CHAPTER I
INTRODUCTION

Small, village and cottage industries have a vital significance in the overall economic development of our country, since a small unit can be established with relatively less capital investment and offer more employment opportunities to the skilled, semi-skilled and unskilled workers. Cottage industries however require a multi-dimensional package of assistance for ensuring accelerated economic growth and development. The Industrial Policy 1991 was a landmark policy both for the cottage industries and the economy as a whole. It laid special thrust on the promotion and strengthening of this sector. In order to protect the interests of this sector and facilitate its rapid growth and its development further, the government, in pursuance of its policies, initiated various support measures from time to time which include the policy of reservation, revision of investments ceilings, modernization, technological upgradation, marketing assistance, financial incentives etc. The emerging economic scenario in the changed liberalized and competitive economic environment necessitated structural and fundamental changes in the policy framework put into place for the development of this vital sector of the economy.

Accordingly, there was a shift in focus from ‘Protection to Promotion’. In the post-reform period, a number of steps including partial
de-reservation, change in investment limits, facilitating foreign participation, establishment of growth centers, export promotion, marketing assistance and incentives for quality improvements and standards. Small, village and cottage industries have come to be recognized as a vital and dynamic sector of the Indian economy in recent times. This sector is considered as a harbinger of economic progress and thus responsible for the transformation of a traditional economy into an industrial economy. Small scale industries are ‘small’ in terms of classification of industries, but play a dynamic role in the structure of the Indian economy. The development of small scale, village and cottage industries is an integral part of the overall economic, social and industrial development of any country.

The functional vibrancy of the sector is visible from its contribution of nearly 40 per cent to the exports of manufactured products and in providing employment to almost 167 lakhs of employees in over 30 lakhs of small scale industrial units, which is next only to that of agriculture in its importance. The sector, which produces a wide range of more than 7500 products, has grown phenomenally over the past five decades\(^1\) in 2007.

To quote Jawaharlal Nehru, “Sky is the limit for small industry”. There is enough evidence to show that, the potential of the small industry is not confined to only particular country or continent. There is a feeling every-

where, that in today’s dynamic world, it is the small scale industry that holds the key for the objective of growth with equity.

The importance of the small scale sector in developing countries has been most precisely described by Prof. P.C. Mahalanobis, as follows: “In view of the meagerness of capital resources there is no possibility for the underdeveloped industries to grow fast. Now, consider the household or cottage industries, they require very little capital, with any given investment, employment opportunities would be ten or fifteen or even twenty times greater in comparison with corresponding manufacturing industries”.

Accordingly, the Industrial Policy Resolutions of 1948 and 1956 have given the small sector a special and important status and role due to its vast potentiality in creating additional employment with a low level of capital investment. The Industrial Policy resolution of 1956 while emphasizing the role of SSI states, “they provide immediate large scale employment: they offer a method of ensuring a more equitable distribution of the national income and they facilitate an effective mobilization of the resources of capital and skill which might otherwise remain unutilized or even underutilized. Some of the problems that unplanned urbanization tends to create will be avoided by the establishment of small centers of industrial production all over the country”.

3
The small scale industry has some significant characteristics, which have been attracting increasing attention of the policy makers all over the world, and more particularly in the developing countries in recent decades. In general, SSI requires relatively less amount of capital therefore, SSI can be developed even in capital scarce economies. Small scale industries generate more employment per unit of capital. So small scale industries will help to create and generate more of employment opportunities and also Small scale industries can make use of the unskilled labour force. Small scale industries can be set up within a short period of time. Small scale industries rely less on infrastructural facilities and therefore can be located even in undeveloped regions. Growth of small scale industries promotes the distribution of economic power and facilitates technological experiments and innovations.

1.1 Definition of SSI

The use of the term ‘small’ as a designation in industry differentiates one set of industries from that of others. The definition of the small scale industry is an important aspect of the government’s industrial policy. It identifies the target groups of industries from all other industries. The operational definition is based on the investment criterion and according to this, the small scale industries are defined in terms of the value of fixed assets, excluding land and building, although the initial definition was also based on the number of workers. The cut off investment limit for defining a small scale industry was Rs.5 lakhs in the year 1960 and this limit has been periodically
changed and at present it is Rs.1 crore. The ancillary units and the tiny units also come under the purview of the small scale industry. As per the definition given by the MSME 2014, may changed by raising the raise the capital limits in plant and machinery to the following limits.

<table>
<thead>
<tr>
<th>Manufacturing</th>
<th>Present</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>Rs. 25 Lakh</td>
<td>Rs. 50 Lakh</td>
</tr>
<tr>
<td>Small</td>
<td>Rs. 5 crore</td>
<td>Rs. 10 crore</td>
</tr>
<tr>
<td>Medium</td>
<td>Rs. 10 crore</td>
<td>Rs. 30 crore</td>
</tr>
</tbody>
</table>

*Source:* The draft Micro Small and Medium Enterprise Development (Amendment) Bill, 2014

### 1.2 Growth of Small Scale Industries in India

The small scale industrial sector is the second largest sector, which uses human resources next to that of the agricultural sector in our country. This small sector acts as a nursery for the development of the entrepreneurial talents, which in its turn promotes the economic development of the country.

