CHAPTER IV

THE SOCIO-ECONOMIC CONDITIONS OF SAMPLE RURAL WOMEN BENEFICIARIES
4.1 Introduction

In India, women cannot be viewed as a homogeneous group, as the society is stratified on the basis of class, caste and religion. It has been observed that the position of women and their demand for bank credit remain tied to class, caste and religious affiliations. In order to grasp the nature of these casual relationships, it is imperative to understand the socio-economic condition of women beneficiaries in the study area. In this chapter an attempt is made to analyse the major socio-economic variables and family profiles of the women beneficiaries. For this, the analysis of the present chapter has been classified under the heads:-

i) Profile of the sample rural women beneficiaries.

ii) Family background of the beneficiaries and

iii) Relationship between family background and income, savings, asset holdings of the respondents (beneficiaries).

4.2 Profile of the Sample Women Beneficiaries

4.2.1. Age-wise Classification of the Respondents

Age is an important factor which has a bearing on the active participation in innovative activities and the risk-bearing ability. Usually, the young people have more risk-bearing capability and better exposure to the economy. The young persons are generally more energetic, change prone, progressive and innovative than the aged. The age of the beneficiaries are classified as, upto 25 years, 26-35 years, 36-45 years and 46 and above. The Table No 4.1 presents the distribution of the sample women respondents according to their age.
<table>
<thead>
<tr>
<th>Age</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>upto 25</td>
<td>6</td>
<td>24</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>[3.70]</td>
<td>[11.76]</td>
<td>[8.55]</td>
<td>[8.33]</td>
</tr>
<tr>
<td>26 – 35</td>
<td>96</td>
<td>82</td>
<td>112</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td>[59.26]</td>
<td>[40.20]</td>
<td>[47.86]</td>
<td>[48.33]</td>
</tr>
<tr>
<td>36 -45</td>
<td>52</td>
<td>92</td>
<td>60</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>[32.10]</td>
<td>[45.10]</td>
<td>[25.64]</td>
<td>[34.00]</td>
</tr>
<tr>
<td>46 and Above</td>
<td>8</td>
<td>6</td>
<td>42</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>[4.94]</td>
<td>[2.94]</td>
<td>[17.95]</td>
<td>[9.34]</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>204</td>
<td>234</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>[100.0]</td>
<td>[100.0]</td>
<td>[100.0]</td>
<td>[100.0]</td>
</tr>
</tbody>
</table>

**Source:** Survey data.

**Note:** Figures in brackets are percentages to the total.

According to Table No 4.1, out of 162 respondents engaged in manufacturing sector, 6 (3.70 per cent) fall in the age group of less upto 25 years, 96 (59.26 per cent) in the age group of 26-35 years, 52 (32.10 per cent) and 8 (4.94 per cent) fall in the age group of 36-45 years and 46 and above respectively.

It has been observed that out of 204 respondents engaged in service sector, 24 (11.76 per cent) fall in the age group of upto 25 years, 82 (40.20 per cent) in the age group of 26-35 years, 92 (45.10 per cent) and 6 (2.94 per cent) fall in the age group of 36-45 years and 46 and above respectively.

Further, it has been observed that out of 234 respondents engaged in trading sector, 20 (8.55 per cent) fall in the age group of upto 25 years, 112 (47.86 per cent) in the age group of 26-35 years, 60 (25.64 per cent) and 42 (17.95 per cent) fall in the age group of 36-45 years and 46 and above respectively.
Thus, it is concluded from the analysis that a majority, of our respondents, ie., 48.33 per cent belong to the age group of 26-35 years and 34.00 per cent of the respondents fall in the age group of 36-45 years.

A look at the higher end of the age group shows that nearly three per cent of the respondents of service sector belong to it. For manufacturing sector, it is around five per cent. For trading sector, it is 17.95 per cent which is the highest among all sectors. This shows that a large number of aged and experienced people concentrate in trading sector. Where as the young people concentrate only in service sector.

It is inferred that the age is a criterion for shift in various sector among our respondents.

**Null Hypothesis**

\[ H_0 \quad : \quad \text{Age of the sample respondents does not significantly influence the shift in various sectors.} \]

**Alternative Hypothesis**

\[ H_1 \quad : \quad \text{There is a significant association between age group of the respondents and various sectors.} \]

**TABLE NO 4.2**

RESULT OF CHI-SQUARE TEST: AGE AND VARIOUS SECTORS

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>36.582</td>
<td>9</td>
<td>0.037</td>
<td>16.9</td>
<td>Rejected</td>
</tr>
</tbody>
</table>
Table No 4.2 reveals that the calculated value of $\chi^2$ is greater than the Table value at 5 per cent level of significance. So the investigator rejects the null-hypothesis (Ho). Therefore, it is inferred that there is some relationship between the age group of the respondents and the various sectors.

4.2.2. Education

Education brings better awareness about the environment and the facilities in the rural area. The level of education motivates the psychological upliftment of persons and widens social awareness. It also plays an important role in understanding the financial and technical aspects of the area. In the present study, the level of education is classified into illiterate, upto high school, higher secondary school, graduate and post-graduate level.

Table No 4.3 shows the educational status of the respondents in various sectors.
### TABLE No 4.3
**EDUCATIONAL STATUS OF THE RESPONDENTS**

<table>
<thead>
<tr>
<th>Education</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

**Source:** Survey data

**Note:** Figures in brackets are percentages to the total.

From this Table No 4.3 it has been observed that in the manufacturing sector, out of 162 respondents, 12 (7.41 per cent) are illiterates. 48 (29.63 per cent) have studied up to high school level, 24 (14.81 per cent) have attained higher secondary education, 34(20.99 per cent) are graduates, and 44 (27.16 per cent) have studied up to post-graduate level.

As far as service sector is concerned, out of 204 respondents, 36 (17.65 per cent) are illiterates. 88 (43.14 per cent) come under high school level, 16 (7.84 per cent) have completed higher secondary level, 30 (14.71 per cent) are graduates and 34 (16.66 per cent) are post-graduates.

Further, it is inferred that out of 234 respondents of trading sector, 16 (6.84 per cent) are illiterates, 90 (38.46 per cent) come under high school
level, 32 (13.68 per cent) have completed higher secondary level, 30 (12.82 per cent) are graduates and 66 (28.20 per cent) are post graduates.

Thus, it is concluded from this study that 37.67 per cent of the respondents have studied upto high school level, which forms the majority, 10.67 per cent of the respondents are illiterates, 12.00 per cent of the respondents have completed higher secondary education, 15.66 per cent of them are graduates and 24.00 per cent of them are post graduates.

A comparison of educational status of respondents of the study area shows that the manufacturing sector and trading sector have least percentages of illiterate (7.41 per cent and 6.84 per cent respectively) and high percentages of graduates and post – graduates. On the other hand, the service sector has high percentage of respondents who studied upto high school level (43.14 per cent).

