CHAPTER I
INTRODUCTION AND DESIGN OF THE STUDY

1.1 INTRODUCTION

Small Scale Industries are viewed increasingly as important vehicle for meeting the growth and equity objectives of developing economics. The employment generating potential of agro-based small scale industry has been the subject of discussion for many years. Since small scale industry employs relatively labour intensive techniques of production (compared to larger, more capital intensive firm) seen as appropriate units in production, especially for labour surplus economy.

However, the relative labour intensity of small firms is not a sufficient condition for the generation of employment. The viability of agro-based SSI in the long run is also of critical importance. In this context, viability refers to the capacity of a firm to survive in the market. The viability of SSI depends upon large part on the nature of their linkages with the market. Agro-based SSI can well be insulated from competition with other firms. The viability of industrialization is best adjudged in the light of the variables such as increasing

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income levels, removing unemployment, promoting external trade, developing key and strategy industries and of vast infrastructure required to carry on the process of industrialization.

1.2 GROWTH AND DEVELOPMENT OF SSI

SSI sector is a major contributor to the industrial economy of India. The SSI sector accounts for 40 per cent of the industrial production, more than 30 per cent of the total exports and employs more than 192 lakhs in about 34 lakhs small scale industrial units across the country. Despite the global and domestic recession, the small scale industries registered a higher growth rate than the overall industrial sector.

It is evident from Table 1.1 that the growth of SSI units has outpaced the growth of total industrial sector.
<table>
<thead>
<tr>
<th>Year</th>
<th>SSI Sector</th>
<th>Total Industrial Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-2000</td>
<td>10.1</td>
<td>9.4</td>
</tr>
<tr>
<td>2000-2001</td>
<td>11.4</td>
<td>12.1</td>
</tr>
<tr>
<td>2001-2002</td>
<td>11.32</td>
<td>5.6</td>
</tr>
<tr>
<td>2002-2003</td>
<td>8.43</td>
<td>6.7</td>
</tr>
<tr>
<td>2003-2004</td>
<td>7.70</td>
<td>4.1</td>
</tr>
<tr>
<td>2004-2005</td>
<td>8.16</td>
<td>6.5</td>
</tr>
<tr>
<td>2005-2006</td>
<td>8.23</td>
<td>5.0</td>
</tr>
<tr>
<td>2006-2007</td>
<td>6.06</td>
<td>2.7</td>
</tr>
<tr>
<td>2007-2008</td>
<td>7.7</td>
<td>5.7</td>
</tr>
<tr>
<td>2008-2009</td>
<td>8.6</td>
<td>6.9</td>
</tr>
<tr>
<td>2009-2010</td>
<td>9.96</td>
<td>8.4</td>
</tr>
<tr>
<td>2010-2011</td>
<td>12.32</td>
<td>8.20</td>
</tr>
<tr>
<td>2011-2012</td>
<td>12.60</td>
<td>10.8</td>
</tr>
</tbody>
</table>

Sources: Ministry of SSI, Department of Statistics, New Delhi.
1.3 SIGNIFICANCE OF SMALL-SCALE INDUSTRIES

The present study aims at analyzing the significance of SSI to the growth of Indian economy. It can be measured in terms of SSI unit’s production, employment, Export and so forth. It is presented in the following passages.

1.3.1 Production

The Agro based small scale industries sector plays a vital role in the growth of the country. It contributes 40 per cent of the gross manufacture to the Indian economy. It has been estimated that lakh rupees of investment in fixed assets in the SSI sector produces 4.621 lakhs worth of goods or services with an approximate value addition of ten percentage points. This has grown rapidly over the years. The growth rates of production of SSI units during the various plan periods have been very impressive as shown in Table 1.2.
### TABLE 1.2

**GROWTH PATTERNS OF PRODUCTION IN SSI – PRODUCTION (Rs.crore)**

<table>
<thead>
<tr>
<th>Years</th>
<th>At 1998-1999 prices</th>
<th>Growth Rate</th>
<th>At Current Prices</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2001</td>
<td>1,21,175</td>
<td>11.40</td>
<td>1,47,712</td>
<td>20.92</td>
</tr>
<tr>
<td>2001-2002</td>
<td>1,34,892</td>
<td>11.32</td>
<td>1,67,805</td>
<td>13.60</td>
</tr>
<tr>
<td>2002-2003</td>
<td>1,46,263</td>
<td>8.43</td>
<td>1,87,217</td>
<td>11.57</td>
</tr>
<tr>
<td>2003-2004</td>
<td>1,57,525</td>
<td>7.70</td>
<td>2,10,454</td>
<td>12.41</td>
</tr>
<tr>
<td>2004-2005</td>
<td>1,70,379</td>
<td>8.16</td>
<td>2,33,760</td>
<td>11.07</td>
</tr>
<tr>
<td>2005-2006</td>
<td>1,84,401</td>
<td>8.23</td>
<td>2,61,297</td>
<td>11.78</td>
</tr>
<tr>
<td>2006-2007</td>
<td>1,95,613</td>
<td>6.08</td>
<td>2,82,270</td>
<td>8.03</td>
</tr>
<tr>
<td>2007-2008</td>
<td>2,10,636</td>
<td>7.68</td>
<td>3,11,993</td>
<td>10.53</td>
</tr>
<tr>
<td>2008-2009</td>
<td>2,28,730</td>
<td>8.59</td>
<td>3,57,733</td>
<td>14.66</td>
</tr>
<tr>
<td>2009-2010</td>
<td>2,51,511</td>
<td>9.96</td>
<td>4,18,263</td>
<td>16.92</td>
</tr>
<tr>
<td>2010-2011</td>
<td>2,75,581</td>
<td>9.57</td>
<td>4,71,244</td>
<td>12.67</td>
</tr>
<tr>
<td>2011-2012</td>
<td>4,71,663</td>
<td>12.60</td>
<td>5,85,112</td>
<td>17.53</td>
</tr>
</tbody>
</table>


### 1.3.2 Employment Potential

SMEs are usually the prime drivers of jobs. SMEs tend to be labour-intensive percent and are able to generate more jobs for every unit of
investment, compared to their bigger counterparts. Small enterprises are an important source of employment in many developing nations, often a sizable share of the labor force. As small firms are more labour intensive, it is suggested that they should be encouraged as a way of generating employment. It has been estimated that a lakh rupees of investment in fixed assets in the SSI generates employment for four persons.

**TABLE 1.3**

**GROWTH PATTERN OF EMPLOYEES IN SSIs**

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment (lakh Nos.)</th>
<th>Production per Employee (Rs. Thousand) at 2008 prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-2000</td>
<td>191.4</td>
<td>57</td>
</tr>
<tr>
<td>2000-2001</td>
<td>197.9</td>
<td>61</td>
</tr>
<tr>
<td>2001-2002</td>
<td>205.9</td>
<td>66</td>
</tr>
<tr>
<td>2002-2003</td>
<td>213.2</td>
<td>69</td>
</tr>
<tr>
<td>2003-2004</td>
<td>220.6</td>
<td>71</td>
</tr>
<tr>
<td>2004-2005</td>
<td>229.1</td>
<td>74</td>
</tr>
<tr>
<td>2005-2006</td>
<td>238.7</td>
<td>77</td>
</tr>
<tr>
<td>2006-2007</td>
<td>249.3</td>
<td>78</td>
</tr>
<tr>
<td>2007-2008</td>
<td>260.2</td>
<td>81</td>
</tr>
<tr>
<td>2008-2009</td>
<td>271.4</td>
<td>84</td>
</tr>
<tr>
<td>2009-2010</td>
<td>282.6</td>
<td>89</td>
</tr>
<tr>
<td>2010-2011</td>
<td>294.9</td>
<td>93</td>
</tr>
<tr>
<td>2011-2012</td>
<td>312.52</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India Annual Reports, Mumbai.
1.3.3 Export Performance

SSI sector in India has been exhibiting a striking export performance. Barring few years, exports have grown double digit in the last 10 years. Major sectors contributing to SSI exports include readymade garments (27 percent), engineering goods (14.5 percent), chemicals & pharmaceuticals, electronics & computers, and processed foods (11 percent). In terms of export orientation, sports goods have 100 percent exports from SSI sector; followed by readymade garments (90 percent) leather (70 percent), marine products (47 percent) and chemicals & pharmaceuticals (44 percent). Over the last 10 years, the share of SSI exports has increased in most of the sectors. SMEs skill in innovation, improvisation and reverse engineering are legendary. By being able to meet niche requirements, they are also able to capture export markets. The export performance of SSI sector is captured in Table 1.4.
TABLE 1.4

PERCENTAGE SHARE OF AGRO-BASED SSI IN TOTAL EXPORTS (2010-2011)

<table>
<thead>
<tr>
<th>Product</th>
<th>% of Agro based Small Scale in Total Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports goods</td>
<td>100</td>
</tr>
<tr>
<td>Readymade garments</td>
<td>90</td>
</tr>
<tr>
<td>Woolen garments, knitwear</td>
<td>35</td>
</tr>
<tr>
<td>Processed foods</td>
<td>65</td>
</tr>
<tr>
<td>Marine products</td>
<td>29</td>
</tr>
<tr>
<td>Leather products</td>
<td>80</td>
</tr>
<tr>
<td>Plastic products</td>
<td>45</td>
</tr>
<tr>
<td>Cosmetic, basic chemicals &amp; pharmaceutical products</td>
<td>55</td>
</tr>
<tr>
<td>Engineering goods</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India Annual Reports.