A major concentration of the SSI units has been in the State of Uttar Pradesh (12.51 per cent), followed by Tamil Nadu (11.34 per cent), Madhya Pradesh (9.71 per cent), Bihar (9.34 per cent), Maharashtra (7.83 per cent), Karnataka (7.3 per cent), Punjab (6.38 per cent), Gujarat (5.76 per cent) and Kerala (5.7 per cent). Tamil Nadu accounted for the largest share of employment in the SSI sector (20.05 per cent) in 2011-2012, followed by
Maharashtra (10.28 per cent), Uttar Pradesh (9.73 per cent), Karnataka (7.39 per cent), Delhi (7.38 per cent), Gujarat (6.46 per cent), Punjab (5.54 per cent), Andhra Pradesh (5.58 per cent) and Kerala (5.16 per cent). Maharashtra had accounted for the largest share of fixed investment in the SSI sector in the country with 33.31 per cent, followed by Tamil Nadu with 12.03 per cent, Gujarat with 8.69 per cent, Karnataka with 6.64 per cent, Uttar Pradesh with 5.47 per cent, Punjab with 5.32 per cent and Kerala with 3.87 per cent. The phenomenal growth of the small scale industries in India from 1992 – 1993 to 2011 – 2012 could be understood from a careful perusal of the figures furnished in the table 1.1.
<table>
<thead>
<tr>
<th>Year</th>
<th>No. of units (In lakhs)</th>
<th>Investments (Rs. in crores)</th>
<th>Production at current prices (Rs. crores)</th>
<th>Employment No. in lakhs</th>
<th>Export at current prices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Value (Rs in crores)</td>
</tr>
<tr>
<td>1992-93</td>
<td>17.12</td>
<td>15229</td>
<td>106400</td>
<td>79.00</td>
<td>5489</td>
</tr>
<tr>
<td>1993-94</td>
<td>18.23</td>
<td>18196</td>
<td>132320</td>
<td>84.20</td>
<td>7625</td>
</tr>
<tr>
<td>1994-95</td>
<td>67.87</td>
<td>19302</td>
<td>155340</td>
<td>90.00</td>
<td>9664</td>
</tr>
<tr>
<td>1995-96</td>
<td>70.63</td>
<td>20438</td>
<td>178699</td>
<td>96.0</td>
<td>13883</td>
</tr>
<tr>
<td>1996-97</td>
<td>7351</td>
<td>21816</td>
<td>209300</td>
<td>101.40</td>
<td>17784</td>
</tr>
<tr>
<td>1997-98</td>
<td>76.49</td>
<td>35376</td>
<td>241648</td>
<td>107.00</td>
<td>25307</td>
</tr>
<tr>
<td>1998-99</td>
<td>79.60</td>
<td>40799</td>
<td>298886</td>
<td>191.40</td>
<td>29068</td>
</tr>
<tr>
<td>1999-00</td>
<td>82.84</td>
<td>49620</td>
<td>122210</td>
<td>197.93</td>
<td>36470</td>
</tr>
<tr>
<td>2000-01</td>
<td>86.21</td>
<td>54698</td>
<td>148290</td>
<td>205.86</td>
<td>39248</td>
</tr>
<tr>
<td>2001-02</td>
<td>89.71</td>
<td>60549</td>
<td>168413</td>
<td>213.16</td>
<td>44442</td>
</tr>
<tr>
<td>2002-03</td>
<td>93.36</td>
<td>66106</td>
<td>189178</td>
<td>220.50</td>
<td>48979</td>
</tr>
<tr>
<td>2003-04</td>
<td>97.15</td>
<td>72633</td>
<td>212901</td>
<td>229.10</td>
<td>54200</td>
</tr>
<tr>
<td>2004-05</td>
<td>101.10</td>
<td>79703</td>
<td>234255</td>
<td>239.09</td>
<td>69797</td>
</tr>
<tr>
<td>2005-06</td>
<td>105.21</td>
<td>84329</td>
<td>161289</td>
<td>249.09</td>
<td>71244</td>
</tr>
<tr>
<td>2006-07</td>
<td>110.10</td>
<td>162317</td>
<td>311993</td>
<td>261.38</td>
<td>86013</td>
</tr>
<tr>
<td>2007-08</td>
<td>113.95</td>
<td>170219</td>
<td>364547</td>
<td>271.42</td>
<td>97644</td>
</tr>
<tr>
<td>2008-09</td>
<td>118.59</td>
<td>178699</td>
<td>429796</td>
<td>282.57</td>
<td>124417</td>
</tr>
<tr>
<td>2009-10</td>
<td>123.40</td>
<td>118113</td>
<td>497886</td>
<td>299.35</td>
<td>150242</td>
</tr>
<tr>
<td>2010-11</td>
<td>128.44</td>
<td>122324</td>
<td>585112</td>
<td>312.52</td>
<td>177600</td>
</tr>
<tr>
<td>2011-12</td>
<td>133.68</td>
<td>145071</td>
<td>695126</td>
<td>322.28</td>
<td>NA</td>
</tr>
</tbody>
</table>

Table 1.1 discloses the performance of the small scale industries in terms of the number of units, investments, as at the end of the year and the value of production, employment and exports at current prices during the years 1992 - 1993 to 2011 - 2012.

The number of small scale units has increased from 17.12 lakhs in 1992 – 1993 to 133.68 lakhs units in the year 2011 - 2012. There has been a steady growth in the investments and in production also during the same twenty-year period. The investment and value of production have increased from Rs. 15,229 crores and Rs.106400 crores in 1992 - 1993 to Rs.1,45,071 crores and Rs. 6,95,126 crores respectively in 2011 - 2012 at current price levels. There has been a steady increase compared to the immediately preceding years ranging between 17 to 27 per cent in investment and between 23 to 31 per cent in respect of increase in the value of production.