**Null-hypothesis**

\[ H_0 : \text{Educational status of the respondents does not significantly influence to shift in various sectors.} \]

**Alternative Hypothesis**

\[ H_1 : \text{There is a significant association between education of the respondents and various sectors.} \]
TABLE NO 4.4

RESULT OF CHI-SQUARE TEST: EDUCATION AND VARIOUS SECTORS

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>46.30</td>
<td>12</td>
<td>0.048</td>
<td>21.0</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Table No 4.4 shows that the calculated value of $\chi^2$ is greater than the Table value at 5 per cent level of significance. So the investigator rejects the null-hypothesis (Ho). There is some relationship between the educational status of the respondents and the various sectors in which they are engaged in.

4.2.3. Marital Status

The marital status of the beneficiaries decides the need to earn more or less income. It is thus an important social variable. The respondents are grouped as married, un-married and widows.

The respondents classified on the basis of their marital status is presented in Table No 4.5.
### TABLE NO 4.5
CLASSIFICATION OF RESPONDENTS ON THE BASIS OF MARITAL STATUS

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>150 [92.59]</td>
<td>184 [90.20]</td>
<td>212 [90.59]</td>
<td>546 [91.00]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

Source: Survey data.

Note: Figures in brackets are percentages to the total.

From this Table No 4.5 it has been inferred that out of 162 respondents in the manufacturing sector, 150 (92.59 per cent) have been married. 8 (4.94) are un-married and four (2.47 per cent) are widows.

Regarding the service sector, out of 204 respondents, 184 (90.20 per cent) have been married, 12 (5.88 per cent) are un-married and 8 (3.92 per cent) are widows.

Out of 234 respondents in the trading sector, 212 (90.59 per cent) have been married, 12 (5.13) are un-married and 10 (4.28 per cent) are widows.

Thus, it is inferred from this table that majority of the respondents, i.e., nearly 91.00 per cent had been married, 5.33 per cent are un-married and 3.67 per cent are widows in our study.
Table No 4.6 shows the distribution of the sample respondents based on the reasons for availing credit.

### TABLE NO 4.6
**REASONS FOR AVAILING CREDIT**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Reason for Availing Credit</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To increase the family income</td>
<td>76 [46.91]</td>
<td>94 [46.08]</td>
<td>106 [45.30]</td>
<td>276</td>
</tr>
<tr>
<td>5</td>
<td>Personal security</td>
<td>14 [8.64]</td>
<td>22 [10.79]</td>
<td>34 [14.53]</td>
<td>72</td>
</tr>
<tr>
<td>6</td>
<td>Others</td>
<td>2 [1.24]</td>
<td>0 [0.0]</td>
<td>4 [1.7]</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600</td>
</tr>
</tbody>
</table>

Source: Survey data

Note: Figures in brackets are percentages to the total.

From this Table No 4.6 it is inferred that in the case of manufacturing sector out of 162 respondents, 76 respondents (46.91 per cent) have availed credit to increase their family income. It is followed by education purpose with 36 respondents (22.22 per cent), personal security 14 respondents (8.64 per cent) and self satisfaction and others account for 9.88 per cent and 1.24 per cent respectively.

In the service sector, out of 204 respondents, 94 respondents (46.08 per cent) have availed credit to increase their family income,
followed by education purpose which accounted for about 52 respondents (25.49 per cent), personal security is accounted for 22 respondents (10.79 per cent), self-satisfaction and status accounted for 18 respondents (8.82 per cent) each.

In the case of trading sector, out of 234 respondents, 106 respondents (45.36 per cent) have availed credit to increase their family income. It is followed by the education purpose with 44 respondents (18.80 per cent), personal security by 34 respondents (14.53 per cent), and self-satisfaction and status by 24 and 22 respondents respectively.

Thus, it is inferred from this table that majority of the respondents have availed credit mainly to increase their family income and for education purpose, accounting 46.00 percentages and 22.00 percentages respectively in the study.

4.2.4. Annual Income of the Respondents before Availing Credit

The income of the respondents shows the personal income from all sources per year. Here the income of the respondents before availing credit is studied. The annual income of the respondents before availing credit has been classified into four groups (below Rs.12000, Rs 12001-Rs.24000, Rs 24001 – Rs.36000, and above Rs.36001) and it has been shown in Table No 4.7.
TABLE No 4.7

CLASSIFICATION OF RESPONDENTS ON THE BASIS OF
ANNUAL INCOME BEFORE AVAILING CREDIT

<table>
<thead>
<tr>
<th>Annual Income (Rs)</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

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

It is clearly evident from Table No 4.7 that before availing credit, about 26.33 per cent of the respondents came under the category of below Rs.12000, 27.00 per cent of the respondents belonged to the category of Rs.12001 to Rs.24000, 29.00 per cent of the respondents belonged to the category of Rs.24001 to Rs.36000, and 17.67 per cent of the respondents belonged to the category of above Rs.36001 per year.

4.2.5. Annual Income of the Respondents after Availing Credit

The annual income of the respondents after availing the credit has been classified into four groups and it has been shown in Table No 4.8.
TABLE NO 4.8
CLASSIFICATION OF RESPONDENTS ON THE BASIS OF ANNUAL INCOME AFTER AVAILING CREDIT

<table>
<thead>
<tr>
<th>Annual Income (Rs)</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Rs.36001</td>
<td>72 [44.44]</td>
<td>126 [61.77]</td>
<td>112 [47.86]</td>
<td>310 [51.67]</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>162 [100.0]</strong></td>
<td><strong>204 [100.0]</strong></td>
<td><strong>234 [100.0]</strong></td>
<td><strong>600 [100.0]</strong></td>
</tr>
</tbody>
</table>

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

It has been inferred from the Table No 4.8 that out of 162 respondents in manufacturing sector, 12 (7.41 per cent) have an income of less than Rs.12000 per year, 42 (25.93 per cent) in the range of Rs.12001 to Rs.24000, 36 (22.22 per cent) in the range of Rs.24001 to Rs.36000, and 72 (44.44 per cent) have more than Rs.36001.

Out of 204 respondents in service sector, for 24 (11.76 per cent) annual income was less than Rs.12000, 16 (7.84 per cent) come under the range of Rs.12001 to Rs.24000, 38 (18.63 per cent) come under the range of Rs.24001 to Rs.36000, and 126 (61.77 per cent) belong to Rs.36001 and above.
It is further inferred from the table that out of 234 respondents in trading sector, 8 (3.42 per cent) have an income of less than Rs.12000 per year, 52 (22.22 per cent) belong to Rs.12001 to 24000, 62 (26.50 per cent) belong to the category of Rs.24001 to Rs.36000, and 112 (47.86 per cent) belong to above Rs.36001.

Thus it could be inferred from this table that after availing credit about 7.33 per cent of the respondents come under the category of less than less than Rs.12000, 18.33 per cent of the respondents belong to the category of Rs.12001 to Rs.24000, 22.67 per cent of the respondents belong to the category of Rs.24001 to Rs.36000, and 51.67 per cent of the respondents belong to the category of above Rs.36001 as their annual income.