The direct involvement of owners, coupled with flat hierarchical structures and less number of people ensure that there is greater operational flexibility. Decision making such as changes in price mix or products mix in response to market conditions is faster.
1.3.4 Adoption to technology

Small enterprises excel by their labour intensity the capability to work with local resources. In the past, this has often led to small sector products being blamed for poor or substandard quality. This has a cascading impact on competitiveness. As small enterprises realize the need to link up with large ones, they are having a relook at technology options which would end competitiveness. While sourcing technology, small business need to concentrate on the following essential issues (i) information about technology, (ii) Actual procurement of technology and (iii) finance for technology upgradation.

Traditionally, SMEs have shown a propensity for adapting and internalizing the technology being used by them. It provides jobs locally and hence utilise manpower available locally. Since it is available for them to transport materials over long distances, they often improvise with materials, which are available locally. Small and medium enterprises (SMEs) have lower overheads. This translates to lower cost of production, at least upto limited volumes.
1.3.5 Reduction of Regional Imbalance

Unlike large industries where divisibility of operations is more difficult, SMEs, enjoy the flexibility of location. Thus, in any country, SMEs can be found to spread virtually right across, even though some specific location emerge as ‘clusters’ for units of a similar kind. Nevertheless, the spread of SMEs is a fact which enhances their attraction from a national or regional policy. Being the decentralized sector, the SSI units cause equitable distribution of wealth and skill.

1.4 AGRO-BASED INDUSTRY

Agro-based food industry is of enormous significance for India’s development because of the vital linkages and synergies that it promotes between the two pillars of the economy namely industry and agriculture. Agro processing industry involves the commercial movement from field to fork.

1.4.1 Concept of Agro-Based Small Scale Industries

In the literature on industrial economies the definition of agro based small scale industry varies. The problem of defining a small scale unit is not only present in India. Such a problem has arisen in the past in foreign countries
as well. It may be functionally defined as a segment of manufacturing industry carried out in relatively small establishment. The Director General of Supplies and Disposal held that the agro based small scale industries are those which did not ordinarily employ more than 100 persons without power or 50 persons, with power and working capital of less than 5 lakhs. Here the emphasis is on the size of employment. In foreign countries also the definition of a small scale unit is influenced by the volume of employment. In the course of time Agro based SSI were being defined on the basis of investment in machinery and equipment, instead of the criterion of the size of employment.

1.4.2 Meaning of Agro based Industry

The agro industry is broadly categoried in the following types:

i) Village industries owned and run by rural households with very little capital investment and a high level of manual labour; and products that include pickles, papad, etc.

ii) Small scale industry is characterized by medium investments and semi-automation; products include edible oil, rice mills, etc.

iii) Large scale industry involving large investment and a high level of automation; products include sugar, jute, cotton mills etc.
The development of agro-based industries commenced during pre-independence days. Cotton mills, sugar mills, jute mills were fostered in the corporate sector.

During the post independence days, with a view to rendering more employment and using local resources, small scale and village industries were favoured. The increasing environmental concerns will give further stimulus to agro based industries. Jute and cotton bags, which have begun to be replaced by plastic bags.

The agro industry helps in processing agricultural products such as field crops, tree crops, livestock and fisheries and converting them to edible and other usable forms. The private sector is yet to actualize the full potential of the agro industry. The global market is mammoth for sugar, coffee, tea and processed foods such as sauce, jelly, honey etc., the market for processed meat, spices and a fruit is equally gigantic. Only with mass production coupled with modern technology and intensive marketing can the domestic market as well as the export market be exploited to the fullest extent.

It is therefore imperative that food manufacturers understand changing consumer preferences, technology, with modernization, innovation and
incorporation of latest trends and technology in the entire food chain as well as agro production, the total production capacity of agro products in India and the world is likely to double by the next decade. India is the second largest producer of food in the world.

Agro based industry includes processing, packing and marketing of cereals, pulses, spices and masalas, noodles making. Mini rice miling units, Indian sweet making, beekeeping, fruit and vegetable processing, edible oil industry, processing of maize and ragi, cashew processing industry diary units, cattle feed, tea, coffee etc.

1.4.3 Importance of Agro-based Industries

The importance of agro-based industries in India is stressed on the basis of four arguments –employment, decentralization, equality and latent resources. Agro industries are labour intensive and are capable of generating more employment per unit of capital employed. These industries have been instrumental in attaining self-sufficiency by narrowing the gulf between demand and supply. These industries have helped in increasing the national income and also in its equal distribution. These require less investment. It has fulfilled the wants of the lower class people.
Another noteworthy importance of this sector is that it takes the benefit of industrialization to the interior areas and this helps in arresting the lopsided development of different parts of the country. The agro based food industries have tremendous export potential. These industries produce eatables of common man.

The perishable nature of food grains needs condensing, canning, preserving, dehydrating, drying, smoking, pickling and similar other processes to make them available throughout the year. To name a few, huilling of paddy into rice, grinding of wheat and other grains to atta, pulse into dals sugarcane after conversion into khandasari and sugar, oilseeds into oil, bottling of fruit juices, preparation of pickles, achar, chutneys, juices, jams and jellies, dehydration of pea, pineapple processing, citrus oil etc.

1.4.4 Position of Agro-Based Small Scale Industries

The Micro Small and Medium Enterprises (MSME) sector contributes significantly to the manufacturing output, employment and exports of the country. The small scale industries sector accounts for about 45 per cent of the manufacturing output and 40 per cent of the total export of the country. The sector is estimated to employ about 42 million persons in 13 million units
throughout the country. There are over 6000 products ranging (from traditional to high-tech items), which are being manufacturing by the MSME and that provide the maximum opportunity for both self employment and jobs after agriculture.

**TABLE 1.5**

**AGRO-BASED SMALL SCALE INDUSTRIES PERFORMANCE, UNIT, INVESTMENT, PRODUCTION, EMPLOYMENT AND EXPORT**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Total SSI (lakh. numbers)</th>
<th>Fixed Investment (Rs.crore)</th>
<th>Production (Rs.crore) at 01.02 prices</th>
<th>Employment (lakh person)</th>
<th>Export (Rs.crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2006-07</td>
<td>109.49</td>
<td>162317</td>
<td>314850</td>
<td>260.21</td>
<td>86013</td>
</tr>
<tr>
<td>2.</td>
<td>2007-08</td>
<td>113.95</td>
<td>170219</td>
<td>364547</td>
<td>271.42</td>
<td>97644</td>
</tr>
<tr>
<td>3.</td>
<td>2008-09</td>
<td>118.59</td>
<td>178699</td>
<td>429796</td>
<td>282.57</td>
<td>124417</td>
</tr>
<tr>
<td>4.</td>
<td>2009-10</td>
<td>123.42</td>
<td>188113</td>
<td>497872</td>
<td>294.91</td>
<td>150242</td>
</tr>
<tr>
<td>5.</td>
<td>2010-11</td>
<td>128.44</td>
<td>213219</td>
<td>585112</td>
<td>312.52</td>
<td>177600</td>
</tr>
<tr>
<td>6.</td>
<td>2011-12</td>
<td>133.68</td>
<td>238975</td>
<td>532979</td>
<td>322.28</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

Source: Annual report of S.S.I.
### TABLE 1.6

**GROWTH RATE OF AGRO-BASED SMALL SCALE INDUSTRIES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Rate of SSI</th>
<th>Growth Rate of Fixed Investment</th>
<th>Growth Rate of Production</th>
<th>Growth Rate of Employment</th>
<th>Growth Rate of Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>4.07</td>
<td>5.16</td>
<td>11.54</td>
<td>4.36</td>
<td>20.73</td>
</tr>
<tr>
<td>2007 – 08</td>
<td>4.07</td>
<td>4.87</td>
<td>11.54</td>
<td>4.31</td>
<td>13.52</td>
</tr>
<tr>
<td>2008 – 09</td>
<td>4.07</td>
<td>4.98</td>
<td>17.9</td>
<td>4.11</td>
<td>27.42</td>
</tr>
<tr>
<td>2009 – 10</td>
<td>4.07</td>
<td>5.27</td>
<td>15.83</td>
<td>4.37</td>
<td>20.76</td>
</tr>
<tr>
<td>2010 – 11</td>
<td>4.07</td>
<td>8.68</td>
<td>17.53</td>
<td>4.23</td>
<td>24.54</td>
</tr>
<tr>
<td>2011 – 12</td>
<td>4.08</td>
<td>12.08</td>
<td>18.80</td>
<td>3.12</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

Source: Annual report of S.S.I.