The level of employment is an important variable that significantly influences the economic development of a nation. In a country with more than 100 crores of people, it is feasible to get more employment mainly through small scale units. Employment opportunities provided by the SSI units are highly encouraging as the data reveal that employment has increased from 79.00 lakhs in the year 1992 - 1993 to the level of 322.28 lakhs in the year 2011 – 2012.
The small scale industry mainly caters to the needs of the local markets and mainly depends upon local raw materials and local skills. The small scale industries which have their market operations in areas outside the state or country, and which are already in the export field, are experiencing increased competition in the domestic market on account of the removal of the quantitative restrictions and due to the lowering of the tariff rates. In this scenario of competition, new export markets become difficult to capture, and the small industries are facing serious problems in respect of marketing their products.

The performance of small industries on the export front has also been significant. Export has increased from Rs.5489 crores in the year 1992 – 1993 to a remarkable level of Rs.177400 crores in 2010 – 2011. The share of the SSI sector’s contribution to the total value of export has increased from 26.5 percent to 34.5 percent during the same period. The contribution of the SSI sector in the total value of the export of the country has been steadily increasing and many of the important products of exports originate from the small scale sector.

1.3 Classification of Small Scale Industries

A common classification is between traditional small industries and modern small industries. Traditional small industries include Khadi and handloom, village industries, handicrafts, sericulture, coir, etc. Modern small –
scale industries produce wide range of goods from comparatively simple items to sophisticated products such as television sets, electronic control system, various engineering products, particularly as ancillaries to the large industries. The traditional small industries are highly labour-intensive, while the modern small-scale units make use of highly sophisticated machinery and equipment. For instance, during 1979-1980 traditional small scale industries accounted for only 13 per cent of the total output but their share in total employment was 56 per cent. In the same year, total output of traditional small scale industries came to be Rs.4420 crores and this output was produced with the employment of 133 lakh workers, the average output of labour in traditional small scale industries was roughly Rs.3323 crores.

One special characteristic of traditional village industries is that they cannot provide full time employment to workers, but it can provide only subsidiary or part-time employment to agricultural labourers and artisans. Among traditional village industries, handicrafts possess the highest labour productivity; besides, handicrafts make a significant contribution to earning foreign exchange for the country. On the other hand, traditional village and small industries are by and large carried on by labourers and artisans living below the poverty line, modern small industries can provide them with a good source of livelihood. Hence, if with an increase to employment, the number of persons living below the poverty line can very well be reduced, so that the necessary expansion of the modern small sector will have to be planned.
1.4 Role of SSI in Economic Development

The SSI sector plays an important role in the economic development of the country, which now accounts for 40 per cent of the gross turnover in the manufacturing sector. It comprises of 245.71 lakhs of small scale units and employs 146.56 lakhs people and produces, manufactured goods valued at Rs.28,000 crores. Therefore it is obvious that small scale industries growth and development contribute to the employment regeneration to rural poor. The following factors are largely responsible for,

i. These industries are quick yielding in nature. In other words their gestation Period is much less when compared to their large-scale counterparts.

ii. These industries are skill-light. There is no need for the use of sophisticated technology and anybody with some basic training and knowledge would be able to run these industries.

iii. The machinery needed for these industries can be manufactured indigenously. In a country like India, which has been facing an acute foreign exchange shortage, these industries are a real blessing in disguise.

iv. A major problem faced by India’s planners is the tendency of the large industries to get concentrated in some specific industrial areas. This has led to the concentrated economic power in these areas and has resulted in regional economic imbalances and regional inequalities between the rich and the poor. As the small scale industries can be widely spread and started anywhere in the country, they are useful for achieving balanced
regional development. Since they facilitate decentralization of industries, they can reduce the concentration of economic power.

v. Small scale industries are helpful in mobilizing capital. In an essentially agrarian economy, like ours people have a tendency to keep their money idle rather than invest them in large scale industries. Since SSIs are located very close to the areas where people reside, mobilization of rural savings and investment in small scale industries becomes relatively easier.

vi. These industries work with local labour and locally available raw materials. They, thus help in the proper utilization of the locally available resources.

vii. Faced with the problems of seasonal unemployment and low levels of wages, poverty stricken and semi-starvation conditions during seasons when there is no work available, the Indian economy is characterized by the migration of labour from the rural areas to the urban centers during non-agricultural seasons. A spread of the small scale industries in different areas will reduce the intensity of the problem of migration of labour.

viii. The small scale industries reduce the intensity of pollution and help in the promotion efforts of protecting the environment.
1.5 Small Scale Industries and Five - Year Plans

The plan outlays for the development of the small scale industries from the first five – year plan to the eleventh five - year plan are presented in the table 1.2.

