traditional leather footwear industry. Similarly replacement of machine cutting models by traditional hand work models has also affected the gold ornament industry.
5.14.3 Problem of Labour

Non availability of skilled labour is a major problem faced by word products industry as well as gold ornament industry. Further the MGNREG scheme offers 100 days of assured employment for rural people. Hence they are not interested to do other jobs. Sometime shifting of labour also affects the production. For example brick manufacture depends on seasonal labour and when the labourers suddenly shift from one unit to the other, the production is affected. In the case of blocks bordering Kerala State, better employment opportunities in the estates lead to shortage of labour here.

5.14.4 Problem of Finance

Government has takes many steps to provide credit facilities for establishment and running of small scale industries. However, in reality, the cumbersome procedure, official apathy, problem of guarantee in the form of property and more time taken for processing and disbursal have been the major hindrances between the plan and its implementation. This is one area where procedures may be simplified so as to benefit the needy entrepreneurs. In fact, in the sample survey, almost all the entrepreneurs have expressed this difficulty and indicated that easier loan or credit facility world help expansion of small scale industries in the study area.

5.14.5 Other Problem

Yet another common problem faced by all groups of industries is related to transport of products to the market. It has already been explained that lorry, van and mini lorry are used as main mode of transport for both raw material and finished products. Sudden increase in the price of petroleum products puts heavy burden on the entrepreneur who cannot hike the price of the product. In addition to this common problem, sometimes deterioration of inter state relations also affects marketing. This is particularly true for products marketed outside the district to other States. In the study area Coir industry in Cumbum block is affected by the Mullaperiyar Dam issue since most of the product is marketed is the nearby Kerala State.