### TABLE 1.7

**COMPARATIVE GROWTH RATE**

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Rate of SSI (%)</th>
<th>Overall Industrial Sector (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>8.68</td>
<td>5.7</td>
</tr>
<tr>
<td>2007 – 08</td>
<td>9.64</td>
<td>6.9</td>
</tr>
<tr>
<td>2008 – 09</td>
<td>10.88</td>
<td>8.4</td>
</tr>
<tr>
<td>2009 – 10</td>
<td>12.32</td>
<td>8.0</td>
</tr>
<tr>
<td>2010 – 11</td>
<td>12.60</td>
<td>11.5</td>
</tr>
<tr>
<td>2011 – 12</td>
<td>13*</td>
<td>8.0</td>
</tr>
</tbody>
</table>

* Projected
Table 1.5 reveals that the number of Agro based small scale industries units have increased from 109.49 lakh in 2006-07 to 133.68 lakh in 2011-12. Annual growth rate has been 4.07. The fixed investment of SSI was Rs.162317 crore in 2006-07. The growth rate of fixed investment was 5.16 in 2006-07 to 12.08 in 2011-12. The production of SSI was at Rs.314850 crore in 06-07 to Rs.532979 crore 2011-12 and growth rate was at 11.54 in 2006-07 to 18.80 in 2011-12. The employment was 260.21 lakh person in 2006-07 to 322.28 lakh person in 2011-12 and growth rate was 4.36 in 2006-07 to 3.12 in 2011-12. The export earning was concerned this sector Rs.86013 crore in 2006-07 and growth rate was 20.73 in 2006-07 to 24.54 in 2010-11. The growth rate of SSI in the Indian economy, could be assessed based on these two tables.

1.5 SIGNIFICANCE OF AGRO-BASED SMALL SCALE INDUSTRIES IN INDIA

The agro-based small scale industries sector has been accorded an important place in the Indian economy by the national decision makers. The sector generates employment at relatively small capital cost, mobilise resources of capital and skill at micro levels and is expected to meet the rising demand for various goods and services required by the economy. Small scale industry forms an important sector constituting nearly 40 per cent of the total output in
the private sector. Much more significant is the employment generation capacity of small scale industry. India operates today in sheet size what is perhaps the largest small industries programme in any developing country. SSI sector as a priority segment of the national economy is protected and promoted in a number of ways. The growth of small industry has been sought to be promoted over years through various government policies and measures.\(^2\)

The second generation of economic reforms is under way with vigour. Liberalization of key sectors is gaining momentum with more relaxed regulatory framework to provide further impetus to growth. Over the past decade, Indian economy has undergone the transition phase witnessing the challenges of more free and market oriented environment of the liberalized era. Being one of the major growth drivers of the economy, the biggest challenge before SSI is not only to survive but also to grow and compete on a sustainable basis in a new environment.

Under the Micro Small and Medium Enterprises Development (MSMED) Act 2006 the earlier, rather limited, concept of ‘industries’ has been widened to that of ‘enterprises’ enterprises have been classified broadly into

\(^2\) Mr.V.Karthihaiselvi is UGC Project Fellow, R.Neelamegam is Emeritus Professor – AICTE, and Dr.A.A. Magesan is Associate Professor in Commerce; all are from the VHNSN College, Virudhnagar, 2010, pp.17-20.
two categories, namely, enterprises engaged in the manufacture/production of goods pertaining to any industry; and enterprise engaged in providing/rendering of services. Enterprises have been defined in terms of investment in plant and machinery/equipment (excluding land & building) as given below in Table 1.8.

**TABLE 1.8**

**INVESTMENT IN PLANT AND MACHINERY /EQUIPMENT (EXCLUDING LAND AND BUILDING)**

<table>
<thead>
<tr>
<th></th>
<th>Manufacturing Enterprises</th>
<th>Service Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>Up to Rs.25 lakh,</td>
<td>Upto Rs.10lakh</td>
</tr>
<tr>
<td>Small</td>
<td>More than Rs.25 lakh and Up to Rs.5 crore</td>
<td>More than Rs.10 lakh and Up to Rs.2 crore</td>
</tr>
<tr>
<td>Medium</td>
<td>More than Rs.5 crore and Up to Rs.10 crore</td>
<td>More than Rs.2 lakh and Up to Rs.5 crore</td>
</tr>
</tbody>
</table>

Source: Ministry of MSME 2011 – 12.

**1.6 SCOPE OF THE STUDY**

The study is restricted to a selective group of agro-based SSI units scattered over Thoothukudi District. Responses by way of questionnaire and interview from proprietors, partners, managers and employees of respective
concerns constitute the score for primary data. Business data for the study period taken from official records and external sources constitutes the scope for secondary data.

Within such the framework, the researcher attempts to study the aspects mentioned below, which are consistent with the objectives of the study. (1) Share of secondary sector in the state’s domestic product and the contribution of different sectors to the annual growth rate in state economy. (2) Structural performance of agro-based SSI units in Thoothukudi District. (3) Performance and rate of growth of agro-based SSI units in Thoothukudi District and (4) Pertinent problems of agro-based SSI units in Thoothukudi District.

1.7 STATEMENT OF THE PROBLEM

India is one of the world’s largest producers of food, and is the largest producer of milk, sugarcane and tea, as well as the second largest producer of rice, wheat, fruits and vegetables. Nearly 70 per cent of the population depends on agriculture and agro-based industries. The agro industry is regarded as an extended arm of agriculture.
The development of the agro industry can help to stabilize and make agriculture more lucrative and create employment opportunities both at the production and marketing stages. The broad-based development of the agro-products industry will improve both the social and physical infrastructure of India. Since it would cause diversification and commercialization of agriculture, it will thus enhance the income of farmers and create food surpluses.

The agro based industry mainly comprises the post-harvest activities of processing and preserving agricultural products for intermediate or final consumption. It is a well-recognized fact across the world, particularly in the context of industrial development, that the importance of agro based industries is relative to agriculture increases as economies develop.

Only with mass production coupled with modern technology and intensive marketing can the domestic market as well as the export market be exploited to the fullest extent.

SSI units in Thoothukudi District have been engaged in a variety of production and services vacation such as engineering, chemical, paper, forest, minerals agro-based and miscellaneous ones. As Indian economy hinges on
rural development, study of such agro-based SSI units gains the utmost importance. In this regard, the performance evaluation of agro-based SSI units in Thoothukudi District has been felt by the researcher. Hence, the present study is worthwhile and will bring to light various functional aspect related to the growth of agro-based SSI units in Thoothukudi District. The study will also throw insight into the technical efficiency and viability and in addition may suggest enhancements in appropriate areas for better functionality and /or serviceability. It may also manifest the opportunities and constraints the agro-based SSI units in Thoothukudi District face and puts forward possible measures to be taken in the future. The proposed study is an attempt in this direction.
1.8 REVIEW OF LITERATURE

This section discusses the major findings of the related studies related to the research problem.

Baljit Singh (1961)\(^3\) in his study, “The Economics of Small-Scale Industries: A case study of small-scale industrial establishments of Moradabad”, had pointed out that 33 per cent of the indebtedness in the small units owed to the traders and the dealers, 27 per cent to their relatives and friends and 21 per cent to the money lenders.

The ILO (1961)\(^4\) has defined the non-farms employment in the rural sector as one comprising mainly peasant agriculture, handicrafts small industries and other services associated with rural village economy. It is characterized by high ratios of labour to capital and often also to land by relatively slow technological progress, by little or no capital accumulation and by low productivity per man-year.