<table>
<thead>
<tr>
<th>Plan and Years</th>
<th>Outlays</th>
<th>Outlays</th>
<th>Percentage of SSI investments to total investment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Village and SSI (Rs.in crores)</td>
<td>Percentage of Total</td>
<td>Modern SSI (Rs.in crores)</td>
</tr>
<tr>
<td>First Plan(1951-56)</td>
<td>42.00</td>
<td>2.10</td>
<td>20.00</td>
</tr>
<tr>
<td>Second Plan(1956-61)</td>
<td>187.00</td>
<td>4.00</td>
<td>56.00</td>
</tr>
<tr>
<td>Third Plan(1961-66)</td>
<td>240.80</td>
<td>2.80</td>
<td>113.06</td>
</tr>
<tr>
<td>Annual Plan(1966-69)</td>
<td>126.10</td>
<td>1.90</td>
<td>53.48</td>
</tr>
<tr>
<td>Fourth Plan(1969-74)</td>
<td>242.60</td>
<td>1.50</td>
<td>56.19</td>
</tr>
<tr>
<td>Fifth Plan(1974-79)</td>
<td>592.60</td>
<td>1.50</td>
<td>221.74</td>
</tr>
<tr>
<td>Annual Plan(1979-80)</td>
<td>955.70</td>
<td>2.10</td>
<td>104.81</td>
</tr>
<tr>
<td>Sixth plan(1980-85)</td>
<td>1829.90</td>
<td>1.70</td>
<td>616.10</td>
</tr>
<tr>
<td>Seventh Plan(1985-90)</td>
<td>2752.70</td>
<td>1.50</td>
<td>1120.51</td>
</tr>
<tr>
<td>Eighth Plan(1992-97)</td>
<td>6334.20</td>
<td>1.46</td>
<td>21.45.36</td>
</tr>
<tr>
<td>Ninth Plan(1997-2002)</td>
<td>12467.50</td>
<td>1.80</td>
<td>4258.23</td>
</tr>
<tr>
<td>Tenth Plan(2002-07)</td>
<td>23489.20</td>
<td>1.70</td>
<td>7823.56</td>
</tr>
<tr>
<td>Eleventh(2007-12)</td>
<td>45196.40</td>
<td>1.90</td>
<td>13489.75</td>
</tr>
</tbody>
</table>


The aim of the Five Year Plans is to achieve a balanced regional development. Since large scale industries are mainly concentrated in the cities,
the objectives of dispersion of industries and the consequent balanced development of all regions would become possible and practical, only through the development of the small scale units. To achieve this goal, the five year plans have allocated funds especially for the development of the small scale industries. The various industrial policy resolutions of the central government have resulted in placing an emphasis on the plan outlays for the small scale industries.

Table 1.2 reveals that, the plan outlay share of the small scale industries in the total outlay has been continuously declining with the exception of the annual plan for (1979-1980). It was mainly due to the industrial policy statement of the year 1977 of the Janatha Government, which gave greater importance to the development of the small-scale industries.

Since 1991, the government has been following the logic of liberalization of market forces and privatization. Since market forces play a dominant role in the liberalized regime, the plan outlay had been considerably reduced. It has declined to a mere 0.53 per cent in the ninth plan period. Therefore, the present policy of the government has affected the plan outlay provided for the small scale industries.

Targets and achievements of village and small scale industries during tenth and eleventh five year plans are presented in table 1.3.
Table 1.3
Targets and achievements of village and small scale industries under tenth and eleventh five year plans

<table>
<thead>
<tr>
<th>Sub-sector (Schemes)</th>
<th>Unit</th>
<th>Tenthplan Achievement</th>
<th>Eleventh plan Target</th>
<th>2011-12</th>
<th>Annual average growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Target *</td>
<td>2006-07 Anticipated</td>
<td>2 as % of 1</td>
<td></td>
</tr>
<tr>
<td>A. Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Small-scale Industries</td>
<td>Rs.Crore</td>
<td>738180</td>
<td>690522</td>
<td>93.5</td>
<td>140400</td>
</tr>
<tr>
<td>2. Coir fibre</td>
<td>000 tonnes</td>
<td>375</td>
<td>375</td>
<td>100.0</td>
<td>435</td>
</tr>
<tr>
<td>3. Handloom cloth</td>
<td>Mill Sq.m</td>
<td>12336</td>
<td>7579</td>
<td>61.4</td>
<td>10000</td>
</tr>
<tr>
<td>4. Powerloom cloth</td>
<td>Mill Sq.m</td>
<td>30489</td>
<td>25273</td>
<td>82.9</td>
<td>132821</td>
</tr>
<tr>
<td>5. Raw silk</td>
<td>Mill tonnes</td>
<td>20540</td>
<td>18395</td>
<td>94.4</td>
<td>26450</td>
</tr>
<tr>
<td>6. Handicrafts</td>
<td>Rs.Crore</td>
<td>52201</td>
<td>18677</td>
<td>35.8</td>
<td>47204</td>
</tr>
<tr>
<td>B. Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Small-scale Industries</td>
<td>Million persons</td>
<td>18.4</td>
<td>19.3</td>
<td>104.9</td>
<td>23.7</td>
</tr>
<tr>
<td>2. Powerloom</td>
<td>Million persons</td>
<td>8.0</td>
<td>4.2</td>
<td>52.5</td>
<td>4.5</td>
</tr>
<tr>
<td>3. Coir fibre</td>
<td>Million persons</td>
<td>0.6</td>
<td>0.54</td>
<td>83.3</td>
<td>0.65</td>
</tr>
<tr>
<td>4. Handloom</td>
<td>Million persons</td>
<td>17.3</td>
<td>12.4</td>
<td>71.7</td>
<td>12.0</td>
</tr>
<tr>
<td>5. Sericulture</td>
<td>Million persons</td>
<td>7.1</td>
<td>5.6</td>
<td>78.9</td>
<td>6.0</td>
</tr>
<tr>
<td>6. Handicrafts</td>
<td>Million persons</td>
<td>8.2</td>
<td>5.8</td>
<td>70.7</td>
<td>6.8</td>
</tr>
<tr>
<td>C. Exports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Small-scale Industries</td>
<td>Rs.Crore</td>
<td>62457</td>
<td>89665</td>
<td>143.6</td>
<td>126000</td>
</tr>
<tr>
<td>2. Coir Industries</td>
<td>Rs.Crore</td>
<td>78900</td>
<td>325</td>
<td>81.2</td>
<td>700</td>
</tr>
<tr>
<td>3. Handlooms</td>
<td>Rs.Crore</td>
<td>3175</td>
<td>2200</td>
<td>69.3</td>
<td>4500</td>
</tr>
<tr>
<td>4. Powerlooms</td>
<td>Rs.Crore</td>
<td>8050</td>
<td>11000</td>
<td>136.6</td>
<td>N.A</td>
</tr>
<tr>
<td>5. Silks</td>
<td>Rs.Crore</td>
<td>1525</td>
<td>2530</td>
<td>165.9</td>
<td>4050</td>
</tr>
<tr>
<td>6. Handicrafts</td>
<td>Rs.Crore</td>
<td>11950</td>
<td>10610</td>
<td>88.8</td>
<td>17000</td>
</tr>
</tbody>
</table>