The null and alternative hypotheses are framed and tested in this study:

**Null Hypothesis:**

$$H_0 : \text{ There is no relationship between annual income of the respondents and the various sectors}$$

**Alternative Hypothesis:**

$$H_1 : \text{ There is a relationship between annual income of the respondents and the various sectors.}$$

<table>
<thead>
<tr>
<th>TABLE NO 4.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESULT OF CHI-SQUARE TEST: AFTER AVAILING CREDIT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Chi-square</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>64.30</td>
<td>9</td>
<td>0.000</td>
<td>16.9</td>
<td>Rejected</td>
</tr>
</tbody>
</table>
It is evident from Table No 4.9 that the calculated value of $\chi^2$ is greater than the Table value at 5 per cent level of significance. So the null-hypothesis (Ho) is rejected. Therefore, there is some relationship between the annual income of the respondents and the various sectors in the study area.

4.3 Family Background of the Respondents

Family is a social institution, and it serves a number of purposes. It is an organized system of relationships and norms. It provides security, love, affection and all kinds of emotional and social support. Hence, family condition forms the base for women’s work participation and in this section an attempt has been made to discuss the family background like religion, caste, family size, husband’s income, and family income.

4.3.1. Religion-wise Classification

Table No 4.10 presents the distribution of respondents by religion.

**TABLE NO 4.10**

**RELIGION WISE CLASSIFICATION OF RESPONDENTS**

<table>
<thead>
<tr>
<th>Religion</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>146 [90.12]</td>
<td>194 [95.10]</td>
<td>204 [87.18]</td>
<td>544 [90.67]</td>
</tr>
<tr>
<td>Muslim</td>
<td>0 [0.0]</td>
<td>0 [0.0]</td>
<td>6 [2.56]</td>
<td>6 [1.00]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

Source: Survey data
Note: Figures in brackets are percentages to the total.
From Table No 4.10 it has been inferred that out of 162 respondents, 146 (90.12 per cent) belong to Hindu religion, 16 (9.88 per cent) are Christians and there is no Muslim in manufacturing sector.

This table reveals that out of 204 respondents, 194 (95.10 per cent) belong to Hindu religion, 10 (4.96 per cent) are Christians and there is no Muslim in service sector.

It is further understood that out of 234 respondents, 204 (87.18 per cent) belong to Hindu religion, 24 (10.26 per cent) are Christians and 6 (2.56 per cent) belong to Muslim religion in trading sector.

It is concluded that 90.67 per cent of the respondents belong to Hindu religion, 8.33 per cent of the respondents belong to Christianity and 1.00 per cent belong to Muslim religion in this study.

4.3.2. Community-wise Classification

Community is an important social factor influencing social and new enterprising activities. Community moulds a person’s attitude and personality towards entrepreneurship. Eventhough the level of education modifies the behaviour of the individual, community remains the basis of the respondent’s activity. In the present study, community is classified as Backward Community (B.C), Most Backward Community (M.B.C), Other Community (O.C) and Scheduled Caste and Tribe (S.C / S.T).

The distribution of respondents according to the community is presented in Table No 4.11.
TABLE NO 4.11
COMMUNITY WISE DISTRIBUTION OF RESPONDENTS

<table>
<thead>
<tr>
<th>Community</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O C</td>
<td>0 [0.0]</td>
<td>0 [0.0]</td>
<td>0 [0.0]</td>
<td>0 [0.0]</td>
</tr>
<tr>
<td>S C / S T</td>
<td>72 [44.44]</td>
<td>80 [39.21]</td>
<td>36 [15.38]</td>
<td>188 [31.34]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

Source: Survey data

Note: Figures in brackets are percentages to the total.

Table No 4.11 shows the community wise classification of the sample respondents in the study area. In the manufacturing sector, there are no respondents belonging to O.C. out of 162 respondents, 48 (29.63 per cent) belong to backward community (B.C), 42 (25.93 per cent) belong to most backward community (M.B.C), and 72 (44.44 per cent) are scheduled caste and tribes (S.C / S.T).

It has been observed that regarding the service sector, out of 204 respondents, 78 (38.24 per cent) come under backward community (B.C), 46 (22.55 per cent) come under most backward community (M.B.C), and 80 (39.21 per cent) come under the scheduled caste and tribes (S.C / S.T).

Further, it has been observed that, out of 234 respondents in trading sector, 122 (52.14 per cent) belong to backward community (B.C), 76 (32.48 per cent) belong to most backward community (M.B.C), 36 (15.38
per cent) belong to scheduled caste and tribes (S.C / S.T). There are no other community (O.C) people.

Thus it is concluded from the analysis that a majority, nearly 41.33 per cent of the respondents belong to backward community (B.C), followed by 31.34 per cent of the respondents belonging to scheduled caste and tribes (S.C / S.T), which is followed by 27.33 per cent belonging to the most backward community (M.B.C).

Association of attributes is applied to test the association between community and sectors. The result shows that, manufacturing sector is favoured by B.C, M.B.C, and SC/ST, service sector is favoured only by B.C, SC/ST and trading sector by B.C and M.B.C.

The null and alternative hypotheses are framed and tested in this study:

**Null Hypothesis**

\[ H_0 \colon \text{There is no relationship between community of the respondents and the various sectors.} \]

**Alternative Hypothesis**

\[ H_1 \colon \text{There is a relationship between community of the respondents and the various sectors.} \]
### TABLE NO 4.12
RESULT OF CHI-SQUARE TEST: COMMUNITY WISE

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>36.428</td>
<td>6</td>
<td>0.009</td>
<td>12.6</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Table No 4.12 reveals that the calculated value of $\chi^2$ is greater than the Table value at 5 per cent level of significance. So the investigator rejects the null-hypothesis (Ho). Therefore, it is inferred that there is significant relationship between the community of the respondents and the various sectors in this study.

#### 4.3.3. Family Size of the Respondents

The family size denotes the total number of members living with the respondents. If the family size is bigger with the dependent population, then extra earning becomes necessary. It may also restrict the risk taking ability of the members. The family size sometimes increases the labour source. In the present study, the family size of the respondents is classified as below 5, 5 to 8, and 9 and above.

The distribution of our respondents according to their family size is presented in Table No 4.13.
TABLE NO 4.13
FAMILY SIZE OF THE RESPONDENTS

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5</td>
<td>70 [43.21]</td>
<td>104 [50.98]</td>
<td>82 [35.04]</td>
<td>256 [42.67]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

Source: Survey data

Note: Figures in brackets are percentages to the total.

It has been inferred from the Table No 4.13 that out of 162 respondents in manufacturing sector, 70 (43.21 per cent) have less than 5 members in their families, 44 (27.16 per cent) have 5 – 8 members and 48 (29.63 per cent) have 9 or more than nine members in their families.