The employment opportunities in the non-agricultural sector through village industries (1976)\(^5\) will have to be developed largely and it can be achieved only through rural development and the process of self-sustained development of the rural economy.

According to World Bank(1978)\(^6\) paper, the process of development in the farms enterprises, appears to stimulate a degree of decentralization and provided employment and earning opportunities for those who can non longer have paid work in agriculture. At this juncture, an attempt is made to know the role of non-farm enterprises in providing large-scale employment in rural areas in the light of the existing schemes of rural development.

Nag (1978)\(^7\) in his study, had reviewed the functioning of the small-scale sector, and had brought to light the growing mortality of the small- scale industries. He had urged the public sector to rescue the small-scale sector in the larger interests of the many skilled and unskilled people employed in these various small enterprises. A great responsibility for the public sector in the


form of direct participation in entrepreneurial activities, was found to be very essential for ensuring the balanced growth of the industry in the future.

It could be clearly seen from the above discussion that many general studies to agro-based industries have been reviewed here. The findings of those studies enabled the researcher to identify the research issues pertaining to this topic. Some of the specific studies on food processing have been reviewed and findings of these indicate the pattern of development and functioning of food processing activities both national level and at the international level. The above mentioned only, centre around, economic, technological financial and marketing issues of agro based and food industries in various countries. They have not taken up the promotion and development of Agro-based and food industries. In a developing country like India. There is a greater need for undertaking studies belong to starting of new industrial ventures in rural areas and developing them to the needs of the teeming millions of people. Hence the present study had been undertaken in Khadi and Village industries, which are labour-intensive, friendly and agro-based.
V.S. Mahajan (1980)\textsuperscript{8} had focused his attention on the critical evaluation of the government assistance and the policy measures adopted by the government to protect the small-scale industries. He conducted a survey at Moga to assess the impact of the government assistance on the growth of the small-scale industries. The units which had produced agricultural implements were taken up for investigation and it was concluded by him that the small-scale units were not dependent on the government assistance only. They flourished mainly because of a sudden spurt in demand for their products and through the initial investments made by them from out of their own funds or through their borrowed funds.

A.H. Advani (1981)\textsuperscript{9} had analyzed the growth of the small-scale industries during the period 1972 – 1979 with reference to the growth in the number of units, fixed capital, employment, output and the total value added. The study covered all the states as well as the union territories. Based on the macro analysis, he had concluded that for the economy as a whole, the figures were highly impressive. According to the report of the Reserve Bank of India, the total number of sick units in 1979 was found to be 20,700. In Kerala, 66 per

\textsuperscript{8} V.S. Mahajan, “Small and Tiny Units”, \textit{Economic Times}, October 2, 1980.

cent of the units were reported sick; in Bihar it was 55 per cent, in West Bengal it was 50 per cent, in Andhra Pradesh it was 30 per cent and in Uttar Pradesh it was 27 per cent. These states had exhibited a very high level of incidence of sickness among the small industries.

Madras entrepreneurs had found faulty planning, high infant mortality and omnibus assistance as the major reasons for the growing sickness among the small industries. They blamed the government agencies for their lack of response, and the large concerns and the public sector undertakings for their default in the payment of electricity charges to the electricity board, the frequent power-cuts and they blamed the traders for their black-marketing in the supply of raw-materials. However the author had concluded that as far as the small-scale industries in Tamilnadu were concerned, the position was entirely different; and the entrepreneurs had blown up their management problems very disproportionately to very high levels as compared to other inherent problems.

J.C. Sandesara (1982)\textsuperscript{10} had analyzed the incentives offered and their impact on the agro –based small-scale industries. The government of India, the

State government and the agencies sponsored by them for the development of the small-scale sector had initiated a number of special programmes over a long period. The objective of the study was to evaluate one of such assistance programmes namely, long-term finance provided by the State Finance Corporation in Bombay, Jaipur, Hyderabad and the Secunderabad areas. The evaluation was conducted in terms of the impact of finance on the assisted units, as judged by their financial and economic performance as against some other units, which had not received such assistance. Recipients of assistance for atleast 3 years were selected as the sample units and the rest of the units studied were treated as the control units.

The number of sample units studied were 206 covering 10 product groups, namely, metal products, machine tools, paper, industrial fasteners, printing presses, chemicals, agricultural implements, casting, electronics and plastics. The major hypothesis of the study was that the sample units might show a better performance compared to the control units at a given point of time.
Banerjee, Shambo Prasad, and Upadhyey (1981-83)\textsuperscript{11} had undertaken macro-level studies which related to particular regions. The regional studies focused their attention on the problems which were faced by the small-scale sector units of the concerned regions. An examination by these researchers had revealed that the problems faced by the small industries located in the different regions were different because of certain basic differences in the different geographical regions. The small-scale units of the underdeveloped regions had more problems than the small-scale sector units of the developed regions. Moreover, the nature of the problems in the undeveloped regions differed from those of the developed regions.

S.K. Goyal (1984)\textsuperscript{12} in his study, “Small-Scale sector and Big Business”, had pointed out that the number of areas reserved for the small-scale sector had no significance as an index of the scope of the areas reserved for the small-scale sector. He had estimated the changes in the share of the output and had briefly commented on the structure of the exports of the assisted SSI sector units. Further, as there were reportedly an equal number of industrial units

\textsuperscript{11} N.C. Banerjee Shambo Prasad, and Upadhyey, Small Scale Industries, Case Study of Old Gaya District, Thesis Magadh University, 1974-76. Shampoo Prasad, Role of Small Scale Industries in a Development Region with Special Reference to Bihar”, Magadh University, 1981-83.

\textsuperscript{12} S.K. Goyal, Small Scale Sector and Big-Business Indian Institute of Public Administration, New Delhi, 1984.
which had not registered themselves with the State Directorate of Industries (SDI’s), the size of the assisted SSI sector units had to be assessed only in relation to the total manufacturing capacity, according to the author.

N. Thanulingam Nadar (1985)\textsuperscript{13} had made a study, of the Small-scale industry and its inter-relationship with the large-scale industry in 1980. The main objective of his study was to make a note of the progress of the small-scale industries in the Coimbatore District of Tamilnadu, with special reference to the engineering industry; and to measure the degree of inter-relationship between the small-scale engineering units and the large-scale engineering units and to identify the factors that had influenced the inter-relationship and also to study the benefits of the inter-relationship that had accrued to the small-scale engineering units.

This study was an empirical research study based on the survey method. Primary data were collected from the field directly and from the records of the selected institutions through an interview schedule and through mailed questionnaires. The inter-relationship of the small-scale units with the large scale units was studied through a survey of the selected small and the large

scale engineering units located in the Coimbatore region. Data relating to the period of five years, 1974 to 1979 were collected from the selected small-scale units.

The study proved to be a worthwhile experiment as it became evident from the study that (i) the mean inter-relationship score for the small-scale engineering units in Coimbatore lay between 32.37 and 44.79. This had revealed that the inter-relationship of the small-scale units with the large-scale ones in the Coimbatore region had not been much encouraging; (ii) the technical qualifications of the small-scale entrepreneurs, their nearness to the large-scale units, the training facilities made available in the large-scale units, the amounts due from the large-scale units to the smaller units and issue of orders by the large-scale units to the small-scale units were the major factors which had influenced the degree of inter-relationship, (iii) the goodwill of the business and the quick disposal of the finished products were the two benefits which were enjoyed by the units having a low degree of inter-relationship.

Goldan (1986)\textsuperscript{14} in his study on the output, input and productivity in the small-scale sector covered the period of 1960-1978. Productivity estimates for

the small-scale sector had indicated that the annual total factor productivity growth rate in the SSI was not significantly different from that noticed in the large scale sector. He had found that the growth rate in the labour productivity in the small-scale sector was lower than that of the large scale sector but it was found that the small-scale industries did not experience a fall in the capital productivity as was the case with the units in the large scale sector. It was also found that there was no marked upward (or downward) trend in the capital intensity of the units in the small-scale sector.

Takahashi. M. (1989)\textsuperscript{15} states that the proportion of processed and service foods used in Japan has increased from 41 per cent in 1955 to 63 per cent in 1988. The farmers' share in the final price has decreased from 40 per cent in 1960 to 20 per cent in 1985, while the share of manufacturers, distributors, imports and food services has increased from 60 per cent to 80 per cent. These changes have increased the length of the food chain from the end of the production process to consumption. Japanese farmers mainly produce rice and fresh foods and the produce offered to processors and for food services is below the standard required by the fresh food market. This has led to

increase in the import buy the processors and had services and could result in a reduction in the agricultural industry.