Source: Compiled and Computed from Planning Commission, Tenth Five year plan (2011-2012), Vol. II

Table 1.3 shows the targets of production, employment and exports set for the ninth and tenth Plan. It may be noted that, the modern sector in the SSI, includes small scale industries and power looms. The traditional sector consists of hand looms, Khadi and Village Industries (KVI), coir industries and
handicrafts and also production of raw silk. From the data, it is obvious that the production of the small scale industries has registered an annual average growth rate of 12 per cent in the tenth plan period. Similar is the rate of growth in the power looms sector also. Even in the traditional sector, production is likely to grow at an annual average rate of about 11 to 12 per cent. This clearly discloses the vibrant nature of the SSI sector.

Regarding employment, the total employment in the SSI sector would increase from 57.5 million to 66.6 million, indicating an additional employment generation of the order of 9.1 million. Out of this, the modern sector’s contribution would be 3.6 million and that of the traditional sector would be 5.5 million. The overall rate of growth of employment would be of the order of 3.0 per cent per annum, which is higher than the rate of growth of employment in any other sector of the economy as visualized during the tenth plan period.

But the most encouraging aspect of the SSI sector is the contemplated increase in exports, which went up from Rs.52230 crores in 2006-2007 to Rs.104000 crores in 2011 – 2012, indicating an average annual growth rate of 14.7 per cent. The most important contributors to exports are the small - scale industries and the handicrafts. It may however be noted that, out of the total exports of the SSI sector expected by 2011-2012 of the order of Rs.1,04,000 crores, the share of modern sector together with power looms would be of the
order of Rs.86.950 crores that is, 83.6 per cent. This underlines the need for strengthening the modern SSI sector with a view to increasing total exports. However, the traditional sector would continue to be a source of supplementary employment for the poor in the rural as well as in the urban areas. From the above facts it is obvious that, the SSIs constitute a dominant and very dynamic sector of the Indian economy and deserve all help, protection and encouragement from the government.

1.6 Coir Industry

The word ‘coir’ is derived from the Malayalam word ‘kayar’ which means cord. The coir industry in India has a long history. The ancient Greek Chronicles mention about Megasthanies the Ambassadr of Seluces Nicater, who told the Indian king Chandra Guptha about the coconut palms he found in Srilanka in 300 BC. Arab writers in 11th A.D. speak about coir and its use as ship cables and rigging. During the 13th century, there was evidence of coir yarns being used in building ships in the Persian Gulf. Marcopolo commented on the uses to which coir mats was put in ship building in Persian Gulf. From the ancient time coir fibre and yarn was known as the “shores of India”.

Coir industry is one of the traditional agro - based cottage industry concentrated in the coconut producing states in the country. Coir, the golden clean fibre extracted from the fibrous husk covering the inner shell of the coconut, is the raw material for coir industry. The industry is important for the
country, as it provides direct employment to more than half a million people and indirect sustenance to an equal or more number. Moreover, it is mostly export-oriented and fetches foreign exchange worth Rs. 5000 crores annually. It continues to be a major cottage industry in the states of Kerala and Tamil Nadu. For historical reasons coir industry has taken deep roots in these States. Natural facilities like lakes and lagoons are available in plenty all along the coast for retting coconut husk. Traditional expertise that abounds in the countryside helped to flourish this industry in the States. Coir industry is labour-intensive and provides direct employment to seven lakhs people of the coastal belt. An equal number or more get indirect employment in this industry. The employees in this industry are largely drawn from the backward classes and weaker sections of the society.

1.7 Coir Industry’s Tradition

Coir extracted from coconut is classified as the industrial hard fibre. It is put to a variety of uses, both industrial and agricultural, like for ashing ropes, cordage for safe haulage and anchorage, manufacture of mats, mattings, rugs, carpets geo-textiles etc. Kerala with her favourable ecological setting, abundant supply of coconut, and cheap labour, has favorable environment for the growth and development of the world’s largest coir industry. The industry has evolved as the second most important source of labour absorption in the state. Coir industry begins with dehusking, which is largely concentrated in Kerala as this state produces 6672 million nuts of coconuts [45%] out of a total
all – India production of 14924.8 million nuts. In addition to this, the facilities like lakes and lagoons for retting the husk and the availability of traditional expertise of the people in coir work also added to the growth of coir industry in Kerala.