In the case of service sector, out of 204 respondents, 104 (50.98 per cent) have reported that their family size is less than five, 44 (21.57 per cent) have 5– 8 members in their family and 56 (27.45 per cent) have 9 or more members in their families.

Further it is inferred from the table that out of 234 respondents in the trading sector, 82(35.04 per cent) have less than 5 members in their families, 122 (52.14 per cent) have 5 – 8 members in their families and 30 (12.82 per cent) respondents have more than 9 members in their families.

Thus it is concluded from our study that majority of the respondents, i.e., 42.67 per cent have less than 5 members in their families, 35.00 per
cent of the respondents have 5 – 8 members in their families and 22.50 per cent of the respondents have more than 9 members in their families.

The null and alternative hypotheses are framed and tested in this study:

**Null Hypothesis**

\[ H_0 : \text{There is no relationship between the family size of the respondents and the various sectors.} \]

**Alternative Hypothesis**

\[ H_1 : \text{There is a relationship between the family size of the respondents and the various sectors.} \]

**TABLE NO 4.14**

RESULT OF CHI-SQUARE TEST: FAMILY SIZE

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>48.302</td>
<td>6</td>
<td>0.001</td>
<td>12.6</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

It is evident from the Table No 4.14 that the calculated value of \( \chi^2 \) is greater than the Table value at 5 per cent level of significance. So the investigator rejects the null-hypothesis (H\(_0\)). There is some significant relationship between the family size of the respondents and the various sectors in the study.
4.3.4 Type of Family

Type of family of the respondents in various sectors is discussed in the Table No 4.15.

<table>
<thead>
<tr>
<th>Type of Family</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>92</td>
<td>144</td>
<td>122</td>
<td>358</td>
</tr>
<tr>
<td></td>
<td>[56.79]</td>
<td>[70.59]</td>
<td>[52.14]</td>
<td>[59.67]</td>
</tr>
<tr>
<td>Joint Family</td>
<td>70</td>
<td>60</td>
<td>112</td>
<td>242</td>
</tr>
<tr>
<td></td>
<td>[43.21]</td>
<td>[29.41]</td>
<td>[47.86]</td>
<td>[40.33]</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>204</td>
<td>234</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>[100.0]</td>
<td>[100.0]</td>
<td>[100.0]</td>
<td>[100.0]</td>
</tr>
</tbody>
</table>

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

From Table No 4.15 it is clear that, out of 162 respondents of manufacturing sector, 92 (56.79 per cent) belong to nuclear family and 70 (43.21 per cent) belong to joint family.

Out of 204 respondents in the service sector, 144 (70.59 per cent) fall under nuclear family and 60 (29.41 per cent) fall under joint family.

Further, in the trading sector, out of 234 respondents, 122 (52.14 per cent) belong to nuclear family and 112 (47.86 per cent) belong to joint family.

It is concluded from this table that 59.67 per cent of the respondents belong to nuclear family and 40.33 per cent of the respondents belong to joint family.
4.3.5. Ownership of House

Table No 4.16 shows the ownership of house of the respondents in various sectors.

**TABLE NO 4.16**

OWNERSHIP OF HOUSE

<table>
<thead>
<tr>
<th>House</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own House</td>
<td>154 [95.06]</td>
<td>188 [92.16]</td>
<td>218 [93.16]</td>
<td>560 [93.33]</td>
</tr>
<tr>
<td>Others</td>
<td>4 [2.47]</td>
<td>6 [2.94]</td>
<td>4 [1.71]</td>
<td>14 [2.34]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

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

It is revealed from Table No 4.16 that, out of 162 respondents in manufacturing sector, 154 (95.06 per cent) have own houses, and only 4 (2.47 per cent) respondents are living in rented house.

This table shows that, out of 204 respondents in service sector, 188 (92.16 per cent) have own houses and 10 (4.90 percent) of them are living in rented houses.

It is further observed from the table that, out of 234 respondents in trading sector, 218 (93.16 per cent) are living in own houses, and 12 (5.13 per cent) are living in rented houses.

It is inferred from the Table No 4.16 that, 93.33 per cent of the respondents are living in own houses, 4.33 per cent of the respondents are
living in rented houses and very low percentage (2.34 per cent) of them are living in other type of houses such as mortgaged houses.

4.3.6. Type of House

Type of house of the respondents in the various sectors is shown in Table No 4.17.

**TABLE NO 4.17**

**TYPES OF HOUSES**

<table>
<thead>
<tr>
<th>Types of Houses</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thatched House</td>
<td>58 [35.80]</td>
<td>78 [38.24]</td>
<td>98 [41.88]</td>
<td>234 [39.00]</td>
</tr>
<tr>
<td>Tiled House</td>
<td>58 [35.80]</td>
<td>78 [38.24]</td>
<td>70 [29.91]</td>
<td>206 [34.33]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

Source: Survey data.

Note: Figures in brackets are percentages to the total.

From Table No 4.17 it is clear that out of 162 respondents in the manufacturing sector, 58 (35.80 per cent) live in thatched houses another 58 (35.80 per cent) in tiled houses, and 46 (28.40 per cent) are in concrete houses.

It is inferred from the table that, out of 204 respondents of the service sector, 78 (38.24 per cent) are in thatched houses, 78 (38.24 per cent) are in tiled houses, and 48 (23.52 per cent) live in concrete houses.
Further it is observed from Table No 4.23 that in trading sector, out of 234 respondents, 98 (41.88 per cent) live in thatched houses, 70 (29.91 per cent) in tiled houses and 66 (28.21 per cent) live in concrete houses.

It is concluded from the table that in the study area 39.00 per cent of the respondents have thatched houses, 34.33 per cent of the respondents have tiled houses and 26.67 per cent of the respondents have concrete houses.

4.3.7 Electricity Facility Available in Houses

The electricity facility available in the houses of the respondents in various sectors is presented in Table No 4.18.

<table>
<thead>
<tr>
<th>Electricity Facility</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>150 [92.59]</td>
<td>178 [87.25]</td>
<td>206 [88.03]</td>
<td>534 [89.00]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

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

From the Table No 4.18 it is noted that out of 162 respondents in the manufacturing sector, 150 (92.59 per cent) have electricity facility in their houses, and 12 (7.41 per cent) do not have electricity facility in their houses.

According to Table No 4.18 out of 204 respondents in service sector, 178 (87.25 per cent) have electricity facilities in their houses and 26 (12.75 per cent) do not have electricity facility in their houses.
It is further inferred from the table that, out of 234 respondents in trading sector, 206 (88.03 per cent) have electricity facilities in their houses and 28 (11.97 per cent) do not have electricity facility in their house.

It is concluded from the table that, 89.00 per cent of the respondents have electricity facility in their house, and the remaining 11.00 per cent of the respondents do not have electricity facility in their house.