Neelamegam (1990)\textsuperscript{16} in his article on “Small Business Financing”, emphasised the fact that small firms suffered for want of capital. Inadequate capital resulted in less investment on labour-saving devices, resulting in less productivity and profit. The short life span of small firms was attributed to inadequate capital.

Shetty (1990)\textsuperscript{17} in his study, “District Industries Centres Programme-an appraisal”, stated that the industrial scenario in the country encompassed the organised large and medium industries, modern small scale industries and unorganised traditional industries. The last two segments of the industrial structure constituted village and small industries (VSI). With rural industrialisation, the VSI sector became the immediate concern. It consisted of 8 sub-sectors, namely, khadi, village industries, handlooms, sericulture, handicrafts, coir, small scale industries and power looms. The last two represented the modern small scale industries and the remaining six sub sectors

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constituted traditional industries. Considering the inherent advantages of the VSI sector with regard to the potential for employment generation, for rectifying regional imbalances, for ensuring equitable distribution of income and economic benefits, for facilitating the use of local resources both human and material and for checking the exodus of labour force to urban areas, the need for promoting and developing such industries had been emphasised in the Industrial Policy Resolutions.

Vaidyanathan (1991) had treated the small-scale industry as an equivalent of the non-factory sector industries and had found that nearly three-fourths of the addition in the manufacturing non-factory industry was contributed by such types of industries. He had stated that this was a reflection of the shift of the industries from the household to the non-Household sector. He had stated that it was perhaps better to approximate the small-scale sector to the non-household non-factory segment of the manufacturing sector.

Bhagwan Prasad (1992)\(^{19}\) in his study suggested that promotional measures for providing support to the small-scale sector need to be relooked into. The ownership pattern of the small-scale sector undoubtedly threw a disturbing signal. While every activity was visualised to be of a higher order, it was a pity that, in relative terms, there was a process of “de-scaling” going on.

Bhagwan Prasad (1992)\(^{20}\) in his study stated that the SSI sector had witnessed rapid expansion in production and employment, in the past 15 years. The rise of the food products industry was the most dramatic in the structure of the SSIs that the census had recorded. The total number of units in the food products industry had gone up from 6,600 in 1972 to 96,100 in 1987-88.

Sandesara (1993)\(^{21}\) treated the enterprises eligible for Government assistance coming under the purview of Small Industries Development Organisation (SIDO), as the small scale sector. Based on data from the two census of such units, he argued that, during the period 1972 to 1987-88,

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productivities of both labour and capital had increased over the period. And an important causal factor was the substantial increase in capital intensity. Structural change had taken the form of rising employment, value added and fixed capital shares of the industry groups, food, textiles and services and the metal products group losing their respective shares. He also noted the poor performance of units producing reserved products and he attributed it to the possibility that reservation attracted more units, both old and new, than other areas of small industry and to the continuation of production activity by inefficient producers.

Balraj Mehta (1993) in his study, “Small Scale industry and Exports”, pointed out that while official policy must vigorously promoted the private corporate sector, Indian as well as foreign, the role and place of the small-scale sector must suffer decline in the market-oriented growth process. The survey also noted that the distinctive features of the growth of the small-scale industry in recent years had been a lower capital-based and a lower capital/labour ratio. But, side by side, there had been a lower productivity of labour and a higher productivity of capital than even in the large scale industry. The wage rates in the small-scale sector were lower than in the large and medium industries.

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Chandra and others (1993)\textsuperscript{23} in their study had found that the importance of the small-scale sector could be positively emphasized in view of its potential for creating employment on the assumption of a low capital output ratio. The employment generating capacity of the small-scale and the village industries was observed to be higher by eight times than that of the large-scale industries. With the increasing mechanization of the SSI units this potential might get lowered.

Reddy (1994)\textsuperscript{24} had pointed out that the small-scale sector which had registered high rates of growth since the 1970s had been affected by the new economic reforms which had harmed the small-scale units in more ways than one. Despite its impressive records of production, the growth in employment was a mere three per cent increase. It was widely believed that a shift in favour of the growth of the small-scale industry would result in the generation of more employment and new incomes and would also bring about a more equitable distribution of income and wealth. The survey had pointed out that the number

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of small-scale units was provisionally estimated to have gone up from 19.48 lakhs in 1992-93 to 29.80 lakhs in 1994-95.

K.V. Ramaswamy (1994)\(^\text{25}\) in his article “Small Scale manufacturing industries; some aspects of Size, growth and Structure”, pointed out that the rise in the share of non-factory segment between 1981 and 1991, formed 56 per cent to 65 per cent and the decline of the factory sector, from 44 per cent to 35 per cent. Further, the SSI units had recorded impressive growth rates of employment and value added across the industry group. The structure of SSI sector had not undergone any substantial change over the period 1972-73 to 1987-88. Broadly speaking, the primary material and agro-based industries, namely, food products, beverages and tobacco, wood, leather and paper products had shown a tendency to improve their employment and value added shares relative to the metal-based industries. Their better economic performance perhaps was largely due to the industries specific characteristics rather than to governmental protection. Therefore, he suggested that industry characteristics were the more important determinants of small scale enterprise growth. Finally, he observed that, in 1987-88, in the SSI sector wages were

lower relative to the large-scale sector but labour productivity was not proportionately lower due to labour cost advantages of small scale production.

Nanjundan (1994)\textsuperscript{26} emphasized the fact that the use of micro-processors had brought about a technological revolution and affected manufacturing methods and enterprises in developed countries in a significant way which tended to favour small-scale production. This technological revolution—known as Flexible Manufacturing Systems (FMSs)—would be the most important development affecting the small industry in developing countries in the coming one or two decades. It might be too early to judge the sufficiency of the strategy to bring out the desired outcome. But internationally rapid technological changes were revitalizing the small-scale sector. It was perceived that the future role of the small industry would be based on competition, productivity and efficiency.

Subrahmanian and Mohanan Pillai(1994)\textsuperscript{27} in their study, “Liberalisation and Small Industry: Need for New Growth Strategy in Kerala”, pointed out the


growth of small industry, besides resulting in employment-intensive industrialisation and wider dispersal of economic activities, ensures the maximum exploitation of latent resources, both human and material in the region. It is necessary, therefore, to design strategies and implement policies and programmes in the States for the growth of small industry in conformity with the on-going economic reforms. As a prerequisite for this exercise, a review of growth performance of the sector had been found necessary. The report is a survey of the small industry in Kerala, compared with the performance of the sector in other major States and with the all-India average.

Titos-Moreno, A. and Gimenez, T-de-H (1995)\(^\text{28}\) examine changes in the competitiveness of the Spanish food industry through an assessment of its productivity between 1980 and 1991, with a division at 1986 to take into account Spain’s accession to the EC.

S.P.Kashyap (1995)\(^\text{29}\) pointed out that the small scale sector helped in generating large scale employment, wage goods and incomes in a fairly

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dispersed manner, and in mobilising dormant skills and resources. It also 
enhanced entrepreneurship, energized village economies and aided the process 
of backward area development. It played an important role in the overall 
process of industrialisation and economic development.

T.L.N.Swamy(1995)\textsuperscript{30} in his study, “Eighth Five Year Plan – Role of 
Small Industry”, concluded that small industry exhibited high growth of 
productivity and low growth of employment during 1980-90 compared to that 
in 1973-80 in India. It might be due to the fact that small industry became 
capital intensive particularly during the eighties since capital had grown at a 
very high rate compared to employment. Moreover, growth in capital was also 
associated with technological advancement which reduced labour employment.

Tulupov, V.P.Tutel-Yan (1997)\textsuperscript{31} have identified the problems of 
monitoring the quality and safety of food manufactured by small and medium-
sized enterprises in Russia. Three schemes are suggested. The first is that the 
sanitary and Epidemiological surveillance of Russia (SESR), which has over

\textsuperscript{30}T.L.N.Swamy, “Eighth Five Year Plan – Role of Small Industry”, \textit{Productivity}, 

\textsuperscript{31}Tulupov, V.P., V.A.Tutel-Yan, \textit{Concerning the Question of Oranizing a System of Control Over the Quality and Safety of Food Products Manufactured in Small and Medium Sized Food Industries}, Voprosy-pitaniya, 1997, No.5, pp.3-5.
3000 laboratories could carry out chemical, microbiological and radiological analyses of the products of the products to ascertain their quality and safety. The Second is that the small and medium-sized firms should join together, on a regional basis, around each large firm and make use of the analytical facilities of the large firm. The third, similar to the second, is that the small and medium-sized firms could make use of the facilities provided by Gosstandart of Russia.