History tells that ancient Greece, Egypt and Rome used coir ropes made in Kerala for the construction of houses, citadels, ship mast and mansions. It was with the arrival of the Portuguese in Kerala that the coir trade spread to the European countries. The British interest on Kerala’s coir products made them conduct an exhibition on coir products in London in 1851. The coir industry of the country comprised of fibre making, yarn making, mats and matting’s, rubber backed mats, synthetic backed mats rubberized beds and various other products.

1.8 Various Stages of Coir Production

From the organizational point of view, the coir industry could broadly be divided into four sector. The first sector is connected with retting of husks and production of fibre. The second is the hand spinning sector which comprises of hand spinning in households. Spinning of coir yarn forms the third sector. The fourth sector is concerned with the manufacture of coir mats and matting’s. Majority of workers employed in the fiber extraction and spinning sector are women. Child labour also appears in these sectors. Spinning is a cottage industry spread over a wide area along the backwaters in the coastal
areas. But manufacturing is an organized industry concentrated in certain localities. The location of these sectors of industry seems purely in accordance with the Weberian theory. The basic raw material of coir industry is the coconut husk which has low value. There are various processes involved from collection of raw husk to manufacturing of yarn. The fibrous raw husk is extracted from nuts through the process called ‘dehusking’, a manual work. The coir fibre is five to ten inches in length. There are two major types of coir fibres. They are white and brown fibre. White fibre is extracted from retted husk. Retting may be natural or chemical. In natural retting the husks are soaked in, preferably saline water for a certain period (average 8 to 10 months) until the fibre becomes loose and soft. Brown fibre is extracted from ripe dry husk or partially retted husk by the mechanical defibering. These husks are fed into revolving drums provided with upright spikes of high carbon steel which tear out the outer skin and some of the pith, leaving the long coarse fibres.

1.9 Importance of the Study

“Small is beautiful”, is a very true and appropriate statement in the context of the small-scale cottage industrial units. Coir industry is an employment-oriented industry. It plays an important role in poverty eradication through giving employment opportunities to the semi-skilled and the unskilled people in the rural areas. It provides employment to a large number of rural people and earns foreign exchange to the tune of nearly 500 crores rupees per annum. Similarly, decentralized industrial development and balanced regional
industrial growth is possible by starting a number of coir industries in small scale sector. Efficient and optimum use of the local resources becomes possible to develop coir industry. Though it is rather a labour consuming unorganized industry, the productivity is often so low and the average earning of the workers is insufficient to maintain even a subsistence standard of living. Economic equality, industrial peace and the like could be achieved through the development of coir industry.

1.10 Scope of the Study

The present study will throw light on pattern and level of production made by the coir industry and its economic viability which would enable other activities. The results obtained from the study would be useful in making suggestions to the employers to overcome the constraints in the production and marketing process of coir industry. The problems identified in the study would help the policy makers to develop right policy package to overcome the constraints faced by them. Therefore, the study has been undertaken to know various aspects of coir industry in Kanyakumari district.

1.11 Statement of the Problem

Coir work entirely depends on the coconut production. The abundance of coconut husk and the availability of natural retting facilities in backwaters and water logged areas are the main reasons for the concentration of the coir industrial units. It realized the coir workers are illiterate though they are skilled
in coir making. They are socially and economically backward. Due to their ignorance and illiteracy, they are most often exploited by intermediaries and owners of coir units. Still recently, coir making is generally considered as a low graded profession in India. The coir workers in India are scattered, but live in cluster in small villages. Most of the villages generally do not have the minimum level of sanitary requirement. The coir workers generally work for more than ten hours per day. The absence of trade union is the main cause of exploitation of workers by intermediaries and owners. They are exploited by way of rigorous regulations, poor wages, extended working hours, denial of bonus and leave with pay. Therefore, the present study is undertaken in Kanyakumari district, to identify the socio-economic conditions of coir workers, existing wage system and working and living conditions of coir workers and to make, if possible, some suggestions to improve the economic welfare of the coir workers. Further a few studies have already been made on small scale industries both at the micro and the macro levels to evaluate the performance of the small scale industries in Tamil Nadu. But these studies have not made any systematic attempt to analyze coir industry at a district level. As a provider of employment opportunities, the coir industry in Kanyakumari district comes only of agriculture. At present, there are 1055 coir industrial units in Kanyakumari district providing employment opportunities to as many as 9632 persons, directly and indirectly. In this context, an attempt has been
made to study as how far the units of the coir industry have contributed to the promotion of the economic progress of the district.

1.12 Objectives of the Study

The present study is set to analyse the following objectives,

i. To study the overview of coir industry.

ii. To analyse the socio-economic background of the sample coir unit owners and their growth performance in the study area.

iii. To examine the production practices and marketing strategies of coir industry in Kanyakumari district.

iv. To discuss the problems encountered by the sample respondents and units in the process of production and marketing of coir and coir products.

v. To analyse the level of attitude and the factors influencing the level of attitude of the workers towards the performance of coir industry.

vi. To offer suitable suggestions and recommendations to improve the coir industry.

1.13 Hypothesis

The following hypotheses are framed for the present study

H<sub>1</sub> : Sex is independent from the level of attitude of the workers.

H<sub>2</sub> : Age is independent from the level of attitude of the workers.

H<sub>3</sub> : The level of attitude is independent of the marital status of the workers.

