Chapter 3
RESEARCH METHODOLOGY

RESEARCH DESIGN

The research design of this research work is concerned descriptive in nature.

NATURE OF DATA

The study has used both primary and secondary data the primary data has been collected through well structured questionnaire to elicit the well considered options of the respondents.

SAMPLING METHOD

The Convenient Sampling is adopted to obtain the responses from the entrepreneurs of SMEs in Cuddalore district.

SAMPLE SIZE

The sample chosen for the study covers the SMEs in Cuddalore district. In particular the research considered SMEs have been distributed over six taluks of Cuddalore district. The sample distribution of the present research is presented in the table below.

<table>
<thead>
<tr>
<th>Name</th>
<th>No. of questionnaire circulated</th>
<th>No. of questionnaire received</th>
<th>No. of questionnaires rejected</th>
<th>No. of questionnaires used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuddalore taluk</td>
<td>125</td>
<td>125</td>
<td>24</td>
<td>101</td>
</tr>
<tr>
<td>Chidambaran taluk</td>
<td>120</td>
<td>120</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Kurinjipadi taluk</td>
<td>125</td>
<td>125</td>
<td>24</td>
<td>101</td>
</tr>
<tr>
<td>Panruti taluk</td>
<td>130</td>
<td>130</td>
<td>27</td>
<td>103</td>
</tr>
<tr>
<td>Tittakudi taluk</td>
<td>110</td>
<td>110</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Virudhachalam taluk</td>
<td>125</td>
<td>125</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>735</strong></td>
<td><strong>735</strong></td>
<td><strong>130</strong></td>
<td><strong>605</strong></td>
</tr>
</tbody>
</table>
Totally 735 owners of SMEs in Cuddalore district have been distributed over six taluks are selected on convenient sampling method. The researcher has considered 15 percent of the total population of SMEs from each taluk. All the questionnaire distributed were among them 130 questionnaires are not properly filled, therefore the researcher rejected them. Hence, the final sample size is 605.

**STATISTICAL TOOLS USED**

The researcher used the following statistical tools to analyse the primary data obtained from entrepreneurs of SMEs.

1. Simple percentage analysis
2. Independent t-test
3. One-way Analysis Of Variance (ANOVA)
4. Linear multiple regression analysis
5. Cluster analysis
6. Chi-square analysis
7. Structural Equation Model (SEM)

**STUDY PERIOD**

The study period is spreading between 2014 and 2018.

**DATA COLLECTION PERIOD**

The primary data has been collected from the respondents between September 2017 to November 2017 (3 months).
PILOT STUDY AND PRE–TESTING

A preliminary investigation is undertaken by contacting 75 owners of SMEs in Cuddalore district. Convenient sampling method is applied. The purpose of the pilot study is to test the quality of the items in the questionnaire and to confirm the feasibility of the study. The normal distribution and Hotelling’s t-test in Cronbach Alpha method is used to identify the quality of each item of the questionnaire in 5–point scale.

The tests revealed that items in Likert’s five point scale regarding credit operations are highly reliable with cronbach alpha co-efficient 0.855. The samples satisfy the normal distribution rationally. So the items in the questionnaire can be used further in the main study.