CHAPTER III: SOCIO-ECONOMIC DIMENSIONS OF STUDY AREA

3.1 Introduction
Socio-economic factor includes a wide range of interrelated variables involving a combination of social and economic aspects. These parameters are the determinants of occupation (to earn their living), housing (somewhere to live them), nutritional regime (intake of food and drink to maintain life), and social organizations (maintaining social linkage for common interest).

3.2 Socio-Economic Dimensions
Among the socio economic parameters stated above, a few selected parameters, that have a direct bearing with the theme and hypotheses of the study, have been chosen. In this chapter Hypothesis I is under consideration (Ch.I; Sec.1.2). This states that the legacy of social structure on distribution of and access to land resource among different social groups still pervades in the rural India.

3.2.1 Parameters
The Basic Premises here is the often accepted reality that in rural/ traditional Indian society, social stratification finds its reflection in differences in access to economic resource base i.e. higher the position of a person in the social strata greater is his access to economic resource base.
To examine the hypothesis, two sets of variables have been selected. They are as follows
   a. Occupational Structure: Two parameters of the occupational structure have been considered here
      i. percentage of cultivators to total working population and
      ii. percentage of agricultural labourers to total working population.
      These parameters have been chosen because they bear implications with respect to differential access to the local land resource of an agrarian economy. Cultivators are owners of agricultural land, the principal resource base in a rural economy, and the ultimate decision makers of economic pursuits to be followed. Agricultural labourers as the name suggests are daily wage earners. The former are economically self-sufficient while the latter are economically vulnerable.

   b. Social Structure: The broad social categories as identified in the census data products of India have been selected to ascertain the social structure. They have been analyzed as
      i. percentage of S.T. population to total population in each of the 161 villages,
ii. percentage of S.C. population to total population in each of the 161 villages and
iii. percentage of non S.T., S.C. population to total population in each of the 161 villages.

To show the access of different social groups to the resource base in a socially stratified society all the 161 villages in study area have been included for analysis. Two sets of variables/ socio-economic parameters have been examined here.

3.2.2 Concentration of ST, SC Population vis-à-vis Cultivators
Relation between SC, ST population and cultivators is inverse i.e. a smaller proportion of SC and ST population are cultivators indicating their limited access to the principal resource base of rural economy (Maps 3.1 & 3.2). This is indicated by the ‘r’ values of -0.143 and -0.188 (Table 3.3) between SC, ST and cultivators respectively implies negative association between them.

This implication is also supported by a comparison of figures 3.1 & 3.2. These reflect that a relatively larger proportion of S.C. population has access to the principal resource base of the rural economy compared to that of the S.T. population.

It may further be noted that the association between S.C., S.T. with cultivators (as revealed by their ‘r’ values stated above) are significant at 0.05 level of significance while in the 0.01 level of significance, the association between S.T. and cultivators alone is significant and S.C. and cultivators are insignificant (Table 3.4). This is also corroborated by Chi Square Test (Table 3.1 & 3.2)

This implies that the lesser % of ST population to total population is cultivators as compared to SC population. This is also corroborated by figure 3.2. It shows that zero percentage of S.T. population is cultivators. In other words, it apparently implies that the entire S.T. population belongs to the occupational category of agricultural labourers. However, this observation should be verified in the light of the descriptive statistics especially mean of S.T. of the villages under observation (Table 3.5).

3.2.3 Concentration of Non ST, SC Population vis-à-vis Cultivators
Pearson’s Product Moment Correlation Coefficient of 0.235 between non S.C. and S.T. population with cultivators (Table 3.3) indicates a positive association between them. The association is statistically significant both at the 0.05 and 0.01 levels of significance (Table 3.4; Figure 3.3 & Map 3.3). This is again supported by Chi Square Test (Table 3.1 & 3.2).
3.2.4 Concentration of ST, SC Population vis-à-vis Agricultural Labourers
Positive ‘r’ values of 0.141 and 0.353 respectively (Table 3.3) between S.C., S.T. population and agricultural labourers are statistically significant at 0.05 level of significance while the association between S.T. and agricultural labourers is statistically significant at even at 0.01 level of significance. Association between S.C. and agricultural labourers is statistically insignificant at 0.01 level of significance (Table 3.4). This is also supported by Chi Square Test (Table 3.1 & 3.2). Maps 3.4 & 3.5 also reveal that higher the concentration of S.C. and S.T. population higher is the concentration of agricultural labourers. These are also supported by figures 3.4 and 3.5 that show a direct relation between both the S.C. & S.T. group of population and agricultural labourers. These reflect that between these two social groups a larger percentage of the S.T. population is agricultural labourers than compared to that of the S.C. population.

3.2.5 Concentration of Non ST, SC Population vis-à-vis Agricultural Labourers
In case of non S.T. & S.C. population and agricultural labourers the Pearson’s Product Moment Correlation Coefficient (Table 3.3) is -0.326 indicating a negative association between them. The association is statistically significant both at the 0.05 and 0.01 levels significance (Table 3.4). This is again supported by Chi Square Test (Table 3.1 & 3.2) and supported by figure 3.6 that shows an inverse relation between the non S.T. & S.C. population and agricultural labourers. This indicates lesser number of agricultural labourers among the non S.T. & S.C. group of population indicating their relatively greater access to the local resource base of the rural economy (Map 3.6).