H<sub>4</sub> : There exists no relationship between educational qualification and level of attitude of the workers.
H₅ : There exists no relationship between the family size and the level of attitude of the workers.

H₆ : There exists no relationship between the nature of the family and level of attitude of the workers.

H₇ : There exists no relationship between previous occupation and level of attitude of the workers.

H₈ : The level of attitude of the coir workers is independent of the income.

1.14 Methodology

In this present study, the researcher has applied descriptive research design to estimate the growth and performance of coir industry and to assess the workers attitude towards the coir industrial units.

1.15 Sampling technique

A stratified random sample of the coir industrial units was chosen from the ‘universe’. The ‘universe’ consisted of all the working coir industrial units registered. The units of the ‘universe’ were divided into three categories on the basis of location of the industry, namely, rural, semi-urban, and urban industries. A sample of 150 units was selected out of 1055 functioning coir industrial units (both registered and non-registered) on the basis of proportionate stratified random sampling method. As far as coir workers concerned a sample of 600 workers were selected from 150 units (150 x 4) on the basis of simple random sampling method.
1.16 Location-wise Coverage of the Sample

The coir industry units are classified into three categories according to the location which are represented in the table 1.4.

Table 1.4
Location-wise coverage of the sample units

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Location of the Industries</th>
<th>Number of Units</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Universe</td>
<td>Sample</td>
</tr>
<tr>
<td>1</td>
<td>Rural</td>
<td>528</td>
<td>74</td>
</tr>
<tr>
<td>2</td>
<td>Semi-Urban</td>
<td>256</td>
<td>36</td>
</tr>
<tr>
<td>3</td>
<td>Urban</td>
<td>271</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1055</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: Unpublished Records of Coir Industries Association, Nagercoil, 2012-2013

1.17 Sources of Data Collection

The present study is based both on primary and secondary data.

The primary data were collected from both the selected coir industrial units and coir workers working in these industries through the personal interview method by using a pre-tested and well-designed interview schedule. Before preparing the interview schedule, the researcher had conducted a pilot survey of the study area, and had held preliminary discussions with the officials of coir industries association, the office bearers of the small and tiny industries development association, Nagercoil and few entrepreneurs of coir units registered with DIC, Nagercoil. After a few modifications based on the basis of the experience gained by conducting the pilot survey, a revised and final
interview schedule was administered to the selected units for the collection of
primary data.

The secondary data was obtained from the published and unpublished
reports, handbooks, action plans of the District Industries Centre, Nagercoil
and Assistant Director of Statistics, Nagercoil. In addition to the above sources,
various journals, books and the Reports of Director of Economics and
Statistics, Ministry of small-scale industries and Commerce, Delhi was also
used.

1.18 Period of Study

The Primary data was collected from the sample selected units and coir
workers during the period of eight months ranging between 1st October 2012
and 30th May 2013.

1.19 Tools of analysis

In order to examine the trend and the growth rates of the number of coir
units registered, investments made, employment generated and the total value
of production over the period under study, the following trend equations and
compound growth rate formulae had been used.

\[ Y = a + bt \]
\[ \log Y = a + bt \]
\[ \text{Compound growth rate} = [(\text{anti log } b-1) \times 100] \]
Where

\[ Y = \text{Actual Value of the Variable} \]
\[ t = \text{Time Variable} \]

‘a’ and ‘b’ are the parameters to be estimated

In order to study the overall growth and the levels of growth of the coir industry, ten components were identified to measure the growth rate by adopting the scoring technique. The total scores for the construction of the growth scale were taken as 100. The ten components were allocated 10 scores each. The ten scores were distributed among the 10 components on the basis of the growth percentage of each of the component. The growth percentage had been calculated on the basis of the ten years data for the period 2002-2003 to 2012-13 by using the following formula.

\[
\text{Growth Percentage} = \frac{\text{Current Year Value} - \text{Base Year Value}}{\text{Base Year value}} \times 100
\]

In order to classify the levels of growth into ‘High’ ‘Medium’ and ‘Low’ levels, the arithmetic mean (X) of the total score and the standard deviation (S.D) obtained had been used and classified as

\[ X + SD \geq \text{were classified as High level growth units} \]
\[ X + SD \leq \text{were classified as Low level growth units} \]

Between X + SD and X-SD were classified as medium level growth units.
In order to study the extent of the variations in growth; the co-efficient of variation had been used.

1.19.1 Extent of Variation

The extent of variations in the growth has been calculated with the help of the following formula.

\[
\text{Co-efficient of Variations (\%) = \frac{\text{Standard deviation (SD) of Growth Scores}}{\text{Arithmetic Mean (X)}} \times 100}
\]

1.19.2 Multiple Regression Model

In order to identify the factors influencing the growth of the coir industrial units, a multiple regression of the following model was estimated.

\[
\log y = \beta_1 \log X_1 + \beta_2 \log X_2 + \ldots + \beta_7 \log X_7 + U
\]

Where

\[
\begin{align*}
    y & = \text{Total Growth Scale Value for Ten Components (in Nos.)} \\
    X_1 & = \text{Age of the Units Years} \\
    X_2 & = \text{Capacity Utilization in Percentage} \\
    X_3 & = \text{Fixed Investment, Rs. in lakhs} \\
    X_4 & = \text{Working Capital, Rs. in lakhs} \\
    X_5 & = \text{Borrowed Capital, Rs. in lakhs} \\
    X_6 & = \text{Value of Production, Rs. in lakhs} \\
    X_7 & = \text{Sales Turn over, Rs. in lakhs} \\
    U & = \text{Disturbance Term}
\end{align*}
\]
\( \beta_0, \beta_1, \ldots, \beta_7 \) are the parameters to be estimated.