4.3.8 Cooking Facility in House

Availability of the cooking facility in the houses of the respondents of the various sectors is shown in Table No 4.19.

<table>
<thead>
<tr>
<th>Cooking Facility</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerosene</td>
<td>2 [1.23]</td>
<td>0 [0.0]</td>
<td>14 [5.98]</td>
<td>16 [2.67]</td>
</tr>
<tr>
<td>Wood</td>
<td>124 [76.55]</td>
<td>186 [91.18]</td>
<td>182 [77.78]</td>
<td>492 [82.00]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

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

It has been inferred from Table No 4.19 that out of 162 respondents in the manufacturing sector, 36 (22.22 per cent) possess gas connection for cooking in their families, 2 (1.23 per cent) cook with kerosene stove, and 124 (76.55 per cent) depend on fire wood for cooking.

This table indicates that, out of 204 respondents in service sector, 18 (8.6 per cent) have gas connection for cooking in their families and
186 (91.18 per cent) depend on fire wood for cooking. Not even a single respondent of this group depend on kerosene stove for cooking.

It is further observed from the Table No 4.25 that, out of 234 respondents in the trading sector, 38 (16.24 per cent) possess gas connection for cooking in their families, 14 (5.98 per cent) cook with kerosene stove, and 182 (77.78 per cent) depend on fire wood for cooking.

It is concluded from the table that, 15.33 per cent of the respondents have gas connection for cooking in their families, 2.67 per cent of the respondents cook with kerosene stove in their families, and 81.4 per cent of the respondents depend on fire wood for cooking.

4.3.9 Drinking Water Facility in House

Water is essential for life, health and human dignity. In most cases, the main health problems are caused by poor hygiene due to insufficient water and by the consumption of contaminated water. Therefore, water quality is essential for preventing the spread of diseases.

In the study area, the water facility in the house is classified into panchayat water, hand pump water, and well water.

The drinking water facility available in houses of the respondents in various sectors is shown in Table No 4.20.
TABLE NO 4.20

SOURCES OF DRINKING WATER

<table>
<thead>
<tr>
<th>Sources</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panchayat Tap</td>
<td>148 [91.36]</td>
<td>200 [98.04]</td>
<td>224 [95.73]</td>
<td>572 [95.33]</td>
</tr>
<tr>
<td>Hand Pump</td>
<td>2 [1.23]</td>
<td>0 [0.0]</td>
<td>0 [0.0]</td>
<td>2 [0.33]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

**Source:** Survey data.

**Note:** Figures in brackets are percentages to the total.

It is found from the Table No 4.20 that majority of the respondents in all the sectors are in access with panchayat tap water. Out of 162 respondents in manufacturing sector 148 (91.36 per cent), out of 204 respondents in service sector 200 (98.04 per cent) and out of 234 respondents in trading sector 224 (95.73 per cent) depend on panchayat tap water.

Table No 4.20 shows that out of 26 respondents who depend on well water, 12 (7.41 per cent) are in manufacturing sector, 4 (1.96 per cent) in service sector and 10 (4.27 per cent) in trading sector.

Respondents depending on hand pump water constitute 0.33 per cent which is very meager. The majority of our respondents depend on panchayat tap water, which is 95.33 per cent and only 4.34 per cent depend on well water.
4.3.10 Toilet Facility in House

Safe disposal of human excreta is a major priority which reduces diseases and disagreeable odours. Sanitation of sewages protects health, surface and ground water.

The toilet facility available in houses of the respondents in various sectors is shown in Table No 4.21.

**TABLE NO 4.21**

TOILET FACILITY AVAILABLE IN HOUSE

<table>
<thead>
<tr>
<th>Toilet Facility</th>
<th>Manufacturing Sector</th>
<th>Service Sector</th>
<th>Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual seewaging</td>
<td>114 [70.37]</td>
<td>174 [85.29]</td>
<td>174 [74.36]</td>
<td>462 [77.00]</td>
</tr>
<tr>
<td>Total</td>
<td>162 [100.0]</td>
<td>204 [100.0]</td>
<td>234 [100.0]</td>
<td>600 [100.0]</td>
</tr>
</tbody>
</table>

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

According to the Table No 4.21, out of 162 respondents, 114 (70.37 per cent) are using manual type, 32 (19.75 per cent) are using flush out latrine, and 16 (9.88 per cent) are using dry latrine.

In the case of the service sector, out of 204 respondents, 174 (85.29 per cent) are using manual type, 24 (11.77 per cent) are using flush out latrine, and 6 (2.94 per cent) are using dry latrine.
This table shows that out of 234 respondents in trading sector 174 (74.36 per cent) use manual type, 46 (19.66 per cent) use flush out latrine, and 14 (5.98 per cent) use dry latrine.

Thus, it is concluded from our study that, majority of the respondents use manual type which is unhygienic, accounting to 77.00 per cent. 6.00 per cent of the respondents use dry latrine, and only 17.00 per cent of the respondents use flush out latrines.

4.4 Relationship between Income of the Respondents and their Family Characteristics:

Women as daughters, wives, mothers, and grandmothers have their own family responsibilities. If there are large number of members in the family, women take up an occupation either to enhance the family income or to satisfy their own personal ambition.

In this section, an attempt has been made to examine the association between the income of the respondents and their family characteristics namely family size and household income.

In order to examine the association, chi-square test is used. It is calculated by adopting the formula:

\[
\chi^2 = \sum \frac{(O-E)^2}{E}
\]

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

Where

- \(O\) = Observed Frequency
- \(E\) = Expected Frequency
4.4.1 Income of the Respondents and their Family size in the Manufacturing Sector:

Null Hypothesis

\[ H_0 : \text{There is no relationship between income of the respondents and their family size in manufacturing sector.} \]

Alternative Hypothesis

\[ H_1 : \text{There exists relationship between income of the respondents and their family size in manufacturing sector.} \]

TABLE NO 4.22

CONTINGENCY TABLE – INCOME OF THE RESPONDENTS AND THEIR FAMILY SIZE IN MANUFACTURING SECTOR

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Income of the respondents in manufacturing Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below Rs.12000</td>
<td>Rs.12001 – Rs24000</td>
</tr>
<tr>
<td>Below 5</td>
<td>16 [33.33]</td>
<td>22 [57.90]</td>
</tr>
<tr>
<td>5 – 8</td>
<td>12 [25.00]</td>
<td>8 [21.05]</td>
</tr>
<tr>
<td>9 and Above</td>
<td>20 [41.67]</td>
<td>8 [21.05]</td>
</tr>
<tr>
<td>Total</td>
<td>48 [100.0]</td>
<td>38 [100.0]</td>
</tr>
</tbody>
</table>

Source: Survey data.

Note: Figures in brackets are percentages to the total.