Wirakartakusumah, M.A. and Nawa, Y. (1999)\textsuperscript{32} state that despite the successful achievement of national development in the last 30 years (until July 1997), the Indonesian food industries are faced with several problems and constraints, viz., low efficiency and competitiveness of national food products, low expertise of human resources involved in the food industries insufficient research and development activities in supporting technology innovation and transfer, and lack of infrastructure and institutional development relevant to the food industries. For future development, the food industries must be backed up with a strong commitment on the part of the government to select food industries as strategic industries. Strong backwards linkages to the agricultural

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sector and forward linkages to meet the market and consumer demand must also support the food industries. A national programme should be implemented to meet the opportunities and challenges of globalization, to promote the development of human resources, science and technology as well as the development of institutions and infrastructure.

Vikram Chadha(1999) in his article pointed out that the small industry which predominated the Indian industrial scene urgently needed the upgradation of its production technologies and methods in order to survive the emerging competitive pressure. The problems encountered by the SSIs ranged from the shortage of credit and finances, underutilisation of capacities in competitiveness in the input and product markets, to the inadequacy of infrastructural facilities like power and transport.

M.G.Basavaraja(1999) in his study “Role of SSIs: A Study of Karnataka”, stated that the SSI entrepreneurs should collectively fight for a swadeshi movement and try to create public opinion in favour of indigenous goods. In Karnataka, there were about 2,35,000 registered SSI units with a


capital investment of about Rs.3000 crores. They manufactured more than 8000 items. The total output was estimated at Rs.20,000 crores per annum. About 39 per cent of the exports from Karnataka were being made by SSI units. The SSI sector had received emphasis in the 1999-2000 budget of the State Government, on account of the fact that this sector was labour-intensive, and contributed a lot towards the development of traditional and non-traditional exports. In the newly emerging business scenario, the Government which in former times, used to come the rescue of SSIs would find itself helpless to continue and extend such policies of helping the SSIs. By taking into consideration these things, the SSI sector should seriously look at issues like quality, cost, appropriate technology, and marketing for their survival.

Robin Mukherjee, Pranab Kumar Das, and Uttam Kumar Bhattacharya (1999)\textsuperscript{35} in their study attempted to examine the growth performance of small scale industries in West Bengal over the last 25 years. For this purpose, alternative growth rates were calculated for the number of SSI units as well as for employment for each district. Broadly speaking, the alternative measures of growth rate presented the same picture. However, there existed considerable

differences in the rates across districts both for the number of units as well as for employment. On the other hand, the year-to-year growth rates did not fluctuate much over time for any district. So far as the flow of new registrations was concerned, intertemporal variations were not large. Also disparities in these flows seemed to be decreasing over time. Attempts had also been made to examine the inter-temporal district-wise variations in the absolute number of newly registered units and in their employment. No clear trend in the inter-district disparity in this respect was noticeable.

The Economic unit of Indian Institute of Public opinion suggested that indigenous and imported raw material should be made available to the small sector at international prices. Organisations like The State Trading Corporation and the State Export Corporation should take the entire responsibility of providing raw material and also marketing the products. It was necessary that special export promotion cells should be incorporated in organisations devoted to the development of the small scale sector. Special attention should be paid to project the small scale sector in trade fairs and exhibitions overseas. It would be desirable to organise specialised exhibitions devoted exclusively to projecting India’s small scale sector in strategic overseas regions. It was necessary that SSI units should be encouraged to participate in the overseas
exhibition free of cost and deputations of their personnel at these exhibitions should be heavily subsidized (1999).  

Wann, J. and Sexton R.J. (1999) attempt to improve understanding of market behavior in food processing by developing and estimating a generalized model of farm-retail price spread determination that reflects these key structural characteristics of agricultural markets. The model assumes the existence of an identifiable raw products input market and allows for multiple processed products. A key feature of the model is its ability to distinguish input market power from output market power, based on the assumption that there is a perfectly competitive benchmark processed product form. The marketing margin for benchmark products is used to estimate oligopoly power. Oligopoly power in the other processed product market is estimated by comparing the margin for there products with the margin for the benchmark product. The California pear processing industry has been used for the application of the conceptual model. Estimation results indicate that this industry had exercised

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market power in both its farms input market and the markets from canned pears and fruit cocktail.

M.H.Balasubrahmanya(2000)\textsuperscript{38} in his study, “India’s Small Industry Policy in the 90s waning Protectionism”, attempted to probe the redefined India’s small industry policy in the 90s. He reviewed the evolving strategy for small industry development and proposed a few policy measures. He concluded that the characteristics of small scale enterprises favourable to achieve the desirable socio-economic objectives led the Indian Policy makers to bring the sector into the central focus as part of the economic development strategy, soon after Independence. The subsequent thrust on institutions for promotion and incentives for protection became a distinctive feature of India’s small industry policy. The policy became comprehensive in terms of institutions, programmes and incentives by the 80s and in the process of its implementation, protected growth assumed significance.

V. Balasubramanian (2000)\textsuperscript{39} in his dissertation, “A Study of Industrial Development in the Composite Ramnad District”, suggested that DIC should make arrangements for adequate supply of raw materials and take more efforts to help the entrepreneurs to market their finished products, instead of simply directing them to approach SIDCO. It was also suggested that at least 40 per cent of the project cost should be granted as margin money assistance, instead of the present 25 per cent.

Thomas P., (2001)\textsuperscript{40} discusses the factors involved in responding to risk in the feed and food industries. It covers risk policy and strategy, risk analysis, risk-related summer issues and some business management considerations. The paper is intended for companies, but also makes reference to public-sector, legislation, regulation and enforcement where relevant. From this review it is concluded that comprehensive study on food processing industries are very limited. Hence to bridge the gap the present study is attempted.


\textsuperscript{40} Thomas, P. \textit{Responding to Risk in the Feed and Food Industries}, Feed Compounder, 2001, Vol.21, No.6, pp.14-19.
Hina Sidhu(2004)\textsuperscript{41}, in his study, “Industrial Development in the Backward Region: A Case Study of Mehsana District in Gujarat”, pointed out that in Mehsana District of Gujarat, the small-scale industries (SSI) were playing an important role in employment generation. The employment per SSI unit had increased over the year which was contrary to the trend at the national level. The growth rates recorded by SSI sector in the District were higher than in the state. Such was the high growth in industrialization in Mehsana that the number of SSI units located in the district increased from 1.74 per cent of the total SSI units in Gujarat in 1993-94 to 4.36 per cent in 2004-05.

Rajendra K., Srivastava and Rajput(2005)\textsuperscript{42} in their article, “Sick SSI units in India: Role of Commercial Banks”, mentioned that though a number of steps were being taken by commercial banks in nourishing SSI units, it was difficult to bring the sick SSI units on to the right track. For example, the industry’s exposure to SSI as a percentage of total advances has ranged between 15 and 18 per cent. But the recovery percentage had lowered to about


35 per cent, much below the minimum of 60 per cent for a viable recycling of funds.

Lahiry S.C.(2007)\textsuperscript{43} in his article, "Rural Industrialization – An Overview", pointed out that improvement of the economic conditions of the rural population was closely linked to the growth and development of rural industries. Rural industrialization should continue to be a central component of industrial policy and the Khadi and village industries institutions should be strengthened in order to meet the challenges posed by rapid industrialization and intense competition due to the opening of the economy. The growth of the small-scale sector and its contribution to export had been impressive. However, the sector required further encouragement to be able to grow by tapping both domestic as well as international markets.