3.3 Chapter summary
The study reveals that higher the concentration of S.C., S.T. population, higher is the concentration of agricultural labourers and lower is the concentration of cultivators. This indicates lesser access of the S.T. and S.C. groups of people to the resource base of a rural economy. Relative differences in the level of access to the local resource base are however noted between S.C. and S.T. population. Detailed statistical analysis shows that the S.C. group of people are relatively better off compared to S.T. group of people as far as access to the local resource base is concerned.

Contrarily higher is the concentration of non S.T., S.C. population, lower is the concentration of agricultural labourers and higher is the concentration of cultivators. This signifies greater access of the non S.T. & S.C. population to resource base of a rural economy.

49
The hypothesis of the study thus stands proved. The S.T., S.C. dominated villages show higher concentration of agricultural labourers and lower concentration of cultivators than the villages dominated by the non S.T. & S.C. population and vice-versa. The study also establishes the fact that occupational profile is a valid indicator to look into the social linkages of the resource base of an economy.

3.4 Concluding Remarks
The preceding discussion proves that the hypothesis this valid as far as the study area is concerned. In the subsequent chapters we focus our attention on the Study Sites. This chapter forms the basis of the selection of study sites. The justification for this will be made evident from the arrangement of the next chapter.

![Figure 3.1: Cultivators in relation to SC Population](source: Census of India, 2001)
Figure 3.2

Cultivators in relation to ST Population

\[ y = -0.251x + 39.33 \]

\[ R^2 = 0.035 \]

Source: Census of India, 2001

Figure 3.3

Cultivators in relation to Non ST & SC Population

\[ y = 0.175x + 27.50 \]

\[ R^2 = 0.055 \]

Source: Census of India, 2001
Agricultural Labourers in relation to SC Population

\[ y = 0.105x + 33.95 \]
\[ R^2 = 0.02 \]

Source: Census of India, 2001

% of SC population to total population

% of agricultural labourers to total working population

Agricultural Labourers in relation to ST Population

\[ y = 0.430x + 35.55 \]
\[ R^2 = 0.124 \]

Source: Census of India, 2001

% of ST population to total population

% of agricultural labourers to total working population

Figure 3.4

Figure 3.5
Figure 3.6

Table 3.1 Chi Square ($X^2$) Values

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Independent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SC</td>
</tr>
<tr>
<td>Cultivators</td>
<td>9.22</td>
</tr>
<tr>
<td>Agricultural Labourers</td>
<td>7.29</td>
</tr>
</tbody>
</table>

Data Source: Census of India, 2001

Table 3.2 Test of Association ($X^2$)*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>SC</th>
<th>ST</th>
<th>Non ST, SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Significance</td>
<td>0.05</td>
<td>0.01</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>0.01</td>
<td>0.05</td>
<td>0.01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Cultivators</th>
<th>Agricultural Labourers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* One Tailed; Degree of Freedom = $n - 2 = 159$; Significant (✓) or Insignificant (×)
Data Source: Census of India, 2001

y = -0.221x + 51
$R^2 = 0.106$
Table 3.3: Values of Pearson’s Product Moment Correlation Coefficient (r)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivators</td>
<td></td>
<td>-0.143</td>
<td>-0.188</td>
<td>0.235</td>
</tr>
<tr>
<td>Agricultural Labourers</td>
<td></td>
<td>0.141</td>
<td>0.353</td>
<td>-0.326</td>
</tr>
</tbody>
</table>

Data Source: Census of India, 2001

Table 3.4: Test of Association (r)*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>S.T.</th>
<th>S.C.</th>
<th>non S.T. &amp; S.C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Significance</td>
<td>0.05</td>
<td>0.01</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>0.05</td>
<td>0.01</td>
<td>0.05</td>
</tr>
<tr>
<td>Dependent Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultivators</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Agricultural Labourers</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
</tr>
</tbody>
</table>

* One Tailed; Degree of Freedom = n – 2=159; Significant (✓) or Insignificant (×)

Data Source: Census of India, 2001

Table 3.5: Descriptive Statistics *

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>ST</td>
<td>4.834</td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>34.119</td>
</tr>
<tr>
<td></td>
<td>Non ST, SC</td>
<td>60.431</td>
</tr>
<tr>
<td>Dependent</td>
<td>Cultivators</td>
<td>38.119</td>
</tr>
<tr>
<td></td>
<td>Agricultural Labourers</td>
<td>37.627</td>
</tr>
</tbody>
</table>

*Total No. of Observations =161

Data Source: Census of India, 2001
Cultivators in relation to ST Population
Labpur C.D. Block, Birbhum District

Map 3.2
Map 3.3

Cultivators in relation to Non ST, SC Population
Labpur C.D. Block, Birbhum District

Index
% of Non ST, SC Population to Total Population
- 0 - 25
- 25 - 50
- 50 - 75
- 75 - 100

% of Cultivators to Total Working Population
- 0 - 25
- 25 - 50
- 50 - 75
- 75 - 100

Note: N.A. - Data Not Available
Source: Census of India, 2001
Map 3.4

Agricultural Labourers in relation to SC Population
Labpur C.D. Block, Birbhum District

Index
% of SC Population to Total Population
- 0 - 25
- 25 - 50
- 50 - 75
- 75 - 100

% of Agricultural Labourers to Total Working Population
- 0 - 25
- 25 - 50
- 50 - 75
- 75 - 100

Note: M.A. - Data not available
Source: Census of India, 2011
Map 3.5

Argicultural Labourers in relation to ST Population
Labpur C.D. Block, Birbhum District
Agricultural Labourers in relation to Non ST, SC Population
Labpur C.D. Block, Birbhum District

Map 3.6