In order to find out whether there is any association between the family size and income of the respondents in manufacturing sector, chi-square test has been applied. The results of the chi-square test are furnished in Table No 4.23.
Table No 4.23 reveals that the calculated value of \( \chi^2 \) is greater than the Table value at 5 per cent level of significance. The investigator rejects the null-hypothesis \( (H_0) \) and accepts the alternative hypothesis \( (H_1) \). Therefore, it is inferred that there exists association between income of the respondents and their family size in manufacturing sector.

### 4.4.2 Association Between Income of the Respondents and their Education in Manufacturing Sector

**Null Hypothesis**

\[ H_0 : \text{There is no association between income of the respondents and their education in manufacturing sector.} \]

**Alternative Hypothesis**

\[ H_1 : \text{There exists association between income of the respondents and their education in manufacturing sector.} \]
### TABLE NO 4.24

**CONTINGENCY TABLE – INCOME OF THE RESPONDENTS AND THEIR EDUCATION IN MANUFACTURING SECTOR**

<table>
<thead>
<tr>
<th>Education</th>
<th>Income of the respondents in Manufacturing Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below Rs.12000</td>
<td>Rs.12001 – Rs.24000</td>
</tr>
<tr>
<td>Upto High School</td>
<td>24 [50.00]</td>
<td>8 [21.05]</td>
</tr>
<tr>
<td>Graduate</td>
<td>6 [12.50]</td>
<td>6 [15.79]</td>
</tr>
<tr>
<td>Total</td>
<td><strong>48 [100.0]</strong></td>
<td><strong>38 [100.0]</strong></td>
</tr>
</tbody>
</table>

Source: Survey data.

Note: Figures in brackets are percentages to the total.

In order to find out whether there is any association between the family size and education of the respondents in manufacturing sector chi-square test has been applied. The results of the chi-square test are furnished in Tab No. 4.25.

### TABLE NO 4.25

**RESULT OF CHI-SQUARE TEST – INCOME OF THE RESPONDENTS AND THEIR EDUCATION IN MANUFACTURING SECTOR**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>17.9864</td>
<td>12</td>
<td>0.019</td>
<td>21.0</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
Table No 4.25 clearly reveals that the calculated value of $\chi^2$ is less than the Table value at 5 per cent level of significance. The investigator accepts the null-hypothesis ($H_0$) and rejects the alternative hypothesis ($H_1$). We infer that there is no association between income of the respondents and their education in manufacturing sector.

4.4.3 Association Between Family size of the Respondents and their Occupation in Manufacturing Sector:

**Null Hypothesis**

$H_0 : \text{There is no association between family size of the respondents and their occupation in manufacturing sector}$

**Alternative Hypothesis**

$H_1 : \text{There exists association between family size of the respondents and their occupation in manufacturing sector.}$

**TABLE NO 4.26**

CONTINGENCY TABLE– OCCUPATION OF THE RESPONDENTS AND THEIR FAMILY SIZE IN MANUFACTURING SECTOR

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Occupation of the respondents in manufacturing Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cottage Industries</td>
<td>Food Items Making</td>
</tr>
<tr>
<td>5 – 8</td>
<td>8 [18.18]</td>
<td>12 [31.58]</td>
</tr>
<tr>
<td>9 and Above</td>
<td>10 [22.73]</td>
<td>16 [42.10]</td>
</tr>
<tr>
<td>Total</td>
<td>44 [100.0]</td>
<td>38 [100.0]</td>
</tr>
</tbody>
</table>

Source: Survey data.
Note: Figures in brackets are percentages to the total.
In order to find out whether there is any association between the family size of the respondents and their occupation in manufacturing sector, chi-square test has been applied. The results of the chi-square test are furnished in Tab No. 4.27.

**TABLE NO 4.27**

RESULT OF CHI-SQUARE TEST – OCCUPATION OF THE RESPONDENTS AND THEIR FAMILY SIZE IN MANUFACTURING SECTOR

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>14.6216</td>
<td>6</td>
<td>0.000</td>
<td>12.6</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

It is clearly evident from the Table No 4.27 that the calculated value of $\chi^2$ is greater than the table value at 5 per cent level of significance. So the investigator rejects the null-hypothesis ($H_0$) and accepts the alternative hypothesis ($H_1$). Therefore we infer that there is no association between family size of the respondents and their occupation in manufacturing sector.

### 4.4.4 Association Between Income of the Respondents and their Occupation in Manufacturing sector

**Null Hypothesis**

$$H_0: \quad \text{There is no association between income of the respondents and their occupation in manufacturing sector}$$

**Alternative Hypothesis**

$$H_1: \quad \text{There exists association between income of the respondents and their occupation in manufacturing sector}$$
TABLE NO 4.28
CONTINGENCY TABLE–INCOME OF THE RESPONDENTS AND THEIR OCCUPATION IN MANUFACTURING SECTOR

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Income of the respondents in Manufacturing Sector</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below Rs.12000</td>
<td>Rs.12001 – Rs.24000</td>
<td>Rs.24001– Rs.36000</td>
<td>Rs.36001 and Above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottage Industries</td>
<td>14</td>
<td>10</td>
<td>12</td>
<td>8</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[29.17]</td>
<td>[26.32]</td>
<td>[30.00]</td>
<td>[22.22]</td>
<td>[27.16]</td>
<td></td>
</tr>
<tr>
<td>Food Items Making</td>
<td>10</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[20.83]</td>
<td>[21.04]</td>
<td>[25.00]</td>
<td>[27.77]</td>
<td>[23.46]</td>
<td></td>
</tr>
<tr>
<td>Candle Making</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[25.00]</td>
<td>[26.32]</td>
<td>[25.00]</td>
<td>[33.33]</td>
<td>[27.16]</td>
<td></td>
</tr>
<tr>
<td>Soap Making</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>9</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[25.00]</td>
<td>[26.32]</td>
<td>[20.00]</td>
<td>[16.68]</td>
<td>[22.22]</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td><strong>48</strong></td>
<td><strong>38</strong></td>
<td><strong>40</strong></td>
<td><strong>36</strong></td>
<td><strong>162</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>[100.0]</strong></td>
<td><strong>[100.0]</strong></td>
<td><strong>[100.0]</strong></td>
<td><strong>[100.0]</strong></td>
<td><strong>[100.0]</strong></td>
<td></td>
</tr>
</tbody>
</table>

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

In order to find out whether there is any association between the income and occupation of the respondents in manufacturing sector, chi-square test has been applied. The results of the chi-square test are furnished in Tab No. 4.29.

TABLE NO 4.29
RESULT OF CHI-SQUARE TEST –INCOME OF THE RESPONDENTS AND THEIR OCCUPATION IN MANUFACTURING SECTOR

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>1.9188</td>
<td>9</td>
<td>0.000</td>
<td><strong>100.0</strong></td>
<td>Accepted</td>
</tr>
</tbody>
</table>
From the Table No 4.29 it is clear that the calculated value of $\chi^2$ is less than the table value at 5 per cent level of significance. So the investigator accepts the null-hypothesis ($H_0$) and rejects the alternative hypothesis ($H_1$). Therefore, it is inferred that there is no association between income of the respondents and their occupation in manufacturing sector.