Ratna N. Shettar(2011)\textsuperscript{44}, has attempted to discuss in his study "Perspective on the Problems of Sickness in SSI sector", the growth of SSI which was spectacular during last five decades (1950-2000). The number of SSI has increased from an estimated 8.74 lakh units in 1980-81 to a 32.25 lakh


\textsuperscript{44} Ratna N. Shettar, Perspective on the Problems of Sickness in SSI sector", Southern Economist, January 1, 2011, pp.42-45.
units in the year 1999-2000. As per the Third census of SSI, there were 105.2 lakhs SSI units out of which 13.75 lakhs were registered and the unregistered units were 91.5 lakh. The productivity and employment potential of unregistered units was relatively high. But the reasons for non-registration are not precisely known. The Small Scale sector is playing pivotal role in the Indian Economy in terms of employment. It has built up brands that are small, reliable, trusted and local. These tiny brands have remained small in their volume and turnover, but are really big in their equity in the markets they operate. Since tiny sector is the nursery of traditional skills of rural areas and caters to artisans and craftsmen both in rural and urban areas, it should be strengthened. To exploit its intrinsic merits, SSI sector should be encouraged to grow in the new economic environment. Post liberalization economic conditions have created immense growth prospect for SSI. The advancement in computer and telecommunication technology, rise of e-commerce etc. have contributed to the growth of SSI. Their survival depends on their adoptiveness to the changing business environment. Continuity which change should be the basic philosophy of SSI.
Lalit Sharma, Mukesh Kumar (2011), in their article on "Kisan Credit Card Scheme: An Analysis since inception", state that agriculture plays a dominant role in Indian Economy. A majority of the population of the country depends on agriculture either directly or indirectly for livelihood. Agriculture credit is one of the most basic and vital inputs contributing to the success of all agricultural development programmes. Therefore, financing for agriculture is an important task because credit is an input. Farmers require credit, In India. There is a well settled institutional credit system to finance agriculture sector specially to farmers. But one of the major challenges for credit institutions in India, is to provide timely and adequate credit. Therefore, Kisan Credit Card Scheme was started by Government of India, in consultation with RBI and NABARD in 1998-99 to help farmers to access timely and adequate credit. Kisan credit card has emerged as innovating credit delivery mechanism to meet the production, credit requirements in a timely and hassle free manner. It is a vital tool of the rural development. Right from the inception of this scheme the farmers are enjoying the inherent advantages. It is observed that not only the size of land, but also the cost of production should be taken into consideration while fixing the credit limit and also there should be a link between Kisan

Credit should also be issued for consumption credit combined with production credit. The success of this scheme, is however mainly based on education, of both the farmers and also the bank officials. However, this scheme is a boon to farmers.

Kavita Mathad, and A. Shivakanth Shetty, (2011)\textsuperscript{46}, have studied "Innovation and Indian SMEs: Emerging Challenges and Opportunities", small and medium-scale enterprises (SMEs) that occupy an important and strategic place in economic growth and equitable development in all countries, constituting as high as 90 per cent of enterprises. In most countries worldwide, SMEs are the driving force behind a large number of innovations and contribute to the growth of the national economy through employment creation, investments and exports. Their contribution to poverty reduction and wider distribution of wealth in developing economies cannot be underrated. Although SMEs make up the vast majority of companies around the world in each country the total percentage of the workforce they employ varies. But the fact remains that they constitute a sizeable chunk of enterprises. Today organizations are knowledge based and their success and survival depend on

\textsuperscript{46} Kavita Mathad and A. Shivakanth Shetty, "Innovation and Indian SMEs: Emerging Challenges and Opportunities", \textit{Southern Economist}, February 15, 2011, pp.11-14.
creativity innovation, discovery and inventiveness. An effective reaction to these demands leads to innovative change in the organization, to ensure their existence. The rate of changes is accelerating rapidly, as new knowledge, idea generation and global diffusion are increasing. Creativity and innovation have a bigger role in this change process for survival SMEs have to learn and imbibe the process of innovation in their day to day working to remain competitive. Only an effective network among agencies at least once in a week would enable a better network programmes.

Krishnamurthy S. and P. Alagarsamy (2011), in their study on "Bank Credit to SSI Sector : A Case Study", state that as more and more small scale industries started receiving bank credit, SSI sector becomes developed one in Theni district during 2005-2010. There are 15 public and private sector banks in Theni district and all these banks sanctioned loan of Rs.159.48 crores to SSI sector in 2005 which rose to Rs.625.56 crores in 2010. As the SSI sector is coming under primary sector, the banks regularly provide loans to small scale industries. But the problems faced by SSI sector are delay in sanctioning of bank loans in right time. The small industries also face the problem in giving collateral securities for obtaining loans. Most of the SSI units could not avail of

the bank loans because of insistence of collateral securities, which these SSI units could not provide. Hence the government should instruct the banks to sanction loans under credit guarantee scheme under which the banks should not ask for securities. If the financial problem of SSI sector is not solved immediately, there will be higher incidence of sickness in SSI sector.

Mathew P.M. (2012)\textsuperscript{48} discussed the “New Role for MSMEs in India”. He has pointed out that the policy frame and the promotional measure in India so far are intended to enable the small – scale units to withstand competition from the large scale enterprises. MSME development today is setting right the priorities at two level (1) policy level, and (2) enterprise level. At the policy level, charges should happen quickly. Such charges should get translated into action instantly. The entrepreneur should be facilitated through fast moving BDS systems. A synopsis of macro policy and micro support systems should happen. Effective communication and advocacy platforms should function as intelligent watch dogs.

\textsuperscript{48} P.M. Mathew, “New Role for MSMEs in India”, Yojana, August 2012, pp. 56- 59.
Chennakrishnan P. (2012)\textsuperscript{49} in his study, “Coir production and its export” has pointed out that India is one of the top producers and exporters of coir in international market. The Indian last products are in great demand in the international market because of their special attributes and golden fiber.

About 5.5 lakh persons get employment, mostly part time in this industry. The exports from this industry are around Rs.70 crores. Coconut husk is the basic raw material for coir products. He suggested that to develop coir industry we should appropriate technology without displacement of labour and have promotion of coir exports and new products in international market. Other things to do an expansion of domestic market through publicity and propaganda, development of skilled manpower through training and extension of research and development of findings through field demonstrations.

Mathiraj and P.S.Nagarajan (2012)\textsuperscript{50} worked on the topic “Indian agriculture and processed food products”. In their study they found that the export of agricultural and processed food products was also in an increasing


trend. The value of agriculture and seeds for the year 2010 to 2011 was 876.1 crores. The value of the animal products for the year 2010-11 was 60160.02 crores. The other processed foods exports were also consistently increasing. It gives a clear signal that in the future period of export agriculture and processed food products will play a major role.

The topic of Research of Anikumar, et.al., (2013)\textsuperscript{51} was “Value addition in Agriculture for higher returns”. In their study they found that value addition is a process in which for the same volume of a primary product a high price is realized by means of processing, packing, upgrading the quality (or) other such methods. Adding value to products can be accomplished in innovation and coordination. Value addition can be made by the use of additives nutrient supplementation, protective packaging, rising food safety by detoxification, reduction of anti nutritional factors, use of anti-oxidants and chemical preservatives, imparting desirable taste, grading and sorting and preparation of by products. Value addition enhances shelf life and encourages crop diversification and also increases the economic value and consumer appeal of an agricultural commodity.

R. Jeyanthi, N. Padmavathy (2013)\textsuperscript{52} conducted a research on the topic “Adoption of ICT in small and medium enterprise”. In their study they found that adoption of basic ICT, obtaining of a fixed or mobile phone line can help their business. It can replace the time and cost necessary for fare to fare communication. Advanced communication technologies such as Email can help firms commutate faster cheaper with both its supplier and clients SCM software can also help to increase productivity, efficiency of inventory controls and increase sales through closer relationship and faster delivery times. Many small and medium enterprise consider the creative use of ICT as a key factor to their development. If not, the SMEs are set to lose out on opportunities to integrate into the global supply chain, bid for outgrowing business and increase their internal productivity and efficiency.

The study conducted by K.A. Rasure (2013)\textsuperscript{53} was on the topic “Agro Industry and Rural Development issues and Lesions”. He found that is agro-industry in India today was plagued by tough challenges, including costly raw – material, supply chain inefficiencies and market demand constraints in order


to overcome the constraints of the agro industrial sector call for innovative models of agro industry organization in India. A few key success factors (1) creation of indentures for farmers to produce the required quantity and quality of raw materials and supply the produce as stipulated in the contract (2) provision of required farm inputs and technology and classification of who bears what costs and risks (3) access to high quality processing technology (4) attention to charging consumer demand through effective market intelligence (5) attraction of investment capital (6) alteration to issues of ownership, organization management and quality control. It is critical that alternative agro – industrial models are encouraged to emerge and relive story government bakery especially those models that contribute positively to rural employment and poverty alleviative.

1.8.1 Research Gap filled up in the Study

Review of earlier studies on small-scale industries (SSI) has helped the researcher to identify the research gap. Studies pertaining to agro-based small scale industrial units are found inadequate. The previous studies covered mainly the general aspects like financial assistance, sickness and the like. Moreover studies concentrated on all types of small-scale industrial units. The particular unit namely agro-based small scale industries remains not fully
explored. Therefore, indepth and comprehensive study on agro-based small scale industries in this respect attempts to evaluate the growth, efficiency, viability and facing problems. Hence, the present work in some aspects is a follow up work and claims improvement over the other studies.

1.9 OBJECTIVES OF THE STUDY

The specific objectives of the present study are as follows.