The above model was estimated by the method of the least squares.

### 1.19.3 Anova

One way analysis of variance (Anova) has been administered to analyse the significant difference among the three groups of units regarding the importance given to the product, place, price and promotional strategies variables.

In order to examine the relationship between the level of attitude and the profile variables of the workers, the Chi-square test has been used. It is calculated by adopting the following formula.

\[
\text{Chi-square} = \sum \frac{(O - E)^2}{E}
\]

With \((r-1)(c-1)\) degrees of freedom

Where

- \(O\) = Observed Frequency
- \(E\) = Expected Frequency
- \(c\) = Number of columns in a contingency table
- \(r\) = Number of rows in a contingency table

\[
E = \frac{\text{Row Total} \times \text{Column Total}}{\text{Grand Total}}
\]
The calculation of the F-distribution measures the ratio of variance between groups to the various within the groups. The variance between the sample means is the numerator and the variance with the sample means is the denominator. This denominator is computed by combining the variance within the K samples into a single measure.

\[ F = \frac{\text{Between Column Variance}}{\text{Within Column Variance}} \]

Symbolically,

\[ F = \frac{S_1^2}{S_2^2} \]

1.19.4 Analytical Framework for Factor Analysis

Mathematically, factor analysis is somewhat similar to multiple regression analysis. Each variable is expressed as a linear combination of underlying factors. The amount of variance, a variable shares with all other variables included in the analysis, is referred to as communality. The co-variation among the variables is described in terms of a small number of common factors plus a unique factor for each variable. These factors are not observed.

If the variables are standardized, the factor model may be represented as,

\[ X_i = A_{i1}F_1 + A_{i2}F_2 + A_{i3}F_3 + \ldots + A_{im}F_m + V_iU_i \]
Where,

\[ X_i = i^{th} \text{ standardized variable} \]

\[ A_{i1} = \text{Standardised multiple regression coefficient of variable on common factor J} \]

\[ F = \text{Common factor} \]

\[ V_i = \text{Standardised regression confident of variable i on unique factor i} \]

\[ U_i = \text{The unique factor of variable i} \]

\[ m = \text{Number of common factors} \]

The unique factors are uncorrelated with each other and with the common factors. The common factors themselves can be expressed as linear combinations of the observed variables.

\[ F_i = W_{i1}X_i + W_{i2}X_2 + W_{i3}X_3 + \ldots \ldots \ldots W_{ik}X_k \]

Where,

\[ F_i = \text{Estimate of i^{th} factor} \]

\[ W_i = \text{Weight or factor score coefficient} \]

\[ K = \text{Number of variables}. \]

It is possible to select weights or factor score coefficients so that the first factor explains the largest portion of the total variance. Then a second set of weights can be selected, so that it is the second factor which accounts for most of the residual variance subject to being uncorrelated with the first factor. This same principle could be applied to selecting additional weights for the additional factors. Thus, the factors can be estimated so that their factors
scores, unlike the value of the original variables, are not correlated. Furthermore, the first factor accounts for the highest variance in the data, the second factor the second highest, and so on.

1.19.5 Kendall’s Co-efficient of Concordance

Kendall’s Co-efficient of Concordance was used to assess the problem faced by the coir workers of the units separately. The formula used is,

\[ W = \frac{s}{(1/12) k^2 (N^3 - N)} \]

Where 
- \( s \) = sum of square of observed deviation from the mean \( R_j \)
- \( s = \sum (R_j - \overline{R}_j/N)^2 \)
- \( k \) = no. of sets of ranks (types of units)
- \( N \) = no. of entities ranked (problems)
- \( R_j \) = sum of ranks for each item.

In the case of tied observations Where

\[ T = \frac{\sum (t^3 - t)}{1/2} \]

\[ W = \frac{s}{(1/12) k^2 (N^3 - N) - K \sum T} \]

The significance is tested by

\[ \text{Chi-square} = \frac{s}{(1/12) kN (N + 1)} = K (N - 1) W \]

\[ \text{Chi-square} \sim k (n - 1) W \text{ with degrees of freedom} = N - 1 \]
1.20 Limitations of the study

i. It is a micro level study that covers only one district in Tamil Nadu, Kanyakumari which is an industrially growing district.

ii. Due to finance and time constraints, the present study has been confined to coir workers; it does not take into account all the aspects of the other cottage industries.

iii. The data given by the respondents regarding the raw material utilization, employment generation and problems faced by the workers in coir units may not be fully accurate due to personal and business bias which might have crept in.

1.21 Chapter Scheme

The study is presented in eight chapters.

First chapter deals with an introduction about the topic, scope of the study, statement of the problem, objectives of the study, methodology of the study, limitations and the chapter scheme.

Brief reviews of related studies, the profile of the study area, theoretical framework and concepts used in the study are given in the second chapter.

The overview of coir industry is presented in the third chapter.

The socio - economic background of coir owners are given in the fourth chapter.
The production practices and marketing strategies of coir industry are given in the fifth chapter.

The socio-economic background of coir workers in the study area are given in the sixth chapter.

The problems faced by coir industry owners and workers are presented in the seventh chapter.

The final chapter discusses findings, suggestions and conclusion of the study.