4.4.5 Income of the Respondents and their Family Size in the Service Sector:

Null Hypothesis

$H_0$ : There is no association between income of the respondents and their family size in service sector.

Alternative Hypothesis

$H_1$ : There exists association between income of the respondents and their family size in service sector.

**TABLE NO 4.30**

**CONTINGENCY TABLE – INCOME OF THE RESPONDENTS AND THEIR FAMILY SIZE IN SERVICE SECTOR**

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Income of the respondents in Service Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below Rs.12000</td>
<td>Rs.12001 – Rs.24000</td>
</tr>
<tr>
<td>Below 5</td>
<td>28 [53.84]</td>
<td>26 [52.00]</td>
</tr>
<tr>
<td>9 and Above</td>
<td>12 [23.08]</td>
<td>10 [20.00]</td>
</tr>
<tr>
<td>Total</td>
<td>52 [100.0]</td>
<td>50 [100.0]</td>
</tr>
</tbody>
</table>

**Source:** Survey data

**Note:** Figures in brackets are percentages to the total.
In order to find out whether there is any association between the family size and income of the respondents in service sector, chi-square test has been applied. The results of the chi-square test are furnished in Tab No. 4.31.

**TABLE NO 4.31**

**RESULT OF CHI-SQUARE TEST – INCOME OF THE RESPONDENTS AND THEIR FAMILY SIZE IN SERVICE SECTOR**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table No Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>9.35488</td>
<td>6</td>
<td>0.001</td>
<td>12.6</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

According to Table No 4.31 the calculated value of \( \chi^2 \) is less than the Table value at 5 per cent level of significance. Hence the investigator accepts the null-hypothesis \((H_0)\) and rejects the alternative hypothesis \((H_1)\). Therefore we conclude that there is no association between income of the respondents and their family size in service sector.

**4.4.6 Income of the respondents and their Education in the Service Sector**

**Null Hypothesis**

\[ H_0 : \text{There is no association between income of the respondents and their education in service sector.} \]

**Alternative Hypothesis**

\[ H_1 : \text{There exists association between income of the respondents and their education in service sector.} \]
## TABLE NO 4.32
CONTINGENCY TABLE – INCOME OF THE RESPONDENTS AND THEIR EDUCATION IN SERVICE SECTOR

<table>
<thead>
<tr>
<th>Education</th>
<th>Income of the respondents in Service Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below Rs.12000</td>
<td>Rs.12001 – Rs24000</td>
</tr>
<tr>
<td>Upto High Shool</td>
<td>18 [34.62]</td>
<td>20 [40.00]</td>
</tr>
<tr>
<td>Total</td>
<td>52 [100.0]</td>
<td>50 [100.0]</td>
</tr>
</tbody>
</table>

**Source:** Survey data.

**Note:** Figures in brackets are percentages to the total.

In order to find out whether there is any correlation between the education and income of the respondents in service sector, chi-square test has been applied. The results of the chi-square test are furnished in Tab No. 4.33.

## TABLE NO 4.33
RESULT OF CHI-SQUARE TEST – INCOME OF THE RESPONDENTS AND THEIR EDUCATION IN SERVICE SECTOR

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>5.8792</td>
<td>12</td>
<td>0.007</td>
<td>21.0</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
Table No 4.39 reveals that the calculated value of \( \chi^2 \) is less than the Table value at 5 per cent level of significance. Therefore the investigator accepts the null-hypothesis (\( H_0 \)) and rejects the alternative hypothesis (\( H_1 \)). It is inferred that there is no association between income of the respondents and their education in service sector.

### 4.4.7 Association Between Family Size of the Respondents and their Occupation in Service Sector:

**Null Hypothesis**

\[ H_0 : \text{There is no association between family size of the respondents and their occupation in service sector} \]

**Alternative Hypothesis**

\[ H_1 : \text{There exists association between family size of the respondents and their occupation in service sector.} \]

**TABLE NO 4.34**

**CONTINGENCY TABLE – FAMILY SIZE OF THE RESPONDENTS AND THEIR OCCUPATION IN SERVICE SECTOR**

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Occupation of the respondents in Service Sector</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tailor</td>
<td>Beauty Parlour</td>
<td>Laundry</td>
<td></td>
</tr>
<tr>
<td><strong>Below 5</strong></td>
<td>18 [47.37]</td>
<td>24 [46.15]</td>
<td>62 [54.39]</td>
<td>104 [50.98]</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>38 [100.0]</td>
<td>52 [100.0]</td>
<td>114 [100.0]</td>
<td>204 [100.0]</td>
</tr>
</tbody>
</table>

**Source:** Survey data.

**Note:** Figures in brackets are percentages to the total.
In order to find out whether there is any association between the family size of the respondents and their occupation in service sector, chi-square test has been applied. The results of the chi-square test are furnished in Table No 4.35:

### TABLE NO 4.35

**RESULT OF CHI-SQUARE TEST – OCCUPATION OF THE RESPONDENTS AND THEIR FAMILY SIZE IN SERVICE SECTOR**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>2.0000</td>
<td>4</td>
<td>0.000</td>
<td>9.49</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Table No 4.35 shows that the calculated value of $\chi^2$ is less than the table value at 5 per cent level of significance and hence the investigator accepts the null-hypothesis ($H_0$) and rejects the alternative hypothesis ($H_1$). There is no association between family size of the respondents and their occupation in service sector.

4.4.8 Association Between Occupation of the Respondents in Service Sector and their Income:

**Null Hypothesis**

$H_0 : \text{There is no association between occupation of the respondents in service sector and their income.}$

**Alternative Hypothesis**

$H_1 : \text{There exists association between occupation of the respondents in service sector and their income.}$
### TABLE NO 4.36

**CONTINGENCY TABLE – INCOME OF THE RESPONDENTS AND THEIR OCCUPATION IN SERVICE SECTOR**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Income of the respondents in Service Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below Rs.12000</td>
<td>Rs.12001 – Rs24000</td>
</tr>
<tr>
<td>Laundry</td>
<td>32 [61.54]</td>
<td>22 [44.00]</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52 [100.0]</strong></td>
<td><strong>50 [100.0]</strong></td>
</tr>
</tbody>
</table>

**Source:** Survey data.

**Note:** Figures in brackets are percentages to the total.

In order to find out whether there is any correlation between the occupation of the respondents in service sector and their income, chi-square test has been applied. The results of the chi-square test are furnished in Table No 4.37

### TABLE NO 4.37

**RESULT OF CHI-SQUARE TEST – INCOME OF THE RESPONDENTS AND THEIR OCCUPATION IN SERVICE SECTOR**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>10.284</td>
<td>6</td>
<td>0.000</td>
<td>12.6</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
It has been inferred from Table No 4.37 that the calculated value of $\chi^2$ is less than the table value at 5 per cent level of significance and so the investigator accepts the null-hypothesis ($H_0$) and rejects the alternative hypothesis ($H_1$). Therefore we infer that there is no association between the occupation of the respondents in service sector and their income.