1. To study the background status of the sample agro–based small-scale industrial units in Thoothukudi District.

2. To analyse the growth and performance of sample agro-based small-scale industrial units.

3. To study the level of growth and factors associated with the growth of Agro–based small scale industrial units in Thoothukudi District.

4. To appraise the technical efficiency and viability of the selected Agro–based small-scale industrial units in Thoothukudi District in terms of capital, labour productiveness, capital intensity, operational efficiency and profitability.

5. To discuss the problems faced by the selected agro–based small scale industrial units in Thoothukudi District.
6. To offer suggestions to improve and develop the Agro–based small scale industrial units in Thoothukudi District.

1.10 HYPOTHESIS OF THE STUDY

Based on the research design and objectives of the study the following hypothesis are formulated.

1. Age of the units does not influence the level of growth of agro-based industries.

2. Fixed investment is independent of the level of growth of agro-based industries.

3. Working capital does not have significant influence on level of growth of agro-based industries.

4. Borrowed funds are no way related to the growth of agro-based industries.

5. Sales turnover has no influence on the growth of agro-based industries.

6. There is no relationship between socio-economic factors and level of growth of agro-based industries.
1.11 METHODOLOGY

This section describes the methodology adopted in the present study which includes the choice of the study area, the sampling technique adopted, the collection of data, the period of study and the tools of analysis.

1.11.1 Choice of the Study Area

Thoothukudi District in Tamilnadu is one of the districts blessed with good basic infrastructural facilities and resources which could contribute to the process of development of the industries in the area and in particular to the development of the agro- based small – scale industries. But the Thoothukudi District was found to be relatively slow. The majority of the working population depended on agriculture. This was found to be the main reason for the stagnation in the industrial development of the Thoothukudi District. The Government of India had declared almost the entire district as an industrially backward area. Hence, incentives were provided for the starting of industries in this district. By and large, the whole background made the researcher conclude that the policy was sufficient enough to accelerate the pace of industrial development in the District. These were the main reasons for selecting the
Thoothukudi District as the study area to evaluate the performance of the agro-based small scale industries.

1.11.2 Sampling Technique

In order to evaluate the performance of the small scale industries in the Thoothukudi District, 344 agro-based small scale industrial units were registered as on March 2011 in District Industries Centre were selected by adopting census method. These units were classified into five categories, namely food and food processing, coir and coir products, herbal based units, cashewnut units and bakery industries. Out of 344 agro-based small scale units, presently functioning 332 units were considered for the present study for data collect.
The number of the selected units classified into five categories are shown in Table 1.9.

### TABLE 1.9

**AGRO – BASED SMALL SCALE INDUSTRIES REGISTERED AS ON 31.3.2011 UNDER FIVE CATEGORIES IN THE DISTRICT INDUSTRIES CENTRE AND THE SELECTED SAMPLE UNITS**

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Category</th>
<th>Units Registered as on 31.3.2011</th>
<th>Selected units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food and Food processing units</td>
<td>275</td>
<td>267</td>
</tr>
<tr>
<td>2</td>
<td>Coir and Coir products units</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>Herbal based units</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>Cashewnut units</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Bakery</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>344</strong></td>
<td><strong>332</strong></td>
</tr>
</tbody>
</table>

**1.11.3 Collection of Data**

The present study was based on primary as well as secondary data. The personal interview method was adopted to collect the primary data from the sample units. For this, a well-designed and pre-tested interview schedule (Vide Appendix) was prepared to collect the information required for the study. With a view to identify the growth components of the agro-based small scale
industrial units, the researcher had made an in-depth review of the previous studies undertaken, related to the topic of the present study. Further, the researcher had preliminary discussions with the officials of the District Industries Centre and a few well informed entrepreneurs of the agro bases small scale industrial units registered in the District Industries Centre, Thoothukudi District. In the light of the information gathered, the researcher had prepared the interview schedule and had also identified the ten factors which had influence the growth of the agro-based small scale industries.

The secondary data were collected from the published as well as the unpublished reports, handbooks, action plans and pamphlets from the office of the Director of Industries and Commerce, Chennai, and from the District Industries Centre, Thoothukudi.

The period of study pertained to the financial year 2011-2012. The primary data were collected from the agro-based small-scale industries during the 6 months period, from October 2011 to March 2012. The data related to the growth components of the agro-based small-scale industries were obtained for period of five years, from 2007-08 to 2011-2012.
1.11.4 Tools of Analysis

In order to study the growth and levels of growth of the agro-based small scale industries, ten component factors were identified to prepare the growth scale by adopting the scoring technique. The total scores for the construction of the growth scale were taken as 100. The ten components were allotted 10 scores each. The ten scores were distributed among the 10 components on the basis of the percentage growth of each of the components. The growth percentage was calculated on the basis of the five years data collected for the period 2007-08 to 2011-2012 by using the following formula.

\[
\text{Growth} = \frac{\text{Current year value} - \text{Base year value}}{\text{Base year value}} \times 100
\]

In order to classify the levels of growth, into the high, the medium and the low levels, the arithmetic mean (\(\bar{X}\)) of the total score and the standard deviation (S.D.) obtained were used and classified as follows:

\(\bar{X} + \text{SD} >\) were classified as the high level growth units.

\(\bar{X} - \text{SD} <\) were classified as the low level growth unit; and
Units which were between $\bar{X} + \text{SD}$ and $\bar{X} - \text{SD}$ were classified as the medium level growth units.

In order to study the extent of the variation in growth; the co-efficient of variation were used.

To identify the factors which had influenced the growth of the agro-based small scale industries, a multiple log linear regression model was estimated.

In order to examine the association between age, gender, education, forms of organization and level of growth chi-square test was carried out.

The ratio analysis was used to analyze the technical efficiency and the viability of the agro – based small scale industrial units.

In order to identify the factors which facilitate the entrepreneurial career, Garrett's Ranking technique has been used.
1.13 LIMITATIONS OF THE STUDY

The present study was based mainly on annual reports and balance sheet of the selected agro-based SSI units. Hence, the extent of reliability of the financial data provided by agro-based SSI units through their balance sheet may be a serious limitations of the present study. Further the present study was confined to the period 2007-08 to 2011-12.

Sincere effort will be taken to minimize biased, opinionated responses from the respondents. However, absolute validity of the same shall not be guaranteed. As in the case of all theoretical studies, accuracy of the responses is time-dependent. The responses shall reflect the current industrial set up and environment. Hence its applicability shall be influenced or even undermined by situational factors such as (i) Government regulations and policies on the functioning of the industry. (ii) Technological upgrade, international trade agreements and the related procedural changes. (iii) Major policy decisions by the regulating bodies of the industry (iv) Matters of national/international importance and environmental considerations and (v) Natural and supernatural events.
Units in the SSI may operate in a relatively competitive environment and keep the organizational and customer details in secret. Therefore, their responses could be in such a way not to disclose anything that may be pernicious to their functioning. Hence, lack of information due to that may have an effect on the research, which is beyond the control of the researcher.

Within their functioning, various government and private agencies such as intermediaries, tax officials etc are involved. Interrelationship therein may be too vague to describe. Those factors may have an impact on the study.

Since the study is based on sampling, that too for a period of five years, the extent of accuracy with which the sample-size represents the population might have a degenerating effect on the study. In addition, constraints of the researcher with respect to selection of the sample also have a bearing on the study.
1.14 CHAPTERISATION

The present study, “PERFORMANCE EVALUATION OF SMALL SCALE INDUSTRIES WITH SPECIAL REFERENCE TO AGRO-BASED INDUSTRIES IN THOOTHUKUDI DISTRICT” is divided into seven chapters.

Chapter I introduces the subject and deals with the growth and development of small-scale industries in India, significance of small-scale industries, agro-based industries in India, concept of agro-based small scale industries, meaning, importance and position of agro-based industries in India, scope of the study, statement of the problem, review of literature, Objectives of the Study, Hypothesis, Methodology, Limitations of the study and the Chapterization.

Chapter II highlights the profile of the study area.

Chapter III discusses the growth and performance of agro-based small-scale industrial units in Thoothukudi District.
Chapter IV deals with the socio-economic status of the sample entrepreneur of agro-based industries and factors associated with level of growth of enterprises.

Chapter V analyses the efficiency and viability of agro-based small-scale industrial units in Thoothkudi District.

Chapter VI highlights the problems faced by the agro-based small-scale industrial units in Thoothukudi District.

Chapter VII presents a summary of findings of the study, along with the researcher’s suggestions made in the context of the findings and conclusion.