**4.4.9 Association Between Family Size of the Respondents and their Occupation in Trading Sector:**

**Null Hypothesis**

$H_0 :$ There is no association between family size of the respondents and their occupation in trading sector

**Alternative Hypothesis**

$H_1 :$ There exists association between family size of the respondents and their occupation in trading sector.

**TABLE NO 4.38**

CONSTITENCY TABLE– FAMILY SIZE OF THE RESPONDENTS AND THEIR OCCUPATION IN TRADING SECTOR

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Trading Sector</th>
<th>Petty Shop</th>
<th>Sale of Cloths</th>
<th>Sale of Food Items</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 – 8</td>
<td>44 [46.81]</td>
<td>38 [59.38]</td>
<td>40 [52.63]</td>
<td>122 [52.14]</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>94 [100.0]</td>
<td>64 [100.0]</td>
<td>76 [100.0]</td>
<td>234 [100.0]</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey data

Note: Figures in brackets are percentages to the total.
In order to find out whether there is any correlation between the family size of the respondents and their occupation in service sector, chi-square test has been applied. The results of the chi-square test are furnished in Table No 4.39.

**TABLE NO 4.39**

RESULT OF CHI-SQUARE TEST – FAMILY SIZE OF THE RESPONDENTS AND THEIR OCCUPATION IN TRADING SECTOR

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>2.9484</td>
<td>4</td>
<td>0.001</td>
<td>9.49</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

It is evident from the Table No 4.39 that the calculated value of $\chi^2$ is less than the table value at 5 per cent level of significance. So the investigator accepts the null-hypothesis ($H_0$) and rejects the alternative hypothesis ($H_1$). Therefore, it is inferred that there is no association between family size of the respondents and their occupation in service sector.

4.4.10 Income of the Respondents and their Family Size in the Trading Sector:

Null Hypothesis

$H_0$ : *There is no association between income of the respondents and their family size in trading sector.*

Alternative Hypothesis

$H_1$ : *There exists association between income of the respondents and their family size in trading sector.*
TABLE NO 4.40

CONTINGENCY TABLE – INCOME OF THE RESPONDENTS AND THEIR FAMILY SIZE IN TRADING SECTOR

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Income of the respondents in Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below Rs.12000</td>
<td>Rs.12001 – Rs.24000</td>
</tr>
<tr>
<td>5 - 8</td>
<td>44 [75.86]</td>
<td>36 [48.65]</td>
</tr>
<tr>
<td>Total</td>
<td>58 [100.0]</td>
<td>74 [100.0]</td>
</tr>
</tbody>
</table>

Source: Survey data.

Note: Figures in brackets are percentages to the total.

In order to find out whether there is any correlation between the family size and income of the respondents in trading sector, chi-square test has been applied. The results of the chi-square test are furnished in Table No 4.41:

TABLE NO 4.41

RESULT OF CHI-SQUARE TEST – INCOME OF THE RESPONDENTS AND THEIR FAMILY SIZE IN TRADING SECTOR

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>15.9874</td>
<td>6</td>
<td>0.000</td>
<td>12.6</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Table No 4.41 reveals that the calculated value of $\chi^2$ is greater than the Table value at 5 per cent level of significance and as such the investigator rejects the null-hypothesis ($H_0$) and accept the alternative hypothesis ($H_1$). Therefore we conclude that there exists an association between income of the respondents and their family size in trading sector.

4.4.11 Annual Income of the Respondents and their Education in the Trading Sector:

Null Hypothesis

$H_0$ : There is no association between income of the respondents and their educational level in trading sector.

Alternative Hypothesis

$H_1$ : There exists association between income of the respondents and their educational level in trading sector.

<table>
<thead>
<tr>
<th>Education</th>
<th>Income of the Respondents in Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;Rs.12000</td>
<td>Rs.12001 – Rs24000</td>
</tr>
<tr>
<td>Upto High School</td>
<td>24 [41.38]</td>
<td>32 [43.24]</td>
</tr>
<tr>
<td>Total</td>
<td>58 [100.0]</td>
<td>74 [100.0]</td>
</tr>
</tbody>
</table>

Source: Survey data.

Note: Figures in brackets are percentages to the total.
In order to find out whether there is any correlation between the income of the respondents and their education level in trading sector, chi-square test has been applied. The results of the chi-square test are furnished in Table No 4.43:

**TABLE NO 4.43**

RESULT OF CHI-SQUARE TEST – INCOME OF THE RESPONDENTS AND THEIR EDUCATION IN TRADING SECTOR

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table No Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>16.8629</td>
<td>12</td>
<td>0.017</td>
<td>21.0</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

It is evident from the Table No 4.43 that the calculated value of $\chi^2$ is less than the table value at 5 per cent level of significance. We accept the null-hypothesis ($H_0$) and reject the alternative hypothesis ($H_1$). Therefore, it is inferred that there is no association between income of the respondents and their educational level in trading sector.

**4.4.12 Association Between Occupation of the Respondents in Trading Sector and their Income:**

**Null Hypothesis**

$$H_0 : \text{ There is no association between occupation of the respondents in trading sector and their income:}$$

**Alternative Hypothesis**

$$H_1 : \text{ There exists an association between occupation of the respondents in trading sector and their income.}$$
TABLE NO 4.44

CONTINGENCY TABLE – OCCUPATION OF THE
RESPONDENTS AND THEIR INCOME IN TRADING SECTOR

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Income of the respondents in Trading Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; Rs.12000</td>
<td>Rs.12001 – Rs24000</td>
</tr>
<tr>
<td>Petty Shop</td>
<td>26 [44.83]</td>
<td>30 [40.54]</td>
</tr>
<tr>
<td>Sale of Food Items</td>
<td>18 [31.03]</td>
<td>22 [29.73]</td>
</tr>
<tr>
<td>Total</td>
<td>58 [100.0]</td>
<td>74 [100.0]</td>
</tr>
</tbody>
</table>

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

In order to find out whether there is any correlation between the occupation of the respondents in trading sector and their income, chi-square test has been applied. The results of the chi-square test are furnished in Table No 4.45:

TABLE NO 4.45
RESULT OF CHI-SQUARE TEST – OCCUPATION OF THE
RESPONDENTS AND THEIR INCOME IN TRADING SECTOR

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>d.f</th>
<th>Asymp.Sig. (2-Sided)</th>
<th>Table NoValue</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>2.8052</td>
<td>6</td>
<td>0.038</td>
<td>12.6</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
Table No 4.45 reveals that the calculated value of $\chi^2$ is less than the table value at 5 per cent level of significance. Accordingly the investigator accepts the null-hypothesis ($H_0$) and rejects the alternative hypothesis ($H_1$). Hence we infer that there is no association between the occupation of the respondents in trading sector and their income.